ARTICLE

I WANT A GIRL (BOY) JUST LIKE THE GIRL (BOY) THAT MARRIED DEAR OLD DAD (MOM): CLONING LIVES

MICHAEL H. SHAPIRO

TABLE OF CONTENTS[†]

| I. | INTRODUCTION | | | | |
|-----|--|---|----|--|--|
| | A. | | | | |
| | В. | THE PLANNED COMMENTARY | 8 | | |
| | C. | IF CLONING IS PROCREATION, WHO IS DOING THE PROCREATING? | 18 | | |
| | D. | A NOTE ON DISCLOSURE OF CLONEHOOD | 18 | | |
| II. | COMMON ATTACKS ON CLONING; REMARKS ON JUNK COMMENTARY, ASEXUALITY, DUPLICATION, AND THE "ARTIFICIAL"19 | | | | |
| | A. | PROLOGUE: SOME ANTI-CLONING THEMES | | | |
| | B. | REPLICATION | | | |
| | | 1. "Cloning Is Replication, Not Reproduction, and Represents a Difference in Kind, Not in Degree in the Way Humans Continue the Species." | | | |
| | | 2. Cloning—whether It Is Reproduction or Not—Represents a "Difference in Kind" Concerning the Way in Which We Continue the Species | 27 | | |
| | C. | GENETIC DETERMINISM: A CLONE IS "SADDLED WITH A GENOTYPE THAT HAS ALREADY LIVED" | | | |
| | D. | Inherent Evil: "Cloning of Humans [Is] Inherently Evil, a Morally Unjustifiable Intrusion into Human Life" | | | |
| | E. | IF INDEED HUMAN CLONING IS INTRINSICALLY EVIL, HOW SHOULD WE MORALLY CHARACTERIZE THE OFFSPRING? DOES THE EVIL OF THE PERSON-CREATING PROCESS LIVE ON IN HER? | 32 | | |
| | F. | RIGHTS NOT TO BE BORN WITH A DUPLICATE GENETIC IDENTITY: "IMPLICIT IN THE PROHIBITION OF CLONAL HUMANS IS THE RATIONALE THAT CERTAIN TYPES OF HUMANS OUGHT NOT TO EXIST, EITHER BECAUSE THEY HAVE INALIENABLE RIGHTS TO NONEXISTENCE OR BECAUSE THEIR PRESENCE WOULD ERODE IMPORTANT SOCIAL VALUES" | | | |
| | G. | More on Personhood and Humanity—of Products and Processes: The Claim that "Clones Aren't Fully Human" | | | |
| | H. | CLONING AS ILLEGITIMATE IMMORTALITY | 40 | | |
| | I. | ARMIES OF JORDANS, HITLERS AND MOZARTS: THE DEBASEMENT OF MERIT AND INDIVIDUALITY | 41 | | |
| | J. | THE PROPORTIONATE PUNISHMENT OF CLONERS SHOULD MATCH THAT FOR "RAPE, CHILD ABUSE AND MURDER" | | | |

 $[\]dot{}$ Citations have been omitted in this Table of Contents. Please refer to the Article for citation information. -Eds.

| | K. | "Ev | ery Human Being Has the Right to Two Biological Parents" | 43 | | |
|------|---|---|--|----|--|--|
| | L. | GEN | ONING OF SUPERIOR PERSONS "IS NOT TRULY THERAPEUTIC; IT IS NOT NUINE MEDICINE" | 44 | | |
| III. | CLONING AND FRAMEWORKS OF HUMAN THOUGHT: CLASSIFICATION ANOMALIES; THE FULLY DETERMINED (AND THEREFORE NONAUTONOMOUS AND NONINDIVIDUATED?) PERSON; NEW USES FOR OLD PROCESSES | | | | | |
| | A. | | | | | |
| | В. | | FULLY DETERMINED PERSON AND THE MYSTERY OF MYSTERY | | | |
| | C. | . New Uses for Old Processes | | | | |
| | D. | How Different Is Cloning? Is It Just Another Method of Infertility Treatment? The Unpredictability of Cloning's Social Reception Occasioned by the Predictability of Genomic Identity | | | | |
| | | 1. | The Reproduction "Continuum"; the Unpredictable Outcomes of Dealing with Enhanced Predictability | | | |
| | | 2. | Stressing the Differences Between Cloning and Sexual Reproduction | | | |
| | | 3. | Cloning and Genetic Engineering; Genetic Enhancement | 51 | | |
| | E. | SUN FRO | ming Up the Disarray: Normative/Conceptual Confusion Arising m Cloning's Differentness; Instrumental Harms | 52 | | |
| IV. | MU | ST C | LONING BE JUSTIFIED BEFORE IT IS PERMITTED? | 58 | | |
| | A. | INC | GENERAL: PRESUMPTIONS OF NONINTERFERENCE | 58 | | |
| | В. | THE PUBLIC/PRIVATE DISTINCTION AS A TOOL FOR LOCATING FIELDS WITH DIFFERING PRESUMPTIONS—OR IS DOING THIS JUST ANOTHER WAY OF BEGGING THE QUESTION? | | | | |
| | | 1. | The Kinds of Harms Risked by Cloning and Other Forms of Assisted Reproduction: Harms to the Social Fabric; Reduction, Mere Use, and Objectification; Shaping Children's Development to Produce Particular Kinds of Persons Rather than Objects for Use or Display | | | |
| | | 2. | Some "Paradoxes" in Our Views of Reproduction that Bear on the Public/Private Distinction | | | |
| | | 3. | The Nature of the Public/Private Distinction in Brief; Burdens of Proof Again | 69 | | |
| | C. | AFT | TER ALL THIS, WHO DOES HAVE THE BURDEN? | 75 | | |
| | D. | IF C | CLONING DID HAVE TO BE JUSTIFIED IN ADVANCE, COULD IT BE? | 76 | | |
| V. | THE CLAIM THAT CLONING IS INTRINSICALLY ("INHERENTLY"?) WRONG OR HARMFUL; THE ROLE OF MORAL INTUITION AND THE REVELANCE OF A PERCEPTION OF REPUGNANCE77 | | | | | |
| | A. | NAT A C | TURAL TWINNING ASIDE, IS THERE A RIGHT TO A UNIQUE GENOME AND OROLLARY RIGHT NOT TO BE BORN IF ONE'S GENOME HAS AN ACT GENETIC PRECEDENT? | | | |
| | В. | IMP. | AIRMENT OF AUTONOMY AND INDIVIDUALITY THROUGH BEING "CONSTRUCTED" "MADE"; PROCESS AND OUTCOME | | | |
| | | 1. | Autonomy and Individuality; Authenticity | | | |
| | | 2. | Threats to Autonomy, Individuality, and Identity | | | |
| | | 3. | Promoting/Impairing Autonomy by Trying to Match Preferences with Expected Aptitudes and Traits | 90 | | |
| | | 4. | "Manufacturing" Persons Versus Receiving Them as "Gifts" of Nature: The Comparative Impacts on Autonomy, Individuality, and Identity; If We "Assemble" a Person Are We Morally Authorized to "Control Her Destiny"? | | | |
| | | | HPT LIPSIINV" / | Q | | |

| | | 5. | Can the Nature of One's Origins Attenuate One's Humanity and Thus One's Status as a Moral Agent?: Of Products and Processes and "Wrongful Rearing"; the Problem of Evil Again | 99 | |
|-------|------|---|---|-----|--|
| | | 6. | Is Cloning Inherently Wrong because of the Overwhelming Empirical Likelihood of Injury to Rights of Autonomy, Individuality, and Identity? | 101 | |
| | C. | THE ARGUMENT FROM REPUGNANCE | | | |
| | | 1. | The Outrage Expressed. | 104 | |
| | | 2. | The Limits of Outrage; Intrinsic and Cultural Repugnance | 106 | |
| | | 3. | Further Remarks on Reason and Emotion in Moral Analysis; What Hume Said | | |
| | | 4. | Being Outraged or Offended as an Independent Harm to Be Avoided | 116 | |
| | | 5. | The Tutelage of Outrage | 117 | |
| | | 6. | Arguments from Repugnance and Their Links to Arguments from Nature | | |
| VI. | RED | UCT | ION OF HUMAN VALUE AS AN INSTRUMENTAL HARM OF CLONING | 120 | |
| | A. | | ECTIFICATION AS THE PROCESS AND PRODUCT OF "REDUCTION" THROUGH RE USE OF PERSONS AS MEANS; REDUCTION AS STATIC REALITY | 120 | |
| | B. | THE | FIVE HUNDRED HATS OF REDUCTION | 121 | |
| | | 1. | In General; Contingent and Noncontingent Bonding | 121 | |
| | | 2. | Varieties of Reduction and Their Common Elements | | |
| | | 3. | Rationales and Risks of Reduction; Reduction as Reality in Place or as a Temporal Process | 131 | |
| | | 4. | Paradoxes of Reduction/Valuation; the Equivocal Meanings of "Valuation"; Perfection as Reduction | | |
| | | 5. | Mechanisms of Value Reduction and Their Connection to Mere Use and Objectification | | |
| | C. | | REDUCTION OF REDUCTION: "PERSON PERCEPTION" AND CLAIMS | | |
| | | of I | NAPPROPRIATE REDUCTION | 156 | |
| | | 1. | In General | 156 | |
| | | 2. | Person Perception and Stereotyping | 160 | |
| | D. | RED | UCTION AND CLONING | 167 | |
| | | 1. | In General: Acceptable Motivations, Purposes, and Goals; Remarks on Moral Theory | 167 | |
| | | 2, | Motivational Networks | 172 | |
| | | 3. | What the Examples Suggest | 192 | |
| | E. | | M TO THOSE WHO CANNOT EXIST EXCEPT AS CLONES; MORE ON | | |
| | | DIST | TINGUISHING INDIVIDUAL AND "COLLECTIVE" PERSPECTIVES | | |
| | | 1. | The Argument from Harm to the Clone | | |
| | | 2. | Separating Viewpoints | 197 | |
| | | 3. | Additional Attacks by Commentators on the No-Harm-from-Existence Argument | 200 | |
| | | 4. | The Last Attack: What Criteria, Applied by Whom, Determine Whether a Person's Life Is Worth Living from Her Viewpoint? | 219 | |
| | F. | CLONING: THE DESTRUCTION OF FAMILY LINEAGE AS WE KNOW IT, AND THE RUPTURE OF NONCONTINGENT BONDS; THE IMPACT OF SCALE OF PRACTICE | | | |
| | | 1. | Lineage; Bonds | | |
| | | 2. | The Impact of Scale of Practice | | |
| VII | DOE | | POSITION TO CLONING REST ON AN ASSUMPTION OF | | |
| , 11. | | | DETERMINISM—OF THE "REDUCTION" OF HUMAN | | |
| | LIFE | TO | ITS UNDERLYING GENOME? | 229 | |
| VIII. | | | G, EQUALITY, AND DEMOCRACY; DISTRIBUTION AND SOCIAL | | |
| | STR | ATIF | ICATION | 233 | |

| | A. | CLC | DNING AS ENHANCEMENT | 233 | | |
|-----|----|---|---|-----|--|--|
| | B. | B. THREATS TO EQUALITY AND DEMOCRACY | | | | |
| IX. | CO | OMMENTS ON CONSTITUTIONAL ISSUES238 | | | | |
| | A. | Preface on Heuristics | | | | |
| | B. | CHARACTERIZATION OF LIBERTY INTERESTS; HOLDERS OF THE INTERESTS | | | | |
| | C. | FIN | DING UNMENTIONED LIBERTY INTERESTS | 242 | | |
| | | 1. | In General: Notes on Constitutional Interpretation; Interpretive Vectors and Criteria | 242 | | |
| | | 2. | Procreational Autonomy as a Silent Liberty Interest; Some Terminological Puzzles; Tradition as an Interpretive Criterion | 245 | | |
| | D. | FRA | es Cloning "Fit" the Liberty Interest in Procreation?: Interpretation, actured and Contested Exemplars, and Degrees of Abstraction; w "Far" Is Cloning from—What? | | | |
| | | 1. | Assessing Nearness and Remoteness; (Dis)similarity to Uncontested Cases; Is Cloning Simply "Person Production" Rather than Reproduction?; Changes in Our Expectations Concerning Parent-Child Relationships; the Presence of Enhanced Predictability; the Absence of Biological Sex | 249 | | |
| | | 2. | Problems with Tradition as an Interpretive Criterion: Altering Descriptions of Conduct by Changing the Level of Abstraction; the Significance of Assumptions About the Nature of a Process; When, if Ever, Do We Stop Describing Tradition and Reach Moral Conclusions? | | | |
| | | 3. | New Traditions; Complex Traditions | | | |
| | | 4. | Standards of Review | | | |
| | E. | PRO | AT IS THE STATUS OF THE SUPPOSED FUNDAMENTAL LIBERTY INTEREST IN OCCREATIONAL AUTONOMY, AND HOW WOULD IT APPLY TO GIVEN | | | |
| | | Ins. | TANCES OF CLONING? | | | |
| | | 1. | Some Possibilities | | | |
| | | 2. | Heightened Scrutiny and Its Outcome | | | |
| | | 3. | A Brief Review | | | |
| | | 4. | Some Cases | 289 | | |
| X. | CO | CONCLUSION: THE FIRST CLONES—A RETURN TO PART I292 | | | | |

I WANT A GIRL (BOY) JUST LIKE THE GIRL (BOY) THAT MARRIED DEAR OLD DAD (MOM): CLONING LIVES

MICHAEL H. SHAPIRO*

[T]he laws of physics may allow the universe to be its own mother.

—I. Li-Xin Li and J. Richard Gott III, Science News*

I. INTRODUCTION

A. LIFE IS HELL, ESPECIALLY FOR HUMAN CLONES, BECAUSE THEY ARE TAINTED BY THEIR ODIOUS ORIGINS

The lives of the first human clones¹ will be harrowing. Not because of grave physical or mental deficits produced by imperfect technique. Not because the clones will be nonunique nonpersons, having been equipped with a previously owned genome. Not because their custodial parents will inevitably be overbearing in their determination to fit their children's lives into pre-planned patterns. Not because, uninfluenced by others, they will intuitively perceive that their creation was inherently repugnant to natural law—or conventional morality or whatever.

Their lives will be hellish because much of the rest of the world will watch them, poke them, tell them how repulsive their origins are, and generally treat each of them as an "it," while simultaneously proclaiming

^{*} Dorothy W. Nelson Professor of Law, University of Southern California. I thank Professors Marshall Cohen, Thomas Lyon, and Roy G. Spece, Jr. for their comments on part or all of this paper. Thanks also to my research assistants Willie Polaski, Mark Lemke, Daniel Houser, and Christopher Perkins for speedy and accurate work. Mistakes and infelicities of style were caused by an external source out of my control.

I. Peterson, Evading Quantum Barrier to Time Travel, 153 SCI. NEWS 231, 231 (1998) (quoting Li-Xin Li and J. Richard Gott III). If it's good enough for the universe, why not for us?

¹ I sometimes refer to these newly generated persons as "clones" or "cloned offspring," and to their genomic precedents as "nuclear sources." Unless otherwise indicated, "cloning" refers to human cloning—a propagative procedure that generates a new human being with a genome nearly or (in the future) fully identical to that of another person. For the most part, I will assume that the nuclear source is not an embryo or fetus, but a person, living or not, who has lived beyond infancy. I do not consider whether the somatic cell nuclei of long-dead persons can ever serve as nuclear sources, but occasionally assume so.

As is by now well understood, cloning by nuclear transplantation ("somatic cell nuclear transfer" or "SCNT") does not result in an exact genetic duplicate because of the presence of mitochondria in the ovum—unless it is the ovum source herself who is cloned. The use of the term "clone," and the terms "duplicate," "replicate," and "copy" (these three apply to genomes only) should thus not be understood literally. I will not always add these qualifications.

that viewing people as "itses" is the main reason why human cloning is such a horror. And the clones, the "itses," will suffer still more when they learn of these views, as they surely will. Protestations that "as long as you are here, we (however grudgingly) welcome you to the community of (true) persons," are unlikely to prevent all the hurts that will be inflicted. The clones, after all, will be told that they were born of an intrinsically immoral process, a process that cannot be made right even if, by chance, they thrive and flourish beyond anyone's hopes. No matter what, they should not exist: intrinsic evil cannot be outweighed by good results or works. (Think of the blighted lives of "illegitimate" or interracial children who have been told that they do not belong here.²) If you were told what the clones will be told. you would feel tainted, stained, polluted-indeed, you would see yourself as a contaminant despite assurances that you cannot be blamed for the evil that others have done. What else could you think after reading exemplars of analytical acuity such as "clones aren't fully human"? As Pence rightly puts it, "almost all the expected harm to the child stems from the predicted. prejudicial attitudes of other people to the [cloned] child. ('Would you want

² Cf. Ronald Smothers, Principal Causes Furor on Mixed-Race Couples, N.Y. TIMES, Mar. 16, 1994, at A16 ("Miss [Revonda] Bowen [a 16-year old African American girl who had a white boyfriend] said she had asked the principal, who knows her racial background, "Who am I supposed to go with [to the prom]?" She said he replied: "That's the problem. Your mom and dad should not have had you. You were a mistake."").

³ Jean Bethke Elshtain, *Ewegenics*, NEW REPUBLIC, Mar. 31, 1997, at 25, 25 [hereinafter Elshtain, *Ewegenics*]. The remark is restated in almost the same terms in Joan Bethke Elshtain, *To Clone or Not to Clone*, in CLONES AND CLONES 181, 181-82 (Martha C. Nussbaum & Cass R. Sunstein eds., 1998) [hereinafter Elshtain, *To Clone or Not to Clone*], so it was probably no accident. The context is:

But I had my own nightmare scenario: a society that clones human beings to serve as spare parts for the feeble. Because the cloned entities are not fully human, our moral queasiness is somewhat disarmed. We could then "harvest" organs to our heart's content—organs from human beings of every age, race and phenotype.

Elshtain, Ewegenics, supra, at 25.

If such clones could be kept alive but in almost total sensory deprivation, they might never develop a degree of self-consciousness and mental functioning sufficient to satisfy the current philosophical definitions of "person." (Perhaps this is what the author meant.) They would of course be "persons" under the law, and obviously members of the human species. But the suggestion in the text quotation seems to be that because they were cloned, they are "not fully human." "They are not created in the standard human mode," one can understand. "They are not fully (less than) human," however, is quite a leap, even under literary license. All that can be said for it is that it trades on an equivocation (not merely vagueness) in the meaning of "human." On one view, humans as we now know them are defined with respect to certain universal cultural and biological characteristics, including mode of procreation. On another view, mode of procreation and related cultural practices are not criteria of human personhood. Although one might say (very loosely) that a human infant kept in near-total sensory deprivation indefinitely would not be "truly" human or "truly" a person (is this what she meant?), such a scenario is quite different from human cloning. Even children long imprisoned in closets, or "wild children," are not generally viewed as nonhuman. In any case, the definitional enterprise is circular; the very issue concerns how we ought to view asexual reproduction. The likelihood of cramming clones into large, darkened medicine cabinets seems quite low and obviously can consistently be prohibited without prohibiting cloning itself.

to be a cloned child? Can you imagine being called a freak and having only one genetic parent?')"

If we have cloning at all, we surely must be able to gather information on it in some way in order to assess its effects both in individual cases and as a visible practice.⁵ One is reminded of a familiar research/observation paradox: We cannot confirm a hypothesis—whether about existence, a process, a causal relationship, a risk of harm, or whatever-without observation. But the act of observation may affect what is observed —and it is unlikely that observation will always be pursued in the least intrusive ways. Cloned offspring will be vetted and measured, and they will know it.

Human cloning will thus be terrible because we will make it terrible: we will fulfill our own prophecies. However the clones learn of their origins, the social characterization of these beginnings will come not from them, but from others. A clone may perceive her "differences" and, if not propagandized by others, perhaps see them as assets for certain purposes. But to come to believe that these differences reflect a loathsome process of person-creation that forever contaminates her requires outside assistance. It is how the clone learns, the way in which we tell her of her origins, and how we treat her generally that will determine her damage—not the unadorned fact that she is a clone.

⁴ GREGORY E. PENCE, WHO'S AFRAID OF HUMAN CLONING 138 (1998) (making in effect a "self-

fulfilling prophecy" argument in the quoted remarks).

**Compare Lori B. Andrews, The Current and Future Legal Status of Cloning, in CLONING HUMAN BEINGS: 2 REPORT AND RECOMMENDATIONS OF THE NATIONAL BIOETHICS ADVISORY COMMISSION, COMMISSIONED PAPERS F1 (1997).

If cloning of an entire individual does occur, there will be extensive scientific and public curiosity about the resulting individual. Consequently, the procedure may be performed as part of a research protocol that would involve observational, psychological and medical testing on the resulting individual to assess whether physical and psychological development are affected by the process of cloning. If the resulting individual is a competent adult, he or she would have a clear right to refuse to participate in any follow-up research. When the resulting individual is a minor child, however, questions arise regarding what types of research are permissible and who may consent to the child's participation in research.

^{. . .} Even those aspects of the research that do not require physical interventions (such as observation and questionnaires) might be harmful to the child by emphasizing his or her dissimilarity to other children. Forcing a clone child to become a research subject, even with his or her parents' consent, might be stigmatizing and emotionally disturbing to the child.

Id. at F50-53. See also her later related article, Lori B. Andrews, Is There a Right to Clone? Constitutional Challenges to Bans on Human Cloning, 11 HARV. J.L. & TECH. 643 (1998) [hereinafter Andrews, Is There a Right to Clone?].

Recall the abandonment of a proposed investigation of the XYY anomaly ("supermales" having an extra Y chromosome) partly on the ground that observations were expected to significantly alter the very developments being observed. See the discussion and references in MICHAEL H. SHAPIRO & ROY G. SPECE, Jr., BIOETHICS AND LAW: CASES, MATERIALS AND PROBLEMS 479-80 (1981).

Compare the exploitation of the Dionne quintuplets in Ontario, Canada. See Anthony DePalma, 3 Dionne Survivors Accept a \$2.8 Million Settlement, N.Y. TIMES, Mar. 7, 1998, at A4.

Yet, even if this self-fulfilling prophecy truly cannot be entirely avoided—it can at least be minimized—it remains an insufficient reason to ban human cloning across the board. In any event, there are many ways of observing, some far less intrusive than others and thus far less damaging to the observed.

B. THE PLANNED COMMENTARY

There are two major nodes in the cloning literature: a few articles a generation ago that first addressed the issue,⁸ and a rapidly expanding new commentary following the apparent cloning of an adult sheep.⁹ Although

⁹ See, e.g., CLONING HUMAN BEINGS: REPORT AND RECOMMENDATIONS OF THE NATIONAL BIOETHICS ADVISORY COMMISSION (1997) [hereinafter CLONING HUMAN BEINGS]. Readers should consult this report for an account of the work of Dr. Ian Wilmut and, more generally, for a description of the current technology of cloning (somatic cell nuclear transfer) and how it differs from techniques that are either severable parts of it, or parts of distinct processes. See also Cloning Symposium, 38 JURIMETRICS 1 (1997). For commentary on "twinning," a procedure that produces two or more persons with identical genomes from very early embryos rather than adult somatic cells, see Mona S. Amer, Breaking the Mold: Human Embryo Cloning and Its Implications for a Right to Individuality, 43 UCLA L. REV. 1659, 1675-76 (1996).

There was for a time some doubt about whether Dr. Wilmut actually succeeded in cloning an adult sheep from a mature somatic cell rather than a stem cell. He has conceded that he cannot be absolutely certain of what happened. For the exchange of letters between Norton D. Zinder and Dr. Ian Wilmut, see Dolly Confirmation, 279 SCIENCE 635 (1998). The initial article by Wilmut and others described the procedure and their personal reservations. See I. Wilmut et al., Viable Offspring Derived from Fetal and Adult Mammalian Cells, 385 NATURE 810 (1997), reprinted in CLONES AND CLONES, supra note 3, at 21 (minus figures and tables). As I understand it, few experts now doubt that Wilmut's procedure was true cloning; there have been many successful mammalian clonings since then. Although this does not prove Dolly is a true clone, there seems little point in wondering about it. See, e.g., Reuters, Researchers Clone Mouse from Male Adult Body Cells, N.Y. TIMES, June 1, 1999, at F2. See also Marjorie Miller, 5 Pigs Cloned: Transplants to Humans Touted, L.A. TIMES, Mar. 15, 2000, at A1.

For a report on the cloning of successive mouse generations and a discussion of uses of cloning in nonhuman mammals, see Ricki Lewis, *Mammalian Cloning Milestone: Mice from Mice,* SCIENTIST, Aug. 17, 1998, at 1 (reporting the reproduction of three generations of mouse clones).

Cloning applications can include genetic engineering or not. Without genetic manipulation, cloning could be used to assess environmental influences on production traits in livestock by holding genetics constant; transfer elite traits into herds faster than can be done with artificial insemination; and create genetically identical flocks and herds that produce human pharmaceuticals in their milk. And the greater efficiency of mouse cloning—2 to 3 percent compared to the 1 in 277 attempts it took to make Dolly, or the 1 in 500 tries it takes to make a "conventional" transgenic animal—puts the technology in the realm of the economically feasible, if losses occur at the early, in vitro stage, as they do in mice, says [James] Robl [University of Massachusetts].

⁸ The first extended and rigorous legal analysis of cloning is Francis C. Pizzulli, Note, Asexual Reproduction and Genetic Engineering: A Constitutional Assessment of the Technology of Cloning, 47 S. CAL. L. REV. 476 (1974), and it remains an important work. We clearly disagree on many important points, however. See also Leon R. Kass, Making Babies—the New Biology and the "Old" Morality, 26 PUB. INTEREST 18 (1972). For references to additional early writings, see the collection of articles in Symposium, Cloning Human Beings: Responding to the National Bioethics Advisory Commission's Report, HASTINGS CENTER REP., Sept.-Oct. 1997, at 6.

^{...} The repeated requests [at a press conference to discuss human cloning] elicited only a terse opinion from [Alan] Colman [PPL Therapeutics, Inc., a biotechnology firm] that cloning humans is immoral and should be banned....

we are still in the early years of the "Revived Fear of Cloning," it is not too soon to complain of the existing commentary's deficiencies and to identify and reinforce its strengths. I try to do this below using portions of the new literature for responsive analysis.

I want to be clear that although I am opposed to much of the opposition to cloning—the significant portion that is ill-reasoned, ill-supported, incoherent, and often mean-spirited—I am not calling for a Manhattan Project to perfect this form of person-creation. In this case, at least, opposing the opposition does not yield a strong affirmation. If most people do not go for cloning, I will not try to talk them into it. What I will do is try to explore the nature of their reservations, even if not fully apparent to them or to anyone else.

But even after probing the literature, my own reservations, and the reservations of others. I find no adequate reason to limit others from doing something I do not wish to do myself. Such a limitation should rest on a showing of risks—not necessarily certainties—that are, all things considered, too great to accept. Evaluating those risks, I will stress, is not much aided by unsupportable claims that human cloning is a wrong in itself, whatever its beneficial or baleful effects.

What follows (some of which generally applies to new technological and social forms of sexual reproduction) is a précis of the full Article.¹⁰

The idea of taking a person's cell, growing an embryo, and coaxing ES [embryonic stem] cells to yield replacement parts—just one possible cloning scenario—is disturbing. But the hope among researchers is that cloning will lead to an understanding of early development that will ultimately make it possible to bypass whole organisms, especially since adult tissue harbors stem cells too. Concludes Colman: "My fantasy vision is to investigate if it is possible to change one adult cell into another without the route through the

Id. at 7.

This article is not a comprehensive review of legal, moral, and policy issues concerning human and policy issues an cloning, but a word about the cloning literature is in order. It has addressed a number of major issues concerning cloning and linked technologies and collaborations. These include embryo creation and destruction; the use of gestators; the impact of perfecting techniques requiring only donor nuclei and no ova; the development of artificial wombs; access of single persons and gay persons to cloning services; the status of reproductive contracts; custody and lineage; tort and contract liability for untoward occurrences in the propagative process; the proper role of the state in overseeing the use of cloning technologies; inheritance rights of cloned offspring; the kinds of regulation of cloning that should be implemented, assuming we have cloning at all; problems with black and gray markets, particularly if cloning is banned or heavily regulated and remains expensive; rights of adults and children to prevent one's own genome from being cloned; genomes as property; contract enforcement; penal enforcement and the concomitant investigative rights of law enforcement agencies; and so on. See, e.g., IRA H. CARMEN, CLONING AND THE CONSTITUTION: AN INQUIRY INTO GOVERNMENTAL POLICYMAKING AND GENETIC EXPERIMENTATION (1985) [hereinafter CARMEN, CLONING AND THE CONSTITUTION]; CLONING (Paul A. Winters ed., 1998); HUMAN CLONING (James M. Humber & Robert F. Almeder eds., 1998); PENCE, supra note 4; JOHN A. ROBERTSON, CHILDREN OF CHOICE: FREEDOM AND THE NEW REPRODUCTIVE TECHNOLOGIES (1994) [hereinafter ROBERTSON, CHILDREN OF CHOICE]; Ira H. Carmen, Should Human Cloning Be Criminalized?, 13 J.L. & Pol. 745 (1997); Ronald Chester, To Be, Be, Be . . . Not Just to BE: Legal and Social Implications of Cloning for Human Reproduction, 49 FLA.

1. Common Attacks on Cloning; Remarks on Junk Commentary, Asexuality, Duplication, and the "Artificial" (Part II)

This Part reviews certain unwarranted but oft-repeated claims about cloning—for example, "cloned offspring are inherently nonautonomous." Such claims appear in both the early and current literature on cloning.

2. Cloning and Frameworks of Human Thought: Classification Anomalies; the Fully Determined (and Therefore Nonautonomous and Nonindividuated?) Person; New Uses for Old Processes (Part III)

Here, cloning is viewed as an activity that escapes established forms of thought that rest on basic-but eroding-assumptions about how life processes must proceed. 11 Cloning poses multiple classification anomalies in several dimensions of thought. A newborn clone is a child—but whose child? Who is (are) the "natural parent(s)" of a clone? Is it the gestator? Or the nuclear source of the clone, or the parents of the nuclear source?

L. REV. 303, 334-36 (1997) (discussing inheritance rights of cloned offspring); Jason T. Corsover, The Logical Next Step: An International Perspective on the Issues of Human Cloning and Genetic Technology, 4 ILSA J. INT'L & COMP. L. 697, 721 (1998) (discussing, among other things, different responses of various countries, and suggesting that Germany's "hard line approach towards the issues of cloning and genetic experimentation" may represent "an effort to exorcise past atrocities"); Katheryn D. Katz, The Clonal Child: Procreative Liberty and Asexual Reproduction, 8 ALB. L.J. Sci. & Tech. 1 (1997); John A. Robertson, Liberty, Identity, and Human Cloning, 76 Tex. L. Rev. 1371, 1423 (1998) [hereinafter Robertson, Liberty, Identity, and Human Cloning]; Symposium on Human Cloning: Legal, Social, and Moral Perspectives for the Twenty-First Century, 27 HOFSTRA L. REV. 473 (1999). For a review of the recent history of cloning, see GINA KOLATA, CLONE: THE ROAD TO DOLLY, AND THE PATH AHEAD (1998).

I also do not specifically address the justification of temporary moratoria, such as that enacted by California. See CAL. HEALTH & SAFETY CODE § 24185 (West 1997). For a review of proposed federal legislation as well as proposed and existing state legislation, see Andrews, Is There a Right to Clone?, supra note 5, at 658-61 & app. at 677-81. See also Paul Tully, Dollywood Is Not Just a Theme Park in Tennessee Anymore: Unwarranted Prohibitory Human Cloning Legislation and Policy Guidelines for a Regulatory Approach to Cloning, 31 JOHN MARSHALL L. REV. 1385, 1404-09 (1998).

Finally, I do not discuss anything other than cloning of human beings. I do not deal with the role of cloning cells in research not directed toward human cloning, except to say that such research may lead both to insights on human cloning and to biomedical advances generally, including the possibility of producing healthy human tissue and possibly organs for transplantation. See generally Marjorie Miller, Britain Urged to Legalize Cloning of Human Tissue, L.A. TIMES, Dec. 9, 1998, at AI (referring to Parkinson's disease, Alzheimer's disease and cancer in the subtitle—"The panel of experts supported Britain's existing ban on cloning babies—creating a human the way scientists created Dolly the sheepbut pointed to the life saving potential of cloning human tissue and even organs for therapeutic uses").

"See generally Michael H. Shapiro, Fragmenting and Reassembling the World: Of Flying

Squirrels, Augmented Persons, and Other Monsters, 51 OHIO ST. L.J. 331 (1990).

The terms "natural mother," "natural father," and "natural or adoptive parents" appear in the Uniform Parentage Act in various states, for example, CAL. FAM. CODE §§ 7600-7730 (West 1999). See generally Johnson v. Calvert, 851 P.2d 776 (Cal. 1993) (awarding custody of child in a gestational surrogacy case to genetic parents who were, under a prior agreement, intended to be the custodial parents; they were therefore recognized as "natural parents" under California's Uniform Parentage Act); In re Marriage of Buzzanca, 72 Cal. Rptr. 2d 280 (1998) (holding in a gestational surrogacy case that although the intended parents had no biological connection to the child, they were her lawful parents, despite an intervening separation during which the intended father renounced responsibility and the gestational mother did not claim legal parenthood).

What sort of relative is the nuclear source of the clone? Is it an earlier-born twin? Our cloned offspring has no unique standard antecedents—no person or couple who can with confidence be called parents in the ordinary (and pre-reflective) sense. We seem bereft here of our conceptual/normative guides. If a child born of the genetic lottery is an awesome, mysterious, unpredictable "gift,"13 what is a clone? Even if it is something less "mysterious," it is hardly a programmed android. Just why are "giftness," "mystery," and "awe" compromised by cloning, either fully or partially? (Why we favor these qualities involves a variety of moral concepts, including autonomy and privacy, and respect for personhood generally.).

The inevitable confusion caused by category-challenging events also helps explain why some commentators denounce human cloning as taboo, making unfortunate allusions to incest, cannibalism, and sodomy.

3. Must Cloning Be Justified Before It Is Permitted? (Part IV)

This Part discusses the common (but not universal) view that cloning must be "justified" before it is "permitted." Who indeed bears the burden of the harm-benefit analysis? This will require some discussion of both moral and legal default rules governing clashes between basic values and interests, such as communitarian claims pitted against personal liberty (though these may often coincide). We have a patchwork of rules, often in the form of rough presumptions, affecting different domains of human action. For most of our daily decisions, we presume that we should be able to do more or less as we wish unless we are given some good reason to refrain. Our choices concerning life work, mate selection, site of residence, and procreation are largely up to us, with exceptions not pertinent here.

But some view cloning as an utterly discrete form of human propagation not subject to the usual presumption against invasion of personal choice, even in a liberal regime. Being the anomaly that it is—and careful work is required to say just why it is anomalous—it carries little weight with cloning's opponents to say that it is not necessarily riskier than other reproductive transactions. Risk-benefit analysis is simply not material to this view.

¹³ Leon R. Kass, *The Wisdom of Repugnance*, NEW REPUBLIC, June 2, 1997, at 17, 22 (using the term "gift").

4. The Claim that Cloning Is Intrinsically ("Inherently"?)¹⁴ Wrong or Harmful; the Role of Moral Intuition and the Relevance of a Perception of Repugnance (Part V)

What does the claim of intrinsic wrong mean? It may be that certain precisely described *forms* of cloning or other reproductive maneuvers might be intrinsically wrong. However, the more precisely we describe the particular cloning process and its purposes, the more plausible it is to say that we are dealing with instrumental, rather than intrinsic wrongs. This is no small distinction. It is theoretically possible, of course, for instrumental harms to be *so likely* that one can indulge a pragmatic across-the-board assumption that there should be no cloning whatsoever. Perhaps this is what some mean by "intrinsically wrong" as applied to cloning. But the likeliest forms of cloning do not seem so overwhelmingly likely to generate harm that we should assimilate instrumental risks into intrinsic harm. Later, I raise the objection that cloned offspring are unlikely to be harmed in any sense because they have no alternative existence. (This is often called the "nonidentity" problem.)

The alarm over cloning is often expressed by saying it is "repugnant," "disgusting," "outrageous," and the like. (Some modest care is taken not to smear the living clone itself as a contaminant.) What is the role in moral and legal theory of such ascriptions, which are based directly on immediate emotional reactions? This is a familiar topic in moral and legal philosophy. At this point, all that needs to be said is that the very notion of "repugnance" is a partial function of prevailing frameworks of moral

[&]quot;Inherent" is a much-abused term that straddles ideas of logical connection, physical connection, and high probabilities linked to various contingent empirical circumstances, processes, or events. It is often usefully avoided. See 7 The Oxford English Dictionary 969 (2d ed. 1989) (defining "inherent" as "[e]xisting in something as a permanent attribute or quality; forming an element, esp. a characteristic or essential element of something; belonging to the intrinsic nature of that which is spoken of; indwelling, intrinsic, essential"). Alternatives such as "intrinsic" and "essential" may not improve things. "Inherently" and "intrinsically" are not synonymous, but it seems a bit fussy to try to distinguish them here. I am not claiming that there is no such thing as intrinsic wrong; I am attacking the view that cloning is an instance of it.

The "repugnance" family of terms has several meanings, all suggesting that they refer to relational concepts requiring, for completeness, phrases of the sort "Xing is repugnant to Professor Y." Of course, the repugnance relationship can hold between various sorts of entities, such as persons, processes, and moral and other theories. In a well worked out propositional system, the repugnance relation presumably would be reflected in the derivation of contradictory statements, or possibly an account of why someone, given his personally held theories and his makeup, would react negatively to the stimulus provided by the thought of human cloning. "Human cloning is repugnant to Jones" or "Human cloning is repugnant to all properly formed human moral systems" would be typical examples. In a way, this article concerns identifying the sorts of conflict that underlie a subjective sense of repugnance, and asking whether reflection of an appropriate sort justifies that reaction. See 13 THE OXFORD ENGLISH DICTIONARY, supra note 14, at 675-76 (defining "repugnance" as a "[c]ontradiction, inconsistency . . . strong dislike, distaste, antipathy, or aversion (to or against a thing)" and defining "repugnant" as "[d]istasteful or objectionable to one . . . [e]xciting distaste or aversion; offensive; loathsome; repulsive").

assessment—frameworks assaulted by the sort of category-straddling mentioned above.¹⁶ (This is not an endorsement of any form of moral relativism.)

The idea that cloning is intrinsically wrong also suggests anti-cloning claims couched in the language of rights. The right most often claimed is the right to a unique genome. What sort of right is this? Is it a right not to be born if one's genome has already been used? The right is said not to be breached by having a contemporaneously born twin. It is breached only by cloning of children already born, and probably by the birth of a delayed twin, formed at the embryonic stage but not gestated until much later. This breach is apparently viewed by its critics as being intrinsically evil and constituting an intrinsic harm to the cloned offspring.

Yet another branch of the claim that cloning is intrinsically wrong seems to rest on fears that the autonomy and individuality of clones will be severely impaired either by the very fact that their genomes are nonunique, or because the risk of being treated in certain autonomy and individualityreducing ways is overwhelming. Although the latter risk is more about instrumental than intrinsic wrongs, it is convenient to mention the instrumental-intrinsic contrast here. I will suggest that these claims of impaired individuality and independence reflect several missteps: conflating autonomy and individuality generally, and confusing individuality with genomic uniqueness; ascribing some dark power to the prior existence of a particular genome; assuming that full or near-full genetic determinism holds; and assuming that in many cases clones will be "tracked" or "used" in certain unacceptable ways. The claims concerning intrusive tracking and mere use are very different from those claiming intrinsic harms from genomic nonuniqueness, and possibly from the absence not only of sexual recombination, but also of sex. The true instrumental significance of genomic nonuniqueness rests on empirical issues, not on some impenetrable metaphysical harm deriving from "not having a genome you can call your own." (Of course, you can rightly call it your own!) The point to stress is that genomic nonuniqueness entails almost full predictability of the exact nature of the genome-to-be. This in turn may lead to excessive reliance on predictions of future traits and behavior, and thus to inappropriate parenting that trades heavily on the expected traits. If clonehood impairs the clone's fair chance at being considered a unique individual who is not to be intrusively tracked, it is

¹⁶ Feelings of repugnance (and related emotional states) may also rest in part on both genetically and nongenetically "hardwired" forms of reaction to various perceptions. However, this does not support the loose talk about our "given nature" that appears in the cloning literature and elsewhere. See, e.g., Kass, supra note 13, at 20.

because of others' misperceptions and exaggerated expectations. Whether these errors can be averted and to what degree is a critical issue.

5. Reduction of Human Value as an Instrumental Harm of Cloning (Part VI)

A good part of the overall analysis will require, as suggested, an investigation of possible instrumental harms to cloned offspring and to the surrounding communities. The idea of harm to a community embraces, among other things, alterations in community norms that at least partially define the community. Such norms often, though not universally, require that we view each other as separate persons automatically entitled to certain forms of treatment and respect. Many claim in effect that cloning, in given cases and as a practice, will reduce us from a community of persons to a collection of things. As things, we will only "bond" with each other (and possibly ourselves?) contingently, depending upon the uses to which we can put each other and upon our views of each other's utilitarian qualities. Perhaps we will no longer even see each other as "other": cloning will turn us into Star Trek's Borg (a large collective entity composed of former individuals who have been assimilated into it and which is bent on assimilating all other individuals). This will require a discussion of human "reduction," which in turn requires a discussion of "person perception," as understood by cognitive psychologists.

"Reduction" is a central idea underlying some claims of instrumental harms—human objectification, devaluation, mere use as means, dehumanization, marginalization, subordination, instrumentalization, deindividuation . . . and so on. Investigating the risk that persons will be reduced to their various uses seems to be the soundest approach in evaluating human cloning. Reduction, if it occurs, rests on several variables: the purposes, goals and motivations underlying any given use of cloning as a means of human propagation; the means sought to implement them; and the ways in which we *generally* perceive other persons. It will be useful to construct a rough typology of reasons for cloning, some of which may be more benign, and some less so, and to follow this with a discussion of modes of "person perception."

I will thus suggest that the idea of person perception, as used in cognitive psychology, is a useful lens for identifying and assessing various risks, but does not significantly aid the case against cloning, germ line

¹⁷ See, e.g., Dena S. Davis, What's Wrong with Cloning, 38 JURIMETRICS 83 (1997) (discussing motivational variations in cloning). See generally Michael H. Shapiro, Illicit Reasons and Means for Reproduction: On Excessive Choice and Categorical and Technological Imperatives, 47 HASTINGS L.J. 1081 (1996).

engineering, or any other process of assisted reproduction. If anything, it cuts the other way.

I will argue that partly because of the speculative nature of the reduction/objectification risk an anti-cloning argument based on loss of autonomy and individuality is greatly weakened. Again, I view these as instrumental harms. The idea of instrumental harms includes damage to basic rights and interests. Later, I will discuss the links between reduction, mere use, and objectification, and the relation of these links to the loss of human individuality, autonomy, and personhood.

I will then comment on the widely misunderstood and unjustly abused argument that, absent certain severe physical and mental anomalies, cloned offspring cannot be harmed simply by their existence. Nevertheless, society may rightly disapprove of certain reproductive processes on other grounds. Analysis here requires a separation of the cloned offspring's viewpoint from other viewpoints, including those of the custodial parents-to-be and the community.¹⁸

The idea of "genetic determinism" ("Genes-R-Us" as some have put it) is marbled through all of the topics just mentioned, and it warrants separate treatment in another work.

6. Does Opposition to Cloning Rest on an Assumption of Genetic Determinism—of the "Reduction" of Human Life to Its Underlying Genome? (Part VII)

Some critics of cloning seem to be mired in a paradox in which they simultaneously criticize and invoke the possibility of genetic determinism.

¹⁸ Cf. Philip G. Peters, Jr., Harming Future Persons: Obligations to the Children of Reproductive Technology, 8 S. CAL. INTERDISC. L.J. 375, 399 (1999).

When a reproductive choice results in the birth of a child who will suffer more, rather than one who will suffer less, the choice causes unnecessary harm. Although no individual child can claim to have been personally harmed, the class of children conceived as a result of these choices will suffer more than they need to have suffered.

Lawmakers who contemplate the regulation of existence-inducing behavior, such as cloning and surrogacy, should consider not only whether the children who owe their lives to that technology have lives worth living, but also whether happier, healthier children would be born if these technologies were used differently or not at all.

Id. (emphasis added).

Although I think this stand is consistent with the text argument, the italicized phrase is somewhat ambiguous because it suggests that individual members of the class are suffering more than they—those very persons—need to. But as Peters observes, none of the children are harmed simply by virtue of their existence as clones. They may be harmed by intrusive tracking, but this is a contingency. The point is that from the world's perspective, either there is a class of children that is suffering more than another class of children that might have been born, or if no other children would have been born, there is suffering observed by us that would not exist but for the cloning. We may be harmed by witnessing what we think is "avoidable" suffering—even though we understand it was unavoidable by those who are suffering, whose only other option was nonexistence.

They are generally not genetic determinists, and indeed object to cloning partly because such a practice reinforces a false belief in the fact and importance of genetic influences. On the other hand, they believe a clone's autonomy and individuality are (necessarily? definitionally? inherently? instrumentally?) compromised by cloning—and these risks seem to presuppose some form of strong genetic determinism. In fairness, however, they evidently do not view this as an all-or-nothing matter.

7. Cloning, Equality, and Democracy; Distribution and Social Stratification (Part VIII)

This account presupposes that cloning entails enhanced predictability about human traits and behavior, not detailed knowledge of a clone's life path. We then ask if a practice of cloning might affect values of equality and democracy. These inquiries overlap the preceding remarks on individuality and autonomy, but have different orientations. As I suggest later, equality and democracy are linked but cannot be conflated; their meanings are different.

But how might cloning bear on equality or democracy? Cloning is a form of genetic control: The use of a complete diploid nucleus (rather than a haploid gamete to be combined with another haploid gamete) assures that any resulting person will have a genome nearly identical to that of the nuclear source. The procedure thus erases much of the uncertainty of the "genetic lottery" with respect solely to the formation of genetically identical templates. How far the procedure affects ultimate behavior and traits in any given person is presently impossible to determine, except to say that genomic identity does not yield a "Book of Life."

The nuclear sources may well be chosen for what are viewed as superior traits, assumed to be at least partly attributable to the source's genome. Although these traits cannot be singled out, as in germ line engineering, they are there and will be selected for; one simply accepts the bad and the neutral with the good. One can thus view cloning as genetic enhancement of succeeding generations and is thus appropriately compared to germ line alteration of particular traits. ¹⁹ It also bears a more remote comparison to enhancement of a living person's traits.

¹⁹ See David Suzuki & Peter Knudtson, Genethics 202-03 (1989) (discussing mice genetically engineered to be heftier than average by insertion of a rat gene coding for growth hormone). See also Frederick Blattner, Biological Frontiers, 222 SCIENCE 719 (1983). Blattner discusses papers that:

describe the introduction of genetic material into animals and plants What has been accomplished will need to be refined since current methods do not achieve correct positioning or gene copy number with any reliability. Even so, dramatic results have been obtained in some cases, such as the production of larger than normal mice.

Id. at 720.

The main equality and democracy issue concerns the possibility that a practice of cloning will, in generally, solidify and worsen social stratification through the resulting distribution pattern of merit attributes and wealth-attracting resources, both mental/behavioral and physical. I will refer briefly to John Stuart Mill's discussion of plural voting based on an elector's relative competence.

8. Comments on Constitutional Issues (Part IX)

The constitutionality of legal regulation of human cloning is well worth several articles. I will briefly discuss the derivation of "fundamental liberty interests" in reproduction, without trying to reinvent constitutional interpretation.²⁰

Most other legal issues in "cloning law" will be left aside, including various constitutional and regulatory matters. A full-scale project in cloning law would have to address the nature of legal regimes for either banning or regulating human cloning—or for leaving people largely to their own devices and looking to markets, the common law, and existing family/parentage statutes for guidance and protection. Although this may seem an unacceptably minimalist position that even faithful libertarians should not endorse, the point is arguable. On the one hand, it seems plausible to enact legislation specifying how lineage and "natural parenthood" are to be understood in human cloning. These issues are particularly confusing. On the other hand, courts have often resolved parentage disputes—and other disputes within the bioethics domain without the benefit of *clear* statutory guidance, and will likely continue to do so, even while continuing to complain about having to so do. (The same confusing value conflicts that lead courts to protest having to make up the law also inhibit the legislative process.) The project would also have to consider whether the federal government should regulate human cloning, either in addition to or in place of state regulation, and if so, under what constitutional powers. If a system for "licensing" or screening of cloning applicants were set up, the project would also have to determine what its substantive and procedural terms should be. Examples of such terms include allowing only married couples as custodial parents; allowing only living adults as nuclear sources; restricting who can be a nuclear source for whom; investigating motivations for any given cloning project; determining how many times and over what span of time the same nuclear source may be used; whether disclosure of origin to clones and to others is required;

²⁰ Here, I note my agreement with both the conclusions and the core of the arguments concerning the federal criminalization of human cloning in John A. Robertson, *Wrongful Life, Federalism, and Procreative Liberty: A Critique of the NBAC Cloning Report*, 38 JURIMETRICS 69 (1997). Later, I will suggest some limited elaborations in the constitutional analysis of these issues.

whether enforcement should involve criminal penalties; the duties of scientific/technical personnel; the remedies for wrongdoing; and how "third party brokers," if any, are to be dealt with.²¹

Finally, we have to acknowledge the impact of legal regulation, whatever its form, on shaping public attitudes and beliefs—and in turn revising the law and continuing the cycle.

C. If CLONING IS PROCREATION, WHO IS DOING THE PROCREATING?

In ordinary discourse, if one has procreated, then one is a biological parent—a father or mother, right? But even ordinary discourse now recognizes some difficulties here. For example, has a gestational surrogate procreated at all? Or is it just the ovum and sperm sources who have procreated, whether they ultimately become social as opposed to genetic parents?

With cloning (which I assume for now is a form of procreation), the procreator is not necessarily best described *biologically* as a father or a mother. The nuclear source, for example, might be the procreator, and we might indeed call her the mother. But there is considerable discomfort in doing so: historically, our children do not carry all of our individual sets of genes. Our clone is in a sense too closely related to us to be our child—rather than, say, our delayed twin. If the intended rearers have designated the nuclear source, they are plainly among the planners of the clone's creation. Have they procreated? Have they all procreated? Since the initiators in this case have no biological connection to the clone, except possibly as gestator, it seems implausible to see them as procreators.

Some commentators may not view this as a minor difficulty of description that we will get used to. For them, it is symptomatic of the evils of cloning: it distorts biological lineage and thus social lineage, and the impossibility of accurately describing the resulting relationships demonstrates that it should not be done. Although as an argument this account fails, it suggests points that require attention as we move on.

D. A NOTE ON DISCLOSURE OF CLONEHOOD

Disclosure raises issues that I merely mention here. It is unlikely that the clone will see herself as an iterated automaton, assuming both nondisclosure and that the clone does not figure things out herself. However, it is still possible that she will be more intrusively tracked than the average non-clone and so, without knowing it, will be constrained by a

For comments on regulation vel non, see generally Judith F. Daar, Regulating Reproductive Technologies: Panacea or Paper Tiger?, 34 Hous. L. Rev. 609, 656-64 (1997), which argues that new legislative regulation is not needed to manage assisted reproductive technologies.

life-path planned for her by others. Some may view this no-knowledge situation as intrinsically wrong. Whether the consequences are harmful depends not only on the particular facts, but also on contested notions of harm that in turn are linked to difficult conceptual issues, particularly those concerning autonomy and its interior aspects, such as authenticity and self-direction. In any case, the possibility of a perfectly satisfactory life is obvious, and the notion of intrinsic harm is pretty thin here. If no disclosure is made but the clone learns of her origins, whether by accident (someone's inadvertent disclosure, for example) or by inference ("I sure do look like our family friend Madonna"), the outcomes are again unpredictable; plausible scenarios can be worked out by novelists and screenwriters. I am assuming in this Article that disclosure is made at some time during childhood, or possibly adolescence.

II. COMMON ATTACKS ON CLONING; REMARKS ON JUNK COMMENTARY, ASEXUALITY, DUPLICATION, AND THE "ARTIFICIAL"

A. Prologue: Some Anti-Cloning Themes

Some of the more irritating claims about human cloning have the virtue of reflecting errors—some quite amazing—that when analyzed help illuminate some contested matters. These claims interlock, but require separate comment because they reflect different aspects of the overall debate.

Five linked themes emerge when inspecting the attacks on cloning:

- 1. In general, human reproduction—and perhaps human personhood itself²²—is a function of the *process* of one's creation as well as of one's resulting biological *structure* and *function*. To take an extreme example, Eve was a human person, but she was not the result of a human procreational process. (If she was, the process was certainly "assisted" in a major way.)
- 2. A cloned offspring's genome is a *duplicate* of an earlier one (first-born twins aside).
- 3. An asexual process necessarily effects this duplication.

²² In philosophical and literary discourse, a being may be a person without being human—a frequent theme in imaginative literature, and one that will be encountered whenever germ line genetic engineering is involved, particularly if transgenic methods are used. For present purposes, however, "human" and "person" will be used interchangeably.

- 4. This asexual process necessarily involves the assembling or manufacture of an artifact.
- 5. Because of the nature of this assembly and the power of genetic mechanisms, and because of our inevitable responses to the availability of this cloning process—we will formulate plans and implement them—the resulting being has an abnormally predictable, semi-determined, and thus less-than-open future.

It is unclear which of these aspects of cloning outrank which others in abhorrence. A child produced by in vitro fertilization ("IVF") of a woman's ovum by her mate's sperm is "manufactured" in a thin sense, but she is not a genetic duplicate and the process is biologically sexual. Although some observers have expressed reservations about IVF, few people view it with the complete disdain that has greeted cloning. It is also unclear whether cloning's opponents view the "duplicateness" of one's genome—entailing (as they see it) a relatively "closed" future—as more problematic than the heavily technologized, artifactual, and asexual mechanism required for such genomic replication.

In any case, the recitation of these odious aspects of cloning is a precursor to some further themes. First, the combination of factors (1) through (5) result in, or constitute (a) a (partial?) loss of *autonomy* and of *individuality*—losses occasioned by one's status as a genetic duplicate; (b) a connected *descent* or *reduction* of the offspring from personhood to thinghood caused by these losses; and as a result; (c) a clone being viewed as a manufactured object with a largely *closed future*, rather than a natural person open to infinite possibilities. Second, given all the above, our existing conceptual system based on sexual reproduction cannot readily assimilate human cloning, and leaves us unable to confidently identify the natural parents of a cloned offspring and to decide how she should be raised.

Here, then, are some of the more popular attacks on human cloning that reveal these themes.

B. REPLICATION

1. "Cloning Is Replication, Not Reproduction, and Represents a Difference in Kind, Not in Degree in the Way Humans Continue the Species."²³

a. Replication of what?

This is an illuminating claim. Consider first the meaning of "replication," and the question of exactly *what* is being replicated, if anything.²⁴ We do know something about what is *not* being replicated: A person is not being replicated, nor her self or her consciousness, nor her memories, nor her life.

To illustrate the point: I heard the following remark at a meeting: "Why would I want to be cloned? My life hasn't been so good, and it isn't so good right now." This odd comment seems to presuppose some sort of

²³ George J. Annas, Human Cloning: Should the United States Legislate Against It?, A.B.A. J., May, 1997, at 80, 80 [hereinafter Annas, Human Cloning: Should the United States Legislate Against It?] (capitalization altered). This claim is repeated several times in a later, more extensive article. See George J. Annas, Human Cloning: A Choice or an Echo, 23 DAYTON L. REV. 247, 248, 254 (1998) [hereinafter Annas, Human Cloning: A Choice or an Echo]. See also Kimberley M. Jackson, Well, Hello Dolly! The Advent of Cloning Legislation and Its Constitutional Implications, 52 SMU L. REV. 283, 298 (1999) (describing arguments concerning "copying" persons). Compare Sophia Kolehmainen, Human Cloning: Brave New Mistake, 27 HOFSTRA L. REV. 557, 563-64 (1999) ("Technically, cloning is a replication of that which already exists."), with id. at 561 ("Though it is not possible to produce exact copies of animals or people, inherent in cloning is the desire to do so.").

The term "replicate" has a variety of meanings, some of which coincide with "duplicate" ("to copy exactly"), see 13 The Oxford English Dictionary, supra note 14, at 647, and others of which might properly apply either to genetic material or to a full organism, thus coinciding with "reproduction"—at least in one sense of reproduction. See id. ("Of genetic material or a living organism: to reproduce or give rise to a copy of (itself)... Arthropods survive, replicate, live off their environment."). Because of the obvious differences between replicating ("copying") DNA and creating a new person with a replicated genome, the distinction drawn between replication and reproduction or procreation is only marginally serviceable. At best, it tells us what we already know: that a genetic template is copied—not a person. At worst, it encourages equivocation or a shifting of ground because of its imprecision; it does not, standing alone, distinguish between copying genomes and copying persons—and the latter is clearly not what is happening when humans are cloned.

As I argue in the text, there is also no adequate reason to exclude cloning from the domains of "human procreation" or "reproduction" (terms that in our context seem to be synonymous), whether in daily discourse or constitutionese. "Procreate" means, among other things, "[t]o beget, engender, generate (offspring)." 12 THE OXFORD ENGLISH DICTIONARY, supra note 14, at 554. And one meaning of "reproduction" is "[t]he process of producing new individuals of the same species by some form of generation; the generative production of new animal or vegetable organisms by or from existing ones." 13 THE OXFORD ENGLISH DICTIONARY, supra note 14, at 669. Perhaps it is time to pick another term. To avoid question begging, I will sometimes use the phrases "person-creation" or "person-production." "Propagate" will not work. It means "[t]o breed; to produce offspring; to reproduce itself, i.e. its kind." 12 THE OXFORD ENGLISH DICTIONARY, supra note 14, at 633.

²⁵ Personal communication—remarks ascribed to an elderly man by his Rabbi, who appeared with me on a panel, A Discourse: Jewish Perspectives on Modern Medical Dilemmas for Hadassah Southern California, Metro Area (Mar. 12, 1997). (The quotation is not exact.) Some parallel is offered by the movie Multiplicity (Columbia Pictures 1996), involving rapid reproduction of genetic duplicates of a living person, who then occupy different portions of his niche.

continuation of the self through cloning. But one does not "continue oneself" by cloning. One does not achieve true immortality, because one's consciousness is not continued in another body, even though that body is genomically—but not otherwise—identical to its predecessors.²⁶

Cloning is thus not the equivalent of Commander William Riker's beaming accident in Star Trek: The Next Generation, "Second Chances," in which he was "copied" while being transported in molecular form.²⁷ The result was two, identical, full-grown Rikers, separately conscious, each with exactly the same genetic and experiential pedigree at the instant of Riker's creation—but who differed thereafter because of different life experiences.²⁸

So, "replication" (or duplication or copying) applies *only* to the DNA arranged in a particular genome. We would otherwise have to believe that complete genetic determinism holds, and perhaps that the selfsame consciousness can inhabit two or more bodies simultaneously, or at least be revived from a dead genomic precursor and implanted in a new host. A nuclear source and her cloned offspring are in no sense "the same entity" with a single consciousness, nor duplicate persons in any sense.

What must be analyzed, then, is the significance of "replicating" a genetic template—the sequence of base pairs in our genome, arranged in a particular way within our paired chromosomes.²⁹ While genetics counts for a lot, it fails to account for a lot, and it is well known that identical twins separated at birth display important dissimilarities as well as striking

The notion of continued or copied identity also does not sit well with facts about the material world. Consider the actual fine structures and processes of a human body—for example, the development of neuronal connections; the replication of cells; the micro- and macro-patterns of various systems, from fingerprints to blood vessels; and the molecular arrangements and motions. These are hugely various and cannot be determined simply by the starting point offered by the genome. Any basic text on brain development will emphasize its enormous plasticity, especially in early years, and the unpredictable variation in the development of neuronal connections. See Tim Beardsley, Getting Wired: New Observations May Show How Neurons Form Connections, SCI. AM., June, 1999, at 24 ("As brains grow and learn, connections called synapses form between the billions of brain cells, or neurons, that process information."). See generally Leon Eisenberg, Would Cloned Humans Really Be Like Sheep?, 340 NEW ENG. J. MED. 471, 473-74 (1999) (discussing environmental impacts on the brain, and stating that "which of the overabundant neurons [involved in the development of vision] live and which die is determined by the amount and consistency of the stimulation they receive. Interaction between organism and environment leads to patterned neuronal activity that determines which synapses will persist.").

persist.").

27 Star Trek: The Next Generation: Second Chances (Paramount Pictures television broadcast, May 22, 1993).

²⁸ See id.

As is now well known, the Dolly method of cloning—nuclear transplantation of a diploid nucleus from an adult body cell into an enucleated ovum—does not necessarily produce an exact genomic duplicate because of the presence of mitochondria in the cytoplasm of the egg. If the ovum source cloned herself, however, the genetic template—barring mishaps—would be identical. Also, if we ever develop the technology to produce a new person from an adult diploid nucleus without having to insert it in an ovum, genetic identity could be achieved.

similarities. Even when they are not separated at birth, they will display significant differences.

b. Replication versus procreation: personhood; process; individuation.

One portion of Professor Annas's remark quoted above³⁰ requires extended commentary: the claim that cloning is in kind and degree different from all other forms of human person-creation. One intuitively thinks that it surely is *quite* different: there is no sex, coital or biological; there is therefore genomic duplication rather than genetic recombination, using some medium-to-high technology; and one result is some measure of enhanced predictability of a clone' traits.

What else is relevantly different or the same? As my contracts professor, Malcolm Sharp, often said, "Everything is similar to everything else and everything is different from everything else." What are we to look for in answering this question about resemblances and differences—as opposed to simply letting ourselves drift in a sea of random perceptions? To speak about differences suggests not just bare perceptions; it requires a framework for judging differences and similarities. Even "bare perceptions" are functions of what we are accustomed to looking for or finding. There are those who cannot distinguish sounds that others distinguish because there is no need in the former's language to look for and assimilate those sounds. Commentary on differences between this or that often bespeaks a specific knowledge of what to look for, and thus, for what is material. But how do we know what is material? To put in advance a question raised later: Why does anything other than creation of a new person by human agency count for anything in the definition of "human procreation"?

I suggest that the asserted contrast between replication and reproduction is implausible. There are two possible reasons why person-creation via cloning might not be human procreation: The entity born is not a human person—or indeed a person of any sort; and even if it is a human person, it was not created through a "human procreational process."

i. Do we get a person?

Few make the witless claim that cloning cannot be human reproduction because the cloned offspring is not a human person. After a person has been cloned, a person exists who did not exist before. She is new, even if her genome is not. Indeed, the opponents of cloning seem to insist that the clone is indeed a human person, but complain that the clone's genome is

³⁹ See supra Part II.B.1.

making a second (or nth) trip. If someone did claim that the clone is the same person as the nuclear source, she would of course be committed to the personhood of the clone: If X (the new entity) is "identical" to Y (the previous person with the same genome), and Y is indeed a person, then X is a person. But I think few would seriously urge that an entity can fail to be a human person solely because she bears a "used genome."

ii. $Process \rightarrow product$?

In effect, the cloning opposition's response is that the appearance of a new person is a necessary but not a sufficient condition for human reproduction: certain aspects of the reproductive *process* may be defining elements, and human reproduction by definition requires sexual recombination of gametes, if not actual sex. This definitional requirement is apparently thought to hold for both ordinary language and constitutional law. (Despite the obvious differences between these two discourses, ordinary meaning may be evidence of constitutional meaning under interpretive theories resting on traditional conduct, history, and past or present lexical meaning.)

But this definitional claim is not clearly correct for either ordinary or constitutional discourse. The flat conclusion that cloning is replication and not reproduction is misleading because it fails to probe the conceptual issue of product versus process as definitional elements. It is asserted with no more defense than general references to the supposed foundations of humanness, which themselves are contested. Still, the implicit view held is that product cannot be separated from process: The outcome, and perhaps the resulting person herself, are indelibly tainted by how they came to be.

I suggest that the dominating point is whether some human biological process, however directed by humans, has resulted in the creation of a person who simply was not there before, however closely she resembles someone else, living or dead. This is meant to exclude, say, the creation of Eve from Adam's rib—Adam is clearly not Eve's father or nuclear source—or the assembling of a complex android, such as Data (another inhabitant of Star Trek: The Next Generation). The former is the reproduction of a human person—but not "human procreation" in the sense that it is human-directed. The same holds for Adam himself, who was created, but not by human procreation—or perhaps any form of "procreation." (As for Data, in one episode he assembles his "daughter," another android, bearing many of his programs. Is this an example of android procreation?)

³¹ See Star Trek: The Next Generation: The Offspring (Paramount Pictures television broadcast, Mar. 10, 1990).

Why is the replication versus procreation/reproduction issue important? It seems like a mere verbal dispute—a question of labeling, as in, "Is this to be called a 'lorry' or a 'truck'?"

But it is not. It is a conceptual dispute resting on competing criterial sets, not on whether we speak American English or English English, and it goes to whether cloning is reproduction within the meaning of the implied fundamental liberty interest in reproductive autonomy.

If so, what are those who argue that replication is not reproduction going on about? Why does the process used in creating the new kid on the block defeat the characterization, "this is a case of human reproduction"? If having a used genome—which entails the absence of sexual recombination—is not fatal to the subsequent genome-holder's personhood and humanity, what is the problem?

The opposition's point (in most cases) is not that the new entity has no separate individual identity or consciousness. The idea seems to be that the *n*th iteration of the genome will be a person lacking in "individuality" because of her genetically identical predecessors. This is because that individual is so much like a prior individual or individuals—and is so perceived by others and perhaps by herself—that under the circumstances, neither she nor anyone else can consider herself unique and individuated. She may thus be raised intrusively in fulfillment of someone's genetic plan, further compromising her individuality. But this is a pretty thin reason for saying that what has occurred is replication as opposed to human reproduction. It is simply argument by labeling. A dispute about how to raise a clone does not alter her personhood (although the plan may disrespect it) or her status as someone born of human procreation.

Of course, to say that the asexual creation of a person is procreation is not to say that we will describe the resulting biological relationship in the same way as sexual procreation. When we have children in the traditional way, for example, we describe them as "our children." Our first thought about one's cloned offspring, however, may not be to describe her in that way. Is a well-informed nuclear source likely to say of her clone, "there goes my daughter"? Much depends on the circumstances. Despite its conceptual and empirical ineptness, we may at first be inclined to say, "there goes another me" rather than "there is my child." This may seem plausible because our clone is far more like us genetically than our regular children would be—she is virtually identical. Our children are generally far from being seen as us (although something like this may happen in particular cases). And our clone is too much like us to be considered our child. On this view, our children are those who have exactly half our genes—not none, and not all.

Nevertheless, although asexual procreation is different, it is still procreation. There is no contradiction in saying that we have procreated our delayed twins, but that in doing so we have not procreated our *genetic* children. If the nuclear source is a rearing parent, then of course it is proper to say that she is the child's mother in social and legal terms, despite the exact identity of the two genomes—a situation inconsistent with traditional parenthood.

An advance note on constitutional issues: As we saw, the supposed contrast between replication and procreation is made in part to avoid characterization of cloning as a fundamental liberty interest under the Fifth and Fourteenth Amendments, thereby drawing some form of heightened scrutiny.³² The interpretive difficulty lies partly in fixing the proper degree of abstraction or specificity—and this returns us to our product/process difficulty. Is counting something as reproduction within the meaning of the Constitution simply a matter of asking whether at t_2 someone is there who was not there at t_1 , or must we also inquire into certain essential aspects of the process?

The more important question for constitutional purposes—and for our quandaries about description and moral analysis—concerns how "far" the supposed case of reproduction is from "standard case" reproductive processes, which involve sexual recombination and genetic uniqueness of offspring.³³ What "far" might mean here is hard to say, but it is not a matter of simple, linear "distance." The obvious outcome of making these near/far distinctions is a logic of liberty interests in which any given, described liberty interest may come in different strengths—or is simply broken apart into discrete, if affiliated, liberty interests. Either way, the supposed liberty interest is internally fragmented or differentiated, not unitary. We might want to say that different ways of pursuing procreational liberty receive

³² It is not always clear what such heightened scrutiny amounts to in any given case. The U.S. Supreme Court, in the context of recognizing "implied" individual constitutional rights, has recently deemphasized the "impair-a-fundamental-right/draw strict-scrutiny" formulation (i.e., the "compelling interest" test). It now speaks more about "fundamental liberty interests" or "liberty interests" and, if it specifies a "standard of review" at all, it is articulated in terms that seem less demanding than strict scrutiny. See, e.g., Cruzan v. Director, Mo. Dep't of Health, 497 U.S. 261 (1990) (acknowledging a liberty interest in refusing medical treatment, and assuming arguendo that there is also a liberty interest in refusing nutrition and hydration (whether classified as medical or nonmedical care), but specifying no standard of review); Planned Parenthood v. Casey, 510 U.S. 1309 (1994) (reaffirming a liberty interest in deciding whether to abort and apparently identifying the idea of "undue burden" on the liberty interest as the standard of review). I return to this in Part IX, infra.

³³ The phrase "standard case" is meant to cover somewhat more than the coital union of a man and woman married to each other. For present purposes, it refers to *biologically* sexual reproduction, with or without coitus, by a man and woman in a stable relationship, single or married. The key factor is sexual recombination of genes, however accomplished. Thus, artificial insemination (with the male partner as donor) and the use of IVF are still within the standard case.

different degrees of constitutional protection—although the lowest-rated might still get some form of heightened scrutiny.

2. Cloning—whether It Is Reproduction or Not—Represents a "Difference in Kind" Concerning the Way in Which We Continue the Species

First, what is the significance and the operational effect of acknowledging a "difference in kind"? At the least, the ascription is designed to make us alter our moral and legal appraisals of whatever is differentiated from another entity or process whose classification is not at issue. If X is different in kind from Y, then, X and Y are likely to be subject to different descriptions, rules, standards, and principles.

So, is asexual reproduction different in kind from regular reproduction—including assisted reproduction in a biologically sexual process? What does the question *mean*? If the criteria for marking "differences in kind" among different reproductive mechanisms are seriously contested, there is no simple way to respond. What is the standard "kind" from which we are tracing a "difference"? Does the difference rest on the importance of sexual recombination in human evolution? Is it a matter of how we traditionally think?³⁴

I suppose that most observers would acknowledge that there are important differences between the two forms of propagation, given both the evolutionary and social histories of sexual recombination. But even this deceptively simple "descriptive" point about acknowledging differences presupposes concurrence on certain issues with both empirical and evaluative components: the social *importance* of the sexual/asexual difference, and its impact on evolution (we obviously would not be here were it not for the development of sexual reproduction). I suppose that most observers would acknowledge that there are important differences, given both the evolutionary and social histories of sexual recombination. But even this deceptively simple "descriptive" point about acknowledging differences presupposes concurrence on issues with both empirical and evaluative components: the social *importance* of the sexual/asexual difference, as well as its impact on evolution (we obviously would not be here were it not for the development of sexual reproduction).

Characterizing the nature of this evaluation is not easy. Although not all evaluation is moral, evaluating the importance of sexual recombination to human life seems to require both empirical and moral considerations. What are the criteria for "importance" here? Our present physiological structure? The nature of our social organizations? The role of sexual recombination in the precise course of evolution?

³⁴ This question recurs in Part IX, *infra*, raising some matters of constitutional interpretation.

Simply asserting a difference in kind cannot be a starting premise. It is partly a moral conclusion, resting on value- and culture-laden views of the reproductive process. It is far from being an objectively or intersubjectively verifiable fact. Moreover, whether whatever differences we find *should make a difference* in matters of law, policy, and moral evaluation is precisely what is at issue here.

If we speak of a difference in kind, then, we must not only specify what the difference is between, but whether it is a morally relevant difference, what it is morally relevant to, and why. If X (reproduction via diploid nucleus in an enucleated ovum) and Y (reproduction via haploid gamete union) are different in kind from an evolutionary standpoint, does this difference carry through to some other difference in kind?—say, "the entity arising from process X is less a person/individual (or perhaps not a human person at all) than the Y-reproduced entity." It is hard to see a difference in kind between clones and others in their basic humaniform personhood, as a matter of pure description. I suggest that the "relational" difference—clones have an exact genetic precedent and "regulars" do not—cannot alter their equal threshold personhood in any plausible sense.

There is thus no *intrinsic* difference between persons born of sexual reproduction and those born of an asexual process. If by wild chance a particular person had exactly the same genome as someone unknown who lived and died ages ago, genetic nonuniqueness would be of little or no concern. It would not even be of much concern if both parties lived at the same time, although stories about "doubles" have long terrified and otherwise entertained people.

Instead, the distinctions that may mark notable differences among reproductive and nurturing processes lie in factual contingencies, many of which are at least partly under our control: mating processes; genetic and medical screening; skill in selecting and using technologies; choice of surrogates; rearing practices; communications with the cloned offspring about her heritage; how others interact with her generally; the formation and effects of her self-images; and so on.

There is thus nothing that compels us to view sexual reproduction (coital or noncoital) and nonuniqueness of one's genome as a defining or an

This would hold even if there were ways of determining whether a given person was a cloned offspring—by some mark or imprint of asexual origins. Other than trying to determine if there is a gap between cell age and chronological age, I do not know if this is even a possibility. See Gina Kolata, Cloned Sheep Showing Signs of Old Cells, Report Says, N.Y. TIMES, May 27, 1999, at A19 (discussing the investigation of structures called "telomeres" as indicators of cell age). Cf. Lee M. Silver & Susan Remis Silver, Confused Heritage and the Absurdity of Genetic Ownership, 11 HARV. J.L. & TECH. 593, 603 (1998) (noting that "cloned children will be indistinguishable from all other children by any biological test or criteria"). These authors, however, were not considering the alteration of telomeres over time.

29

inherent characteristic of human reproduction, whatever the social and cultural context is. Such "essentialism" generally proves too much: that every ingrained social institution or way of doing things (especially pretechnology) must be part of the definition of what it is to be human. But the very idea of "what it is to be human" is in dispute. Human cloning's opponents are trying to weld one way of doing things (the "natural" way) into the very meaning of "human" and "human reproduction." I do not say that all bets are off and that human conduct is infinitely—and rightly adjustable so that we can do whatever we want in modifying or propagating ourselves. But ingrained behaviors, derived from biology and reinforced by social institutions, are not necessarily formal criteria for humanity. (Think about the ingrained behavior of slaughtering your enemies to the last man, woman, and child. Of course, we do not do this anymore, so it cannot be definitional, right?) Recognizing or rejecting a contingent social practice as part of humanity's essence requires far more justification than conclusory remarks about what it means to be human. The new person, after all, has a complete genome of precisely the sort that is produced by the union of haploid gametes. (Assuming it is possible that differences arise, there is no reason now to think them significant.) The new person's genome is thus, in this respect, exactly like all other human genomes, whatever the process of creation that preceded it. How she fits in to the prevailing culture is a contingency, and how this culture receives her will heavily affect her fate. And as I said, we are as a group in charge of this reception.

Of course, it is certain that sexual and asexual human reproduction will be associated with different sets of emotional processes affecting the participants and observers, and with pressures for particular forms of nurturing. To this extent, sexual and asexual reproduction are different. But cloning occurs through implanting an embryo that is indistinguishable from the sort of embryo from which all humans develop—an embryo that, like any embryo, must be gestated, whether in a natural or artificial womb.

C. GENETIC DETERMINISM: A CLONE IS "SADDLED WITH A GENOTYPE THAT HAS ALREADY LIVED" 36

Do genotypes live lives? Sure, in some strained sense that works better for evolutionary theory than for ordinary discourse. It is better said that persons live lives. A cloned offspring is in no sense saddled with a *life* that has already been lived. Perhaps she will have an omnipresent custodian—possibly the nuclear source herself—who hovers over her, intrusively tracking her development in ways going beyond legitimate parental nurture. But this is a *contingency*. Having a genome that has already been through

³⁵ The phrase appears both in Pizzulli, *supra* note 8, at 509, and in Kass, *supra* note 13, at 22 (capitalization altered).

the mill does not warrant our saying that the offspring is "saddled" with it in some deterministic or otherwise burdensome way. Arranging to "write out" the same genome in another person is utterly different from Fate writing out one's future history. A predetermined genome simply does not entail predestination or anything close to it.

D. INHERENT EVIL: "CLONING OF HUMANS [IS] INHERENTLY EVIL, A MORALLY UNJUSTIFIABLE INTRUSION INTO HUMAN LIFE" 37

This is sputtering. There are *no* plausible secular arguments, consequentialist or nonconsequentialist, which establish the "inherent" evil of cloning. Nor is there any coherent account of how cloning "intru[des] into human life."³⁸

As for religious arguments, there has been no universal condemnation of cloning by clergy, or theologians. I will leave it at that. I do not deny the secular relevance of religious arguments, even *qua* religious arguments, rather than as exsanguinated husks presumably suitable for "public reason." Secular arguments may reflect long-standing attitudes and behaviors of many persons acting from at least partly religious inspirations, and such historical truths about our conduct inform constitutional arguments from tradition.³⁹

But opponents of human cloning are not more likely to be afflicted with moral hallucinations than are its supporters or tolerators. *Something* underlies the persistent claims of inherent evil. Those who say that human cloning is inherently evil may be using the term "inherent" in at least two

³⁷ Kenneth L. Woodward, *Today the Sheep*, Newsweek, March 10, 1997, at 60, 60. Recall the immediately preceding discussion on differences "in kind" between asexual and sexual reproduction. *See supra* Part II.B.2. The "in-kind" versus "not-in-kind" distinction is linked to the "inherently evil" versus "contingently evil" distinction.

³⁸ Woodward, supra note 37, at 60.

³⁹ In resting constitutional analysis on tradition, there is some risk of tension with the First Amendment's Establishment Clause, depending on which practices are counted as relevant. Nevertheless, I will not try to distinguish religious from nonreligious arguments—which may be impossible in some situations. Religious and secular arguments often run in parallel and interact with each other, a topic worth pursuing in the appropriate forum. In the meantime, note the remark, "'Only God can do that,' say the religious Luddites. 'Only Nature can do that,' cry the secular Luddites," Michael Shermer, If Only God Can Do It, No More Triple Bypasses, L.A. TIMES, Dec. 28, 1998, at B9. In fairness to Luddites of any persuasion, however, triple bypasses are not on all fours with the transformation of human reproduction by cloning.

For a discussion of religious views on cloning, see generally CLONING HUMAN BEINGS, supra note 9, at 39-58; Michael Broyde, Cloning People: A Jewish Law Analysis of the Issues, 30 CONN. L. REV. 503, 519 n.58, 534 (1998); Joshua H. Lipschutz, To Clone or Not to Clone—a Jewish Perspective, 25 J. Med. Ethics 105, 107 (1999); Susan Cohen, A House Divided, Wash. Post, Oct. 12, 1997, (Magazine), at W12; Jeffrey Weiss, Religions Aren't Unanimous on Cloning, Dallas Morning News, Mar. 1, 1997, at 1G. For a collection of views, see Human Cloning: Religious Responses (Ronald Cole-Turner ed., 1997). For a discussion of religious argumentation in the domain of "public reason," see Leslie Griffin, Legal Ethics: The Relevance of Religion to a Lawyer's Work, 66 Fordham L. Rev. 1253 (1998).

ways. They may be repulsed by what seems to them bizarre—and any practice that straddles or escapes normatively important boundaries (for example, in matters of human kinship) might be so viewed. As I said, this is not surprising when events escape our received modes of thought. Even the introduction of the waltz was met with moral denunciation (and rightly so).

Opponents of cloning may also think that serious harms from its practice are all but inevitable. If so, protesting against the claim that cloning is inherently evil is a cavil, given the extreme empirical improbability that everything might turn out well.

Although the issue will come up again later, let's briefly test out the idea that it is *intrinsically* wrong to use a used genome to form a new person, who thus has a "genetic precedent." Suppose a cloned offspring is never told of his genetic antecedent(s). Suppose also that his custodial parents are unaware of this and adopt him in the usual manner. All of them live in bliss for the rest of their lives, and the grown clone wins the Galactic Award for physics by invoking superstrings to unify quantum theory and general relativity. Aside from the clearly odious grand unification, there is nothing on the face of this situation suggesting grotesque evil. Nor is the flourishing of clones wildly unlikely—depending on how we treat them.

I am *not* recommending that clones *not* be told of their asexual origins. The point is that claims of inherent evil or harm are not obviously sound when we can posit possible and indeed likely situations in which nothing appears to be seriously amiss. The supposed situation in this thought experiment of course involves the suppression of the truth, and some may say that this is intrinsically wrong. Perhaps so, but the point of this keepthem-from-the-truth example is simply to highlight the difference between claims of "inherent" wrong and claims that cloning is likely to *lead to harms* of a sort we can all understand.

The question, then, is whether the nature and likelihood of the asserted harms require a flat ban on human cloning—because absolutely no one should be allowed to be born into such risky environments. This is worth arguing, but it is a combined conceptual and empirical claim, and subject to the familiar retort that *from the clone's viewpoint*, it is highly unlikely that his existence would *necessarily* or *inevitably* not be preferred by him. Think of the possibility that the clone will feel empowered and self-confident because of the knowledge of his origins and of the life of his predecessor.⁴⁰ If this occurs, his autonomy may be significantly enhanced

⁴⁹ See PENCE, supra note 4, at 104 (observing that a cloned offspring might be grateful that his custodial parents selected his maternal grandfather as a nuclear source, given his health and longevity). See also Susan M. Wolf, Ban Cloning? Why NBAC Is Wrong, HASTINGS CENTER REP., Sept.-Oct. 1997, at 12, 13 ("[C]loning may in fact save children from psychological difficulties involved in having an anonymous genetic parent through donor or egg sperm.").

because of enlarged opportunities arising from his elevated sense of self. (To be sure, there is also the risk of overconfidence and unjustified expectations.) And, since the clone is living a wholly separate life from that of his genetic predecessor, there is little reason to deny the individuality or independence of that self, from any standpoint. Why assume that *all* clones—or even a substantial number of them—will be significantly burdened by a sense of "genetic oppression"?

E. IF INDEED HUMAN CLONING IS INTRINSICALLY EVIL, HOW SHOULD WE MORALLY CHARACTERIZE THE OFFSPRING? DOES THE EVIL OF THE PERSON-CREATING PROCESS LIVE ON IN HER?

Whether evil endures in its consequences is a standard issue in the analysis of evil. Evil processes may produce what seem to be beneficial (or at least neutral) outcomes. For many observers, accepting these outcomes is improper because of their links to the evil that generated them.

Take some well-known examples: the use of information derived from immoral research on human subjects (say, the use of Nazi findings derived from their wretched experiments on death camp prisoners); and the use of fetal tissue from elective abortions (whatever the reason for the election), if abortion is taken as intrinsically evil.

Similarly, some may view the offspring of rape or incest as morally tainted. If it is morally sensible to say that someone (a product of rape or incest) should not exist because the reproductive act should never have occurred, how do we view him and treat him, assuming he survives? Does he somehow contaminate us or pollute our surroundings? Or is it that his continued existence acts as a sort of "ratification" of the evil act that generated him? Is this ratification an intrinsic evil? Does it encourage the same sort of evil? If we view the offspring simply as another person to integrate within our community, are we complicit in the rape? How would we explain our position to him? ("Nothing against you personally, kid. You just should not be here. Like original sin, you know?" "1")

⁴¹ I am not the only one who thinks that under some anti-cloning arguments, clones are viewed as tainted by their evil origins. See Lawrence Tribe, On Not Banning Cloning for the Wrong Reasons, in CLONES AND CLONES, supra note 3, at 221, 229 (referring to the possibility that condemnation of a form of reproduction might rest on the "personalized and stigmatizing judgment that the baby itself—the child that will result from the condemned method—is morally incomplete or existentially flawed by virtue of its unnaturally manmade and deliberately determined (as opposed to 'open') origin and character"). See generally Shapiro, supra note 17, at 1145-46 (briefly discussing this problem of evil).

F. RIGHTS NOT TO BE BORN WITH A DUPLICATE GENETIC IDENTITY: "IMPLICIT IN THE PROHIBITION OF CLONAL HUMANS IS THE RATIONALE THAT CERTAIN TYPES OF HUMANS OUGHT NOT TO EXIST, EITHER BECAUSE THEY HAVE INALIENABLE RIGHTS TO NONEXISTENCE OR BECAUSE THEIR PRESENCE WOULD ERODE IMPORTANT SOCIAL VALUES"

The nature and source of such rights are never made clear. On what basis would we say that certain humans "ought not to exist"? Are there any existing humans who ought not to exist? One thinks of Saddam Hussein or Slobodan Milosevich, but this is not to the point. We are not talking about people who *turn out* to be objectionable, but persons whose coming into existence is objectionable either from conception or from some prenatal point (if some major injury occurs, for example). But who would these folks be?

Think of whatever examples you wish of persons who "should not exist" because of the immoral circumstances of their conception: children born of rape, incest, and cloning. In all these cases, the objection is not to their humaniform personhood; it is to a relational attribute: one is the product of sex between certain close relatives, another is the result of forced sex, another has a genome that has gone around once before. They (or at least the first two) are results of transactions that never should have occurred—but not necessarily because of the prospect of intrinsic deficiencies or the mark of evil in the resulting persons themselves.

Do any or all of these persons have "inalienable rights to nonexistence"? Here is proposition A: "This contemplated act of sexual intercourse (or human assembly) should not take place because (...)." Here is the conclusion, B: "There is an unconceived entity—the possible future product of this impermissible act of intercourse—who has a right to remain unconceived." How does one get from A to B? The unconceived entity, if born, is unlikely to have a life that, from its standpoint, is not worth living—unless the rest of us make it such. Its only alternative is nonexistence. Finding a right to nonexistence here seems to rest on a non sequitur. Rape violates an existing person's rights. Incest generally does also, although incest between competent consenting adults arguably does not even do that (whatever other harms it causes to family integrity values, to the gene pool, and so forth).

Now, one can think of a reason to assert publicly such rights to nonexistence, and one can offer an explanation (not a justification) for viewing the resulting child with horror. To do otherwise seems to ratify the evil by accepting its result as a benefit—the existence of a new human

⁴² Pizzulli, *supra* note 8, at 493 (capitalization altered).

being. But these observations have no impact on the deeper point: None of these people has a right not to be conceived. And if *they* do not have such a right, it is hard to see why a possible clone does.

Can we think of *any* unconceived entities with a right to nonexistence? Consider a possible child with Tay-Sachs disease. There are no redeeming qualities to this disorder, which dooms children to an early, painful death. And there may be others who, because of genetic or gestational mishaps, are so damaged that, from their point of view, nonexistence would be preferable. I think that these are conceptually (and legally) plausible claims, though the cases on "wrongful life" do not squarely accept these premises. 15

So, there are dismal situations in which a minimally decent existence is, from the potential persons' projected viewpoints, nearly impossible, and nonexistence is thus preferred. This is not entirely unrealistic in the cloning context, given the 276 failed attempts by Dr. Wilmut immediately preceding Dolly's appearance.⁴⁶ Does it help to refer to this as a right not to exist? It may sound strange to talk of the nonexistent having a nonwaivable or inalienable right to nonexistence, but it may nevertheless be coherent.⁴⁷

⁴³ See 5 ATTORNEYS' TEXTBOOK OF MEDICINE 17-10 (Roscoe N. Gray & Louise J. Gordy, eds., 3d ed. 1998) (explaining that Tay-Sachs arises from a deficiency of the lipidose enzyme hexosaminidase, and leads to "progressive retardation in development, paralysis, dementia..., blindness,... and death by age three or four years").

In addition to the well-known problem of comparing existence and nonexistence, there is a further conceptual difficulty in referring to the child's (or potential child's) point of view: One's point of view may be badly flawed. Consider, for example, a clinically depressed person not otherwise impaired who is bent on suicide and whose condition could be effectively improved through medication and/or other forms of therapy. In some sense, his life, from his point of view, may seem not worth living even long enough to justify waiting for antidepressant therapy to work. But this is very likely to be a mistaken judgment. Perhaps the more accurate (but still logically problematic) formulation is that the posited viewpoint must be that of a reasonable person in that position—a kind of "objectivity" requirement. "That position" includes being depressed, but entails more than a passing moment or two; it includes anticipated courses of life, during some of which the depression is largely under control. If there are no such possibilities and the condition is severe, then one might well conclude that from the affilicted person's point of view, nonexistence would be preferable. Indeed, in contemplating non-care or reason for it. The general problem of evaluating the clone's viewpoint is mentioned again in Part VI.E, infra.

⁴⁵ See, e.g., Turpin v. Sortini, 643 P.2d 954 (Cal. 1982) ("rejecting" wrongful life theory and denying general damages, but awarding special damages nevertheless).

See, e.g., Tim Beardsley, The Start of Something Big?: Dolly Has Become a New Icon for Science, SCI. Am., May 1997, at 15, 15 (reporting that three out of eight cloned lambs died soon after birth, according to Dr. Ian Wilmut). See also Gina Kolata, Clinton's Advisory Panel Backs Moratorium on Human Clones, N.Y. TIMES, May 18, 1997, §1, at 21 (discussing serious malformations suffered by many fetuses).

many fetuses).

47 But it is ironic, perhaps even paradoxical, that some who oppose cloning because possible clones have a right not to exist also oppose recognition of wrongful life claims. In their view, vindicating such claims would demean the worth of human life by asserting that the quality of some persons' lives is so poor, they never should have come into existence. Cloning opponents, however, do not (necessarily) rest their "right not to exist" view on "quality of life." The right is apparently based on avoidance of the inherent evil of the clone's origins. Francis C. Pizzulli, an opponent of human cloning, also opposes recognition of wrongful life claims believing that the two positions are linked by notions

As for the idea that certain persons should not exist because their *very presence*, standing utterly alone, might erode important social values: taken literally, this is flatly impossible. *Presence* does nothing—it simply is. What counts is what happens as a *result* of one's presence—and in our context there may be certain results arising from the *perception* of that presence, particularly when we know how that presence came about. Moreover, there are mental and behavioral effects of being observed on both the observer and the observed.

Whatever these effects are, how would they cause an "erosion" of social values? I assume this means that over time, certain important preferences and beliefs will change in certain ways, and as a result, so will behavior. More explicitly, the underlying values would become "weaker": fewer persons would hold the right views; those who hold them would hold them more weakly; there would be fewer behaviors implementing those views and more instances of conduct implementing inconsistent views; and the forms of expression of the views—the rhetoric—at both the community and individual levels would reflect and accelerate the weakening of the views in a continuing cycle of normative attrition.

But how will this happen with cloning? Presumably the erosion of social values would occur through the learning effects of knowing about, hearing about, observing, and possibly participating in the questioned practice. Having certain perceptions, conscious or unconscious, is a critical precondition to learning. We thus learn from observing or otherwise learning about our institutions and social practices.

So exactly what will we be observing and assimilating when we observe cloning? That depends partly on how it is practiced: how and why it is accomplished, and how we interact with the clone and others closely connected with her. We can in significant ways control what we observe because we are largely responsible for much of the behavior that will be observed—our own.

And that is precisely the point. The risks to clones and to our society's normative structures depend in significant part on what we do—how we respond to a presence—and not mere presence "in itself," as if clones befoul the world simply by being here.

It would be very easy to say next that the problems of human cloning will vaporize if we just get our act together and treat these people—these clones—properly. Sure. And the day after that, we can become wholly peaceful creatures, end war, genocide, ethnic cleansing, and oppression. But the fact is, people are no damn good. Even though we should not be

of respect for life and thus reconcilable. Interview with Francis C. Pizzulli, in L.A., Cal. (Feb. 19, 1998).

prejudiced and disrespectful toward clones—despite their repugnant, intrinsically odious origins—we will be.

Indeed, the fact that people are no damn good is the best argument available to the anti-cloning position: we will fulfill our own forecasts of harm to cloned offspring and to ourselves by in fact harming them and us. Perhaps, then, we should prevent human cloning because even if we recognize the unjustified nature of our abhorrence, we are largely powerless against our evil natures. Are we not entitled to take account of our uncontrollable reactions to some project by preventing or abolishing the project—by lashing ourselves to the mast? Is the prospect of such uncontrolled reactions a sufficient condition for banning something otherwise acceptable—a self-justifying opposition? If you want some practice condemned, teach people to hate it and to be unable to regulate their hostility to it—another version of Harry Kalven's Heckler's Veto.

I suppose such learn-to-hate projects are common historical practices, but it remains unclear why it should be applied to human cloning.

G. More on Personhood and Humanity—of Products and Processes: The Claim that "Clones Aren't Fully Human"

I am not refuting straw arguments or beating dead horses. A respected scholar made this argument in two separate publications. I suppose it could be ignored as literary hyperbole, but its deliberate restatement warrants an inquiry into what inspired it. Perhaps we can learn something from such excess.

The clones-are-less-than-human-persons claim is ambiguous at the threshold: it is about both being a person, and being a particular sort of person—a human one. I do not know if anyone thinks that clones might be persons, but not human ones; if they do, they may also think that it is a reason not to clone—we do not want nonhuman persons.

Silly as this may seem, there is a thin point to make. The claim seems to rest on the view that cloning is not a distinctively human way to create a

⁴⁸ For a reference to the Heckler's Veto, see Rory Lancman, *Protecting Speech From Private Abridgement: Introducing the Tort of Suppression*, 25 Sw. U. L. Rev. 223, 224 n.7 (noting that the term originated with Harry Kalven, Jr., THE NEGRO & THE FIRST AMENDMENT 140 (1965)).

[&]quot;Elshtain, Ewegenics, supra note 3, at 25 (capitalization altered). Compare Elshtain's remarks with George Annas's statement that cloning "would radically alter the very definition of a human being by producing the world's first human with a single genetic parent." PENCE, supra note 4, at 122 (quoting George Annas). As Pence notes, "parent" is in this context a highly contested concept. See id. He suggests that it is plausible to identify the clone's genetic parents as the nuclear source's own parents. See id. at 122-23. It is hard to say just what is meant by Annas's reference to "alter[ing] the very definition of a human being" through arranging for a different genesis. Id. at 122. Why is it a defining characteristic of humanness to be generated in a certain way when the outcome—the clone—is impossible to distinguish from other members of the human race (the gap between cell age and chronological age aside)? Cloning is not optimally dealt with as a matter of definition.

person. (I leave aside the point that complex and conscious manufacture and assembly is also distinctively human, as well as the related notion that humans naturally do unnatural things.) Moreover, that nonhuman person will be harmed and perhaps her existence and those of others similarly created will harm the social fabric. The issue thus translates, at least in part, into arguments about instrumental harms. But I see no reason to pursue the human/nonhuman-person issue any further. It probably has been overly dignified by these two paragraphs. For our purposes here, ascriptions of personhood and humanity will be taken to be roughly equivalent, despite their obvious differences in meaning.

We have already encountered the argument that having a certain physiological structure is not *sufficient* for human personhood, although it may be necessary. Humanity requires more than structure and function: Certain modes of creation are also conceptually necessary to being a human person, as we are told. To be a human person, then, structural/functional requisites must be joined with genesis processes. Both factors may then be jointly sufficient to establish human personhood. With cloning, there is a nonhuman—or less-than-human—mode of generation. The offspring's human personhood is thus compromised.

But there is another strand to this claim that clones are less than fully human. It is not simply that genesis is asexual. It is that asexual human reproduction requires technological intervention, and thus, the resulting offspring has been "manufactured" or "assembled" in the way artifacts are produced. (A parallel claim is that we are reduced to vegetables as much as we are reduced to artifacts because of our asexual origins. Since being a vegetable is natural in a way and being an artifact is not, perhaps we should prefer that image.)

As we saw, it is not clear how to rank in definitional importance the asexuality of the reproduction, its resulting genomic duplication, its "puttogetherness," or its assertedly deterministic outcome. With nuclear transplantation, these elements are strongly linked—but one can imagine future modes of reproduction that seem even more like industrial fabrication. Suppose, for example, we could construct genes of various sorts from purely human nucleic materials off the shelf, arrange them into a

⁵⁹ For comments on the "technologizing" of reproduction, see generally PAUL LAURITZEN, PURSUING PARENTHOOD ix-xxi, 3-67 (1993) (discussing "basic opposition to reproductive technology"). The author states that in considering in vitro fertilization ("TVF") "beyond the simplest case [within a marriage where care is taken to avoid destroying or risking embryos], we discover that the worries about the commodification and mechanization of reproduction [discussed earlier by the author] become increasingly grave." *Id.* at xix. Nevertheless, Lauritzen concludes "the basic opposition to reproductive technology is misplaced." *Id.* (discussing IVF and artificial insemination using sperm from one's husband). Of course, one may well claim that "technologizing" in the form of moving from biologically sexual to asexual reproduction is riskier by far.

cell bearing a more-or-less standard human diploid nucleus, and produce a human being, either by implantation in a human surrogate or by artificial gestation.

This of course would be quite different from cloning because there is no deliberate genomic duplication—uniqueness is sought instead. This avoids creating a "duplicate" person, which seems to be the chief supposed vice of asexual reproduction. The parts-off-the-shelf person is, in sharp contrast, a genetic mosaic, possibly with a staggeringly large number of genetic "parents."

In any case, there is scant reason to assert that the cloned offspring's origins automatically attenuate her humanness or personhood. Are sexual/nonduplicative methods of reproduction so essential to the very concept of being human (what is that "very concept"?) that anyone not born of a sexual process is necessarily not fully human? I have not seen any persuasive arguments showing this—only impassioned assertions without apparent foundation. I do not think the burden is on those prepared to tolerate cloning to establish the human personhood of cloned offspring. Perhaps it is worth recalling the old saw in revised form: "If it looks, walks, and talks like a human person..."

In light of these obvious considerations, it is ironic and damaging to blast cloning as an assault on human dignity, and then to demean the resulting child by labeling it "not fully human"—thus self-fulfillingly realizing the charge that cloning assaults human dignity.

Suppose the claim is instead that the clone will be *perceived* as nonhuman—and possibly that she will perceive herself that way because of the ruinous effects of her self-knowledge, her knowledge of others' views, and their treatment of her.⁵¹ The way she is treated by "normals" may indeed be devastating, a point I have already complained about. Perhaps this is a problem in education and public discussion: perceptions, feelings and attitudes can change under the pressure of rational persuasion and extended observation of human practices.⁵² But such perceptions, even if

This argument was made in HANS JONAS, Biological Engineering—a Preview, in PHILOSOPHICAL ESSAYS: FROM ANCIENT CREED TO TECHNOLOGICAL MAN 160-62 (1974), where he urged that a clone "is antecedently robbed of the freedom which only under the protection of ignorance [of one's genomic antecedents] can thrive," and that this is a crime. For a criticism of Jonas's view, see Dan W. Brock, Cloning Human Beings: An Assessment of the Ethical Issues Pro and Con, in CLONES AND CLONES, supra note 3, at 141, 155-57. Brock also argues that cloning does not violate the right to "an open future," see id. at 153-55, as discussed by JOEL FEINBERG, The Child's Right to an Open Future, FREEDOM AND FULFILLMENT: PHILOSOPHICAL ESSAYS 76 (1992).

This is a major thesis in Judith F. Daar, The Future of Human Cloning: Prescient Lessons from

Medical Ethics Past, 8 S. CAL. INTERDISC. L.J. 167, 178-79 (1998). See also Henry Hansmann, The Economics and Ethics of Markets for Human Organs, 14 J. HEALTH POL., POL'Y & LAW 57, 76-77 (1989).

[[]S]ubstantial forces of inertia make it hard for us to rearrange our categories.

they endure, are far from establishing any inherent evil in cloning. It is the perceptions themselves that account for most of the risks of harm to anyone or anything.

There are some arguments I do *not* make in asserting the humanity of clones. Some defenders of cloning might say that the claim of lesser humanity of clones fails because it proves too much: that is, it also shows that babies born with technological and medical assistance—from antibiotics to neonatal intensive care units—would also be nonhuman. But cloning's critics are not subject to this *reductio*. They may properly stress the distinction between cloning and, say, in vitro fertilization ("TVF") as usually practiced: all methods of assisted reproduction are biologically sexual except for cloning. IVF is becoming part of the "baseline of normality"—"unnatural" though it is.

Nor are cloning's critics stuck with conceding that their views would stigmatize as nonhuman all children who otherwise would have expired of disease or injury, as nature wished it. 53 Cloning is indeed different from, as well as similar to, standard human procreation.

Defenders of cloning might also say: "Cloning is perfectly human because it reflects the distinctively human capacity—a natural capacity—for developing technologies and new relationships to supplement or supplant nature." But this would render meaningless any distinction between nature and artifact, and this goes too far. There is *some* useful distinction to be made between the natural and the artifactual, though it may be pointless in many contexts. While we might loosely say "it is 'natural' for humans to wear clothes," one cannot say this about cloning.

This inflexibility in our normative categories may help explain the reflexively negative moral response that commonly greets proposals for marketing human organs....

But initial resistance to shifting normative categories should not in itself be a sufficient reason for avoiding change. Transactions can be and have been recategorized when technological changes have made market mechanisms advantageous. . . . [A]fter several decades' experience our society has accepted a thriving market in human sperm brokered by propriety firms. It would be easy to characterize such a market as deeply offensive to fundamental values involving paternity, sexual relations, responsibility for and identity with one's biological offspring, and the need to make children feel that their relationship with their parents transcends that of mere commodities. And evidently, there was substantial ethical resistance to this market when it was first introduced. Yet over time we have chosen not to so characterize such transactions. . . .

Id.

Still, if something is very likely to be perceived in ways that generate unfortunate learning effects, perhaps we cannot say it is morally impeccable: the adverse learning effects may lead to adverse consequences. This may count heavily not only on consequentialist theories (of which utilitarianism is the chief example), but also on nonconsequentialist theories, as where the effects include injustices or other evils defined within their respective doctrines. Consequentialist theories of course may also count such outcomes as morally adverse.

⁵³ For remarks on the idea that nature is "morally freighted," see generally Shapiro, supra note 11.

I thus suggest that structure and function conceptually dominate mode of origin. Eve was human because she was structurally and functionally a human person, although a human procreational process did not create her. In this context, at any rate, the *product* counts for more than the *process*.

H. CLONING AS ILLEGITIMATE IMMORTALITY

"We may not clone ourselves . . . for we are not granted permission to live forever [T]o clone ourselves would be to worship ourselves rather than God, and that is idolatry of the worst sort "54

In fairness, such comments were made shortly after the announcement of Dolly's birth. By now, it should be apparent to most that cloning does not duplicate an identity in an endless line of succession, and even if in some sense it does so, there is no reason to suppose that one's original individuated consciousness travels down this line.

As for the assertion that cloning is a form of arrogant self-worship (narcissism of a sort)—it is a mere assertion. Not all motivations for cloning will reflect such self-love—and even if they did, the harm in such exercises of self-love has yet to be established on a secular basis. To a degree, many persons expecting and hoping their children will resemble them in many ways are similarly arrogant. Even if the degrees of arrogance and narcissism in asexual and sexual reproduction are different, what difference does either level make—either in the abstract or in life? What counts is how this arrogance plays out in raising and dealing with the offspring—and there is no inevitability about that. As we will see later, cloning carries with it some elevated risks as compared with sexual reproduction. But it is doubtful that this difference warrants a broad prohibition.

⁵⁴ Hearts of the City: Navigating the Real World, L.A. TIMES, Feb. 26, 1997, at B2. This quotation represents a view criticized by Rabbi Elliot N. Dorff of the University of Judaism—he is not a proponent of the argument; he is simply stating it as an object of criticism. See also Clone Rangers, 284 SCIENCE 2083, 2083 (Constance Holden ed., 1999) (stating "On its Web site, Clonaid says cloning will allow people to jump into new bodies when they die and 'reach eternal life.' No money-back guarantees, however.").

See the reference to supposed narcissistic motivations in Katz, supra note 10, at 22-23. See also Annas, Human Cloning: A Choice or an Echo, supra note 23, at 248-49. Compare Gustav Niebuhr, Suddenly, Religious Ethicists Face a Quandary on Cloning, N.Y. TIMES, Mar. 1, 1997, §1, at 1. "It tempts our narcissism enormously... because it gives a physical dimension to a fantasy that one can keep going on through the reproduction of oneself." Id. (quoting Dr. Robert Coles, a child psychiatrist). However, Coles obviously does not think one's identity and consciousness persist in the cloned offspring.

I. ARMIES OF JORDANS, HITLERS AND MOZARTS: THE DEBASEMENT OF MERIT AND INDIVIDUALITY

There would be no Mozart if there were forty Mozarts. We know the singularity of the one, the extraordinary genius—a [Michael] Jordan, a Mozart—because they stand apart from and above the rest. Absent that irreducible singularity, their gifts and glorious accomplishments would mean nothing. They would be the norm, commonplace: another dunk, another concerto. . . .

. . .

... [Here the author imagines a possible scene in an updated work of fiction by Stanislaw Lem where, at a rocket-port,] there are forty very tall basketball players all wearing identical #23 jerseys, dribbling on one side and, on the other side, forty men in powdered wigs, suited up in breeches and satin frock coats, all playing *The Marriage of Figaro*. 56

One wonders how literally to take such remarks. Assuming that the author is recounting genuine fears, the responses are clear (though not dispositive): The idea that latter-day Mozarts would not only be spectacularly gifted in music, and would not only become composers, but would compose in the classical style, and indeed would independently compose *Figaro* (why not *Figaro II*?) reflects a runaway belief in far more than genetic determinism. I concede that the original re-composition of *Figaro* is an intriguing idea, the same sort that inspired Borges's tale of Pierre Menard, who reinvents *Don Quixote*—and he was not even Cervantes's clone. The Borges story is so interesting I recently reoriginated it myself.

Still, cloning Mozart obviously raises the probabilities that the offspring will have (at least) substantial musical talent, inspiring others to make sure he uses it, and this raises the issues of instrumental harms discussed below.

As for the idea that "xeroxing" high talent would debase our notions of merit and accomplishment, a partial response is again that genetic determinism is overestimated. But beyond this, these merit-debasing effects are likely to rest partly on the *scale* of human cloning and on the possibility of progressively finer calibrations of merit.

Suppose the "worst": many gifted persons are cloned. Moreover, augmentative germ line manipulation is also practiced widely and successfully, from a technical standpoint.

I suppose the impact of such practices in every dimension of human life can range from nil to incalculable. They include some obvious problems

⁵⁶ Elshtain, Ewegenics, supra note 3, at 25.

⁵⁷ See JORGE LUIS BORGES, Pierre Menard, Author of the Quixote, in LABYRINTHS: SELECTED STORIES AND OTHER WRITINGS 36, 39 (Donald A. Yates & James E. Irby eds., 1964).

not discussed at length here—distribution of cloning and enhancement resources, and worsening of social stratification.58 Such a world might be so different from ours that it would be exceptionally difficult for us and for residents of that world to evaluate each other's circumstances—a sort of mutual incomprehensibility that makes moral evaluation difficult. Radical shifts in ideas of merit and in how it is measured are entirely possible. The very idea of merit may fade away in the new age. But this is to say that the core nature of our evaluations of merit will change, not that ascriptions of merit will be "debased." For better or worse, distinctions will continue to be drawn—even if the bell-shaped curves of abilities or aptitudes are shifted to the right. Newton was a greater genius than Boyle. Jose Canseco is a better baseball player than his identical twin Ozzie-despite both attained professional status, which is a considerable accomplishment. Compared to the general run of mortals, both brothers are highly gifted; they are far closer to each other in ability than either is to the average person. But "small" differences—in what? (visual perception? ability to concentrate? reaction time? emotional tone and drive?)—make the difference between major league regulars and major league also-rans. Even now, in elite athletic competitions such as running and swimming, winners, losers, and record-breakers are often separated by hundredths of a second rather than tenths. At the next diminution in order of magnitude, will merit be (further) "debased"? Perhaps so, but not obviously so. Genius and high accomplishment come in different orders.

J. THE PROPORTIONATE PUNISHMENT OF CLONERS SHOULD MATCH THAT FOR "RAPE, CHILD ABUSE AND MURDER" 59

Perhaps the author had in mind only the true slavery/bondage images of cloning—persons cloned to be human beasts of burden, suited for particular tasks that they are forced to undertake. He is on sounder ground there. In the United States, the sole fundamental right of persons that can be abridged by other persons, rather than by government action only, is the Thirteenth Amendment. This possibility aside, the comparison is not even worth rejecting.

ss One might expect more and better goods and services to be produced if average abilities rise, though this is not inevitable. Where cloning is widespread, those born the regular way might be considered inferior. Much the same applies to germ line augmentation, with somewhat greater plausibility.

⁵⁹ Ehsan Masood, Cloning Technique 'Reveals Legal Loophole,' 385 NATURE 757, 757 (1997) (quoting Jeremy Rifkin as "demanding a worldwide ban on human cloning, suggesting that it should carry a penalty 'on a par with rape, child abuse and murder'") (capitalization altered).

K. "EVERY HUMAN BEING HAS THE RIGHT TO TWO BIOLOGICAL PARENTS" 60

Adoptees have two biological parents and one or two custodial parents. As long as they have custodial parents, we do not dwell on the geographical absence of their biological parents. If a clone has one or two custodial parents, why does his clonehood reflect some form of moral disaster? (I leave aside the point that every clone indeed has—in an obvious if puzzling sense—two genetic parents: the mother and father of the nuclear source. Being a source of mitochondria does not seem to qualify the egg source as a third full-fledged genetic parent.⁶¹)

Here, we need to distinguish two questions: First, are persons generally better off with two custodial parents (of opposite sex?) than with one or none? Second, if we restrict human cloning to couples (married or not) who intend personally to raise the child, why must we insist that these custodial parents be standard "biological" parents?

There are major disputes about the risks of single-parenting, foster homes, and orphanages that I leave aside. But James Q. Wilson may be right in thinking that a great many of the asserted risks of cloning are reduced or eliminated by restricting access to it in certain ways—to married couples, for example. Whether such restrictions would be constitutionally permissible is another question.

⁶⁰ Id. at 757 (referring to remarks of Nicholas Coote) (capitalization altered).

⁶¹ The impact of mitochondria is still under study, particularly insofar as they are genetic causal factors in various disorders. *See* Gregory E. Pence, *Introduction* to FLESH OF MY FLESH xi-xii (Gregory E. Pence ed. 1998)

flereinafter Wilson, The Paradox of Cloning, WKLY. STANDARD, May 26, 1997, at 23, 26 [hereinafter Wilson, The Paradox of Cloning]. Wilson also believes that cloning without human gestation—such as in an artificial womb—would be very risky because our emotional attachments to the resulting children would be compromised. Id. In a later essay, responding to Kass, Wilson seems to go much further, recommending severe limits on genetic sources. See James Q. Wilson, Sex and Family, in Leon R. Kass & James Q. Wilson, The Ethics of Human Cloning 89, 99-100 (1998) [hereinafter Wilson, Sex and Family]. (The Ethics of Human Cloning consists of Kass's New Republic essay, Kass, supra note 13, and Wilson's WKLY. STANDARD essay, Wilson, The Paradox of Cloning, supra, along with their respective responses to each other, Leon R. Kass, Family Needs Its Natural Roots, in The Ethics of Human Cloning, supra, at 77 [hereinafter Kass, Family Needs Its Natural Roots]; Wilson, Sex and Family, supra.) But if persons are not free to enter into agreements with anyone they choose as a nuclear source, then the terms of the debate change sharply because the elements of planning and predictability, and whatever risks they entail, are distorted. Although one may predict various traits in cloning a given person, if it is not the person desired as a nuclear source, one's plans are frustrated.

L. CLONING OF SUPERIOR PERSONS "IS NOT TRULY THERAPEUTIC; IT IS NOT GENUINE MEDICINE" 63

The medical-nonmedical distinction informs some major normative/ conceptual issues in bioethics generally, but it has limited application here. We judge human conduct of many sorts by investigating what justificatory models apply to it. The invocation of a medical-therapeutic model of justification of course has a major point: Ascriptions of disorder are not only meant to authorize certain interventions in life processes—they are meant to limit them. Although human reproduction has not been generally understood to be "therapeutic" in a medical sense (even if it is sometimes foolishly pursued to save marriages or lift depression), assisted and collaborative reproduction have their therapeutic aspects in "treating" infertility, which may reflect individual disorders (anomalies?) and perhaps "disorders of a couple." (There is no pressing need to review this use of disorder models here.) As for the no-reproduction aspect of human reproductive choice, most decisions not to have children have little or nothing to do with disorder, whether in the anticipated child or in the parents. Nevertheless, a substantial proportion of decisions not to reproduce are linked to prenatal testing for both genetic and nongenetic disorders in a fetus or embryo, or to preconception screening for genetic predispositions in the parents and for adverse gestational factors in the mother. Some decisions to abort or to avoid conception thus rest on medical matters. Whatever one's final view of these procedures, they either fall within or are heavily informed by a disorder model of justification. They seek to avoid the existence of a person with disorders.

So, many aspects of reproductive choice and its justification are disorder-connected. What of it? If a particular act of cloning is *not* a response to infertility (in the rigorous sense of absence of functioning gametic material), how should one respond to the argument that it is not therapeutic? By saying that human cloning does not have to be therapeutic. The fact that many reproductive innovations are arguably justified within a disorder model does not establish that all must be. Moreover, the main justifications for having children have nothing to do with disorder: having children is not generally viewed as cure, palliation, or prevention of disorder (though it may have such effects). Why does cloning have to be linked to disorder? The fact that biomedical scientists are needed to implement cloning doesn't entail that cloning's rationale must be medical.

Glonn O'Connor, Human Cloning Would Be Unethical, in CLONING, supra note 10, at 9 (capitalization altered). The rest of the sentence is: "it is not human progress and it is not welcome." Id. Dr. Wilmut has said much the same thing. Marjorie Miller, For Cloning Pioneer, Biotechnology Holds Promise of Medical Gains, L.A. TIMES, April 9, 2000, at A8 (stating that "[t]here is no medical justification for attempting human cloning, [Dr. Wilmut] says.").

A decision to reproduce in the usual way is itself generally accompanied by prenatal medical monitoring and physician-assisted birth, but deciding to have a child does not require a medical justification. I see no reason to pursue further the application of "disorder models" to asexual reproduction.

III. CLONING AND FRAMEWORKS OF HUMAN THOUGHT: CLASSIFICATION ANOMALIES; THE FULLY DETERMINED (AND THEREFORE NONAUTONOMOUS AND NONINDIVIDUATED?) PERSON; NEW USES FOR OLD PROCESSES

[U]nless there is a new mind there cannot be a new line, the old will go on repeating itself with recurring deadliness: without invention nothing lies under the witch-hazel bush 64

A. IN GENERAL: TAKING THINGS APART AND PUTTING THEM BACK TOGETHER—DIFFERENTLY—SO THAT WE CANNOT TELL WHAT WE HAVE

The purpose of this Part is to offer one set of partial explanations for the widespread reservations about human cloning.

I have suggested elsewhere that evaluating cloning and other biological technologies is difficult partly because they separate basic human life processes and recombine them in new ways. This may make the technological outcomes hard to characterize and evaluate within standard categories of description and judgment.⁶⁵ This is not some relatively minor classification puzzle within a larger system: whether tomatoes are called fruits or vegetables may be taxonomically interesting, but the conceptual issues do not directly threaten the integrity of our normative system. The categories and abstractions under siege in the cloning debate, however, inform some of the most important aspects of our existence as a social species. They bear on how we think about reproduction, death, the control of behavior, and (most importantly here) about how our personal attributes or those of our children may be selected and created—not just found and shaped within narrow limits. But revisions in the structure of such life processes often seem to impair the usefulness of key abstractions we use in making decisions about these processes. They may require reconstruction or replacement—processes that go beyond everyday interpretation, although it may often be hard to tell the difference.

65 See Shapiro, supra note 11, at 332-48 passim.

⁴⁴ WILLIAM CARLOS WILLIAMS, PATERSON (1948), reprinted in Paterson, Book Two, in PATERSON 50 (Christopher MacGowan ed., New Directions Books 1992) (1963).

Examples are obvious: the rearrangement of reproductive processes in standard or gestational surrogacy—leaving us puzzled about who the "natural" mother is—or even whether we should retain the one-child, one-mother/one-father template; ⁶⁶ the separation of organic life from personal identity in vegetative states—leaving us wondering about how the term "death" applies to still-living bodies permanently severed (so we think) from personality, mental functioning, and consciously directed human behavior; and the alteration of human traits and performance through chemical agents or other technological performance-enhancement methods, thus raising doubts about identity or personal merit.

Cloning is a clear instance of an activity that partly defies categorization and thus makes adequate moral and legal assessment more difficult. From its inception, the process seems strikingly different from "natural" reproduction and even technologically assisted sexual reproduction. No gametic (haploid) nuclear DNA is needed or used. We deal with ova only as "vessels" for fertilization. No men and women, coitally or noncoitally, "get together" to produce the sexually recombined genomes historically characterizing human reproduction. Within the domain of genomic structure, taken separately, we know what we are almost certain to get: an offspring's genome nearly identical to that of the nuclear source. Perhaps the fact that clones—for now—will have to be gestated in the customary way helps blunt the shock by assuring us of an identifiable birth mother, but this is small comfort to serious opponents of cloning.

We are thus at a loss in several ways. As we saw, we are not sure who the clone's lawful parent or parents are to be—because we are not sure how to apply the idea of "genetic parent" to asexual reproduction. We have already encountered the question whether the source of the nuclear DNA is a genetic parent. Genetic parents have hitherto contributed only half a child's nuclear DNA, plus mitochondria from the ovum. Perhaps this nuclear source is the "super-parent" because she provides the entire nuclear genetic complement. But her biological role is so unlike that of any prior genetic parent that we are uncomfortable with this also. Then again, as

⁶⁶ See the reference to the ACLU's "two mothers" argument in *Johnson v. Calvert*, 851 P.2d 776, 781 n.8 (Cal. 1993), a gestational-surrogacy case pitting the "genetic mother" against the "gestational mother." Custody of the child was awarded to the genetic parents by looking to a prior agreement as evidence of prior intentions as to custody; these intentions, in this case, determined who the sole natural mother was under California's Uniform Parentage Act. *See id.* at 782. *See also* Broyde, *supra* note 39, at 534 (discussing various arguments under Jewish law (Halacha) and stating that under Jewish law, it is possible for there to be no father of a child and—possibly—two mothers).

Note that the lineage problem is not simply one of determining a genetic "ancestor"—although the nuclear source and her parents are both competitors for the nearest ancestor. What is clear is who the nuclear source is, which is a different matter. The difficult problem is determining who the custodial parents should be (say, under a statutory scheme requiring identification of "the natural parents"). But cf. PENCE, supra note 4, at 139 (arguing that identifying a clone's "ancestor" is simple).

asked earlier, might the nuclear source's own parents be the genetic parents, and perhaps the presumptive custodial parents? The offspring, after all, is (almost) genetically identical to the nuclear source, who is *their* child produced by the union of *their* standard-issue haploid gametes. The offspring is genetically the delayed twin of their child, the nuclear source. Or should we simply ascribe parenthood to the intended custodial parents?

Our impaired ability to interpret foundational concepts through which we order human social life—here, the very concept of a parent—is bound to have its terrifying aspects. This helps explain the alarmist tone of much of the anti-cloning literature. We simply have no precedent for evaluating deliberate human genetic duplication. Whatever the cultural or physiological reasons, the idea of "replacement" by a separate person who is a duplicate, replica, or re-created self has long been feared. We are afraid of evil "doubles"—doppelgängers—taking our places, stealing our mates, our children, our jobs, and our lives. 67

Clearly, much can be gained by probing some of these dark fears about replacement, and, more generally, about carving up and rearranging life processes and, in doing so, revising ourselves and our social systems. The latter inquiry is continued in the next section.

B. THE FULLY DETERMINED PERSON AND THE MYSTERY OF MYSTERY

Fragmentation and reassembly of life processes—and of persons themselves—inspire fear that we will be able to create fully predictable, explainable, and controllable persons. Artifacts—things that we assemble—are, after all, meant to do what we want and expect, and they frequently do. The idea that a person can be fully "determinate" in this way is not part of our *ideal* of what it means to be a person, even if we accept commonplace observations and predictions about the effects of education, conditioning, coercive manipulation, and so on. To be fully determined is to be, instead of an autonomous person, either a mindless form of life (an amoeba, a tree) or an equally mindless machine, operating through fixed

⁶³ Cf. LINDA NOCHLIN, THE BODY IN PIECES: THE FRAGMENT AS A METAPHOR OF MODERNITY (1994) (presenting and discussing art works depicting the human body in fragments). "Modernity, in this [drawing by Henry Fuseli, Artist Overwhelmed by the Grandeur of Antique Ruins] is figured as irrevocable loss, poignant regret for lost totality, a vanished wholeness." Id. at 7.

[&]quot;For example, in the film The Return of Martin Guerre (Fox Lorber, 1982), a man moves into a village pretending to be the long-lost husband of a woman resident. Perhaps this fear of replacement—and possibly of one's personal annihilation—accounts for some of the arguments made against cloning. The non-Martin Guerre, played by Gerard Depardieau, was executed. But the hostility to cloning has so far not inspired homicidal sentiments against clones. See generally Wendy Doniger, Sex and the Mythological Clone, in Clones and Clones, supra note 3, at 114 (discussing mythological and literary themes akin to cloning). Although not quite on point, recall the "changeling" myths (child replacement—but not by a duplicate). See generally EDWIN SIDNEY HARTLAND, THE SCIENCE OF FAIRY TALES: AN INQUIRY INTO FAIRY MYTHOLOGY 93-134 (1891); D.L. Ashliman, Changelings (visited Oct. 8, 1996) https://www.pitt.edu/~dash/changeling.html.

algorithms instead of creative exercises of "free will." And if we do have minds after all, our thought, affect, behavior, and performance not intuitively viewed as "locked in" and largely predictable. Why would clones be so viewed? I will not try to compare the idea of determinism-through-cloning with the more general ideas of determinism and free will long-debated by philosophers, and I neither defend nor attack the coherence of any of these ideas. Here, I am just trying to describe what the cloning opposition seems to say and think.

The idea of determinateness seems to be at the core of the complaints that human cloning entails "loss of mystery" and "loss of individuality." To create determined beings such as clones is functionally inconsistent with the maintenance of mystery. Put in its strongest and perhaps most vulnerable form, the idea is that uncertainty—particularly that derived from the genetic lottery—is a defining characteristic of "truly human" procreation and indeed of human personhood itself.

Here we have one of a series of puzzles regularly encountered in bioethical analysis: we struggle to predict and manage our lives through observing and controlling life processes—we diet, exercise, consult physicians, and so on—but when we achieve effective methods for enhancing our foreknowledge and control of human behavior, we bridle. "I think that most people prefer the lottery to certainty."

Nevertheless, there is no necessary contradiction here: there is no allor-nothing problem facing us. Despite the heavy influence of genes, we are nowhere near "determining" the lives of persons whose genomes have "lived" in others before them. The prospect of human cloning may suggest a move toward the "fully determined person," but, although cloning may narrow the range of certain forms of uncertainty to some extent, determinism in this form is not in prospect.

C. New Uses for Old Processes

With technological assistance, we can often appropriate ordinary life processes for novel purposes not hitherto associated with them. Think of using reproductive processes for *non*reproductive purposes—as where one conceives for the purpose of taking tissue from the soon-to-be aborted fetus and using it for transplantation.⁷⁰ A more terrifying example would be to use cloning itself for ultimately nonreproductive purposes—to produce

⁶⁹ Wilson, *The Paradox of Cloning, supra* note 62, at 26. This seems related to the "paradox of perfectionism." *See* Michael H. Shapiro, *The Technology of Perfection: Performance Enhancement and the Control of Attributes*, 65 S. CAL. L. REV. 11, 34-36 (1991) (discussing the paradox of perfectionism); *infra* text accompanying note 77.

⁷⁰ See, e.g., Heather Meeker, Issues of Property, Ethics and Consent, in the Transplantation of Fetal Reproductive Tissue, 9 High Tech. L.J. 185, 185-88 (1994).

organs for transplantation.⁷¹ This anomalous use of procreational capacities suggests to some that human processes—and thus humans themselves—are being treated as (and transformed into) artifacts.

- D. HOW DIFFERENT IS CLONING? IS IT JUST ANOTHER METHOD OF INFERTILITY TREATMENT? THE UNPREDICTABILITY OF CLONING'S SOCIAL RECEPTION OCCASIONED BY THE PREDICTABILITY OF GENOMIC IDENTITY
- 1. The Reproduction "Continuum"; the Unpredictable Outcomes of Dealing with Enhanced Predictability

Cloning is sometimes viewed as simply the next step on the continuum of fertility-promoting technologies. This goes too far—despite my earlier complaints about loose references to cloning as "different in kind" from ordinary reproduction. These complaints were directed toward arguments that cloning should not receive more than minimal constitutional protection because it does not produce a human being. "Procreation different in kind" is hardly synonymous with "not human procreation at all."

Although I argue that many objections to cloning are either incoherent or exaggerated, its dangers are not trivial. If we perceive serious incremental risks to what initially seems like reproduction, some of us might withhold the honorific title "human reproduction/procreation"—even if the process results in a new human person indistinguishable from any other human person. (A possibility exists, however, that clones can be identified because their cells are older. This may bear on risks, but not on human personhood.73) Though properly viewed as a form of human reproduction, the dissimilarities between cloning and other reproductive techniques help explain our reservations about it. It is, to a considerable extent, an unknown in two respects: as we saw, it is not readily classifiable into our customary frameworks, and we are confused about what to expect from it. As I argue later, nature is a rough default guide for human behavior in part because of our experience with—and thus our foreknowledge of likely outcomes of sticking with nature. With nature, however, we have only rough outlines of what we will get. With cloning, we know the full genetic template, and to some degree—can better predict what we will get. But this very increment in predictability makes it hard to predict how we

⁷³ See Kolata, supra note 35.

⁷¹ On this possibility, see generally Lewis, *supra* note 9. The technological path for doing so has not been worked out. For additional comments, see generally Matthew M. Merrill, *The Sheep Heard 'Round the World: Legislation vs. Self-Regulation of Human Cloning*, 7 KAN. J.L. & PUB. POL'Y 169, 173-74 (1998).

⁷² See Chester, supra note 10, at 309 (referring to cloning "as simply another tool against infertility," although "real practical problems remain in getting the organs of the state to regulate such a procedure"); Broyde, supra note 39, at 505 (arguing that "fundamentally cloning is a form of assisted reproduction—no different from artificial insemination or surrogate motherhood").

will react to cloning. We cannot predict what we will do with greater predictability of a specific person's human characteristics.

2. Stressing the Differences Between Cloning and Sexual Reproduction

Think back to the earlier discussion about the linked anti-cloning themes. Human cloning is biologically asexual, resulting in genomic duplication. It is thus properly called a form of genetic engineering, at least where we deliberately select nuclear sources because of their traits. It is achieved only through a highly technologized form of reproduction, and will be even more so when fully artificial (extracorporeal) gestation becomes available. (The final stage would be to bypass ova altogether by using any diploid nucleus to generate a new person, but this is not about to happen.) The genomic certainty in turn entails near-certainty in predicting *some* traits, and enhanced foreknowledge of strong dispositions for other characteristics. This is *sharply* different from even the most careful mating within the sexual recombination lottery—as with the Nobel sperm bank. Cloning creates the opportunity for people to maximize a valued trait. The more determinate the final outcome, however, the less humanlike is the reproductive process—or so one might argue.

Because of these striking differences between sexual and asexual reproduction, human cloning assures us of conceptual and practical problems of varying degrees of seriousness: assigning lineage and custody, and (yet to be discussed) judging the identity, autonomy, and individuated personhood of the offspring.

Yet, despite enhanced predictabilities, the uncertainties of cloning's physical and behavioral outcomes are enormous. One cannot resolve these uncertainties by stipulating what a trait is and assuming that it is genetically backed in full and will reappear in the cloned offspring. "Trait" is a hugely protean idea, ranging from the genetic specificity of eye color to the complexities of one's interests, cognitive frameworks, honesty, and so forth. The difficulty is illustrated when we think of genetic engineering or performance enhancement generally. What is being engineered or enhanced? This is part of the difficulty in speaking fearfully of Hitler clones—or hopefully of Churchill clones. What are the traits we will secure through such cloning? Anti-Semitism? Oratorical skill? A belief in Aryan

⁷⁴ See supra Part II.

⁷⁵ See Shapiro, supra note 69, at 47 n.112. The Nobel sperm bank no longer operates. Logan Jenkins, Exclusive Sperm Bank Calls It Quits, SAN DIEGO UNION-TRIB., May 19, 1999, at B1. The ostensible reason for shutting down was that the American Association of Tissue Banks had promulgated standards requiring that sperm must be generated on-site, rather than delivered. Id.

⁷⁶ Wilson, *The Paradox of Cloning*, supra note 62, at 26. See also PENCE, supra note 4, at 101-02 (discussing benefits to children deriving from improved genetic inheritance).

superiority? A craving for Wagner's music? An interest in the history of the English-speaking peoples and in the consumption of brandy and cigars?⁷⁷

Nevertheless, a belief in genetic determinism and predictability may inspire a custodial parent's specific expectation of various genetically induced outcomes. This suggests a risk that parents of a child with a nearly-exact iteration of a used genome will unduly channel and direct her life, and that the child herself may come to believe that her future is fixed. Later, questions will be raised about what "undue channeling" might mean.

3. Cloning and Genetic Engineering; Genetic Enhancement

Near-certainty in cloning ends with the genomic duplication and the presentation of certain traits defined almost entirely by genes. As for "precision engineering," any complex trait we favor in selecting a nuclear source comes "tied" to other traits; we cannot vary them "one at a time" with cloning.

Other forms of genetic engineering, of course, are not going to address all one's genes at once, necessarily leaving most other genes unchanged. If so, the effects of the specific alterations will depend on varying genomic contexts from person to person—just as selecting a nuclear source for one trait leaves it joined to other gene-trait relationships in the cloned offspring. However, these directly unchanged portions of the genome may be affected by the induced genetic change, thus making outcomes still harder to predict.

Cloning and other forms of genetic engineering may "enhance" the next generation. With cloning, we are assuring the reappearance of a variety of genetically influenced traits, some of which we may value highly and hope will outweigh any disvalued ones.⁷⁸ Cloning can also be used to

Tit is not always clear what a "trait," "attribute," "characteristic," or "feature" may be. It is one thing to identify eye color as a trait—although it may be of greater or lesser consequence and salience in different cultures. But what of the capacity to hit small objects with sticks—a capacity that may not even be noticed absent activities such as baseball, cricket, hockey, golf, and croquet. If we seek to enhance performance, is the relevant trait the capacity to, say, lift weights, or the physiology of one's muscles and its relation to biological energy conversion, or the pattern of subatomic entities underlying it all? (This question suggests the idea of reduction, discussed in Part VI, infra.) The description of traits seems, to a considerable extent, to depend on what purposes we are pursuing at a given time within a given culture. Recognition and valuation of traits is thus far more than a matter of simple description: describing and assessing them may presuppose certain social and personal practices. See Shapiro, supra note 69, at 19-21 (discussing meanings of "trait" and "trait alteration").

note 69, at 19-21 (discussing meanings of "trait" and "trait alteration").

⁷⁸ But cf. Robert Wachbroit, Ethical Concerns About Cloning Are Misplaced, in CLONING, supra note 10, at 66, 69.

But such questions [about enhancement] are about genetic engineering, which is a different issue [from] cloning. Cloning is a crude method of trait selection [not necessarily—it may be quite exact, even if coupled with other traits that may be unwanted]: It simply takes a preexisting, unengineered genetic combination of traits and replicates it.

Id. at 69. The qualification "simply" does not entirely belong here, however. To the extent we can identify highly valued traits that are significantly influenced by genetics—intelligence, for example—

deselect traits: one chooses nuclear sources not just on the basis of favored traits but because of the absence of disfavored traits—not necessarily defined in terms of "disorder" or other pathology.⁷⁹ In this sense, the next generation is enhanced relative to the preexisting baseline of disfavored traits.

It seems a stretch, however, to say that a particular cloned offspring has been "enhanced." Her genome may be an iteration of the genome of someone with (supposedly) superior traits—or the absence of inferior traits—both sets influenced by genetics. The offspring, however, knowing that she would not exist but for the favored traits of her genetic "ancestor," might view herself as enhanced in some variant sense, and may well be viewed so by others. Are clones "advantaged" in the sense that they exist because, and only because, some of their traits were expected to be superior?

In contrast, if gametes or early embryos are genetically manipulated, we are not limited to talking of enhancement of a generation or a society: the specific person-to-be has indeed been enhanced, compared to his inherited genetic baseline.

E. SUMMING UP THE DISARRAY: NORMATIVE/CONCEPTUAL CONFUSION ARISING FROM CLONING'S DIFFERENTNESS; INSTRUMENTAL HARMS

Cloning exemplifies several of the causes of conceptual and moral confusion recounted earlier: the fracturing and rebuilding of basic life processes into new forms; the "manufacturedness" of the fully determined (nonautonomous, nonauthentic, nonindividual) person (can such an entity can be a person in the philosophical sense?); and the development of new—perhaps perverse—uses for natural life processes to cloning.

The idea of such a person inspires fear of cloning:⁸⁰ we have always been frightened of monsters. The clone is a prefabricated human being, a

then the replication of the "preexisting, unengineered genetic recombination" represents a degree of control and "generational enhancement" that goes far beyond the genetic lottery, even if it falls far short of precise genetic programming. We are determining the trait-composition of successive generations in ways going considerably beyond everyday mate selection or even gamete selection.

The article discusses "knocking genes in and out' to achieve assorted traits," and quotes Alexander Capron, who believes the trend will start with parents nixing genes that cause diseases like asthma. Then 'people will start arguing that cloning is the more responsible way to reproduce." Id. Of course, prenatal testing with present technology may be far more efficient in many cases, unless the project at hand is to select favorable traits and not just deselect unfavorable ones.

These observations apply to particular acts of cloning and genetic engineering. What of large-scale use? Neither cloning nor genetic engineering will have much effect on the human gene pool if practiced only rarely—except possibly over very long periods of time.

⁸⁰ But cf. Erik Parens, Tools from and for Democratic Deliberations, HASTINGS CENTER REP., Sept.-Oct. 1997, at 20, 21 (referring to the power to "predetermine the genes of a child," thus making "it possible for prospective parents to know in advance a very great deal about their offsprings'

monstrosity³¹ whose life is crystallized in advance. How so? There are two reasons. First, she is a genetic duplicate, and genetic mechanisms being what they are, she is therefore locked into certain critical paths—she has no choice in the matter: if her genes say "blue eyes," she gets blue eyes, and more. Second, because she is viewed by others and by herself as genetically constrained, whatever wiggle room there was for "free will" disappears, at least according to the hyperbole of some critics of cloning.

For related reasons, the clone—and any fully determined person—also seems to be an artifact, constructed by using ordinary human material for unprecedented purposes. We have, after all, taken a nucleus from a human body cell with certain specific physiological functions and used it to reproduce an entire organism, not just its host cell. It is a form of reproduction that bypasses customary natural modes, and does it in a way that suggests we are manufacturing an object, not a person. When we manufacture things, we mess around with physical materials and processes for utilitarian purposes—taking them apart and putting them back together, not as they once were, but as we want them to be. If our enterprise fails for any reason, we discard the defective or unsold products or hide them away.

The problem of cloning's uncomfortable (or nonexisting) "fit" within existing categories of description, explanation, and justification may help account for the colorful phrases that decorate cloning debates, such as "inherently dehumanizing" and "repugnant." For example, Kass states: "[W]hether or not we know it, the severing of procreation from sex, love and intimacy is inherently dehumanizing, no matter how good the product." See the product." See the product of t

Perhaps his idea is that *every* behavioral and biological element of standard-form reproduction within our culture—perhaps across every culture—is necessary for the humanness of such reproduction. On his claim, taken literally, any form of assisted technological reproduction is necessarily dehumanizing. For example, artificial insemination separates coital sex from procreation. To alter the standard process by deleting or

characteristics"). This properly circumspect description suggests both the fear of "predetermination" and rational limits to such fear: "a very great deal" of knowledge is very far from "all knowledge."

Streatures and other things that straddle or evade categories sometimes draw this description. On monsters, see David Bloor, *Polyhedra and the Abominations of Leviticus: Cognitive Styles in Mathematics, in Essays* in the Sociology of Perception 191, 197-98 (Mary Douglas ed., 1982) (discussing the work of Lakatos, a mathematician who identified anomalous mathematical ideas, describing some as "monsters").

Kass, supra note 13, at 22. Pence heavily criticizes Kass at various points in his book. See, e.g., PENCE, supra note 4, at 77-78. In a later essay, Kass again asserts that cloning is wrong in itself, and that there can be no "innocent" cases, despite his willingness to concede that a cloned child, if born of woman and if cared for lovingly and responsibly within a marriage like any other child (a big if) could turn out to be no worse or less happy a person than he [Wilson] or I—that would be an empirical question, not resolvable as a matter of principle. Kass, Family Needs Its Natural Roots, supra note 62, at 78-79. Still, he thinks cloning is a form of child abuse. See id. at 78.

substituting elements is dehumanizing, and "inherently" so. But this is simply an assertion. It defines by undefended stipulation the "human" aspects of reproduction, and thus defines "dehumanization." But why should we accept that definition?

I suggest reconstructing Kass's remarks in this way—a reconstruction that does not reflect my views but makes more sense, even if it departs from Kass's meaning:

Cloning departs from natural and traditional ways of human procreation: the actual sexual association of male and female, the bearing of the child by the woman, and the construction of a nuclear family with clear lines of parenthood and other kinship relations, and a view of the children as awe-inspiring gifts of nature whom we unconditionally accept and bond with. When the standard ways are used, there is little or no confusion. The category straddling and resulting bewilderment about relationships, responsibilities, and bonds entailed by cloning (and other forms of assisted reproduction) are rightly viewed as inherently dehumanizing. By this I mean that the very nature of creation by cloning-its biotechnological mechanisms, its nuclear selection practices resting on trait selection, its genomic predictability, the inevitably connected and immensely heightened expectations of certain outcomesis empirically incompatible with the free non-contingent acceptance of the children that come to us undesigned and unpredictably structured through sexual recombination.83

Id. at 161-62. Later, Jonas refers to a "right to ignorance." Id. at 163.

⁸³ See also Jonas, supra note 51, at 161 (referring to "the very assumptions in cloning [someone], which by their imposition on all concerned become a force themselves"); Robertson, Liberty, Identity, and Human Cloning, supra note 10, at 1419 ("After all, [the married people] are choosing to give the child a particular genome for a reason."). It is instructive to examine some of the text surrounding Jonas's quoted phrase above: it fills out his views on reproductive motivations, but also reveals several assumed but unverified views about the probable psychology of those involved in cloning.

The simple and unprecedented fact is that the clone knows (or believes to know) altogether too much about himself and is known (or is believed to be known) altogether too well to others. Both facts are paralyzing for the spontaneity of becoming himself, the second also for the genuineness of others' consorting with him. It is the known donor archetype that will dictate all expectations, predictions, hopes and fears, goal setting, comparisons, standards of success and failure, of fulfillment and disappointment, for all "in the know"-clone and witnesses alike; and this putative knowledge must stifle in the pre-charted subject all immediacy of the groping quest and eventual finding "himself" with which a toiling life surprises itself for good and for ill. It is all a matter much more of supposed than real knowledge, of opinion than truth. Note that it does not matter one jot whether the genotype is really, by its own force, a person's fate: it is made his fate by the very assumptions in cloning him, which by their imposition on all concerned become a force themselves. It does not matter whether replication of genotype really entails repetition of life performance: the donor has been chosen with some such idea, and that idea is tyrannical in effect. It does not matter what the real relation of "nature and nurture," of genetic premise and contingent environment is in forming a person and his possibilities: their interplay has been falsified by both the subject and the environment having been "primed." The trial of life has been cheated of its enticing (also frightening) openness; the past has been made to preempt the future as the spurious knowledge of it in the most intimate sphere, that of the question "who am I?", which must be a secret to the seeker after an answer

The idea of cloning, as it almost certainly will be practiced, is thus very likely to drastically diminish the strength of our noncontingent bonds⁸⁴ with our children, and—via the slippery slope—to each other generally. One can extend this line of thought beyond cloning to other forms of assisted, unnatural reproduction: There is a moral preference for randomness over genetic planning, because the former is associated with the indeterminacy and unpredictability—the naturalness and freedom—we associate with being a person. With cloning, schemes and scripts for raising our children will become specific, precise, and overtly goal-directed because of the kind of ideation, anticipation, and expectation inextricably connected with genetic control generally, and cloning in particular. We will be primed to look for and find what we expect or wish, and we will be anchored into our preexisting mindset.⁸⁵

Finally, the absence of actual sexual intimacy or even biological sexual union may elevate the risk of merely contingent bonding between parent and child. Without sex, human reproduction—if that is what it is—resembles the sale of a product more than the procreation of a child. Loving companionship will be replaced by ownership of useful things. Humanity will be reduced to objecthood.

This is of course not really an account of Kass's views, but a partial replacement of them with significantly different arguments. Nevertheless, it serves two purposes: making Kass's bottom-line complaints somewhat more comprehensible, and displaying both their strengths and weaknesses.

I make only one point here: Jonas takes pain to stress that the supposed "knowledge" is only supposed. Suppose, however, that the facts, to the extent that they are known, are presented—and the mistaken notions of certainty are dispelled. What then? To the extent that intrinsic and instrumental harms are caused by misconceptions, why can't (some? many?) of them be cleared up? Once again, even with respect to the psychology of cloning, the critique of cloning is all-or-nothing, just as it sometimes appears when critics talk of the impact of genetics.

The idea of noncontingent bonds is elaborated in Shapiro, supra note 11, at 348-57. The core idea is that we are to unconditionally accept the children born to us, whatever their traits. We make both legal and illegal compromises with this ideal—giving children up for adoption, abandonment, infanticide—but it remains an ideal. Compromises that sever the bond and end obligations are officially tolerated, perhaps even encouraged, only when there is some substantial reason to believe this will promote the child's best interests—ideally by bonding with adoptive parents. Adoption is the main example and possibly the only one on some views. Cf. Martha C. Nussbaum, Objectification, 24 PHIL. & PUB. AFF. 249, 262 n.19 (1995) ("The norm of unconditional love of children may lead love to disregard the particularizing qualities of the individual, and this may be seen as a good feature of parental love."); Martha C. Nussbaum & Cass R. Sunstein, Introduction, to CLONES AND CLONES, supra note 3, at 11, 13 ("If we could choose the genetic makeup of a child, would unconditional love for children become rarer than it is now?"); Erika Blacksher, Cloning Human Beings, HASTINGS CENTER REP., Sept.-Oct. 1997, at 6, 6 (referring to "the ethics of unchosen obligations"); CLONING HUMAN BEINGS, supra note 9, at 69-70 (stating that planning and control are "viewed by many as fundamentally at odds with the acceptance, unconditional love, and openness characteristic of good parenting").

⁸⁵ See also Robertson, Liberty, Identity, and Human Cloning, supra note 10, at 1391 ("[C]loning is concerned not merely with producing a child, but rather with producing a child with a particular set of genes."); PENCE, supra note 4, at 137 ("[T]here will always be some reason for choosing to originate a child from this genotype rather than that one."). For a definition of "anchoring," see RICHARD NISBETT & LEE ROSS, HUMAN INFERENCE: STRATEGIES AND SHORTCOMINGS OF SOCIAL JUDGMENT 41-42 (1980) (discussing "inferential adjustment and its limitations"); on "priming," see DANIEL L. SCHACHTER, SEARCHING FOR MEMORY: THE BRAIN, THE MIND, AND THE PAST 166 (1996).

For example, the claim that cloning is inherently dehumanizing rests on a very vulnerable core premise: that human cloning is at war with natural, traditional procreation, and that that way is the only properly human (and therefore moral) way to proceed.

That premise has a similarly vulnerable corollary: practices that escape or fail to fit our traditional and natural categories of description and evaluation should be rejected as taboo, at least insofar as they concern essential human functions. These categories of judgment are morally preferred because they reflect the natural, sexual, human way of creating persons. Therefore, there should be *no* cloning whatsoever; even one such act would be an assault on humanity.

I do not think this is the proper way to think about cloning and whether it should be banned or limited and regulated. How does the radically different nature of cloning as a form of human propagation—and the conceptual confusion it spawns—intrinsically, necessarily, or inherently harm clones or anyone else? Our concerns are properly with instrumental harms. The inherent/instrumental harm distinction is imperfect, to be sure, but it remains useful nonetheless. It drives us to ask whether the probable motivations and other circumstances of cloning make it likely or inevitable that the clone's autonomy and individuality would be compromised by practices of her custodial parent(s), by the world's perception of her anomalous and assertedly offensive creation, and by her own (perhaps externally induced) views of herself. These are at least some of the right questions.

The fact that cloning seems strikingly different from other forms of reproduction is relevant but not decisive in forecasting instrumental harms. It is not irrational to worry over harms to a technologically created being whose lineage is unclear, who may have been brought into existence pursuant to a trait-selection plan, and who will perceive herself to be an outlier. Our confusion, rational or not, may drive behaviors that will injure her. Think again of the harms humanity has done to the "illegitimate" children of illegal or nonsanctioned relationships.

From the cloned offspring's perspective, she is not harmed in most cases—whether or not she thinks she is—because she had no alternative existence, a point I return to later. But from the *community's* perspective rather than the offspring's, it is easy to understand why we would be leery of dealing with squads of psychologically damaged and highly confused persons. The community has a right to discourage such forms of reproduction—but it cannot rationally be founded on a belief that the children so created are necessarily harmed. (I do not deal with the theoretical arguments concerning the nature, rights, and powers of "the community.")

This sort of instrumental/consequential assessment is sometimes conflated with the foul theory of utilitarianism, which opponents of cloning persistently misdescribe as a nonmoral theory that ignores the most important things in life. This is wrong. "Instrumental" analysis is not so confined, and instrumental harms may include impairments of interests and values often understood in nonconsequentialist ways—infringements of rights founded on autonomy, privacy, equality, justice, and fairness. "Instrumentalists" and consequentialists generally may thus be deontologically oriented; harms defined by impairment of "abstract" rights and interests can be counted as adverse consequences and therefore as instrumental harms. The source of the s

The instrumental risks of cloning will be discussed again later when I continue to try to revise the arguments in opposition to cloning into their strongest form. I will examine the frail chain of reasoning that underlies these arguments and will suggest that the central concept requiring analysis is "reduction" in a sense to be specified. I will then link reduction to matters of "person perception."

The upshot of these investigations will be that, although there are risks associated with cloning, the likelihood that it will accelerate our decline from persons to objects is greatly inflated by its opponents. There is therefore no justification for a flat across-the-board ban on human cloning. Threats to autonomy and individuality, even if nonzero, are nowhere near creating an extreme situation in which these values are utterly annihilated or even substantially impaired. It is not always clear that a given circumstance—such as a strong expectation of specific behavioral outcomes—indeed "threatens" or "risks" autonomy or individuality or satisfaction: expectations are not intrinsically evil and may be enabling or enriching for a given child, even when strongly held by determined parents. (Think of baseball's Ken Griffey Senior and Junior, or the second

²⁵ See infra text accompanying note 172. Also see Kass's claim that "bioethicists... have found utilitarianism to be the only ethical vocabulary acceptable to all participants in discussing issues of law, regulation and public policy [by members of government commissions, boards, etc]." Kass, supra note 13. at 18. This is not so. Some critics of bioethics complain about what in some sense is a partial "opposite"—an excessive focus on autonomy and on rights generally that may or may not have a utilitarian foundation. See generally Alexander M. Capron & Vicki Michel, Law and Bioethics, 27 Loy. L.A. L. REV. 25 (1993) (briefly reviewing multiple aspects of "bioethics" and its historical origins and noting the critique of "rights talk").

⁵⁷ See Samuel Freeman, Utilitarianism, Deontology, and the Priority of Right, 23 PHIL. & PUB. AFF. 313, 348 (1994) "[T]he teleology/deontology distinction does not mark a contrast between moral conceptions that take consequences into account and those that do not. No significant position has ever held consequences do not matter in ascertaining what is right to do." Id.

Think also of the idea of "the utilitarianism of rights," a phrase used in ROBERT NOZICK, ANARCHY, STATE, AND UTOPIA 28-29 (1974). If one practice is likely to impair a given set of rights more than another practice, then (other things being equal), the latter may be preferable—on both consequentialist and nonconsequentialist grounds, and depending on the content of the theories in question.

generation of Unsers and Andrettis in their race cars, and even James Mill and John Stuart Mill.) To see this, just think of the effects on children of a substantial *lack* of expectations that they will amount to anything. It seems obvious that being expected to fulfill certain roles can hurt or help children—or do both in different ways. There are far too many variables to allow us to say with assurance what the likely outcomes are in any parenting process, including those involving cloned offspring. And the very characterization of an outcome as a harm or benefit also depends heavily on one's value perspective; the feared outcome may constitute a good rather than a bad in some eyes.

So, there are expectations, some pleasantly vague or inchoate—as when we contemplate the bare idea of having children—and others sharper and more obsessive. To pare the risk analysis down to its narrowest core, it is precisely here in the realm of motivations, expectations, and our responses to them that cloning may be incrementally risky—not intrinsically, but instrumentally. We gain little by littering our discussions with conclusory, question-begging characterizations and by unilluminating appeals to the idea of a rock-solid human nature. Such appeals have their place and may have a beneficial stop-look-and-listen effect, but in the cloning debate they have been used circularly and clumsily.

IV. MUST CLONING BE JUSTIFIED BEFORE IT IS PERMITTED?83

A. IN GENERAL: PRESUMPTIONS OF NONINTERFERENCE

We are not bound in every field of human activity to start with the moral axiom that we are free to do as we wish, so long as it does not hurt others. The arguments here, to borrow from a well-known source, are not meant to implement Herbert Spencer's *Social Statics*⁸⁹ or John Stuart Mill's *On Liberty*. If that axiom held full strength across the board, then a simple switch of the burden of justification onto cloning's opponents could (in theory) transform public discussion and possibly end the matter (at least for a time) because the outcomes of cloning are so speculative. To be sure, a weak presumption, implemented by a weak standard of proof, might allow

⁸⁸ For additional remarks on this "burden of proof' issue, see Shapiro, *supra* note 17, at 1212-14. *Cf.* Miller, *supra* note 63 (stating that "[Wilmut] believes that it would be 'grossly irresponsible' to consider trying to clone a human, given scientists' lack of expertise in the field and the lack of knowledge about what it means to be a clone.").

See Justice Holmes's dissenting opinion in Lochner v. New York, 198 U.S. 45, 65-66 (1905) ("The 14th Amendment does not enact Mr. Herbert Spencer's Social Statics."). The idea of a "starting" presumption is ambiguous. What I say in the text is consistent with thinking that at the threshold of community formation, the strong libertarian principle may hold across the board, but that over time, the presumption is overcome for certain described fields.

DOHN STUART MILL, On Liberty, in THREE ESSAYS 5 (Oxford Univ. Press 1975) (1859).

the arguments against cloning to be successful; much depends on how risk averse we are

We have long recognized areas of activity where the autonomy presumption is weakened, suspended, or even reversed. They cannot be precisely defined, and the issues of where and how such presumptions operate is too complex to pursue here; they underlie much of political and moral philosophy and political theory. But some examples can at least illustrate the problem of designating different spheres for different presumptions of liberty. We disallow certain forms of personal risk-taking and place the burden of showing that it should be permitted on those wishing to take those risks. For example, think of the contemporary constraints on enrolling human subjects in biomedical research. The main terms of the enrollment agreement are in significant part specified by law and not left to market-like bargaining. Moreover, research projects thought to bear inappropriate risk/benefit ratios may be disallowed altogether despite the subjects' informed consent. To this extent at least, research using human subjects exists within an openly paternalistic regime, although it is not founded exclusively on simple paternalism.

To rest on just one area would greatly distort investigation of the scope of the presumption of autonomy. Large domains of conduct have been at least partly regulated or even appropriated by governments in all parts of the world, even those most "liberal" in the Millian sense. Think of the forced savings required by social security systems; the restraints on use of substances to alter our minds or bodies in significant ways, whether for entertainment, augmentation, or repair; coercive public health programs; regulation of commercial transactions; prohibition and inhibition of various practices and institutions to avoid their unwanted learning effects as well as to forestall individual harm (e.g., regulating the use of performance-enhancing drugs); a large collection of traditional limitations on sexual practices (e.g., incest) and public behaviors (e.g., public nudity or sex); and so on. But the fact that there are historical limitations on autonomy and privacy whose foundations are hard to pin down establishes little, if anything, concerning how we are to assess novel practices. Indeed, the

⁵¹ See 45 C.F.R. § 46 (1997) (regulating all research involving human subjects performed, supported or regulated by any federal department or agency that acts to make the regulatory policy defined by § 46 applicable to that research); 21 C.F.R. § 50 (1998) (applying to clinical investigations regulated by the Food and Drug Administration under certain federal statutes).

⁷² Cf. ROBERT J. LEVINE, ETHICS AND REGULATION OF CLINICAL RESEARCH 63-64 (2d ed. 1986) (discussing paternalistic displacement of informed consent in research because of "unfavorable harmbenefit ratios to subjects").

The text discussion is about moral burdens of proof. To the extent that certain forms of cloning research are constitutionally protected (whether on First Amendment or procreational autonomy grounds), there is a presumption that highly burdensome regulation is unconstitutional. See Roy G. Spece, Jr. & Jennifer Weinzierl, First Amendment Protection of Experimentation: A Critical Review and Tentative Synthesis/Reconstruction of the Literature, 8 S. CAL. INTERDISC. L.J. 185 (1998).

moral or policy foundations of these realms of freedom, qualified freedom, and nonfreedom are rarely made explicit. "Paternalism" may be a swear word to some, but in certain respects it designates a locked-in characteristic of our society, and—to an even greater extent—of many others, whether or not so acknowledged.

Before judging how burden-of-proof ideas apply to cloning, we need to ask "burden of proof as to what?" Cloning might be disallowed until it is shown likely to benefit society without undue risk, or until it is shown that it is not unduly risky, whether it is affirmatively beneficial or not. The questions now multiply. What counts as harms to be or not to be risked? In comparing risk/benefit analysis with risk-only analysis, would the latter permit a lesser showing of risk to block cloning than the former?

One might easily object that "benefit to society" is so obscure that the idea of a benefit/harm calculus is meaningless here. For example, it seems obvious within many moral theories that satisfying a preference generally counts for something; this seems part of the understanding of a liberal regime. We need not explore theories about what sorts of preferences (to live in an ethnically cleansed community, for example) should be assigned little or no (or negative) weight. It is enough to say that if someone—whatever her fertility status—wants to be a nuclear source and someone wants to raise the resulting offspring (perhaps the nuclear source herself), receiving the child one wanted is a presumptive benefit, leaving one better off (and no one worse off). Some would hold that if anyone is better off in this sense, society is also better off—other things remaining equal. But "other things remaining equal" is part of what cloning opponents question.

Plainly, then, assigning burden-of-proof structures to different areas does not enable us to bypass hard questions. Deciding what burdens of proof (or persuasion, or nonpersuasion) apply to what issues obviously presupposes that some evaluative judgments have already been made.

Now, in what domain does cloning belong and what sort of burden of proof, if any, ought to be applied to it? We cannot beg the question by talking loosely of "replication" rather than "procreation," parading one's naked disgust at the former, and then selecting the appropriate burdens for the (dis)favored activities.

Nor can we advance the analysis by offering dismissive remarks about "choice" and the baleful effects of markets. Annas, for example, says that to defend human cloning is to extol "[c]hoice for its own sake." What does this mean? It seems to be a confusing way of saying that some choices are not properly matters of personal autonomy, possibly because they are likely to be intrinsically or instrumentally wrong. It might also mean that

⁹³ Annas, Human Cloning: A Choice or an Echo, supra note 23, at 250.

the choice-maker wishes to display her independence and power to secure attention or reinforce her sense of self, the actual content of the choice being secondary; or that she simply enjoys lording it over others. In the latter cases, she may be relatively uninterested in securing the apparent goals of the substantive choice. Of course, there is no evidence for this claim because human cloning is not exactly a common practice. But the need for evidence might have been acknowledged.

Even as reformulated, however, the "choice for its own sake" claim is a mischaracterization because it is significantly incomplete. Choice here, as elsewhere, has a subject matter—in this case, generating another human being asexually to replicate his genome. It is not rightly characterized as "doing/deciding something just to do/decide something." Neither the "choice for its own sake" formulation nor its reconstruction advances our analysis of cloning; it simply reflects the author's hostility to it. Many exercises of choice have multiple goals, and if some of them involve technological showing-off or ego reinforcement-what then? It will not do even to say that we are then entitled to be suspicious—suspicious of what? If people are "showing off" in cloning human beings, the question is relevant only insofar as it bears on instrumental harms linked to certain motivations, purposes, and goals underlying the decision to clone. If someone's attitude is, "I just want to see if I can do it; after that, the cloned offspring can be left at the nearest child services department," we would be right to condemn the person and notify the constabulary if the child is indeed abandoned.

To assert, then, that "choice is an insufficient justification for human cloning" —because, after all, it is just "choice for its own sake" —does not even beg the question; it avoids it either by a conclusory description or perhaps a stipulated definition of the nature of certain choices. Either way evacuates "choice" of much of its content.

But how *should* we characterize the burden of proof? We cannot tell without examining the nature and effects of human asexual reproduction and estimating its instrumental harms. Part of the reason for our puzzlement about burdens of proof concerning cloning lies, once again, in our inability to fit cloning into our standard frameworks of analysis and judgment: we do not know where it "goes" within this normative map—what its proper domain is.

So, it is hard to deflect questions such as: "I still do not see why anyone would want to clone, or what good cloning would do." These make

³⁴ Id. at 254.

³⁵ Cf. Martin E. Marty, Cloning: The Ultimate Human-Potential Movement, L.A. TIMES, Mar. 2, 1997, at M1 (referring to Alexander Capron, a member of the National Bioethics Advisory Commission: "He looked at the con's and pro's of human cloning and pronounced: 'I don't see the pros,

maximum sense only on the assumption that cloning—rather than its blockade—must indeed be justified. But this assumption is neither obviously correct nor incorrect. Determining the relevance and propriety of asking, "Why would anyone do it?" rests on placement of the moral/policy burden—and proper placement of that burden presupposes, within a moderate libertarian framework, that there is good reason to fear cloning's outcomes. "Why would anyone bungee-jump?" is a good question, but by itself does not suggest a case for legal prohibition. Here, selecting the "procedural" or "evidential" stop—"you lose if you bear the burden while the contested issues remain indeterminate"—coincides, to some extent, with the ultimate "substantive" issue.

At this point, there is little use in dealing with who must justify what. The sole virtue of opposing cloning simply "because I cannot see it will do anyone any good" or because there is no "clinical reason to copy a human

frankly.""). See also Robertson, Liberty, Identity, and Human Cloning, supra note 10, at 1372 (observing, in the process of defending the moral and constitutional right to pursue human cloning in various situations, that it "serves few pressing needs"). Robertson, however, later states that "it is now possible to articulate several plausible uses that fit closely with existing reproductive and genetic selection practices." Id. at 1386.

** Compare Ruth Macklin, Human Cloning Has Not Been Proven Harmful, in CLONING, supra note 10, at 64, 65 ("Even if human cloning offers no obvious benefits to humanity, why ban it? In a democratic society we don't usually pass laws outlawing something before there is actual or probable evidence of harm.") with Gina Kolata, The Hot Debate About Cloning Human Embryo[s], N.Y. TIMES, Oct. 26, 1993, at A1 (quoting Macklin and stating that (in Kolata's words) "although it was hard to argue that ethical principles would be violated by cloning, the technique could provide 'an opportunity for mischief.' And, she added, that places a burden on those who would develop and offer the technique."). But see George J. Annas, Regulatory Models for Human Embryo Cloning: The Free Market, Professional Guidelines, and Government Restrictions, 4 KENNEDY INST. ETHICS J. 235, 246 (1994).

One of the most important procedural steps a federal Human Experimentation Agency could take would be to put the burden of proof on those who propose to do novel experiments, such as cloning, that call deeply held societal values into question. Thus, cloning proponents should have the burden of proving that there is an important societal purpose for such an experiment, rather than the regulators having the burden of proving that there is some compelling reason not to approve it.

Id. Compare the statement by Mark Sauer: "I would have no problem with that as long as I understood what the couple's real motivation was. I've always been one to agree with reproductive choice." Kolata, supra (quoting Mark Sauer).

As I discuss in the text, suppose that cloning will not promote some "important social purpose" yet will not pose any important risks. Why should it be prohibited in such a case? Also, Annas's predicate for imposing the burden—"call[ing] deeply held societal values into question"—itself begs some questions. Annas, supra, at 246. Whether certain practices are rightly taken to assault certain norms is part of the question, and, although we should take visceral reactions as a sign that further investigation is needed, they cannot be conclusive. There may also be "deeply held societal values" that shouldn't be so held.

⁹⁷ See generally Daniel Callahan, Cloning: The Work Not Done, HASTINGS CENTER REP., Sept.-Oct. 1997, at 18.

Nowhere has anyone suggested that cloning would advance the cause of children. And why should anyone? Apart from imaginative exercises in which cloning would answer some parental wishes, or maybe (in the most idiosyncratic case) save a child's life, children in our world do not suffer from an absence of cloning. But it has been one of the enduring failures of the reproductive rights movement that it has, in the pursuit of parental discretion and relief

being"³⁸ (as if all significant human behaviors required a clinical reason) is that at least it drives us to probe the effects of cloning rather than to rely on the possibly transient nausea induced by "repugnance." But standing alone, these arguments beg significant questions about cloning. They also beg larger questions concerning the nature and status of personal choice in specific fields. To that end, I suggest a review of the public/private distinction to see if we can mine anything of use in talking about cloning—including burden placements.

B. THE PUBLIC/PRIVATE DISTINCTION AS A TOOL FOR LOCATING FIELDS WITH DIFFERING PRESUMPTIONS—OR IS DOING THIS JUST ANOTHER WAY OF BEGGING THE QUESTION?

This well-known (and somewhat ill named) distinction is regularly raised as a major conceptual tool in moral, legal, and political analysis. ⁹⁹ It is conceptually linked to ideas of autonomy, political liberty, individuality, and personhood—and perhaps we are better off allocating our time to the latter concepts than to the somewhat clumsier "public/private" formulation. ¹⁰⁰ But the formulation is still out there and bears some attention. Some aspects of the public/private distinction are surely culturally relative, and there are large differences among groups on where

of infertility, constantly dissociated the needs of children and the desires of would-be parents. Instead of taking the high road and focusing on what children require for a good life (only part of which is being wanted by their parents) the reproductive rights movement consistently drifts toward a lower standard.

Id. at 19. If we were building a society from scratch and searching for an adequate conception of reproductive rights, moral considerations would mandate taking into account all relevant matters, the welfare of children obviously being one of them. But we are talking about our own already formed society in which certain kinds of reproductive rights have crystallized. Unless the nature of the risks to clones arising from the very process of cloning (its genetic and technological implementation aspects) or from likely circumstances (intrusive parenting?) indicate that many of them will lead lives that from their viewpoint are not worth living, then there is no basis for an all-or-nothing position that leads to a ban on cloning while immunizing standard-form reproduction. And as for standard-form reproduction, this is not the place for discussing questions such as, "Should procreation be viewed as a privilege, not a right, and should we therefore enact a licensing law in which prospective parents must establish that their children's needs will be satisfied?" This is well worth discussing—but not here, and not without making clear that taking it seriously would represent a sharp departure both from existing law and common practice.

As for the idea that the bioethics literature deals with fertility issues largely by taking account of desires to reproduce without sufficiently attending to the welfare of the resulting children: I do not think this is so, and suggest that those who think otherwise check an adequate sample of the literature.

38 Youssef M. Ibrahim, Ian Wilmut: Secrecy Gives Way to Spotlight for Scientist, N.Y. TIMES, Feb.

Youssef M. Ibrahim, Ian Wilmut: Secrecy Gives Way to Spotlight for Scientist, N.Y. TIMES, Feb. 24, 1997, at B8 (quoting Wilmut).

See, e.g., Symposium, The Public/Private Distinction, 130 U. PA. L. REV. 1289 (1982).

I am not arguing that all references to the public/private distinction can be "reduced" to references about other normative/conceptual structures without alteration or loss of either truth-value or sense-meaning. However, the distinction cannot be adequately plumbed without dealing with other classic concepts and distinctions, particularly ideas of autonomy, liberty, and freedom together with notions of justice, fairness, and utility.

the borders are located, and indeed whether there are borders at all. But it is not some stray, transient notion.

In its application here, I take the distinction to refer to whether cloning should be left largely to private ordering in accordance with the classic liberal presumption that "we can stop you from acting only if you create a sufficient risk of harm." (I leave out qualifications concerning competence, coercion, and so on.) The alternative is that cloning is among those practices that are (rightly or not) considered impermissible unless an appropriate justification is shown. We thus need at least a glance at a rough typology of harms (briefly mentioned earlier) that cloning might cause.

1. The Kinds of Harms Risked by Cloning and Other Forms of Assisted Reproduction: Harms to the Social Fabric; Reduction, Mere Use, and Objectification; Shaping Children's Development to Produce Particular Kinds of Persons Rather than Objects for Use or Display

Some believe, as we saw, that certain forms of assisted reproduction are intrinsically or instrumentally wrong, or both. We have heard, for example, that a person has a natural right to genetic uniqueness that is defeated by cloning—though not by multiple births, as of identical twins. (Although one might ask what "uniqueness" means and whether it has been overvalued, I will not pursue this now. We have also heard that a person has a right not to be born of a woman who gestates him—even where he is

The idea of remitting questions to private ordering is rarely an all-or-nothing matter. With cloning, one would expect that even a classic liberal stance would under certain circumstances embrace legislative determination of parentage and custody—issues that are critically important at the outset of any cloning projects and have no simple, intuitive solution based on preexisting concepts of procreation, parentage, and companionship. Thus, if repeated judicial attempts fail to deal adequately with the issues under existing common law and statutory rules, legislation would be a rational move.

[&]quot;Assisted reproduction" is taken here to mean either technological assistance (say, through artificial insemination, in vitro fertilization, or cloning), personal assistance (for example, gamete donation, embryo donation, or surrogacy services), or combinations of the two.

¹⁰³ See CLONING HUMAN BEINGS, supra note 9, at 67. As pointed out in Jan C. Heller, Religiously Based Objections to Human Cloning, in HUMAN CLONING, supra note 10, at 153, 169, it is not clear, when considering the "right to genetic uniqueness," why it is ethically relevant that natural twins are conceived simultaneously, but the nuclear source and her cloned offspring—her "delayed twin"—are not.

The fact that there is greater time between the birth of the twins in cloning than is the case with natural twins does not, on the face of it at least, seem to constitute a violation of human dignity. Some other reasons are required if we are to establish that somatic cell nuclear transfer cloning violates human dignity.

Id. The serious issue here concerns different modes of interaction between persons with identical genomes and between them and others. But this does not directly bear on a "right to genetic uniqueness."

See Richard M. Zaner, Surprise! You're Just like Mel, in HUMAN CLONING, supra note 10, at 105, 136 (stating that "being unique may be the source of more distress than being like others in a consumer society"). Genomic uniqueness, personality uniqueness, individuated personhood, and the nonfungibility of persons are not identical concepts, but charting their differences would not be useful here.

genetically connected to her—intending that his custody be transferred to others (surrogacy). And we have been told that assisted reproduction is likely to cause harms of several sorts: physical and/or psychic harms to the children born of the process, to their genetic and/or gestational parents, to their custodial parents, to women and children generally, and to our social fabric. If these global risks to our normative system materialize, they will affect everyone and in turn induce behavior that further damages the system in an extended cycle. The odd relationships (the genetic father and genetic or gestational surrogate); the anomalous entities (freestanding embryos); the conceptual messiness (identifying a natural parent); the ruinous effects of planning a child's traits—all damage the social fabric.

Put still more generally, the fear is that we may become more of a "community of commodities" rather than of persons, a community in which we are valued not as whole persons but as tools. The source of risk is said to stem from the ill-considered focus on generating specific traits in our offspring, which renders them implements for use rather than intrinsically valuable family companions. The shift from accepting the randomness and unpredictability of human reproduction to actively determining its outcome will spur us to treat our children—and eventually everyone—as things valued only as long as they fulfill our plans. This shift cannot be viewed as acceptable evolution exhibiting the ideal of progress for the community of persons. It is a "phase change" in which our core character as a community of individuals is transmogrified: The community waters do not merely grow colder, they become ice.

But these mechanisms of objectification are not clearly at full force here, a point elaborated later. Moreover, objectification seems to be confused with something else: a process that produces not objects but persons of a particular sort to the exclusion of other visions of an individual's personhood. This too may be a harm, and it may be tempting to refer to such projects as entailing "mere use," "objectification," "reduction," and so on. Nevertheless, it is misleading to assume that these pejorative characterizations rightly describe efforts to raise a certain kind of person as opposed to another. ("Kind" can embrace matters of personal interests and line of work, character and virtue generally, attitudes and beliefs, personality traits, and so on.) We need an account of both the differences and similarities between acceptably shaping persons of certain

¹⁰⁵ See generally Herbert T. Krimmel, Surrogate Mother Arrangements from the Perspective of the Child, 9 Logos at 97, 98 (1988) ("The child is conceived, not because he is wanted by his biological mother, but because he can be useful to her and others. He is conceived in order to be given away."). I criticize this view in Shapiro, supra note 17, at 1170-71.

¹⁶³ One might ask if harm to the social fabric stemming from inroads on normative systems can be confirmed if we cannot find that some persons are worse off. There is no need to pursue this now.

sorts and mere use/reduction.¹⁰⁷ The motivations for cloning or genetic enhancement may indeed raise the probability that inappropriate constraints will be placed on a child's development—constraints imposed so that she closely matches specific preconceived notions deriving from the initial reproductive plan. But to conclude from this that cloning entails maltreatment of offspring as objects is an unwarranted leap. It is not only the facts that I am contesting, it is their moral characterization. A person shaped according to a particular vision is not necessarily objectified or exploited, and indeed may be better off because of the shaping. It depends on the nature and purpose of the shaping—and all children are shaped.

2. Some "Paradoxes" in Our Views of Reproduction that Bear on the Public/Private Distinction

Reproduction—especially assisted reproduction—might seem to make hash of the public/private distinction. On the one hand, what could be less fitting for public oversight than a person's decision to have children? This is her private, personal business, not a matter for public inquiry, or so most of us think. Imagine the reaction when a married couple, living in ordinary circumstances, is called upon—by family, friends, the state—to justify their decision to have children. For the couple, reproduction is a self-regarding decision on whether they, and no one else, will have the companionship—and the burdens—of their children.

On the other hand, the very creation of a person is, perhaps in an unusual but plausible sense, about as other-regarding an act as one can imagine. It may seem odd to speak of the impact of creation on the created—but it isn't *that* odd, particularly if one is inclined to accept the coherence of the question whether a given life is worth living from the perspective of the person in question. And of course that person's existence

Id.

¹⁰⁷ Cf. Glenn McGee, Parenting in an Era of Genetics, HASTINGS CENTER REP., Mar.-Apr. 1997, at 16, 17 (discussing parental calculativeness, overbearingness, shortsightedness, and other ill-advised ways of parenting). But cf. Brock, supra note 51, at 144.

Even if not part of reproductive freedom, the right to raise one's children as one sees fit, within limits mostly determined by the interests of the children, is also a right to determine within limits what kinds of persons one's children will become. This right includes not just preventing certain diseases or harms to children, but selecting and shaping desirable features and traits in one's children. The use of human cloning is one way to exercise that right.

¹⁰³ If the circumstances are not ordinary (this may be culturally defined, in part), some moral burden of justification might be placed on the would-be parents. Suppose, for example, one or both parents are gravely disabled, physically or mentally; or both are homeless and without means of support; or they are trapped in a repressive society in which all children are taken from their parents and enslaved, living brutal lives. Even persons in ordinary but somewhat straitened circumstances might be privately upbraided for inappropriate timing of reproduction. None of this is to say that such informal burdens of justification cannot be met by any given persons who are disabled, homeless, repressed, or straitened; it is simply to say that we are likelier to press the question of justification in such circumstances.

is itself an "externality" (positive or negative) to others and generates an enormous future stream of externalities. So serious and far-reaching are these effects that it is no surprise that the reproductive decision is not universally regarded as within the sole and absolute discretion of the private parties involved. Think of the republic contemplated by Plato, or of heavily populated—and scarcely resourced—nations trying to inhibit reproduction. Think also of the now confined but nevertheless well-established practice of inhibiting procreation by incompetent persons.

For us, however, the privacy of the reproductive decision continues—with serious qualifications—at and after birth. There is a strong presumption of parental autonomy—and thus of nonliability—for child rearing practices. This presumption is far weaker than that attending the procreational decision: although the "outside" is generally supposed to keep out of "inside" (private, intrafamilial) decisions, once a person exists, we surround her with protections such as child neglect laws.

Ironically, the very fear of externalities generated by some reproductive efforts—efforts by homeless persons with no prospects, for example—may obliquely contribute to objectification risks. Suppose we were (privately) to insist that such a person or couple *specify exactly* why they want children in the face of the huge risks to the child, to themselves, and possibly to the community. The respondents (if they answer at all) might say "because we want them, we want the joy of companionship, and everyone else does it anyway." But this is unlikely to persuade the inquisitors. Even when the ostensible reason for asking this question is the protection of future children, the inquiry itself risks reducing the value of the child, and children generally, to their specified uses. The very appearance of this reduction can be damaging even if no couple views the child as a mere tool; an overly-specific answer suggests that the child is being created to be used, whatever actual motivations govern. Specificity *imports* utility and therefore use—or so it might be argued.

So, reproduction is at once one of the most self-regarding and other-regarding actions; it is both intensely private and glaringly public. Neither the insulation of the coital act from public view nor the threat posed by having to absorb a new entrant into the community can exclusively dominate our view of reproduction. And there are more layers of complexity. The very intensity with which reproductive or other decisions are viewed as private propels them, in a sense, into the public domain: it is a matter of great public interest that we try to craft social regimes to protect

¹⁶⁹ PLATO, THE REPUBLIC 291 (B. Jowett trans., Vintage Books 1960) ("[W]e have arrived at the conclusion that in the perfect State wives and children are to be in common").

¹¹⁰ See generally Ellen Keng, Note, Population Control Through the One-Child Policy in China: Its Effects on Women, 18 WOMEN'S RTS. L. REP. 205 (1997).

privacy. The more personal something is, the greater the occasion for public intervention to protect it.

Puzzles about public and private, then, are not limited to the assisted forms of reproduction. In the United States and much of the world, any fertile male and female can voluntarily procreate without penalty and without securing advance permission. It may be morally perverse to do so under various circumstances, and there is a strong possibility that under very adverse conditions the parents will lose custody of their offspring, but reproduction in such situations is not illegal in the United States; nor is it clear under what circumstances it could be made illegal for competent persons, consistently with constitutional constraints.¹¹²

Why do we not step in beforehand, rather than after the fact, via neglected/abused child statutes? Is it because we think the child is unlikely to be harmed by its existence even under adverse circumstances? After all, the child's only alternative is nonexistence. But many persons do not see the problem this way, however persuasive the point may be. 113

However, if one seeks to adopt a child either already born or in gestation, then the state imposes serious obstacles. Why the sharply varying degrees of oversight over different forms of family formation? Perhaps in part because of the division of "genetic unity": we think that natural genetic bonds make for personal bonds of love and care, whether formed by cultural learning, "hormones," or both. Personal bonds of felt duty between genetic parents and their children need little or no reinforcing in most cases, or so we think.

If those "natural bonds" are thought to be absent in adoption, then social oversight will be imposed to help assure that parent-child bonds will develop despite the absence of a genetic link. The absence of a genetic link

¹¹¹ For a discussion of the public/private distinction, see generally Ruth Gavison, *Feminism and the Public/Private Distinction*, 45 STAN. L. REV. 1, 12 n.28 (1992).

¹¹² Compare Skinner v. Oklahoma ex rel. Williamson, 316 U.S. 535 (1942) (announcing a basic right to reproduce) with Buck v. Bell, 274 U.S. 200 (1927) (upholding the constitutional validity of involuntary sterilization under the circumstances presented there). Buck was wrongly decided for various reasons, but it has never been overruled and occasionally is cited to no good purpose.

Various statutes and cases have some bearing on the right to reproduce. See generally CAL. PENAL CODE § 645 (West 1999) (requiring, among other things, that certain repeat child sex offenders "shall" be treated with chemicals that suppress sexual urges); Goodwin v. Turner, 908 F.2d 1395 (8th Cir. 1990) (ruling that prisoners may be prohibited from providing sperm to their respective spouses for artificial insemination); Conservatorship of Valerie N. v. Valerie N., 707 P.2d 760 (Cal. 1985) (striking down law prohibiting sterilization of conservatees as an infringement on procreational autonomy, but noting that a proper showing is required to justify the procedure); People v. Pointer, 199 Cal. Rptr. 357 (Ct. App. 1984) (prohibiting a woman found guilty of child endangerment from becoming pregnant as a condition of her probation). See generally Stacey L. Arthur, The Norplant Prescription: Birth Control, Woman Control, or Crime Control?, 40 UCLA L. REV. 1 (1992).

See generally Michael H. Shapiro, How (Not) to Think About Surrogacy and Other Reproductive Innovations, 28 U.S.F. L. Rev. 647, 670-71 (1994) (explaining the argument from nonexistence).

partially nullifies, in the public mind, the mantle of privacy accompanying "natural reproduction." We thus seize the day—a chance to reduce risks that we think might be greater than those accompanying natural reproduction.¹¹⁴ Whether such fears are empirically justified is beyond the topic here.

In any case, despite our awareness of the concurrent self- and otherregarding aspects of reproduction, we refrain from intruding on natural consensual procreation. What would the alternative be? The notion of monitoring all prospective acts of reproduction is not viewed favorably in most Western cultures, and probably beyond. But if the departure from this natural paradigm is significant, the state steps in to alleviate the danger, and the inch taken expands to a light-year. Artificial insemination by donor, for example, seems to breach the hazy public-private barrier because it fragments the marital, sexual, and genetic unity of standard reproduction and creates lineage and custodial confusion, though of a far lesser magnitude than does cloning. We have thus enacted statutes regulating its pursuit. 116 And, in reaction to the recent reproductive mess at the University of California, Irvine, explicit rules have been enacted to govern the extraction and transfer of ova and embryos. 117 The more important the realm of personal choice is for the choosers, the more societal oversight it may draw-both to protect personal choice and to guard against the harms risked by (desperate?) attempts to implement it.

- 3. The Nature of the Public/Private Distinction in Brief; Burdens of Proof Again
 - a. Overlapping contrasts.

The public/private distinction has links to several other contrasts, though it is identical to none of them. These contrasts include self-regarding actions as opposed to other-regarding actions;

¹¹⁴ For an example of the laws governing adoption, see generally CAL. FAM. CODE §§ 8600-9340 (West 1999).

¹¹⁵ For present purposes, this "breach" metaphor applies where circumstances might be thought to overcome presumptions of personal autonomy or desires for secrecy, solitude, nonvisibility, and so on. See Ruth Gavison, *Privacy and the Limits of Law*, 89 YALE L.J. 421, 428-40 (1980) (discussing related meanings of "privacy").

¹¹⁶ See CAL. FAM. CODE § 7613 (West 1999).

¹¹⁷ One could well argue, however, that existing law did not require supplementation. In any case, see CAL. BUS. & PROF. CODE § 2260 (West 1999) (regulating removal of sperm and ova) and CAL. PENAL CODE § 367g (West 1999) (criminalizing unauthorized use of sperm, ova and embryos), both inspired by the events at the University of California, Irvine, where it appears that inadequate informed consent procedures and monitoring led to misappropriation and unexpected use of ova and embryos. See generally Karen T. Rogers, Comment, Embryo Theft: The Misappropriation of Human Eggs at an Irvine Fertility Clinic Has Raised a Host of New Legal Concerns for Infertile Couples Using New Reproductive Technologies, 26 Sw. U. L. REV. 1133 (1997).

liberty/freedom/autonomy arrayed against community interests; and (less persuasively) matters "internal" and "external" to a person. 118

This family of contrasts is meant to help identify realms of presumptive autonomy—or presumptive denial of autonomy—and is thus clearly related to burden of proof issues. The units of privacy or autonomy relevant here are individuals, traditional families, and certain other small groupings. These units decide in the first instance what to do or avoid and what information to give to or withhold from those "outside"—decisions presumptively insulated from external review or control.

But patterns of presumptive immunity may vary sharply as a function of reigning political philosophies. For example, the public/private distinction, while not entirely meaningless in Plato's *Republic*, is a mere wisp there, to the extent that it exists at all: the state decides many matters we consider private questions. Even within our own political system, the public/private boundary is in flux because political philosophies and public attitudes shift over time.

It thus does not settle the matter to say that a coherent central decision making policy on reproduction is unnecessary. If it is said that we should "leave it to the realm of private choice," we meet some obvious responses. First, cloning and other forms of reproduction just aren't the sorts of thing that *should* be left to decentralized individual market choices. Second, within the realm of private choice, the private decider is uninformed about the benefits and adversities of cloning. All she has been told, under the proposed decentralization plan, is to figure it out for herself, according to her own preferences. This does not necessarily aid the would-be private procreator in morally assessing a new mode of creating persons—in effect, deciding what she *ought* to want.

They are not all the same, but are linked in complex ways. The problem of accounting for the different treatment of "economic" and "noneconomic" interests in constitutional adjudication is a heavily traversed one. See generally Gerald Gunther & Kathleen M. Sullivan, Constitutional Law 482-86 (13th ed. 1997) (briefly reviewing the issue).

The concepts can also apply to larger commercial or governmental entities with respect to their internal workings, the activities of their officers, personnel, shareholders, and customers or clients.

I am not arguing that the distinction is *simply* "culturally relative," nor, as I said, am I suggesting an accompanying moral relativity.

121 PLATO, *supra* note 109, at 291 ("[W]e have arrived at the conclusion that in the perfect State

PLATO, supra note 109, at 291 ("[W]e have arrived at the conclusion that in the perfect State wives and children are to be in common . . . "). Cf. Hecht v. Superior Court, 20 Cal. Rptr. 2d 275 (Ct. App. 1993) (upholding a woman's right of access to sperm of her deceased friend). "We simply do not in our society take children away from their mothers—married or otherwise—because a 'better' adoptive parent can be found." Id. at 286-87 (quoting Adoption of Kelsey S. v. Rickie M., 823 P.2d 1216, 1234 (Cal. 1992)). For citations to other stages of this case, see note 321, infra.

Extended probing of the public/private distinction is not needed here, however, particularly given the high quality of some of the existing scholarship. 122 But three points require attention.

First, ascriptions of publicness and privateness may be descriptive or normative; they may be premises or bottom-line conclusions; and privacy claims may also be described in various circumstances (accurately or not) as, say, claims of liberty, autonomy, confidentiality, repose, and freedom from monitoring or surveillance.¹²³ Unless careful attention is paid to context and to the concepts within these overlapping contrasts, invoking the public/private distinction may be more confusing than helpful.

Second, the public/private distinction has some obvious and important links to familiar constitutional doctrine that distinguishes two forms of substantive due process and two parallel (but not identical) modes of equal protection analysis: those bearing on "economic" or "commercial" matters, and those addressing questions of "fundamental liberty interests," "fundamental rights," and possibly "invidious discriminations," though the last is not usually understood as a matter of privacy. We often regard market transactions involving "commodities,"—products or services—as having strong "public" aspects subject to governmental regulation that is easily justified as against constitutional claims of right. To the extent that cloning or other forms of assisted reproduction are thought to reside in-or nearthe market, and thus deal with persons as "commodities" (or, more generally, "objects"), the reproductive process is "public" and thus its regulation is more easily justified. The countervailing view—that cloning is human procreation within the realm of private choice—may be heavily discounted because it seems so far removed from the standard cases of procreation. The fact that expert services are purchased, however, does not alone justify calling reproduction a pure market/economic transaction: most persons in developed areas retain physicians or midwives to aid in childbirth.

Just why these new reproductive processes are viewed by many as squarely implanted in the noisome marketplace is itself unclear. The perceived publicness of cloning seems to rest on (i) the need for outside assistance (the act of cloning does not take place in the bedroom); (ii) the transfer of money for reproductive services and for payment of expenses; (iii) the massive intervention of technology into the reproductive process; and (iv) the perception of serious risks of harm to children and to others as well as to the integrity of the surrounding social system. Most present observers thus see cloning, like other reproductive technologies, as bearing a dominant overlay of publicness and "marketness" and thus of

122 See generally Gavison, supra notes 111 & 115.

¹²³ See Gavison, supra note 115, at 423-36 (discussing various aspects of privacy).

presumptive regulability. Perhaps some see this commercial aspect of cloning as debasing the procreative process, further justifying regulation. On this view, one of the very factors allowing public oversight—commerce—is what makes the oversight seem so urgent.

Third, the public and the private intersect when it appears that government action can promote private choice—as when a court announces that persons have a right to refuse lifesaving treatment.¹²⁴

b. Determining when the public/private barrier is breached in reproduction: justifications for outside intrusion; an advance word on constitutional analysis—standards of review live.

A true burden of persuasion, as opposed to a flat substantive rule, is one which can be met in ways at least roughly describable in advance. Much depends here on how the relevant personal interest is described, on how it is burdened, and on the rationales offered for imposing the burdens.

The presumption favoring autonomy in particular areas is roughly reflected and captured by constitutional standards of review embodying "heightened scrutiny": an area of strongly protected individual choice is identified and rated (for example, political speech or abortion); a threshold immunity from regulation is installed (for example, the government action must be strictly scrutinized); and a specification of how the presumption may be overcome is presented (though usually very loosely). The government must show that what it did—or proposes—is necessary to further a compelling or important interest.

Constitutional standards of review, far from being mysterious epiphenomena or semi-fraudulent rhetorical devices, reflect and implement our constitutional hierarchies of rights and interests. If such hierarchies are found or inferred from the text, then standards of review *must* also be inferred, assuming the hierarchy is taken seriously. The fact that the standards are sometimes ill-used and always incompletely specified does

¹²⁴ Cf. Louis Michael Seidman, Confusion at the Border: Cruzan, "the Right to Die," and the Public/Private Distinction, Sup. CT. REV. 1991, at 47, 49 (complaining that neither Justice Brennan nor Justice Scalia "is willing to entertain the possibility that freedom might be maximized by government intervention or that the Court might have a role in protecting public values"). Seidman states:

It may seem paradoxical to claim that the state is vindicating an individual's rights and protecting a private sphere when it prevents the individual from doing what she wishes. But there is no necessary identity between rights and desires, and no necessary contradiction in the claim that certain rights are inalienable.

Id. at 73. Public practices generally may reinforce values of privacy; and one may rightly say, as mentioned earlier, that in many cases the protection of private matters is distinctly a public issue. Of course private action can promote public interests.

Any comprehensive constitutional law treatise or casebook describes the heightened scrutiny argument structures in their various forms. See, e.g., ERWIN CHEMERINSKY, CONSTITUTIONAL LAW: PRINCIPLES AND POLICIES § 6.5 (1997) (discussing "the levels of scrutiny"). Standards of review—even roughly equivalent ones (equivalence is hard to judge)—are described in different ways.

not contradict this proposition. Of course, their consistent mismanagement suggests problems in formulation and in understanding by courts and counsel that should be rectified and thus is no simple task. Whether human cloning is indeed strongly protected by a heightened standard of scrutiny is discussed later. 126

But for now, wherever the constitutional and moral burdens fall, we need to ask what public interests are in fact at stake in assisted reproduction. As suggested, it does not seem sufficient simply to urge the "publicness" of cloning insofar as it rests on the need for outside personal and medical/technical assistance, and thus on payment to these parties possibly including the nucleus and ovum sources. 227 Specific risks of harm should be identified to promote rational analysis, if not to meet a burden of persuasion. Without investigating these harms, there is nothing that forecloses viewing cloning as within the field of privacy-as-autonomy, even though it is a technological venture that is in some sense in the marketplace. To be sure, before assignment of burdens, one might also say that, without investigating its benefits, nothing requires us to exclude cloning from the field of regulable or prohibitable commerce.

So, what are the risks to the public interest raised by cloning? Here, the literature again elides the distinction between intrinsic and instrumental harms. For some, it is not simply that technologizing and marketizing reproduction causes harmful consequences to whomever or whatever. It is that technologizing and marketizing are themselves "intrinsic" harms simply because of how participants in these processes are viewed and treated: they constitute the harm, they do not cause it. 128 But determining the asserted intrinsicness of harm requires specifying the nature of the harm and its causes. 129

See infra Part IX.
 See Ann Alpers & Bernard Lo, Commodification and Commercialization in Human Embryo Research, STAN. L. & POL'Y REV. 1995, at 39, 41-44 (discussing gamete sales).

³ Cf. 2 Proceed with Care: Final Report of the Royal Commission on New REPRODUCTIVE TECHNOLOGIES 683-84 (1993) [hereinafter PROCEED WITH CARE].

The fundamentally repugnant aspect of preconception arrangements is that they instrumentalize human beings through the deliberate act of creating a child for the express purpose of giving it up, usually in exchange for money. [This is an utterly incomplete and thus misleading description. It ignores the fact that the purpose of giving up the child is to place it in a nuclear family, not to abandon it. Although no description can be complete, some descriptions can be unacceptably incomplete.] The premise of commercial preconception contracts is that a child is a product that can be bought and sold on the market .. The commodification of children entailed by preconception arrangements ignores these essential values [that children are not commodities or instruments] Commercial preconception contracts by their nature—the exchange of money for a child—contradict one of the fundamental tenets of the Commission's ethical framework.

¹²⁹ See discussion infra Part V.

What is it about technologizing and marketizing that causes harmful consequences, and to whom? Many market transactions are private in a perfectly plausible sense, *despite* the geographical location of the transaction in the "public square." For example, most persons engaging in standard-form reproduction secure professional prenatal, natal, and postnatal assistance in office and hospital settings; but we insist that the decisions on whether to reproduce, which professionals to consult, and exactly how to feed and clothe the baby largely remain matters of presumptive autonomy and privacy.

There are, then, aspects of market transactions that bear different characteristics. Some of them are subject to public scrutiny, while others are rightly thought immune from public scrutiny even though they are in a sense publicly done. Any given human interaction may be a mosaic of public and private matters. For example, the NAACP is a public organization fighting things out in the arena, but as we know from NAACP v. Alabama, 130 it is entitled to keep its membership lists secret under some adverse circumstances. Physician-patient encounters start in the market with a seller and buyer of services, but aspects of the transactions are deemed private and immune from government control except upon adequate justification—perhaps as a matter of constitutional dimension. It will not do to say that the market is public because its transactions are done "out in public." Aspects of the market are private because many of our transactions are "our business": we decide what goods and services we want and from whom to acquire them; in some markets, outsiders are prohibited from collecting sale or rental information; and so on.

The relative publicness of some aspects of cloning is, then, intertwined with its private aspects. For cloning rightly to be considered more within the public than the private domain—or the reverse—the possibilities of benefit and harm must be addressed. The public/private distinction thus has little independent standing here. (One might say that it is improper even to inquire into benefits and harms without first establishing publicness, but I leave this endless cycling aside.) I do *not* argue that we must fully evaluate all of cloning's benefits and harms and be able to quantify them before adjudging whether it, or particular aspects of it, are public or private. But given an abstract presumption of privacy-as-autonomy (not a specific one about cloning), theories of harm that are anchored in reality are required to justify placing all aspects of cloning in the public realm of the regulable market. After all, the purpose and function of such placement is the regulation or prohibition of cloning. Similarly, we cannot confidently place cloning within the protection of privacy-as-reproductive-autonomy without

^{130 357} U.S. 449 (1958).

plausible accounts of possible benefits and how they compare with the risks

How is the further examination of cloning—its likely harms and benefits—to be pursued? What are we to look for? What *counts* as harm, what counts as benefit? This is at the core of many moral disputes. One might simply catalogue the considerations thought to justify overcoming autonomy or privacy claims generally, and see how they bear on cloning. The principal way is to inquire into reproductive purposes and objects, and this is pursued below.

But suppose someone touts as a harm, or an immediate cause of harm, the very conceptual jumble presented by cloning (or surrogacy, or keeping persons in permanent vegetative states alive, and so on). We have a conceptual system that does not smoothly handle all rearrangements and revisions of life processes. The resulting confusion can produce intense moral puzzlement. The conceptual challenge, though it cannot be intrinsically harmful, may itself be viewed as a direct cause of injuries and conditions that lead to still further harms: displaced, demoralized, and developmentally impaired children; general demoralization at seeing our favored conceptual schemes for ordering and judging the world shredded; and whatever other adversities follow from the preceding consequences.

Later, I will return to this search for credible risks of harm—in particular, to objectification. I will suggest that objectification rests on the core concept of reduction in the sense that persons are "reduced" in value to one or more traits that define their use(s) to others. If objectification/reduction/mere use are credible risks, then the case for the publicness of cloning, and hence of its placement outside the realm of presumptive protection of autonomy, is much enhanced.

C. AFTER ALL THIS, WHO DOES HAVE THE BURDEN?

We certainly cannot answer this without examining the "reduction" family of risks just mentioned. I say in advance, however, that I do not think the who-has-the-burden question is answerable within our present normative system, given both factual and conceptual indeterminacies. It is tempting (to me) to say that *neither* challenge—"if you want to allow human cloning, you first have to prove it is okay" as opposed to "if you want to prohibit human cloning, you first have to show it is no good"—is currently sustainable. Within our legal system, burdens of proof are essential in order to enable certain decisions to be reached. But here—although not in every area of moral analysis—the burdens cannot easily be assigned. The placement of burdens presupposes certain value judgments and factual resolutions that are among the very issues being contested.

But there is an important strand of analysis at least suggesting that some burden be placed on cloning's opponents. This is the same line of inquiry that underlies the constitutional question concerning whether and to what degree cloning might be protected as a liberty interest under the Fourteenth and Fifth Amendments. 131 There are arguments, referred to in the final section of this Article, about whether cloning can be subsumed within the "traditional" protection of procreation. Even though it is far from our image of customary procreation, it remains, as I argue, a form of procreation deserving some protection. Whatever considerations might lead to a (possibly modest) degree of constitutional protection may also lead to placing some moral burden on cloning's opponents to show that it should not be permitted.

Sooner or later, of course, constitutional decisions will have to be made about what presumptions hold given the threshold characterization of cloning within a constitutional framework. That prior characterization concerns whether it is an aspect of procreational autonomy entitled to heightened protection against government intrusion. In this realm, (legal) burdens must be assigned—and the process of doing so will be informed by questions concerning the moral burdens. As it turns out, investigating both the legal and moral burdens occasion parallel (not identical) tracks: arguments from tradition, historical understandings, and fresh normative insights—by the community, the courts, or both.

IF CLONING DID HAVE TO BE JUSTIFIED IN ADVANCE, COULD IT BE? D.

Without knowing the precise terms required by the call for justification, it's hard to say, but the answer is likely to be: Probably not, given our insufficient data and insufficient conceptual understanding. 132 When you know little, the party who bears the burden is likely to lose. Pending further analysis, all I suggest at this point is that we try briefly to apply the positive/negative eugenics distinction to cloning's supposed benefits and harms to see if this adds any illumination.

Perhaps we will be benefited by selecting nuclear sources whose cloned offspring are likelier than average to improve the lot of the human race through good works and stronger constitutions. Some link this to a possible obligation to enhance the talents and the prospects for significant accomplishments by succeeding generations. 133

See infra Part IX.
 See infra Parts V-VI (discussing intrinsic harms and instrumental harms via reduction).

¹³³ Pence discusses some of these possibilities in PENCE, supra note 4, at 99-117. He stresses the possible benefits of a genetic connection between parents and children-benefits that suggest some value in allowing infertile persons to maintain such a link by having cloned offspring. See id. He also cites JOHN RAWLS, A THEORY OF JUSTICE 108 (1971), to support the view that there may be a duty to

Cloning thus suggests some crossover between negative and positive eugenics, as well as different forms of negative and positive eugenics. A nuclear source may be selected for a highly particularized, discrete trait say, extraordinary mathematical skills. But a source may also be chosen not solely because of specific talents revealed through accomplishments, but because the source was, overall, immoderately healthy, happy, and longlived—one of the select few who are never sick, upset or depressed a day in their lives. As a form of positive eugenics, it is not very specific—and if you believe such euphoric people must be mentally disordered, then the effort is dysgenic, not eugenic. As a case of selecting for the absence of health risks, it is not clear whether this is better viewed as negative or positive eugenics. As for cases in which nuclear sources are selected because they do not have a specific genetically connected disorder or condition, this seems to be best classified as negative eugenics. The only point of addressing these "positive" and "negative" labels is to suggest the variety of possible motivations for cloning.

The study of the motivations for cloning is one of the most promising avenues for estimating its possible harms and benefits, and this will be pursued below. For now, the answer to the question in the section heading remains the same: if the burden is placed on cloning to show it is likely to be beneficial and/or not dangerous, it cannot sustain this burden. (This is both for empirical reasons and for conceptual ones; what constitutes a benefit or harm is often seriously disputed.) As I said, however, it is inappropriate to place a burden on either side.

V. THE CLAIM THAT CLONING IS INTRINSICALLY (INHERENTLY"?) WRONG OR HARMFUL; THE ROLE OF MORAL INTUITION AND THE RELEVANCE OF A PERCEPTION OF REPUGNANCE¹³⁴

Here, I return to issues introduced in the précis at the beginning of this Article. Claims that human cloning is intrinsically wrong or harmful are usually filled out by invoking supposed rights to genetic uniqueness—a right meant to promote more general rights to autonomy, individuality, and identity. Later sections also examine the anti-cloning "argument from repugnance." Afterwards, I turn to instrumental harms. The contrast, as I said, is imprecise. Think, for example, of harms resulting from the possibility that the "cell-age" of clones—the age of the nuclear source—

improve humanity, and points out that gay and lesbian persons would be able to form genetically connected families through cloning. See PENCE, supra note 4, at 112-15.

¹³⁴ See generally James F. Childress, The Challenges of Public Ethics: Reflections on NBAC's Report, HASTINGS CENTER REP., Sept.-Oct. 1997, at 9 (discussing the claim that human cloning is intrinsically wrong and contrasting it with other claims).

may be far greater than their chronological age. It remains unclear what to make of this possibility, which might allow identification of clones as clones. It is "inherent" in somatic cloning, given the empirical fact that cells age. On the other hand, this may someday be technologically reversible. (However the harm is classified, a shortened life span does not necessarily make for a life not worth living from the clone's viewpoint.)

In what follows, I do not simply dismiss the nonreflective intuition that human cloning is "inherently," "intrinsically," and "necessarily" "wrong in itself." These reactions occur in minds schooled or "wired" in certain ways, and such structuring is not anomalous: we are all subject to it—indeed, it is a major part of what forms our identities. Such responses may be clues to important moral and empirical arguments, though these arguments, as I have said, turn out to rest on contingent matters of fact. It may be that certain consequences of cloning are so likely and so serious that the practice should be banned or severely limited. I strongly doubt it, but that is what must be argued, not some opaque circular claims about the inherent outrageousness or inhumanity of cloning. (Some things are intrinsically wrong, but I see no reason to deal with this any further.¹³⁵)

A. NATURAL TWINNING ASIDE, IS THERE A RIGHT TO A UNIQUE GENOME AND A COROLLARY RIGHT NOT TO BE BORN IF ONE'S GENOME HAS AN EXACT GENETIC PRECEDENT?

If there is such a right, which I doubt, I suggest it is grounded solely on a showing that bearing a duplicate genome is—under the probable circumstances—so overwhelmingly likely to cause immense harm to the clone that her life would not be worth living, from her point of view. (What this viewpoint-relative view entails I mention later.) If that showing is

¹³⁵ For completeness, I note that at least in some contexts, "inherently evil" is not necessarily a bottom-line term indicating that some course of action cannot morally be undertaken under any circumstances. A utilitarian might, for example, concede the inherent evil of torturing an innocent child—a classic *reductio* move against utilitarianism—but then conclude that if it is necessary to save the world's population from annihilation, the inherent evil (disutility) of the end of humanity outweighs the inherent evil done to the child. In other contexts, however, the meaning of "inherently evil" may reflect an absolute—no balancing allowed—so it cannot be outweighed by a great good.

The right to genetic uniqueness is not coextensive with the right to a nonmanufactured identity. The set of manufactured identities clearly includes—if anything—those whose genomes have been deliberately altered. It may also include cloned offspring, but this is less clear. On the one hand, the clone's genome exists an nth time only because of sophisticated biotechnological intervention. On the other hand, any clone's genome by definition is exactly the same as that of the original nonmanufactured identity—assuming there has been no specific alteration, augmenting, or otherwise. All these iterated human genomes are indistinguishable from natural genomes produced by the sexual union of gametes (though there may be cellular age differences with somatic cell cloning). See generally LAURENCE TRIBE, CHANNELING TECHNOLOGY THROUGH LAW 189 (1973) (discussing a "right" to a nonmanufactured identity). So, one can be nonunique and nonmanufactured. Some may think, however, that the specific selection of a particular person as a nuclear source should be viewed as part of a process of "manufacture." Of course, it is possible to be manufactured and unique. (Think of a one-of-akind genetic mosaic.)

made—and this would be difficult to establish in most cases—then arguably she should never be conceived. Her existence would probably be wrongful to her, and those who arranged for it would thus be wrongdoers. Her conception and birth, for that reason, would wrong her.¹³⁷ I do not press the threshold question whether there can be any such thing as a right not to be born or to be conceived. (I think there can.) I am simply questioning the argument that if there is such a right, it has a clear application to cloning.

The life-not-worth-living formulation above concerns an empirical contingency, although based on "overwhelming likelihood." For many cloning opponents, however, the assertion of a right not to be born unless genetically unique does not rest on any such contingencies. They argue that all cases of cloning reflect an intrinsic wrong and embody an intrinsic injury.

As I suggested earlier, however, there is not much useful content to this notion, rigorously interpreted to exclude factual contingencies. The closest approach is the "wrongful life" idea just mentioned. If the probabilities are very high that the lives of clones would satisfy a wrongful existence standard, then all cloning should be banned, for the sake of the offspring as well as ourselves. After all, how would one forecast whether we encounter one of the rare cases in which the harm-causing circumstances are absent? Moreover, those clones who find life worth living had no right to be propelled into existence; leaving them unconceived, along with those doomed to a life not worth leaving, violates no rights.

Are the probabilities that the lives of clones will not be worth living indeed so high? This rests on both empirical and normative/conceptual matters. The chief empirical question concerns the likely fate of cloned offspring at the hands of their custodial parents—and the rest of world, which will be looking on. The chief normative issue is whether this "fate" embraces outcomes that constitute harms of extreme gravity. The dead certainty mistakenly offered by those who embrace an intrinsic harm theory is not justified.

So, once again, what should we make of the claim that, without regard to circumstances and contingent harms, one has a right not to exist if one's

Id.

¹³⁷ It is at least conceivable that this might be true at some early stage of the relevant technological developments. See, e.g., Scientific Discoveries in Cloning: Challenges for Public Policy, Hearing Before the Subcomm. on Pub. Health & Safety of the Senate Comm. on Labor and Human Resources, 105th Cong. 22 (1997) (statement of Ian Wilmut) [hereinafter Scientific Discoveries in Cloning].

[[]O]ur own experiments to clone sheep from adult mammary cells required us to produce 277 "reconstructed" embryos. Of these, twenty nine were implanted into recipient ewes, and only one developed into a live lamb. In previous work with cells from embryos, 3 out of 5 lambs died soon after birth and showed developmental abnormalities. Similar experiments with human [sic] would be totally unacceptable.

projected genome has been "used" before? The bare fact that one's genome has existed before—at least in someone who survived for a lengthy period after birth—seems entirely neutral as a matter of rights analysis. ¹³⁸ If the problem is not the likelihood of grave harm to someone who carries a given genome around on its *n*th trip, then it must rest on some principle establishing the wrongfulness of replicating a genome to create another human being. What is that principle? If your response as a loyal "repugnance" theorist is "Who cares about principles?" (other than the one about the rightful place of repugnance), I note that even pragmatists concede that at some stage of analysis and assessment, principles are indispensable. ¹³⁹

But it is still too soon to give up on intrinsic harm. Try this: The supposed right to genomic uniqueness has been defended as a right not to be devalued through genomic duplication.

[A] person's uniqueness adds to her value in society, and much of that uniqueness is arguably related to [her] genetic makeup. Given that society values the individual and that a right to individuality exists, the creation of clones through blastomere separation [and presumably the cloning of adults through nuclear transplantation or other methods] will harm the value of individuals in their relations with society. . . .

... Simply because their occurrence [the natural birth of identical twins] is natural, we cannot assume that the value of each twins' individuality has not been lessened. 140

¹³⁸ Cf. Elliot Dorff, Human Cloning: A Jewish Perspective, Testimony before the National Bioethics Advisory Commission (Mar. 14, 1997), quoted in Jonathan R. Cohen, In God's Garden: Creation and Cloning in Jewish Thought, HASTINGS CENTER REP., July-Aug. 1999, at 7, 9 ("Cloning, like all other technologies, is morally neutral. Its moral valence depends on how we use it."). As I say in the text, however (and I expect Rabbi Dorff would agree), if a practice is, for whatever reason, skewed so that the probability of harm is notably elevated, we may—and possibly must—scrutinize the practice carefully, even if we do not presume it wrong.

practice carefully, even if we do not presume it wrong.

139 See, e.g., Catharine Wells, Situated Decisionmaking, in PRAGMATISM IN LAW AND SOCIETY 275,
289 (Michael Brint & William Weaver eds., 1991).

[[]A] belief in situated decisionmaking does not entail the abandonment of structuring methods such as reason, generalization, and abstraction. Instead, it recognizes that there is more to legal decisionmaking than the mechanical application of these techniques and, for this reason, it sees all legal reasoning as "situated" in the sense that it operates within a structure that is constructed by the decisionmaker's own unique mode of participation in the ebb and flow of human events.

Id.

Amer, supra note 9, at 1682-83 (footnotes omitted). Amer is discussing "twinning" of embryos, rather than nuclear transfer from adults or children. See also CLONING HUMAN BEINGS, supra note 9, at 74 (referring to the possibility—as seen by critics of cloning—that "the child created through somatic cell nuclear transfer is regarded as somehow less than fully equal to the other human beings, due to his or her diminished physical uniqueness and the diminished mystery surrounding some aspects of his or her future, physical development."). See also Kolata, supra note 96 (remarking on twinning). "One of the things we treasure about ourselves is our individuality Obviously, we have twins and triplets in the world, but they are there by accident. You begin to worry that when you deliberately set out to make copies of something, you lessen its worth." Id. (quoting Arthur Caplan).

But this account does not help either. It is just asserted, not shown, that one's "individuality" is necessarily/inherently/intrinsically compromised just by having the same genome as someone else—even a contemporaneous twin. It fails to advance the claim of intrinsic wrong or harm because it too rests on an undefended *a priori* assertion: that something concededly valuable—"individuality"—is seriously and necessarily impaired by genomic duplication. Leaving aside the problems of interpreting "individuality," the most we can say about cloned offspring is that there is a somewhat elevated probability that those with replicated genomes will develop behaviors and dispositions similar to those exhibited by prior holders of the genome. The closer the genetic connection—here, near-identity—the greater such likelihood is—holding environmental factors constant, which is impossible.

But these likelihoods cannot rest on a puppeteering image in which the genomic antecedent is pulling the clone's "genetic strings." The force of genetically founded dispositions is internal to the offspring, and is likely to be so perceived by the offspring—unless busybodies "teach" her otherwise. The fact that two or more persons turn out to have similar dispositions, preferences, and lifestyles establishes nothing whatever about personal uniqueness or autonomy, even when the similarities are partly accounted for by genetics. The offspring and her antecedent are housed in separate bodies, each with a separate consciousness and identity, and subject to different environmental variables that begin to work from the start, however one defines the "start." Once again, mistaken notions about genetic determinism, duplication, replication, iteration, copying and the like, seem to inspire invalid inferential leaps among opponents of human cloning. Even if "individuality" in some (unspecified) sense is compromised, this s nowhere near an all-or-nothing matter and cannot support a claim of intrinsic harm.

What else is there to argue in defense of the idea that one is intrinsically harmed by one's genomic nonuniqueness—at least where the nonuniqueness is deliberately sought by others? Does it help to say that human cloning is "unethical in itself"?¹⁴¹ If so, one could then claim that there is a right not to be born of so evil a transaction. But this adds nothing except tinted words. Once can say that we are morally entitled to be born without the moral taint, stain, pollution, corruption, filth, contamination, debasement, depravity, or defilement necessarily caused by actions wrong in themselves. We do not know, however, why this barrage of denunciations

¹⁴¹ Kass, supra note 13, at 25. But see Brock, supra note 51, at 153 ("[N]o such right [to genetic uniqueness] is found among typical accounts and enumerations of moral or human rights—because even if there is such a right, sharing a genome with another individual as a result of human cloning would not violate it.").

applies to the ongoing *life* of a person as opposed to her origins—and we still do not know why the origins in question are inherently evil and thus rightly denounced.¹⁴²

Perhaps one can draw an analogy to rape and incest, as some have tried. Does one have a right not to be born as a result of rape or incest? (This issue is entirely apart from the right of the mother to abort.) Does this follow from the obvious propositions that one has a right not to be raped or to be the victim of incest? It is sensible to say that persons born of rape or incest should never have been conceived—because one's mother should never have been raped or have had sexual intercourse with a too-near relative. But how does it aid analysis to invoke rights talk and say that the child had a right not to be born? It is true that in ordinary language we might say that the resulting child is tainted by the wrongful act resulting in his conception. But is the child *rightly* to be subjected to scorn and denunciation because he is intrinsically evil—befouled, debased, the spawn of a terrible wrong? In any case, the comparison of cloning to rape and incest is a stretch, so the tainted-by-evil argument remains pretty feeble.

Finally, perhaps the claim that human cloning is inherently wrong is a suppressed claim about equality, fairness, and justice that goes something like this: "Everyone other than unfortunates like myself, a clone, is born in more or less the regular way—biologically sexual reproduction, with or without coitus. Why was I born this way? Why am I different? What did I do to deserve this burden of having a genomic precedent? Didn't I have a right to be born the same way as a regular person? Didn't I have the right to be genetically unique, like everyone else? If there is no other way for me to be born except as a genetic retread, then I had a right to remain nonexistent."

This does not advance matters either; it is just another fusillade that begs the same questions and offers the same incomprehensible censures. The premise that one is different in the sense of being a deliberately created genetic duplicate does not authorize an inference that one has been treated "unequally"—merely differently. To establish such inequality, one must

¹⁴²James F. Childress offers this distinction in the course of discussing religious analysis of cloning:

On one point a strong consensus, perhaps even unanimity, exists among Jewish, Roman Catholic, and Protestant thinkers: A child created through somatic cell nuclear transfer cloning would still be created in the image of God. It is important to make this point because so many commentators on religious perspectives miss or neglect it. Even when religious thinkers maintain that cloning would always or at least sometimes violate the dignity of the child created this way, they also contend that it would not diminish that child's dignity

Childress, supra note 134, at 11 (citation omitted). As I suggest in the text, the process of cloning would "violate the dignity" of the clone, if at all, only if under the circumstances life would not be worth living from her point of view. Cf. Andrews, Is There a Right to Clone?, supra note 5, at 656 ("[A]n individual might be stigmatized or discriminated against based on foreknowledge of his or her genotype.").

describe the morally relevant differences between the two groups—here, differences resting on intrinsic or instrumental harms. As for intrinsic harm, that is just what is at issue. As for instrumental harm, we are not done with the investigation, but the earlier preliminary accounts suggest a parallel lack of success.

Still, one can oppose cloning without relying on empty notions of *a priori* rights not to be born. The only circumstance in which it makes sense to acknowledge a right not to be born is when the circumstances of one's life will be incompatible with a life worth living from the possible person's viewpoint. This may be because of expected physical and mental attributes or the offspring's environmental circumstances. ¹⁴³ The equality claim, then, does not help us to establish a right not to be born a genetic duplicate.

And as for the overall notion of a right not to exist—how many of us are lucky enough not to be born? Not one in a million.¹⁴⁴

B. IMPAIRMENT OF AUTONOMY AND INDIVIDUALITY THROUGH BEING "CONSTRUCTED" OR "MADE"; PROCESS AND OUTCOME

1. Autonomy and Individuality; Authenticity

a. Some conceptual problems concerning autonomy and individuality.

To know how autonomy and individuality may be impaired, one must know something about what they are. To know what they are requires some knowledge of other values. And to know if they are permissibly or obligatorily impaired also requires us to attend to other values. So, assessing any claimed risks to autonomy and individuality demands consideration to several matters.

First, there are different and inconsistent versions of these ideas—and so their varying aspects may point in different directions. Autonomy as self-direction, for example, may conflict with autonomy as a measure of opportunities to pursue one's preferences—including preferences to delegate decision making. And either of these aspects may be in tension with rationality constraints embedded in the concept of autonomy. Parallel difficulties are embedded in the idea of individuality.

Second, assuming we have some clear idea of the varying versions of "autonomy" and "individuality," we nevertheless cannot be sure what promotes or impedes their realization for given persons under given

Old Yiddish joke of uncertain origin.

¹⁴³ I mention in passing that when germ line augmentation becomes feasible, nonaugmented children might raise more plausible claims of unequal treatment. In a cloning-only regime, they might make equality objections to multiple cloning—too many superior competitors. *See* Michael H. Shapiro, *The Impact of Genetic Enhancement on Equality*, 34 WAKE FOREST L. REV. 561 (1999).

circumstances. There are those whose autonomy-as-self-direction is promoted because they were only loosely directed and constrained by their parents; and there are those who achieve that autonomous, self-directed independence because they were sharply reigned in while growing up. We are all wired differently and live in different circumstances—even identical twins and of course cloned offspring.

Third, autonomy and individuality are not everything. Other values count too. There may well be cases where matters of personal satisfaction or happiness should be favored, even when they rest on or are linked with supposed compromises of autonomy and individuality. Suppose, for example, a person is most comfortable when he delegates or simply accepts decision making on major matters to others—"medical" decisions to physicians, marital decisions to parents (as is common in various cultures), and so on. Even if we reject proposals for producing happy slaves or for genetic engineering to produce specialized toilers for involuntary service, we are not committed to—and indeed cannot—promote every conception of autonomy and individuality for every person on every occasion all at once.

Fourth, careful analytics will not necessarily alter anyone's views on the individuality-threatening nature of human cloning. "Whatever its ultimate scientific or commercial importance, the unsettling reality of cloning... undercut[s] a human faith in the uniqueness of individual identity, even though it is not possible to duplicate human personality or the life experience that produces it." It is hard—if possible at all—to argue against faith. There are perceptual grooves that can be changed, if at all, only by extensive debate and subtle forms of learning. Whether these perceptual patterns *ought* to be changed, however, drives us back to efforts at hardcore substantive analysis.

All four of these difficulties might plague us in any combination in any number of situations, including various cloning scenarios. For example, as elaborated later, selection of a genome for certain aptitude-traits may diminish autonomy in some respects: the offspring might be rigidly driven onto narrow experiential tracks that limit her awareness and her opportunities. Yet such genomic selection may promote autonomy in other clones—as when she is molded so that her preferences *match* her aptitudes, thereby enhancing her overall opportunities. Such preference-aptitude matching processes may themselves seem to impair autonomy (in some senses), even as the outcome may represent greater autonomy (in some

¹⁴⁵ Robert Lee Hotz, *Hello Dolly*, L.A. TIMES, April 26, 1998, at 14 (reviewing KOLATA, *supra* note 10).

other senses). This matching may also promote satisfaction and happiness—perhaps while compromising autonomy and individuality in some respects.

On the other hand, the knowledge that human cloning is widely viewed as creating persons of diminished individuality and uniqueness (these terms are not synonymous) may lead some custodial parents to lean backwards to avoid excessive constraints on the child. But a relative lack of structure and constraint in upbringing may not promote the best interests of all persons, including cloned offspring.

Although complete and satisfactory accounts of autonomy and individuality—also not the same—do not exist and never will, we are hardly adrift. Autonomy has something to do with the dimensions of one's opportunities (the size of one's "opportunity set"), with self-direction, and with the rationality of one's actions. Each aspect of autonomy poses serious analytical difficulties, and they sit uneasily with each other. Each aspect also involves considerations or presuppositions of authenticity, competence, and the rational consistency of one's preferences. The conceptual link between autonomy and individuality involves ideas of independent action reflecting one's own authentic preferences.

b. Authenticity.

"Authenticity" bears special mention here: it seems partly constitutive of both autonomy and individuality, but carries with it—or is even at the root of—some of the fundamental paradoxes of each. In a sense, it bridges the two concepts. The defining question is: Are one's individual preferences on major matters really "one's own," rather than someone else's, improperly induced, say, by "brainwashing" or other form of "conditioning." If so, one is neither (fully) autonomous nor (fully) acting as an individual.

¹⁴⁷ For discussion of the structure of autonomy and for citations to other works on autonomy, see Michael H. Shapiro, *Is Autonomy Broke?*, 12 LAW & HUM. BEHAV. 353 (1988) (book review).

148 Lawrence Haworth writes:

An autonomous person's authenticity results from his decisions, motives, desires, habits, and so on, being his own (while his independence results from their being his own). That they are his is brought about by his identifying with them, by his recognizing them as part of his true self, by his assimilating them to himself....

LAWRENCE HAWORTH, AUTONOMY: AN ESSAY IN PHILOSOPHICAL PSYCHOLOGY AND ETHICS 220 n.4 (1986). Here, Haworth refers to Gerald Dworkin, *Autonomy and Behavior Control*, HASTINGS CENTER REP., Feb. 1976, at 23, 25. For extensive analysis of autonomy, see also GERALD DWORKIN, THE THEORY AND PRACTICE OF AUTONOMY (1988).

¹⁰ See generally RUTH R. FADEN & TOM L. BEAUCHAMP, A HISTORY AND THEORY OF INFORMED CONSENT, 237-38, 262-69 (1986). The authors discuss authenticity as "one's own' actions, character, beliefs, and motivation." *Id.* at 238.

The qualification arises from the multiple versions of the ideas of autonomy and individuality. Unless the separation of senses is important, I will not always repeat the qualification.

However, though autonomy and individuality are closely conjoined, they are not identical—at least on some accounts of these concepts. For example, there may be circumstances in which someone autonomously chooses to delegate important decisions to others, or to suppress personal inclinations in favor of a community, or even to "merge" with another. Perhaps, then, one can autonomously compromise one's individuality. Perhaps this is also an autonomous compromise of autonomy. The paradoxes are obvious and need far more attention than can be offered here.

2. Threats to Autonomy, Individuality, and Identity

What are the threats to autonomy and individuality posed by cloning? How are autonomy and individuality, in any of their senses, threatened by the near-certainty of genomic replication and the further expectation of certain traits at least partially affected by genetic influences? Can human cloning also compromise personal identity? "Identity" in what sense? What could this claim mean?

The most obvious—though not the most realistic—threats are recounted in cloning stories about producing servants with mental or physical aptitudes or characteristics that are especially useful to their masters. 150

The more credible dangers, however, arise from the simple fact that if one invests heavily in specific plans, one is inclined to implement them. The questions, then, are as follows: What plans underlie a given act of cloning? How much more specific are these plans and expectations when compared with the plans and expectations of standard-case sexual reproduction? (Plans and expectations are associated with everyday reproduction, whether initiated deliberately or not—otherwise it might occur far less frequently.) Do these increments in specificity and cost generate increments in risk—perhaps risks that are different in kind from baseline risks of sexual reproduction? How are the plans and expectations to be realized?

These are *a posteriori* questions about the nature and circumstances of the cloned child's origins and upbringing. The prior existence of the child's genome is relevant only insofar as it provides the empirical basis for projections about the cloned offspring's traits, and for how her rearing parents might respond to these projections and to the appearance—or *non*appearance—of the traits themselves.

Our concern, then, is whether our knowledge regarding the life of the genome's prior holder will inspire certain interactions between the rearing parents and the cloned offspring, possibly to the latter's detriment, and

¹⁵⁰ See, e.g., Pizzulli, supra note 8, at 510.

ultimately to the community's. The same question applies to the offspring's interactions with others generally. In principle, these interactions are within our control: they are not mandated by the nature of the child's origins—by some mysterious genetic lines of force that govern how we receive the child.¹⁵¹ The only other significance of the fact that this is the nth time around for the genome concerns the maintenance of human genetic diversity. 152 This is a minor problem unless cloning is practiced widely over long periods.

It is easy to foresee threats to autonomy and individuality arising from the plan underlying a given cloning process. Such plans rest on confidence in our knowledge of the clone's genome, and thus our enhanced (if imperfect) knowledge of the clone's probable traits. The plans may—but need not-involve fairly specific ideas about how the clone's life is ultimately to be lived and thus how her developing attributes are to be nurtured and formed. These designs may well be implemented by rigorous constraints on the developing child. For example, she will be exposed to activity X but not activity Y—although Y is, ex ante, a reasonable form of experience for nearly anyone. The threat to individuality/autonomy lies partly in the possible compromise of authenticity: a child firmly tracked onto a particular path might be said to have developed preferences that are not really "hers," but those of her "trainers."

It is unclear how to confirm or reject such claims. The problem is both conceptual and empirical: What are the criteria for saying your preferences are "yours"? What sorts of environmental constraints are so constraining that one turns into someone else's image of what you should be?

Here, we might recall Jonas's remarks, quoted earlier. They suggested that clones will know too much about themselves and their spontaneity will be destroyed. But why would this be so, unless they were falsely told that genetic determinism was true? Jonas suggests that it is knowledge of the plan itself that does the damage: a clone's genome locks in his future because of assumptions underlying the decision to clone. I not only do not deny such risks, I insist that they exist—and that they require our utmost attention: resting on repugnance is not enough. Despite the impressive eloquence of Jonas' commentary, however, it carries no greater

¹⁵¹ See Annas, Human Cloning: A Choice or an Echo, supra note 23, at 272. Annas is on sound ground when he says: "What matters is that a specific person is chosen to be cloned because of some characteristic or characteristics that person possesses (and, it is hoped, would be also possessed by the copy or clone)." Id. I have said that this ought to be the primary focus of cloning analysis, and that the customary hurling of conclusory arguments be abandoned.

But compare the text accompanying note 351, infra, discussing the view that being one of several clones may cause harms that were avoidable, thus nullifying the no-harm-from-existence argument. On genetic diversity, see CLONING HUMAN BEINGS, supra note 9, at 25 (commenting on diversity in agriculture).

153 Note 83, *infra*.

weight than his own assumptions: that all cloners and their accomplices will seek to calibrate the cloned offsprings' lives in oppressive detail in order to further fixed goals; that "spontaneity" will be "paralyz[ed]"; and, perhaps, that all diminishments in spontaneity and all increases in predictability are presumptively harms that outweighs most conceivable benefits—say, of matching preferences to aptitudes.

To take one example, think of how James Mill raised his son John Stuart. James's methods were reputed to be exceptionally rigorous and demanding: John Stuart, in his father's view, was meant to be *somebody of a certain sort and social stature*, and his father evidently tried to assure this by imposing a regime he thought would generate particular dispositions and attitudes.¹⁵⁴

Still, few are prepared to say that the younger Mill was an artifact of his father's designs, lacking in authentic preferences, having an identity merged into his father's, and thus less an autonomous individual than others, despite his accomplishments. (Are they "his"?) True, he was gifted with intellect—and possibly ego strength—in great measure. Perhaps he was therefore enabled to flourish despite, rather than because of, his father's dominion. On the other hand, some might argue that John Stuart's impressive accomplishments belie the idea that James wronged his son—though without further premises this is a non sequitur. Perhaps those very accomplishments evidence the wrong—that John Stuart was merely a vessel for his father's inclinations, and thus John Stuart's preferences for pursuing the life of the mind generally, and political philosophy in particular, were not fully authentic. And John Stuart was not even a cloned genetic duplicate of his father!

Whatever really happened, the Mills' tale is nonetheless illustrative of our moral and conceptual problems. The question is, with clones as with non-clones such as John Stuart, whether their important preferences are "their own." If not, their autonomy and individuality have been compromised. But, assuming it makes sense at all to speak of "one's own" preferences—are they one's own "all the way down?" In what sense are clones' preferences—or anyone's preferences—not their own? Presumably, if the preferences are not their own, they are those of the instigators of the cloning or of fathers such as James Mill. (And who knows where their preferences came from?)

¹⁵⁴ See, e.g., John Stuart Mill, Autobiography, in ESSENTIAL WORKS OF JOHN STUART MILL 1 passim (Max Lerner ed., 1961); BRUCE MAZLISH, JAMES AND JOHN STUART MILL: FATHER AND SON IN THE NINETEENTH CENTURY 169-72 (1975) (discussing the idea that John Stuart "seems never to have been a child, or to have had a childhood").

¹⁵⁵ Cf. NOZICK, supra note 87, at 225 (discussing desert rather than authenticity, and stating that "[i]t needn't be that the foundations underlying desert are themselves deserved, all the way down").

It is one thing, however, to ask if rearing methods compromise the authenticity of a person's preferences, and quite another to suggest that the prior existence of a genome, standing alone, renders the cloned offspring's preferences nonauthentic. I am unaware of anyone who has put it in quite that way, but the claims of inherent wrong and of necessarily enfeebled autonomy and individuality come pretty close. Whatever inclinations or dispositions are wired into us by genetics, one cannot simply say that a human being's complex preferences are transmitted through his genome to his cloned offspring. There is no *a priori* reason to see the clone's behavioral traits as fixed in amber.

It is thus dangerous for opponents of human cloning to assert that matters of personal identity are "at the heart" of the cloning debate. ¹⁵⁶ If their arguments based on threats to individual identity fail, then their opposition has no basis.

Clearly, are troubling foundational questions underlying this discussion. As with many foundational questions, they lead quickly to prove-too-much arguments and, in general, are unlikely ever to be answered with assurance. How can anyone say their preferences are their own when such preferences arise only through the union of genetics, nurture, education, and life experience—none of which, at the outset, a person chooses for herself? Our preferences do not appear ex nihilo. (If they did, in what sense would they be ours?) But if so, how can we be responsible for our preferences? And if we are not responsible for our preferences, how can we be autonomous, independent, and individual persons? After all, autonomy rests heavily on the nature of, and opportunities for, pursuing our preferences in a self-directed, rational manner. Yet if we come by our preferences through no conscious decision making process of our own—and how could we do so, at least when we first start collecting preferences?—then no one's preferences are authentic and they cannot be constitutive of our individuality and autonomy. And now that we have encountered certain aspects of the free-will/determinism problem, let us leave them where we found them.

Before leaving authenticity aside, two points should be made. The first is that the claim that "rigid training may weaken authenticity" presupposes the possibility of some directed shaping of preferences, and in particular, of "matching" them to one's aptitudes. (One could also try to mold aptitudes to match preferences, but this seems virtually impossible with existing technology.) Perhaps some preferences are less heavily influenced by genetics than are some aptitudes, allowing room for matching.

¹⁵⁵ See Annas, Human Cloning: A Choice or an Echo, supra note 23, at 256. Yet, those who argue this way characteristically observe that "exact replication... is not possible." Id.

The second point is that we may not know whether any given nurturing, training, or preference-shaping process is intrinsically wrong. One might think that if the process is intrusive enough to compromise autonomy, individuality, or personhood, it is intrinsically wrong. On the other hand, the person being trained or shaped may end up more satisfied or happy than if she had not been so trained, thus promoting overall social utility.

This suggests, once again, that our proper focus is instrumental harm, and that the rigorously trained or shaped person may not have been harmed overall. Perhaps in some cases it is a good thing that a person achieves a higher level of satisfaction at the expense of some autonomy or liberty.¹⁵⁷ If so, the ascription "intrinsically harmful" again appears suspect. Whether there are instrumental harms remains the central question—though *some* serious intrusions might be thought intrinsically wrong because of their overwhelming impairment of autonomy. But it is the *intrusion* that might be intrinsically wrong, not the human cloning that might have spurred it.

Finally, a word on "identity," yet another abused term. How is a clone's "identity" compromised? Perhaps the term is being used loosely to refer to a "sense of self"—"knowing who you are." Such a self-view is a complex mix of knowing one's own powers and limitations, the confidence so generated, a sense that one's preferences and lifeplans are one's own (authenticity again), and a sense of independence—that one is not in thrall to or "reduced" to another, including a nuclear source bent on a "merger." If so, then the problem of identity collapses into problems of autonomy, independence, reduction, and "positive evaluation," which I discuss later. "Identity" is in fact used largely as an alternative term for those notions and, despite having some special shades of meaning, no great harm would be done by ceasing to speak of it as an independent consideration. Beyond that, there are no identity problems here bearing any special difficulties.

3. Promoting/Impairing Autonomy by Trying to Match Preferences with Expected Aptitudes and Traits

Directing a person's preferences toward her talents and strengths is not necessarily evil—far from it. John Stuart Mill may have suffered from a variety of parental/educational excesses, some of which may be inexcusable, but the match between his preferences (authentic or not) and

¹⁵⁷ But autonomy and satisfaction are connected. For example, satisfaction is linked to elevated mood and this in turn may enlarge opportunities—it is hard to pursue one's life plan when acutely depressed.

¹⁵⁸ See generally Kathinka Evers, The Identity of Clones, 24 J. MED. & PHIL. 67 (1999) (discussing Leibniz's Law; noting that the identity problem concerns two organisms, not a single numerically identical one; focusing on the idea of indiscernibility of "intrinsic" properties as opposed to "relational" ones; and introducing the notion of "empirical identity" or "individuation").

his talents proved quite fruitful and, in many ways, the early constraints enhanced his "long-run" autonomy. Thus, one of the possible autonomy-promoting aspects of cloning lies precisely in the possibility of encouraging a link between aptitudes and preferences. Of course this is not unique to cloning—but cloning may make the prospect more vivid and the possibilities of "success" more assured. At the same time, many methods of shaping preferences do impair autonomy but care must be taken to specify the sense of "autonomy" in question, assuming this is possible. This tension between promoting some aspects of autonomy and impairing others is, I suggest, among the best avenues for assessing cloning from both a societal perspective and from the personal perspective of the offspring. (The importance of making this perspectival distinction is emphasized later.)

The child's own good is not necessarily promoted by the policy of protecting his budding right of self-determination. . . . [A] majority view [among philosophers] that seems to me highly plausible would identify a person's good ultimately with his self-fulfillment—a notion that is not identical with that of autonomy or the right of self-determination. Self-fulfillment is variously interpreted, but it surely involves as necessary elements the development of one's chief aptitude into genuine talents in a life that gives them scope, an unfolding of all basic tendencies and inclinations, both those that are common to the species and those that are peculiar to the individual, and an active realization of the universal human propensities to plan, design, and make order. Self-fulfillment, so construed, is not the same as achievement and not to be confused with pleasure or contentment, though achievement is often highly fulfilling and fulfillment is usually highly gratifying.

Id. (footnote omitted). However, as a whole, Feinberg's article also registers warnings about the autonomy-impairing aspects of some unduly narrow or intrusive rearing practices. See, e.g., id. at 76-89 (discussing, inter alia, what he calls "C rights," or "rights-in-trust"). In discussing the violation of "rights in trust" for children, he notes that "[t]he violating conduct guarantees now that when the child is an autonomous adult, certain key options will already be closed to him." Id. at 77. Feinberg's chief examples are cases "that pose a conflict between the religious rights of parents and their children's rights to an open future." Id. at 79. Later, he argues:

[T]he parents who rear their child in such a way as to promote his self-fulfillment most effectively will at every stage try to strengthen the basic tendencies of the child as manifested at that stage. They will give him opportunities to develop his strongest talents, for instance, after having enjoyed opportunities to discover by various experiments just what those talents are. And they will steer the child toward the type of career that requires the kind of temperament the child already has rather than a temperament that is alien to him by his very nature. . . . [I]f the child's future is left open as much as possible for his own finished self to determine, the fortunate adult that emerges will already have achieved, without paradox, a certain amount of self-fulfillment, a consequence in large part of his own already autonomous choices in promotion of his own natural preferences.

Whether autonomy is ultimately a paradoxical concept—in the sense that different (but linked) versions of it lead to inconsistent results—is a complex matter that cannot be addressed here. For a brief account of notions of autonomy that may be in tension in given situations, see Shapiro, *supra* note 147, at 353.

¹⁵⁷ Cf. JOEL FEINBERG, supra note 51, at 91. Feinberg makes a parallel point concerning "self-fulfillment," which, as he notes, is not synonymous with "autonomy." Id. Nevertheless, in any given case, self-fulfillment may be a strong factor in an overall autonomy assessment that considers one's range of opportunities, one's self-direction in pursuing such opportunities, and the rationality of doing so.

So, in considering whether someone (John Stuart or a cloned offspring or anyone at all) was "made" or "engineered," think of the Artur Rubinstein clone who, as it turns out, can really play that piano, and—with a little help from his parents/friends—loves doing so and becomes a world-class artist who is happier, more fulfilled, more satisfied, and more autonomous for having his preferences match his aptitudes. Perhaps he will nevertheless resent his clonehood because it constitutes a difference from others that is often reinforced by those others. The resentment, however, is not likely to make his life not worth living from his perspective, nor does it provide a strong basis for pitying him because of the supposed horrors of his life. Perceiving oneself as different—and having others remind one of the supposed differences—may be generally unpleasant. Even so, it does not generally warrant banning the existence of those who are different, even if their difference will regularly be called to their attention. There is something to be said for being "different" in the sense that one's strongest aptitudes match one's strongest preferences to an unusual degree. And of course, some people revel in their differentness.

One more point about the baleful effects of perceiving that one is different: Where did the perception of a *shameful* or adverse difference come from? Not from the genome. Not from genetic lines of force. If it came, it came from those entrusted with his care—and others who watched and interacted with him.

Perhaps this matchmaking tale sounds too simple. Unaccompanied by appropriate caveats, it is. On the one hand, you can't just do nothing with children. On the other hand, the very process and outcome of trying to arrange a match between ability and inclination embodies serious autonomy paradoxes. Moreover, some induced preferences, by their content and/or intensity, may be inconsistent with or otherwise preempt other preferences. Such displaced preferences represent a sort of opportunity cost. (Of course there are losses and then there are losses. Artur Rubinstein reports that if he had not been a pianist, he would have been a travel agent.) And there is no way to know whether an attempt to enhance autonomy, self-fulfillment, satisfaction, well-being or anything else by certain preference-shaping techniques will do so better than some other technique, including laissez-faire. 160

Finally, the risk of failure in matching preferences to aptitudes is obviously nontrivial. There is no assurance that preferences can be even

¹⁶⁰ See generally Dena S. Davis, Genetic Dilemmas and the Child's Right to an Open Future, HASTINGS CENTER REP., Mar.-Apr. 1997, at 7 (applying Feinberg's notion to the problem of parents with certain conditions who want their children to have them also (usually deafness or achondroplasic dwarfism)). Davis notes that applying the "open future" model to, say, the Amish, would in many cases effectively delete an Amish child's retention of Amish sensibilities and so the benefits of an Amish lifestyle would largely be lost to them. See id, at 11.

roughly calibrated to perceived aptitudes. The sorts of preferences sought to be elicited may cut against the offspring's wiring as affected by environment—molecular, gestational, parental, and so forth; genes have no control over their protein spawn once they leave the nest. And aptitudes themselves are not functions solely of genetics: the shaping of preferences to aptitudes might be like aiming at a moving target. Worse yet, the failure of the specific plans underlying a cloning decision may lead to serious strains in the bonds between custodial parents and those offspring who will not or cannot conform to the plan. The strains produced by even a successful attempt at linking preferences to aptitudes may disrupt the parent-child relationship. There are also conjoined risks that the offspring, knowing of her origins and the accompanying plans, may feel oppressed by her history; or she may lack the confident, independent self-view that she can accomplish what her nuclear source did; or she may overestimate her capacities because of her nuclear predecessor's (over-achieving?) accomplishments; or she may overestimate her capacities because she sees her antecedent as an underachiever; or she may come to believe that if her antecedent failed at something, so must she. Imagine one's nuclear source saying "You can't do that because I couldn't—don't even try; the Navy Seals are beyond you." Of course, it wouldn't be wonderful if one's standard diploid genetic parents said the same thing. But, saying so to the cloned offspring may be more damaging because of the clone's "knowledge" that she has (gasp) "someone else's" genomic identity.

Now, consider again the claim that the clone's preferences might not be authentic, and that therefore her autonomy, individuality, and personhood are diminished. The fact that the clone's genome is a rerun cannot be even a partial factor in characterizing her preferences as nonauthentic. This holds even if the preferences are largely "wired" in solely through genetic mechanisms. In that case, perhaps, no one's preferences would be authentic. In any event, authenticity does not depend on the absence of genetic precedent; thinking so conflates authenticity with uniqueness. And one's having a genomic precedent does not seriously compromise even uniqueness. The clone exists as a separate entity with a separate consciousness and is not living someone else's life. The consciousness and life course of the prior holder of the genotype are not infused into the clone's bones, directing her every move, an internalized external force, a ghost in the mind and body. (Even if it were, the clone is still generally not harmed by its existence, a point discussed below.)

- 4. "Manufacturing" Persons Versus Receiving Them as "Gifts" of Nature: The Comparative Impacts on Autonomy, Individuality, and Identity; If We "Assemble" a Person Are We Morally Authorized to "Control Her Destiny"?
 - a. The claim and what it is supposed to show.

Opponents of cloning and other reproductive innovations often characterize these processes as "manufacturing," "assembling," or "fabricating." Even if these were apt characterizations, they are not inconsistent with the personhood of the clone. "Manufactured person" is not an oxymoron—it is a misleading metaphor. But it is an instructive misleading metaphor (this description is not an oxymoron either) because it reveals the strengths and weaknesses of our cognitive lumping and splitting skills. It tells us that there is something different about a given reproductive process, and that this difference roughly marks the hazy border between the natural (presumptively good?) and the artifactual (in the context of human reproduction, presumptively bad?). Although the idea of "objectification" is quite different from that of "manufacturedness," the two have obvious connections—particularly if one thinks that the prime evil of "manufacturing" humans is that this automatically renders such humans objects or things.

The "argument from manufacturing" is that autonomy and individuality are put at risk because a cloned offspring is "constructed": it is a "product" that we have made and are thus (we think) entitled to fiddle with and control. In short, humans created in this way are manufactured objects.

It is not always clear if this claim is a definitional matter or a matter of empirical inference about consequences. As for the claim that "cloning by definition is manufacture," is there indeed a definitional connection between "being built" and "being an object"? Examine the following claim (especially if you think I am attacking straw arguments): If one is made, one is a product, by definition; and products are objects, reduced in value to pure utility derived from its attributes.¹⁶¹

Why should we accept this definition? What argument or lexical authority shows that we must do so? Are we obliged to concur in this

¹⁶¹ Cf. PROCEED WITH CARE, supra note 128, at 683-84.

The premise of commercial preconception contracts is that a child is a product that can be bought and sold on the market The commodification of children *entailed* by preconception arrangements ignores these essential values [that children are not commodities or instruments].

Commercial preconception contracts by their nature—the exchange of money for a child—contradict one of the fundamental tenets of the Commission's ethical framework.

Id. (emphasis added).

because of actual linguistic/conceptual practices and understandings? This seems quite unlikely, and in this light, the argument is just a definitional stop. You cannot validly define for yourself a preferred conclusion; the only effect of a definitional stop (it may be considerable) is rhetorical.

Consider also the non sequitur reflected in the comment: "What we beget is like ourselves. What we make is not; it is the product of our free decision, and its destiny is ours to determine." 162 No it is not. It depends on what "it" is. The contrast drawn between begetting and making is far too indistinct to permit this heavy-handed dichotomy. Moreover, even with a clear distinction, the argument is again a non sequitur: being manufactured is not a warrant for one's destiny to be determined by anyone else. It depends on what is said to be manufactured. If you wish, you can apply this description to coffee tables and persons, and you can rightly say that someone is entitled to dominion over the coffee table, but you cannot rightly say this about a person, whether you think he is manufactured or not. A human person— cloned offspring, genetically enhanced child of sexual recombination, and so on—is not a toaster. Literary excesses about "beget[ting]" and "destiny" do not convert commonalities ("I made this toaster and I'll decide what to do with it.") into absurd "profundities" ("If you fiddle with natural processes of begetting and bearing, what you get is an 'it' whose destiny is subject to our absolute control.").

The quoted argument is banal, simple-minded, and does not work. It rests on begging a series of questions expressed as premises: "We 'beget' Xs and only Xs (persons); we 'make' Ys and only Ys (things); we can either beget or make, but not both; anything made is a thing we can fully control; anything begot is an autonomous individual person." But who said these sets of Xs and Ys do not intersect, and where did the inference of control come from?

The argument cannot be ignored, however: its rhetorical impact carries the classic risk of self-fulfilling prophecies.

b. Reproduction and assembly.

Arranging reproductive mechanisms so that we can have more accurate expectations that a person will be born with a certain set of traits, dispositions, and possibilities is not the same as assembling an object. Anyone seriously urging the similarities between cloning or germ line engineering on the one hand, and factory assembly on the other, must also deal with their differences.

¹⁶² Gilbert Meilaender, Human Cloning Would Violate the Dignity of Children, in CLONING, supra note 10, at 21, 24.

¹⁶³ Anyway, androids can be persons too. So sayeth Star Trek: The Next Generation, (Paramount Pictures television broadcast, 1987-94), via the character "Data." I see no reason to question this view.

What exactly are the similarities between cloning and manufacturing? In both cases, we do not simply let nature proceed unaltered. Toasters do not pop into existence; they are designed from top to bottom and appear only after pieces are made and put together. In "natural" procreation leaving aside medical assistance during pregnancy and birth—nothing of this sort happens. Even in eugenic mate selection it would be a stretch to see the resulting children as artifacts. In cloning, however, the selection of the nuclear source goes far beyond eugenic mate selection because of our exact knowledge of the genome-to-be. Lots of technical stuff has to be done after that—getting a somatic cell, extracting the nucleus, getting an egg, extracting its nucleus, inserting the clonant's nucleus into the egg, and placing the resulting entity into a woman so that she becomes pregnant. This is hardly letting nature take its course. Moreover, if we add genetic capabilities for germ line alteration, technological complexity is escalated through trait-by-train selection—which does indeed suggest an "assembling of parts into a whole."

The question now is: are cloning and genetic engineering rightly viewed as manufacturing processes? And if so, so what? We have no clear set of criteria for "manufacturedness." (Law instructors still ask students if chickens are manufactured products.) However, I suggest that identifying one or more shared characteristics between processes X and Y does not alone establish any common memberships; the differences require equal attention. Which differences? The planning of traits characterizes both the manufacture of toasters and some cases of human reproduction—cloning and genetic engineering in particular. But the results are rather different. Unless the procreational plan includes the development of traits inconsistent with personhood, the result of cloning and genetic engineering will be a person capable of independent, autonomous operation, assuming she is raised in a manner consistent with such operation. The result of building a toaster is expanded opportunities to make toast.

How, then, should we evaluate the argument that the planning entailed in cloning and some forms of genetic engineering renders reproduction a manufacturing process producing something we think we can deal with as we please? That argument is a simple triad, which one can describe loosely: for all X: the planning and technological intervention creating entails X's status as a manufactured object, which in turn entails someone's dominion over X.

On reflection, it is still silly. How did people get sucked into making such an argument, even for rhetorical purposes? Perhaps concern about "manufacturedness" reflects, in large part, an inflated estimate of genetic determinism. The fate of a toaster is more or less sealed. This cannot be

said about cloned offspring or even offspring whose germ line was deliberately altered—even "diminished."

Further, the traits selected for enhancement are likely to be strongly favored as distinctively human—talents and behavioral dispositions of various sorts. There might be particular reproductive efforts meant to produce obedient, limited persons truly "designed" for certain tasks. We could then rightly say we are *treating* persons as manufactured objects, although no person is truly an object. Putting these abusive enterprises aside, it is hard to assimilate cloning or germ line alteration to toaster production—even if we do sometimes select appliances in ways parallel to how we select persons (physical attractiveness, efficiency, passivity, low-cost maintenance, and so forth).

To clarify the argument-from-manufacture, we might next try another cut at the distinction between intrinsic and instrumental harms. The principal instrumental risk is objectification¹⁶⁴ by means of reduction, as will be explained later. This risk stems from the explicit or assumed focus on specific traits entailed by cloning and genetic engineering. Such advance concern with and control over particular human attributes does indeed parallel manufacturing—our design and assembly of useful objects—and perhaps even the creation of works of art. These are things that we build or structure rather than bear or beget. The specificity of expectations when building or sculpting elevates the probability that the clone's custodians will adopt educational methods that arguably impair the clone's autonomy and individuality. It is not enough to respond that all parents have expectations concerning their children. Cloning brings the possibility of sharply *enhanced* expectations, creating significant *incremental* risks of overly officious parenting, which in turn generates a variety of evils.¹⁶⁵

In this light, cloning is not entirely benign. Attention to a person's particular traits may threaten to reduce that person to the utility of those traits to others. People *do* merely use each other in various ways—so why should we make things worse in this respect by tolerating cloning or genetic engineering?

But advance attention to traits does not on its own establish any form of evil, whether intrinsic or instrumental. Emphasizing a person's particular

¹⁶⁴ See Shapiro, supra note 17, at 1093, 1180-81 (discussing arguments based on objectification).
165 See PENCE, supra note 4, at 135 (noting the expectations of parents-to-be generally). But Pence also notes the possible benefits of parents having substantial expectations of their children. See id. at 135-40. See also James Lindemann Nelson, Cloning, Families, and the Reproduction of Persons, 32 VALP. U. L. REV. 715, 717 (discussing a situation in which a clone might be created in part as a compatible tissue source). "The issue involves . . . identifying clearly and vividly how cloning might heighten risks, as well as offer benefits" Id. at 724. The reference is to a couple, the Ayalas, who bore a child who, it was hoped, would be a compatible bone marrow donor for an older sibling with leukemia.

traits—or a possible person's expected traits—is essential to being valued as a person rather than as a commodity. Of course, "suppression" of interpersonal differences is required when dealing with matters resting on threshold personhood and on the respect all persons are due because of that personhood. Despite the somewhat paradoxical affinity of such valuation to reduction, this sort of attention to traits is both inevitable and, within limits, desirable. It is not "reduction" in a pejorative sense. An accomplished professional pianist is in a sense reduced to her useful artistic skills—she is "used" to transform a symbolic schema for sounds into music. On the other hand, if a person is valued *only* for such usefulness, it seems to represent a devaluation of her worth as a person.

But the term "only" is doing too much work here. Don't we want to be valued for the right things—such as our talents and skills? This question captures the tension between reduction and positive valuation. If persons are valued only for their talents and skills, as some might argue, they are merely being used. Think of the football player who becomes disabled and addicted because he is frequently given pain-killing drugs to enable him to play and so to maximize his value to the team. But being valued for talents and skills is also reflected in admissions to institutions of higher learning, promotions, prizes, and so on.

Other "traits" present themselves differently here. For example, it seems odd to say "she is being valued only for her character." If we cannot value persons for their character, what can we value them for? Valuing persons for their character or virtue requires attending to particular characteristics. We admire, praise, and value courage. This is of course subject to abuse: it is a useful trait for soldiers, and, in battle, we value courageous soldiers as effective *tools* of warfare. Reckless bravery may even be encouraged. However, particular virtues are still appropriate bases for valuation, despite the risks of abuse.

Perhaps reduction and character valuation are different ways of looking at and valuing the same trait—although one could argue that it couldn't be "the same trait" if the person is viewed in such different ways. Or, one might instead say it is the same trait: valuation of a person's worth is then itself "reduced to reduction." I will briefly return to this oddity later, but will not attempt to probe its philosophical foundations.

Apart from the risks of being dealt with in certain ways as a result of being born of a genetic plan, there is nothing about being "made"—in the sense cloning critics use—that *necessarily* or even probably reduces the clone's value to that of an object, or even to that of a marginally autonomous person whose preferences are not his own. "Made" persons are likely to look, think, and act much like persons generally—unless we bully them into other paths.

There are objects and there are *objects*. If human clones are "manufactured objects" who nevertheless generally lead rich, satisfying lives that are both autonomous and individuated (there is no *logical* or *a priori* reason why they cannot), then more power to objecthood.

5. Can the Nature of One's Origins Attenuate One's Humanity and Thus One's Status as a Moral Agent?: Of Products and Processes and "Wrongful Rearing"; the Problem of Evil Again

This inquiry obviously overlaps the preceding discussions, but it recalls in particular the reference to the "problem of evil," briefly raised earlier: Assuming arguendo that cloning is intrinsically wrong, what exactly follows from this with respect to the moral characteristics of the clone? To begin, what are we to make of Kass's claim?

It is not at all clear to what extent a clone will truly be a moral agent. For, as we shall see, in the very fact of cloning, and of rearing him as a clone, his makers subvert the cloned child's independence, beginning with that aspect that comes from knowing that one was an unbidden surprise, a gift, to the world, rather than the designed result of someone's artful project. 166

This is simply a series of assertions without obvious support, and in some cases, without clear meaning. For example, the "very fact of cloning" is one thing; the manner of rearing is a separate contingency. As we saw, this "very fact of cloning" cannot be a stand-alone source of evil; its evil, if any, arises only in conjunction with how the clone is treated. Yet the real-world experience and treatment of the clone are de-emphasized by Kass and other critics, who favor the view that cloning is intrinsically, inherently wrong.

At its core, Kass's claim is a set of descriptions followed by an illicit inferential jump from the loss of "giftness" and "surprise" (lack of predictability?) to characterization as an artifact of questionable moral status and value. But the idea that a clone cannot be a moral agent simply by virtue of having a replicated genome ("in the very fact of cloning") is far-fetched. It is not entirely clear that Kass meant to say so. The quoted formulation adds "and of rearing him as a clone," but, given the looseness of the context, it is hard to say whether "and" states an additional, rather than an alternative condition. Still, given Kass's view that genomic duplication through cloning is intrinsically harmful, we should consider both possibilities.

Now, what could support the claim of lack of moral agency? Moral agency is not definitionally connected with genetic uniqueness. If Kass defines it that way, so be it, but why should anyone else be bound by this

¹⁶⁶ Kass, supra note 13, at 22.

definition? If definitions are offered, they must make sense; we are not in Wonderland.

As for the challenge to individuality stemming from the "subversion" of the clone's independence by rearing him "as a clone," the argument seems to be as follows:

a. Either one is an unbidden "gift"—a "nonconstructed" being whose exact characteristics are thus necessarily a "surprise"—or one is an "artifact."

This is an indefensible all-or-nothing formulation, closely related to the "begot versus made" distinction. The clone brings few or no surprises with his genome, taken separately—but of course we cannot take it separately. To do so would be to reduce someone to his genome—which, ironically, some cloning critics seem to do—and this is a plausible description only on an assumption of overwhelming genetic determinism and of the supposedly inevitable behaviors resting on this assumption. To say in response that cloning is meant to effect genomic reduction—otherwise why clone this person?—simply assumes certain goals and repeats the question-begging about the effects of living within the workings of a used genome. It ignores the obvious point that all physiological processes initiated by gene functioning take off on their own into a rich, transformative environment. The response is yet another stipulated definition without adequate lexical, conceptual, or normative foundation.

b. Having a planned, predictable genome is inconsistent with being an independent, autonomous individual.

We have in effect already covered this claim. The clone's supposed lack of autonomous individuality just does not follow from his having a replicated genome. Is the clone's supposed unfortunate status the result of intrusive rearing—being raised "as a clone," in Kass's words? If so, this is a contingency within our control. Nothing *compels* us to treat a cloned offspring as "nothing but" an iteration of a prior life: cloning genomes is not the same as cloning "lives." The implicit premise that "nothing planned can be independent" is still another in a series of peremptory stipulations resting not on rational probing but on visceral reactions. As I say later, our visceral reactions are rightly *part* of moral analysis—but it obviously cannot end there.

As for the risk of compromising moral agency by heavy-handed rearing according to some rigid plan: I explain later why any given pattern of rearing, whether it appears to be more (or less) constraining than others would prefer, may in fact promote the long run status of the clone as an independent autonomous agent. No threat to moral agency is yet apparent

from either the fact or the social consequences of cloning. Although it is plausible to anticipate incremental risks from inept rearing and ill-considered social reactions, human cloning does not deserve the florid rhetoric it has generated.

The conclusions that creating a clone is an unacceptable intrusion on independence, individuality and autonomy is thus, to this point, not made out. The premises are false, the inference unwarranted, and we have encountered no independent reason to accept the conclusion. What would such a reason look like?¹⁶⁷ Still, there are matters left to consider.

6. Is Cloning Inherently Wrong because of the Overwhelming Empirical Likelihood of Injury to Rights of Autonomy, Individuality, and Identity?

Evaluating the circumstances of a reproductive event obviously plays a legitimate role in evaluating cloning. Although the cloned offspring's origins do not at all weaken her claim to full personhood, they confuse lineage to and are linked to risks arising from some forms of responsive conduct made likelier by the very nature of the planned procreation. (Recall that this point is a partial—though very weak—reconstruction of the claim that cloning is intrinsically wrong.) Rational or not, two genomically identical persons, one a nuclear source and the other his cloned offspring, might be viewed by others as two different sorts of persons because of their noticeably different origins. They are certainly not viewed as equally the children of the nuclear source's natural biological parents. Moreover, "[i]f [clones] are created to be used . . . then we have already differentiated them from regular people."

¹⁶⁷ Cf. Wilson, *The Paradox of Cloning, supra* note 62, at 23-24. "Before deciding what we think about cloning, we ought to pause and identify more precisely what it is about the process that is so distressing. My preliminary view is that the central problem is not creating an identical twin but creating it without parents." *Id.*

Vs See Broyde, supra note 39, at 511-23 (discussing the question of who the clonee's family is). For striking illustrations of lineage problems, see generally Silver & Silver, supra note 35, at 596-98 (discussing the concept of "one's own child"). "[W]hat about a situation in which parents decide to expand their family with a clone of a child they already have. Would the older child be the parent of the younger child, or would the two children simply be identical twins (of different ages) with the same genetic mother and father?" Id. at 603. The author also discusses the cloning of an adult woman who is the custodial mother of the clone:

The child's social grandparents will be her genetic parents. And when the child grows up and is ready to have her own children, she will have to contend with the fact that all her children will also be the genetic children of her mother-progenitor. Finally, there's the unusual situation that is sure to happen some day when a woman decides to clone herself after she has already had children by natural conception. The child that is born will become the genetic mother of her older brothers and sisters.

[&]quot;Niebuhr, supra note 55 (quoting Robert A. Destro). As I argue, the claims that clones would be created to be used, and would be so viewed, are hopelessly bloated. These claims' only virtue is in identifying a particular mechanism of avoidable risk arising from possible motivations for cloning.

So, the fact of planning and expecting is hardly without consequence, even though those consequences are in large part ours to control rather than inevitable features of some mysterious genetic reality. Process counts; the problem is to specify which processes count for what and how much. It will not do to say:

[I]f the cloning of human beings is undertaken in the hope of generating a particular kind of person, then cloning is morally repugnant... not because cloning involves biological tinkering but because it interferes with human autonomy. To discover whether circumstances might exist in which cloning would be morally acceptable, one must ask whether the objectionable motive can be removed.¹⁷⁰

But the particulars of what has happened must be pursued, not just the abstractions that generally characterize it; and it remains unclear why the burden should be on cloning's defenders. So far, nothing has been established that would explain why "the hope of generating a particular kind of person" is in the least objectionable; and the distinction between hoping and expecting has not yet been adequately plumbed.

Whether or not people will believe that clones, because of their genomic identity to a predecessor, will radically differ from regular folks in adverse ways may be a contingency we can control. Whether we will control it, however, is itself a huge contingency. As I said, we are faced with serious problems of self-fulfilling prophecies—and the conclusory nature of much of the analysis of human cloning supports this fear. There will no doubt be clear cases of inappropriate rearing that will injure some clones, inspiring an offensive chorus of "I told you so" from cloning's opponents. Indeed, some may conclude that the harms to the interests recounted above are so empirically likely that it is appropriate" to think of them as "inherent" in cloning. Partly for that reason, they will also be

¹⁷⁰ Philip Kitcher, Whose Self Is It Anyway?, in FLESH OF MY FLESH, supra note 61, at 67, 72; cf. Wilson, The Paradox of Cloning, supra note 62, at 27. "I would ask of [devout Christians and Jews] only that they explain what it is about sexual fertilization that so affects God's judgment about the child that results." Id.

¹⁷¹ One might argue that cloning's risks, such as they are, will not be notably different from those posed by other reproductive technologies, or even natural reproduction under certain circumstances. *Cf.* Robertson, *Liberty, Identity, and Human Cloning, supra* note 10, at 1444 (discussing self-cloning, and stating that "these potential problems would be within the range of comparable risks assumed by parents in having children or in exercising (or failing to exercise) genetic selection in other circumstances"); Gina Kolata, *Commission on Cloning: Ready-Made Controversy*, N.Y. TIMES, June 9, 1997, at A12. Still, whatever incremental risks of cloning there are beyond those of other reproductive actions might be viewed as "unnecessary" except in those cases where there is simply no other reasonable option to having a genetically-linked child. Even if the risks of X (cloning) were only slightly greater than Y (regular procreation), the permissibility of Y would not entail the permissibility of X, because X is unnecessary in view of Y. Why take the incremental risk at all? Taking risks to have children through biological sex or to save a life may be permissible and even desirable; but taking risks for merely for cloning is more questionable, as one might urge.

Kass urges that even the smallest-scale practice of cloning is impermissible. See Kass, supra note 13, at 20.

strongly opposed to the practice on even the smallest scale. Although this empirical claim is greatly exaggerated, it represents a far more defensible position than one relying on a sense of repugnance and intrinsic wrong and expressing affirmative disdain for searching for anything beyond.

One can always attack the basic values being touted by a disputant: Why worry over autonomy, individuality, identity, humanness, and personhood anyway? But I mount no such attack because I value these values and cannot critically examine their foundations here. I simply want an explanation of how these values, on any given interpretation, are impaired by cloning and to what degree.

THE ARGUMENT FROM REPUGNANCE 172

Our evaluations of conduct often start—and end, perhaps too swiftly with a sense of attraction or repugnance. And why not? Extended reflective deliberation is not appropriate for all choices, and in any case, is beyond our capacities. But we cannot rationally proceed without it in all cases. When we have reached the apparent limits of rational argumentation, there may indeed be nothing further to appeal to except such positive or negative feelings. Before that, however, these reactions must themselves be probed: they do not necessarily reflect sound moral intuitions. Of course, no one can provide a moral algorithm for identifying when to look and listen—and stop. Those who endorse the "argument from repugnance" are in no position to complain about this inability to specify the proper limits on repugnance: they have no use for algorithms anyway.

Although I am not now making a constitutional argument, I note Justice Holmes's remark that "the accident of our finding certain opinions natural and familiar or novel and even shocking ought not to conclude our judgment upon the question whether statutes embodying them conflict with the Constitution of the United States." 173 Nor should such novelty "conclude our judgment" about the moral qualities of conduct or states of affairs. Since some commentators explicitly or implicitly base their opposition to cloning on their disgust with it—rejecting without much argument other persons' emotional or rationally-derived inclinations toward it (or toward neutrality)—something should be said about this stance.

[&]quot;We are repelled by the prospect of cloning human beings not because of the strangeness or novelty of the undertaking, but because we intuit and feel, immediately and without argument, the violation of things that we rightfully hold dear." See Kass, supra note 13, at 20. For criticisms of Kass's approach, see generally Tribe, supra note 41, at 223-29. See also Miller, supra note 63 (stating that "Wilmut finds the idea of human cloning abhorrent...").

173 Lochner v. New York, 198 U.S. 45, 76 (1905) (Holmes, J., dissenting).

1. The Outrage Expressed

Immediately after the news of Dolly's creation, many, including her "designers," expressed revulsion at the prospect of human cloning. Some observers quickly concluded that the very idea of human cloning prompted "universal horror." Indeed, it does appear that more people oppose it than endorse it or are prepared to tolerate it, but the opposition is far from universal. Over time, it may decrease (or increase).

Current opponents seem to have more intense preferences on cloning than those who endorse or accept it. Anti-anti-cloning positions do not assert that cloning is our ticket to Utopia. If it turned out that human cloning was impossible, I myself might be relieved. I never said I liked big changes.

But emotions, short-run or long-run, obviously cannot be discounted as morally irrelevant: ¹⁷⁵ the Vulcans (more Star Trek¹⁷⁶) are wrong if they think otherwise. In many ways, emotions are foundational to moral theory, a point too complex to plumb adequately here. At the very least, the familiar emotions of fear, anger, guilt, shame, and repulsion are clues that something is afoot that ought to be taken seriously. It remains unclear what moral insights or conclusions these emotional states are ultimately "clues" of. Their logical relationship to such moral evaluations is also uncertain. Emotions of certain sorts are obviously adaptive to human survival generally, and to life in particular social structures. They may also (though far from always) reflect embedded moral judgments, whatever the source:

¹⁷⁴ See, e.g., Annas, Human Cloning: A Choice or an Echo, supra note 23, at 248.

¹⁷⁵ The "role" of emotions and feelings in moral analysis involves a variety of issues, including the following: the various meanings of "emotion," "feeling," "mood," and allied terms; what one morally should or should not feel under various circumstances; whether feelings, emotions and the like can themselves be intrinsically good or bad (perhaps when they are benefits or harms in themselves), and if so, which ones; whether emotions and feelings are instrumentally good or bad, and if so, under what circumstances; whether there are obligations to try to engender or avoid certain feelings in others or ourselves; whether the occurrence of feelings justifies moral presumptions reflecting the content of these feelings (such as presumptions against whatever inspires feelings of aversion); whether there are moral obligations to preserve or alter particular feelings; whether there are moral obligations to maintain or revise the very nature of our capacities to feel emotion (this suggests problems in the genesis of emotions, their authenticity, and the bearing of this on autonomy); the role of emotions in explaining beliefs, motivations, decision making, and behavior; the role of emotions in cognition, perception, sensing, attending, and the formation of habits; what counts as evidence for one or another emotional state; the status of the emotivist position in analytic philosophy, urging that statements applying moral predicates are-largely or exclusively-expressions of emotion and may be performative utterances; and the effect on moral analysis of the reducibility vel non of emotions-and all other mental states and processes—to physical states and processes. See generally RONALD DE SOUSA, THE RATIONALITY OF EMOTION (1987) (addressing matters of moral theory and the bearing of the psychology and biology of emotions on moral judgment). On the reducibility issue, see Christine Mlot, Probing the Biology of Emotion, 280 SCIENCE 1005, 1005 (1998) ("Emotion is now tractable at a mechanistic level,' says neuroscientist Richard J. Davidson of the University of Wisconsin, Madison."). I am not suggesting that Prof. Davidson is urging strict reductionism.

some of these emotions are aptly called "moral sentiments" or "moral emotions." Some emotional capacities are probably hardwired both by genetics and early life experience. But as we all know, propositions about emotional reactions to "Xing" do not, alone, yield valid moral inferences about Xing. The visceral aversion that the Blues have for the Greens does not authorize the Blues' moral disdain for the Greens, never mind ethnic cleansing or worse. As Gibbard puts it, "Morality consists in norms for moral sentiments. I am looking for a way to assess moral sentiments, asking how to decide what norms to accept as governing them. . . . We think feelings can be apt or off the mark "177

Even the strongest defenders of arguments from repugnance (reluctantly) concede that responsive emotions might not carry the day by themselves. Yet their further arguments may nevertheless contain little more than expressions of outrage. Indeed, Kass expresses disdain for those who turn aside from their feelings and argue against cloning on instrumental or what he calls "utilitarian" grounds. He explicitly chides James Q. Wilson for not "trust[ing] his immediate moral sense." More generally, in describing three approaches to judging cloning, he says:

The technical ["an extension of existing techniques for assisting reproduction"], liberal [promoting "liberation"] and meliorist [promoting "outstanding traits" approaches all ignore the deeper anthropological, social and, indeed, ontological meanings of bringing forth new life. To this more fitting and profound point of view, cloning shows itself to be a major alteration, indeed, a major violation, of our given nature as embodied, gendered and engendering beings-and of the social relations built on this natural ground. Once this perspective is recognized, the ethical judgment on cloning can no longer be reduced to a matter of motives and intentions, rights and freedoms, benefits and harms, or even means and ends. It must be regarded primarily as a matter of meaning: Is cloning a fulfillment of human begetting and belonging? Or is cloning rather, as I contend, their pollution and perversion? To pollution and perversion, the fitting response can only be horror and revulsion; and conversely, generalized horror and revulsion are prima facie evidence of foulness and violation. The burden of moral argument must fall entirely

¹⁷⁷ ALLAN GIBBARD, WISE CHOICES, APT FEELINGS: A THEORY OF NORMATIVE JUDGMENT 277 (1990). Gibbard discusses "moral emotions," *id.* at 126-50, "biological adaptation," *id.* at 61-64, and "guilt and shame as adaptive syndromes," *id.* at 138-44.

¹⁷⁸ See Kass, supra note 13, at 20 ("Revulsion is not an argument; and some of yesterday's repugnances are today calmly accepted—though, one must add, not always for the better.").

Kass, Family Needs Its Natural Roots, supra note 62, at 88. Kass elsewhere complains about utilitarian arguments for cloning. He does not seem to have the right idea about the various forms of utilitarianism, stating that utilitarians are those who "measure only in terms of tangible harms and benefits but who are generally blind to the deeper meanings of things." Id. at 79. The first claim is simply false (read any professional account of utilitarianism you please), and the second one—"blind to the deeper meanings of things"—is either false or has no meaning. (Which deeper meanings? If one sees the deep "meaning" but considers it outweighed by other "meanings," is this "blindness"?) It is hard to see how such claims aid analysis—but then again, what good is analysis?

on those who want to declare the widespread repugnances of humankind to be mere timidity or superstition.

Yet repugnance need not stand naked before the bar of reason. The wisdom of our horror at human cloning can be partially articulated, even if this is finally one of those instances about which the heart has its reasons that reason cannot entirely know. 1800

So, the "bar of reason" rates mention even for him—but it does not rate much more than that. There is a hint that distinguishing "pollution and perversion" from "begetting and belonging" may require some brief critical thought; but after that, you're either for it or against it and there is no further occasion for analysis—just nausea or enthusiasm.

2. The Limits of Outrage; Intrinsic and Cultural Repugnance

The passage just quoted is as entertaining a formulation of an argument from repugnance as one can find. But its utility, I think, lies in three limited dimensions:

First, it names—though it does not analyze—values, attitudes, and beliefs that properly form at least a partial framework for debates on cloning. We are right to be concerned at even a hint of significant risk to interests such as autonomy, human bonding, and respect for personhood generally.

Second, it illustrates how not to argue about cloning (among other things) and thus serves as a foil. The argument from repugnance may be tolerable when discussing marzipan or professional wrestling or even night baseball, but there remain many persons who easily apply it, say, to the existence of all groups other than one's own.

Third—as suggested earlier—a sense of strong aversion is a rational spur for moral deliberation. Since I find the argument from repugnance itself repugnant, that should count as an appropriate inducement for studying it. There is somewhat more to it than *just* calling cloning bad names in support of a flat ban.

The limits of the argument from repugnance are suggested by the Kass formulation before us. To start with, it bears a threshold descriptive problem: What is it that is viewed with such alarm and disdain that it is taken to be evidence of foulness? Which aspects of cloning (separately or

¹⁸⁰ Kass, supra note 13, at 20-21.

¹⁸¹ See generally Brock, supra note 51. Brock argues that gut reactions "should not be simply dismissed" because they can "point us to important considerations otherwise missed and not easily articulated," but public policy formation "should not ignore the moral reasons and arguments that bear on the practice of human cloning [which] must be articulated in order to understand and inform people's more immediate emotional responses." Id. at 141-42. The "role of emotion" in moral analysis is well worth further inquiry. See generally Justin D'Arms & Daniel Jacobson, Expressivism, Morality, and the Emotions, 104 ETHICS 739 (1994).

in any combination) are repulsive—the lack of coitus, the absence of at least biological sex, the very fact of being a genomic duplicate, the supposed high predictability of appearance and behavioral dispositions, the conceptual and normative confusion about lineage, the imagined plans and expectations of those who initiated the cloning process, or the risk of intrusive rearing? (We encountered a variant of this difficulty in discussing whether cloning is "different in kind" from conventional procreation.) Is there some sense that the genome is wrongfully wrested from its true owner, or that it is a second-hand commodity tainted or haunted by the prior owner(s), to be avoided in the way one avoids someone else's toothbrush or discarded Kleenex?

In this context, the idea that "generalized horror and revulsion are prima facie evidence of foulness and violation" bears some major deficiencies as a standard for moral epistemology. It bears a similarity to the pragmatic form of the "argument from nature": what is "natural"—or at least culturally conditioned—is a presumptive guide to the useful or the benign. The latter argument thus deserves a few words. First, it does not get us very far. We often depart from nature, and think it right to do so. Whatever presumptive value "the natural" has as a behavioral guide, it is very weak in many contexts. Assuming that reproduction is a context in which the presumption is stronger requires sustained argument, not expressions of revulsion. Even if we accept the view that widespread horror and revulsion are "prima facie evidence of foulness, violation, or anything else," we are never told the strength of the presumption—its "prima facie" force—or how it is to be overcome. Presumptions and hypotheses have parallel structures: if it is not explained how a hypothesis can be falsified, its meaningfulness is doubtful. It is much the same when it is not explained how a presumption could be overcome. The lack of information on this suggests that the "presumption" is simply a circumlocution for a conclusory assertion—and indeed, horror-shows-foulness is not a presumption. It is, in this context, the expression of an absolute—there is nothing prima facie about it. Its manner of presentation brooks no countershowing. 182 ("[The ethical judgment on cloning] must be regarded primarily as a matter of meaning.") It is meant to co-opt deliberation, perhaps reflecting a kind of anti-intellectual, anti-elitism of the intellectual elite. It is just another argument-stopping "argument," far removed from the plausible view that emotions may be important starting and often ending points for policymaking, lawmaking, and moral and legal reasoning generally. But between the beginning and the end of rational argument, there is an extended middle. It may be that reason's indeterminacies will leave us without firm answers and that we may in the end have to rely on

¹⁸² See Kass, supra note 13, at 20-21.

our continuing but (one hopes) more informed aversions. As a community, we could then rationally rest on democratically toting up our conflicting inclinations. However, this is supposed to occur *after* critical analysis has tested and informed our early inclinations.

Another equally obvious problem with the "presumption" in question is the very idea of "evidence of foulness and violation." If we assert that X is evidence of Y, we need to say what X is, what Y is, and how they are connected. Feelings of horror come and go ("Smith is tolerable company after all"; "I hated my divorce, but now . . ."). Moreover, it often happens that we initially fail to develop any strong emotion about some anticipated event: instead, we in effect ask ourselves how we ought to feel. There is no wall of separation between reason and emotion. As for Y—it barely bears mention that there are no crisp accounts of the true nature of foulness, adulteration, pollution, whatever. If X and Y are uncertain, then, it is hard to say whether or how X can be "evidence" of Y.

The very existence of the argument from repugnance reminds one of the effects of finding a process or event to be an outlier or category-straddler in a conceptual scheme. I suggested earlier that the anomalous nature of cloning within our present framework of reproduction might drive us to see it as monstrous: it crosses boundaries or escapes them entirely, thus defying description. It is a violation of nature—as perceived—and so also of the cultures and norms built on this perception.

In railing against the argument from repugnance, I am not presenting a defense of "moral relativism," infused by tales of cultural variation. I have no general theory for precise line-drawing between moral and immoral purposes—no surprise, since none is possible—but nevertheless assert that some human practices are, given specific assumptions, contexts, and forms of description, always wrong. It may be right and proper to view them as repugnant without much deliberation. But whether producing someone with a "used" genetic template is viewed as morally bizarre rests heavily on cultural variables. These variables involve, among other things, a community's way of defining and resolving collisions between (on the one hand) claims of individuated personhood and autonomy, and (on the other) communitarian concerns. Practices and relationships that seem suspect or outrageous to us might be endorsed and promoted in Plato's Republic.¹⁸⁴ That does not make the practices in his republic right; my point concerns feelings of repugnance and outrage. We should be prepared to take initial feelings of aversion seriously—but they have to be subjected to critical reflection. Sometimes the reflection can be swift and simple: there is not much to be said for ethnic cleansing. But temporary ethnic separation in

¹⁸³ See supra note 81 and accompanying text.

rare cases may be not only justifiable but also mandatory; think of gang wars in prison, where the gangs are defined largely in ethnic and racial terms.

So, we surely cannot stop with the phenomenon of cultural category busting. Even Kass, for example, alludes to instrumental harms when referring to "biological truths" about the sexual nature of our reproduction. He rightly registers concern about the effects of creating children of uncertain lineage and placing them within existing—natural—kinship networks. The reproductive habits we have built up over millennia have entered the baseline of nature—or nature as reasonably adjusted by natural human needs—and what is natural or even culturally conditioned may be, as I said, taken as a rough default guide to what is practicable and safe.

This is not saying very much, however. As for making further analytical efforts, even *considering* the matter reflectively seems to be taken by Kass as morally offensive—as if one were to say that there are two sides to whether genocide and forcible rape are intrinsically evil. However, this hardly applies to cloning; according it the dignity of debate does not befoul our moral sensibilities in the same way, if at all. There is no warrant for disavowing deliberation and reducing moral epistemology to unexamined reactions. As Gibbard puts it: "We cannot explain moral judgments in terms of guilt and anger [or, one might add, repugnance, revulsion and disgust], for we must explain guilt and anger in terms of moral judgments." And as Bernard Williams observes:

¹⁸⁵ See Kass, supra note 13, at 20. See also Patrick Dixon, Animals Are One Thing, Humans Quite Another, L.A. Times, Dec. 28, 1998, at B9 ("A woman tells me she wants to clone her dad and have 'him' as a baby."). Note, however, Justice Powell's remark (announcing the judgment of the Court) that "the Constitution prevents East Cleveland from standardizing its children—and its adults—by forcing all to live in certain narrowly defined family patterns." Moore v. City of E. Cleveland, 431 U.S. 494, 506 (1977). Of course, this observation concerned living arrangements (a grandmother who wished to live with two grandchildren who were cousins rather than siblings), not the structure of kinship relationships, and that even if it did bear on kinship definitions, cloning goes too far. Justice Powell also offered a somewhat more general statement, urging that history does not "require what the city urges here: cutting off any protection of family rights at the first convenient, if arbitrary boundary—the boundary of the nuclear family." Id. at 502.

GIBBARD, supra note 177, at 128. There is something of a cycling problem here. Emotions in some cases reflect or derive from a moral judgment. But is the moral judgment sound? Is it sound because it generates a strong emotion? Hardly. Or is the emotion sound because of the correctness of the moral judgment? Again, hardly. Not much comes easy in moral analysis. See CLONING HUMAN BEINGS, supra note 9, at 71.

[&]quot;Intuition has never been a reliable epistemological method, especially since people notoriously disagree in their moral intuitions. . . . If objectors to cloning can identify no greater harm than a supposed affront to the dignity of the human species, that is a flimsy basis on which to erect barriers to scientific research and its applications."

Id. (quoting Ruth Macklin) (alteration in original). Intuition obviously cannot be entirely excluded from moral analysis; in many ways it drives moral analysis, although its precise role in moral epistemology is fundamentally uncertain. See GIBBARD, supra note 177, at 107-10 (briefly discussing intuition).

As the phenomenologists have constantly stressed, to feel a certain emotion towards a given object is to see it in a certain light; it may be wrong, incorrect, inappropriate to see it in that light, and I may become convinced of this. When I am convinced, the emotion may go away; and it is wrong to forget the numbers of cases in which it *does* just go away or turn into something quite different, as when my fear of the impending car journey evaporates on learning that Miss X is not in fact going to be the driver....

- ... [W]hen considerations which show the emotion to be inappropriate fail to displace it, this is not because it is an emotion but because it is an irrational emotion.
- ... [A]s Aristotle perceived, we are concerned with something not so aptly called the inculcation of principles, but rather the education of the emotions.¹⁸⁷

Perhaps my defense of reason is overdone, but critics insist on presenting lists of other practices (some of which are emetic as well as evil), for which objective evaluation is said to be unnecessary and unwelcome. The list here includes sodomy, adultery, incest, abuse, cannibalism, slavery, rape, murder, corpse mutilation, sex with animals, and father-daughter incest (why limited to that form?). Kass asks:

The risks of conflating strong emotion with moral insight and truth are also illustrated in Hugh T. Scogin, Jr., Withdrawal and Expulsion in Germany: A Comparative Perspective on the "Close Corporation Problem," 15 MICH. J. INT'L L. 127, 143-52 (1993).

[T]he new "attitude of the German people" toward the Jews was the perspective from which to analyze the question of [the substantive basis for expulsion from a close corporation]. Its result was to link the unwritten communal norms of the corporate entity with the "attitudes" of the German people. This somewhat mystical continuum was the basis for determining the deeper realities of the law of associations. . . .

... Following the general approach of Nazi jurisprudence, [Franz Scholz, a German jurisprude] stressed the relationship between law, justice, and morality. The proper goal of the legal system should be justice. Justice, Scholz felt, could only arise when law was in harmony with morality. An important achievement of the legal system would be to "close the gap between law and morality so that that which contradicts the healthy views of the people cannot be law." In the law of associations, positive law had to be placed in the context of unwritten, but generally accepted, community values. The reality of human relationships gave birth to certain fundamental moral principles such as good faith. All specific legal provisions must therefore be read in the light of these permeating concepts (which Scholz refers to as the "unwritten law"). They were the "general legal concepts of the public's moral order, which are called 'general clauses', and which are to be recognized as tacitly inherent in all legal relationships."

Id. at 146-47 (footnotes omitted).

¹⁸⁷ BERNARD WILLIAMS, *Morality and the Emotions, in Problems of the Self 207, 224-25* (1973). The remarks quoted in the text surround other useful insights about the shaping of moral sentiments.

The notions of appropriateness, correctness and so forth in the object of course cry out for examination; and they wear on their front the fact that they are in some part evaluative. What should be feared or hoped for, and so forth, is obviously, to some extent, a matter in which disagreements of value between societies and individuals come out. Equally this is a central matter of moral education. If such education does not revolve round such issues as what to fear, what to be angry about, what—if anything—to despise, where to draw the line between kindness and a stupid sentimentality—I do not know what it is.

Id. at 225.

Would anybody's failure to give full rational justification for his or her revulsion at these practices make that revulsion ethically suspect? Not at all. On the contrary, we are suspicious of those who think that they can rationalize away our horror, say, by trying to explain the enormity of incest with arguments only about the genetic risks of inbreeding.¹⁸⁸

The central question, of course, is why cloning belongs on this list. Kass does not actually assert that cloning is a full member of this set of horrors and does not just lump it into this set. Kass's point is that there are many practices, disparate or connected, that share the particular characteristic of not requiring—and not being amenable to—rational demonstration of their evil natures.

For completeness, I restate the obvious. This abstract claim that some moral truths are beyond rational argument begs a dominant question here: Assuming that there is often no reason to offer rational defenses for finding certain revolting practices immoral, is cloning one of these practices? The repugnance of the argument-from-repugnance is that an affirmative answer automatically cuts off the need for further analysis. The sense of repugnance is itself not to be defended, but felt. This of course is what one would expect when resting everything upon repugnance: if reason is rejected as unnecessary, then reason is likely (though not necessarily) to be rejected in defending its own rejection. After all, it seems odd to say that if cloning is one of the practices that we may unreflectively denounce as intuitively immoral, we must nevertheless deliberate on whether it is a

¹⁸⁸ Kass, *supra* note 13, at 20. Kass continues comparisons of cloning to the most wretched human activities, in Kass, *Family Needs Its Natural Roots*, *supra* note 62, at 80 (sodomy, adultery), 87 (incest, cannibalism, and slavery). *See also* Annas, *Human Cloning: A Choice or an Echo*, *supra* note 23, at 274 ("crimes against humanity," "forced labor," "child abuse").

Nor is this all. Did you know that cloning represents yet another mechanism for male control, and promotes immortality (of a sort)?

And so I think the men who will clone the compliant women will control them both reproductively and sexually; and, in the process, they will destroy all human meaning: The men will abandon change for absolute control, any chance of intimacy for absolute power. Through cloning especially, men will defeat death; and change, too, will die. Lie will be power without love or freedom or grace.

Andrea Dworkin, Sasha, in CLONES AND CLONES, supra note 3, at 73, 77. For references to cloning as "nonsexual incest," see Tully, supra note 10, at 1393 (citing Kass), and as "racism" and "pre-emptive genocide," id. at 1394.

And here is a lesson not only in finding analogies but in clarity of expression: "Cloning is about making us pond scum, with all its disgustful associations with excess, surfeit and eternal reduplicative recurrence." William Ian Miller, Sheep, Joking, Cloning and the Uncanny, in CLONES AND CLONES, supra note 3, at 78, 84.

Miller evidently endorses the argument from repugnance. "[T]here are certain large constraints on being human and we have certain emotions that tell us.... when we are leaving the human for something else; either downward toward the material, mechanical and bestial, or upward toward the realm of spirit or the world of pure hokum." *Id.* at 87.

As argued in the text, however, a proper argument from repugnance takes emotional reactions as a matter to be taken seriously, but not as morally decisive standing alone. Both Miller and Kass put their points in such a way as to disparage efforts to assess and reflect on our emotional reactions.

member of this set. Either it's in or it's out, and you know this when you see it.

Even in listing obvious horrors, matters are not always so clear. Perhaps starving sailors or mountaineers are morally privileged or even obliged to eat their deceased colleagues (not necessarily to kill them) in order to stay alive. Perhaps a group of powerful extraterrestrials is bent on exterminating humanity, and, like the Terminator, 189 they cannot be dissuaded or reasoned with. Should we do away with them first? Suppose the last two persons in the universe are a father and his daughter, or a mother and her son, and they—or one of them—think the human race must go on. As for sodomy, its placement on the list is ridiculous; anyone can see that, and further analysis is unwelcome.

There is actually a small benefit in discussing incest because, like cloning, it creates lineage problems (among the others it creates). If a male and female each generates a clone, is it incest if the Dad's clone and Mom's clone get together to form a couple genetically identical to their "parents"? If you really want a girl just like the one that married your old man Is it also incest when a man has sex with his sister's clone? What is it when someone has sex with his or her own cloned offspring?

I do not press the conceptual distinctions between cannibalism, incest, and cloning any further, because anyone can see the differences, and rational analysis of the issue is once again a waste of time. Who needs analysis when one has a refined sense of repugnance? (This is fun; maybe Kass is on to something after all.)

This attack on the attack on cloning does not establish that anyone ought to clone anyone. There are risks and there are benefits. As we saw, some critics seem to deny that there are benefits from cloning that count in moral analysis—but the risks might indeed outweigh the benefits, if there are any. Critics of cloning observe that the benefits of reproduction can be obtained in other ways—by sexual reproduction (assisted or not) or adoption. But the fact that there is another way to accomplish a general goal—forming a family—does not show that the way you picked is intrinsically or instrumentally harmful.

3. Further Remarks on Reason and Emotion in Moral Analysis; What Hume Said

A friend suggested that my hostility to hostility-based arguments is inconsistent with David Hume's account of morality and moral analysis. 190

THE TERMINATOR (Orion Pictures 1984).
 See generally DAVID HUME, A TREATISE OF HUMAN NATURE (L.A. Selby-Bigge ed., 1958) (1888) [hereinafter HUME, A TREATISE].

It isn't. Hume's views are not only consistent with a defense of reflection, they require it. Feelings of repugnance toward something—a process, event, action, or condition—must ordinarily be tested within a framework of other reactions and of rational considerations generally. The testing may lead to other sentiments, perhaps inconsistent with one's initial feelings of repugnance. If am taking this as obvious. Observing that there are circumstances in which time for reflection is limited does not refute it. Nor is it refuted by referring to proposals that not only do not require deliberation, they are inappropriate subjects for it. Absent very unlikely circumstances, we would think little of the character of someone who seriously considered killing his parents to inherit their wealth.

As I mentioned, Kass cannot bring himself to a full stop at revulsion. Whether because of an interior drive to act rationally, or as a bone to his

191 See generally Thomas Nagel, Mortal Questions 145-46 (1979).

What human beings have discovered in themselves is a capacity to subject their prereflective or innate responses to criticism and revision, and to create new forms of understanding. It is the exercise of that rational capacity that explains the theories.

Ethics, though more primitive, is similar. It is the result of a human capacity to subject innate or conditioned pre-reflective motivational and behavioral patterns to criticism and revision, and to create new forms of conduct. . . . Biology may tell us about perceptual and motivational starting points, but in its present state it has little bearing on the thinking process by which these starting points are transcended.

Id. See also Hello, Dolly, ECONOMIST, Mar. 1, 1997, reprinted in Cloning Should Not Be Banned Out of Fear, in CLONING, supra note 10, at 61.

But it is not enough merely to register repugnance, without examining the cause of this emotion and testing its claim against the claims of reason. To throw up one's hands in horror simply on the ground that cloning interferes with the natural order is to exaggerate the extent to which the natural order is desirable, and to under-estimate the extent to which man has already altered it, often with advantage.

Id.

¹⁵² Nor does David Hume stop at "the sentiments" (even though these sentiments are not matters of pure emotion).

Assuming that Hume's approach is strongly like Kass's, so much the worse for Hume. Hume, however, never said that one should base action on emotional reactions arising from immediate impressions. He distinguished roughly between "reason" and "sentiment," and one of his prime concerns was to refute the view that reason alone was a sufficient guide to morality. But he did not take the opposite view—that (moral) sentiment alone was a sufficient guide, or that pure emotion or feeling could be enough a fortiori. "Morals excite passions, and produce or prevent actions. Reason of itself is utterly impotent in this particular. The rules of morality, therefore, are not conclusions of our reason." HUME, A TREATISE, supra note 190, at 457. Hume also speaks of "that reason, which is able to oppose our passion." Id. at 583 (emphasis omitted). Note also Hume's views on "moral deliberations," including the remark that:

If any material circumstance be yet unknown or doubtful, we must first employ our inquiry or intellectual faculties to assure us of it, and must suspend for a time all moral decision or sentiment. While we are ignorant whether a man were aggressor or not, how can we determine whether the person who killed him be criminal or innocent.

DAVID HUME, AN INQUIRY CONCERNING THE PRINCIPLES OF MORALS 108 (Charles W. Hendel ed., 1957).

Thus, it appears that Kass's position more closely approaches the mode of argument Hume complains of than my position. (As I note in the text, Kass did not invoke Hume.)

Finally, much of Hume's thought highlighted the role of "habit." See HUME, A TREATISE, supra note 190, at 265-66. We of course have habits concerning how we deal with novel rather than habitually observed situations. Nevertheless, one wonders how far Hume can be pressed into service when we are

critics, he reluctantly suggests some of the standard consequentialist arguments he disdains. They can be roughly reformulated here by dealing with ideas I mentioned earlier: interpersonal bonding, autonomy, individuality, objectification, mere use as a means, and physical and psychological harms. These are discussed in succeeding sections. If arguments formed from such ideas remain unpersuasive after reasonable deliberation, there is little to do except to rely on our now more-educated feelings of repugnance, or perhaps to pursue some form of "moral compromise."

This is far from saying that naked, abstract reasoning with no connection to human emotion will carry the day. Those who say, with Kass, that consequentialists (or at least utilitarians) miss the "deeper" meanings of generating new life, are themselves missing the point by oversimplifying serious moral theory—utilitarian analysis included. No one is urging what David Hume denied: that making *purely* conceptual connections, distinctions, and inferences can be the whole of moral analysis.

Considering Kass's disdain for good results ("the severing of procreation from sex, love and intimacy is inherently dehumanizing, no matter how good the product"), his unassisted mode of intuitive argument parallels the nonconsequentialist's pure reason approach assailed by Hume. Compare "You feel it or you don't, and consequences don't matter," with "you see through pure reason or you don't, and consequences still don't matter." (Kass did not expressly rely on Hume; I am arguing only with my friend.)

To argue either that rational vision or intuitive emotional reactions are independently sufficient in moral analysis is wrong. To say that the two paths are mutually exclusive is also wrong. There is no forked road here. It makes no sense to say that conceding any role for emotional intuition negates any role for deliberation, or that conceding any role for reason forecloses any role for emotion. It is true that the origins of moral analysis begin with affect. On the one hand, if we didn't give a damn about anything and feared nothing, how would we even come to the idea of morality? On the other hand, reflection is required to test and appraise one's feelings, sentiments and passions, on their own and against each other. As Hume said: "The judgment here [in the case of moral sentiments] corrects the inequalities of our internal emotions and perceptions; in like manner, as it

faced with largely unprecedented problems such as those represented by cloning, the separation of genetics and gestation, the endurance of organic life when mental life is entirely and permanently ended, and so on.

¹⁹³ Kass, *supra* note 13, at 22.

preserves us from error, in the several variations of images, presented to our external senses."194

In an important sense, then, morality is partly about what emotions we ought to have and implement, or to avoid or mitigate. 195 That question itself cannot be answered without some ultimate reference to how we feel about things. Bricke, commenting on Hume's moral theory, said: "Reflection, knowledge, and experience enter into the formation of impartial desires and corrected sympathy as well. They do so by providing knowledge of the causal and constitutive conditions on a solution to the predicament."196 Indeed, Hume spends much time discussing "the correction of sympathy." 197 For him, a moral sentiment (moral affection or moral desire) is neither a starting nor an ending point. 198 Hume's position seems far closer to Rawls's formulation of reflective equilibrium than to a simple argument from repugnance.199

Not all change is progress, but not all change—even change that challenges our basic category systems—is evil. The desirability of a conservative presumption ("Look before you leap"; "Whatever is natural is presumptively right or at least reasonably fit given the premises of

of what moral feelings it is rational to have.").

Mill and Kant pick different feelings as basic to morality, but there is something in common to the structure of their treatment of moral concerns. Many impulses we discover we cannot trust as moral guides on their own. Still, in their place, they turn out to be endorsed by moral principles. They need some trimming, some debunking, and then they can be reconciled.

Id. at 319.

BRICKE, supra note 194, at 145. The predicament arises from the changeability of one's desires with respect to others. See id. at 137.

Id. at 128-48 (discussing "sympathy and its correction").

158 "Within Hume's naturalistic framework, corrected sympathy must play a role in the generation of specifically moral affections Corrected sympathy is requisite for specifically moral desires." Id. at 153-54. Moreover, "moral affections . . . cannot play a quite straightforward role in action explanations, and . . . they none the less play a perfectly intelligible oblique role in such explanations. They cannot play a quite straightforward role for they are not suited to serve as the major elements in reasons for actions." Id. at 153.

The idea of reviewing and revising one's initial attitudes and beliefs does not entail that they are in some sense "irrational." One can evaluate and rethink rational reactions in light of new considerations. The argument against the argument from repugnance does not rest solely on claims of errors of perception or evaluation. For comments on the nature of the connection between cognitive error and moral theory and methods, see F.M. Kamm, Moral Intuitions, Cognitive Psychology, and the Harming-Versus-Not-Aiding Distinction, 108 ETHICS 463 (1998).

See RAWLS, supra note 133, at 20-21 (discussing reflective equilibrium).

¹⁵⁴ JOHN BRICKE, MIND AND MORALITY: AN EXAMINATION OF HUME'S MORAL PSYCHOLOGY 141 (1996) (quoting David Hume) (alteration in original). See HUME, supra note 190, at 582. "Such corrections [of our sentiments] are common with regard to all the senses; and indeed 'twere impossible we cou'd ever make use of language, or communicate our sentiments to one another, did we not correct the momentary appearances of things, and overlook our present situation." *Id.*185 See GIBBARD, supra note 177, at 6 ("Narrowly moral judgments are not feelings but judgments

biological and perhaps cultural evolution") is perfectly consistent with the view that stasis is not intrinsically good. It is only after we have gone past attraction or repugnance that one can say, at some point, that we were *right* to be attracted or repelled. Indeed, some of Kass's remarks suggest that very point—but only when he confronts reactions of *non-repugnance* and *acceptance*. Those feelings apparently have to be thought through. Is this consistent? Here is Kass's response to James Q. Wilson's example of the acceptance of in vitro fertilization ("IVF"):

Professor Wilson's use of the *social* acceptance of [IVF]—at first "ethically suspect," today "generally accepted, and for good reason"—to rebut religious objections against laboratory conception of human life cannot be taken seriously: Does the growing social acceptability of sodomy or adultery constitute a refutation of Leviticus 18:22 or the Seventh Commandment?²⁰¹

Apparently, repulsion works as a blockade to thinking things over. Acceptance, however, has to be revised in light of proper deliberation.

4. Being Outraged or Offended as an Independent Harm to Be Avoided

Emotional states are relevant to moral inquiry not only as directional signals for moral reasoning but as goods or bads in themselves. Unpleasant emotional states (repugnance, anger, grief) may be harms on their own, although a close look at how they arose may reveal them as integral parts of morally praiseworthy processes. Repugnance at taxation without representation may be essential to the establishment of a just regime, and thus is instrumentally good—though it would have been better still to have prevented the unjust system from developing in the first place and generating the righteous repugnance. In some cases, however, the degree of harm may be sufficient to justify penalizing practices that inspire these emotional states. (Tort claims based on infliction of emotional distress or on causing accidents that result in emotional distress suggest as much.) Moreover, we may be unable to shake off the emotional reaction, despite repeated efforts, a point mentioned again below.

The idea that ongoing emotional turmoil in itself constitutes a harm to the turmoiled was suggested by at least one account of the proceedings of the National Bioethics Advisory Commission ("NBAC"). Some members apparently thought deference to strong public feeling was required—whether by democratic theory, political pragmatism, or the view that certain unwanted feelings may be independent harms.²⁰²

of the world, I soon carry my eye to the pernicious tendency of such a conduct, and feel the sentiment of repugnance and displeasure towards it." BRICKE, supra note 194, at 147 (quoting David Hume).

Example 201 Kass, Family Needs Its Natural Roots, supra note 62, at 80.

²⁰² See Cohen, supra note 39.

But causing outrage is not reason enough to hold the causal agent culpable, and to limit her conduct in order to avoid further harmful emotional reactions to it. Indeed, it does not even establish a general presumption of culpability, except perhaps in certain limited spheres. Within recent memory, the bare suggestion that black children and white children might associate in school or indeed anywhere outraged large regions of the country and such association remains repugnant to many. Certain domains of conduct, however, rightly qualify for presumptions of immorality—hurling racist or sexist insults, for example. In any case, the justifications or excuses for causing emotional harms are critical in morally judging a situation.²⁰³

5. The Tutelage of Outrage

Expressions of outrage and a sense of repugnance may have long-term learning effects: they teach us to dislike whatever causes these reactions. If so, any practice generating such feelings should be evaluated as a learning mechanism. For practices that justify outrage, the expression of this outrage and its observation by others help to reinforce the moral views underpinning the reaction. If we try to eliminate the reaction, we may damage the prevailing system of norms. More insidiously, the reaction may simply dissipate over time from repeated exposure to the (formerly) provocative conduct: one may develop a tolerance for evil. If the endangered norms promote respect for persons, and certain actions fail to show such respect, failing to express righteous outrage at these disrespectful actions suggests acceptance and thus causes adverse learning effects. Respect for persons will thus be attenuated. We will then confront the feared descent from personhood to objecthood because of the learning effects of replacing outrage with acceptance.²⁰⁴

Consider, for example, the argument of William E. May, as reconstructed by Joel Feinberg: "Whatever leads to the weakening or vanishing of a natural, honest, human sentiment thereby degrades ('dehumanizes') human character and is in that way a bad thing." May's reconstructed argument goes on to apply this reasoning to the routine salvaging of organs from the brain-dead. Feinberg then adds: "It is always a good and relevant reason in support of a proposed criminal prohibition that

^{203 &}quot;[B]ecause profound offense results from an affront to the standards of propriety that determine one's higher-order sensibilities, it offends because it is believed wrong, not the other way round. It is not believed to be wrong simply and entirely because it causes offense." JOEL FEINBERG, OFFENSE TO OTHERS: THE MORAL LIMITS OF THE CRIMINAL LAW 59 (1985).

See Michael H. Shapiro, Regulation as Language: Communicating Values by Altering the Contingencies of Choice, 55 U. PITT. L. REV. 681, 685, 687 (1994) (discussing the learning effects of observing institutions and practices).

205 FEINBERG, *supra* note 203, at 79.

it is necessary to improve (or prevent the degrading of) human character. (Legal Perfectionism)."²⁰⁶

The problem, of course, is that this aspect of the argument from outrage presupposes that the outrage is justified and thus that the underlying conduct is immoral (intrinsically or instrumentally). Whether human cloning is the sort of practice that rightly prompts certain forms of revulsion is one of the basic questions at issue here. If we conclude after due reflection that cloning does not deserve revulsion and that it is seriously misunderstood, we may be obliged to try to correct this through public and private discourse.

However, suppose that people persist in seeing something as disgusting, despite vigorous arguments that such reactions are not called for. Perhaps the fact that perceptual frameworks and specific views often resist rational critiques is morally relevant, and this persistence of attitudes should be raised against the moral claims for pursuing or tolerating the practice in question. If we cannot talk irrational persons into thinking straight about something, and their (we assume) unjustifiable emotional reactions persist, should we at least consider the possibility of inhibiting the offending practice in order to prevent the resulting emotional harm?

Although this argument cannot be entirely dismissed, it is clearly pretty dangerous. It teaches us that to defeat a practice, we should encourage widespread hatred of it and continually denounce it so that we can punish the practitioners for generating unwanted emotions. Such an enterprise may be pursued whether the practice is worthy of hate or not.

In any event, how does this idea—that we should inhibit a practice that many cannot help viewing as nauseous—apply to cloning? After all, we may never achieve a consensus on cloning, and we may never even reach a point where only a few are repelled by it. Even if cloning were morally impeccable (it is not), it does not seem that way to everyone, and tolerating its practice may lead to communicative impacts and learning effects that we want to avoid. Some people think, however unreflectively, that clones are tainted by some cognate of original sin and are living examples of several of humanity's worst instincts: to objectify and use other persons solely as means. No arguments will talk them out of it. Compare surrogacy, which is sometimes said in itself to objectify the surrogate and the resulting child. But if nothing is done to limit the practice—cloning, surrogacy, whatever the persistence of outrage will gradually annihilate itself and be replaced by its opposite—emotional acceptance of the practice that originally produced the outrage. The continuation of the outrageous practice inures us to it, making us see it as permissible or even something worthy of aspiration. Of

²⁰⁶ Id.

course, if the practice is not morally outrageous, then our sense of repugnance ought to dissipate. This is precisely what should and probably will happen with the successful integration of most cloned offspring into society.

6. Arguments from Repugnance and Their Links to Arguments from Nature

An "argument from unnaturalness" seems imbedded in the critical commentary on cloning. I suggested earlier that nature might be a default guide to efficiency, where efficiency includes goals of human safety and welfare. To oversimplify considerably, the point is that our place in nature reflects (to a scientifically disputed extent) eons of evolutionary development of adaptive traits. That ought to count for something.

For all that, however, nature is only an uneven guide, depending partly on what one even means by "nature" and "natural," and partly on what it is said to be a guide to. As many have argued, it is natural for us to try to improve on nature—and to take those improved baselines as themselves "natural," using the term loosely as an honorific. Medical treatment is generally accepted, despite its general lack of clear precedent in nature before the higher primates appeared. But, as I said, I do not mean to obliterate the distinction between nature and artifice.

If naturalness suggests that a practice is likely to be safe and effective, possibly more so than unnatural maneuvers, then nature is a guide not only for efficiency but also for matters of moral decision making generally. It is, after all, generally a good thing—possibly morally obligatory in various circumstances—to promote safety and efficacy. (This is not solely a matter of utilitarian analysis.) It is unclear, however, what is natural and what is culturally conditioned—and hard to say what sort of moral significance attaches to being either. What is culturally conditioned is likely to be linked to the natural and, whatever the linkage, to itself be referred to as "natural." But of course the fact that a given way of doing things is the natural and the nearly universally preferred way does not entail that it is the only morally possible way. Once again, there are severe limits to a simple argument from repugnance.

^{2,7} See Shapiro, supra note 69, at 58-59; cf. Dave Wendler, Understanding the 'Conservative' View on Abortion, 13 BIOETHICS 32, 53 (1999).

[[]A]s we try to control more and more of the natural processes that shape the fundamental structure of our lives, we run the risk of losing the natural context that provides the moral background against which these decisions can be made. Ultimately, we would be left with the task of redefining ourselves without any basis for comparing the available options.

VI. REDUCTION OF HUMAN VALUE AS AN INSTRUMENTAL HARM OF CLONING

A. OBJECTIFICATION AS THE PROCESS AND PRODUCT OF "REDUCTION" THROUGH MERE USE OF PERSONS AS MEANS; REDUCTION AS STATIC REAL ITY²⁰⁸

The literature on assisted reproduction is strewn with complaints of human objectification, commodification, devaluation, mere use as a means, exploitation, dehumanization, marginalization, instrumentalization, degradation, and so on. The very abundance of affiliated terms suggests the historically immense scale of human practices of misusing and destroying one another. The persons objectified by assisted reproduction are generally thought to be women and children, although men are sometimes mentioned as within the risk of such calamity.

I suggest that the element of meaning that these terms share rests upon the core concept of reduction, which partially unifies several related attacks on cloning and assisted reproduction generally. That concept is itself internally complex, but for our purposes it refers to the process and product of "valuing" a person largely for a particular trait or traits that make her useful. It might also be taken as a statement about unvarying moral reality: the moral value of a person is the interactive aggregation of her uses to others; the specified traits, separately or in various permutations, define and exhaust her value. Reduction thus does not necessarily designate a temporal process and its outcome, but might reflect the ongoing true nature of persons. (Compare "biology is 'nothing but' physics" or (less plausibly) "thought is 'nothing but' physical processes.") The major problem for us is that the idea of valuing embraces not only reductive processes but also those meant to affirmatively value persons as persons. "Valuing" is thus an equivocal term.

It is possible that I am reversing concept and criterion. Does merely using someone reduce them, or is mere use something one does to persons already reduced? Is reduction or objectification the true bottom-line notion? Is objectification appropriately reduced to reduction?

Whatever the logic of these bonded concepts, and whatever their connections inter se and their internal complexities, they are all cited in

²⁰³ It may be unclear just which concepts "rest" on which. For example, is a person "reduced" merely by mere use? Or does one pursue the mere use of another only after the process that produces reduction? Which is the conclusion and which is the criterion? I suggest that the most important criterial and sub-criterial terms are the Kantian no-mere-use/treat-as-ends idea and the various notions of reduction; they can at least be taken so for present purposes without undue confusion. Terms such as objectification, devaluation, exploitation, and the like, seem to be bottom-line conclusory terms resting on prior premises involving mere use and reduction.

arguments for viewing otherwise private transactions as within the public realm and thus subject to regulation or prohibition, even against claims that autonomy and privacy are being invaded. So it is worth pushing on with the idea of reduction: even if it is not the "core" concept, it captures a major aspect of the only plausible arguments against human cloning.

B. THE FIVE HUNDRED HATS OF REDUCTION²⁰⁹

1. In General; Contingent and Noncontingent Bonding

The idea of reduction has been or can be introduced in every field within or abutting bioethics. As it applies here, reduction seems to be viewed by some critics of cloning as a universally accompanying feature of "designing" and "manufacturing" human reproductive mechanisms beyond their natural/traditional forms, whether the mechanisms are physiological or social. The beings that result from such humanity-reducing methods are themselves reduced. Even if these beings are augmented through trait alteration—whether before or after their conception—they are nevertheless necessarily reduced by the very process of augmentation. (There is nothing oxymoronic about this claim; augmentation of traits can be an integral process of reducing or enslaving a person.)

It could be further argued that the very decision to design and manufacture persons presupposes that people—or at least specific possible people—are already seen as things or objects. Their perceived value is thus measured solely by their utility to others. Their reduced status is not simply the product of a specific reproductive plan's implementation; on the contrary, they were reduced—they were objects for use—from the start. Otherwise no one would have thought to embark on the offending reproductive adventure. The inevitable outcome of participating in and observing such "construction" of humans is that we will come to deal with each other as products that must satisfy certain standards before we "value" and "bond" with them—in rather narrow senses of these terms, not to be confused with their use in contexts of love, friendship and companionship. The scare quotes here are thus not casually inscribed: the meanings of "value" and "bond" in a manufacturing context, commercial or not, are quite different from what these terms designate in standard reproduction and in its underlying traditional social arrangements. Bonds to objects can appear and disappear instantaneously—upon creation, upon the discovery of flaws, or upon the disappearance of the circumstances that made the

For reference to reductionist risks in human augmentation, see Shapiro, *supra* note 69, at 56-57, 65-70.

²⁰⁹ "Reduction" bears a product/process ambiguity. The context should make clear which arm of meaning is the appropriate one; in some cases either will do.

objects of bonding worth something to their owners or controllers. A manufactured person might be devalued as a person into a tool—while he is simultaneously "valued" as a tool. In theory, however, these are separate (but possibly intersecting) planes of valuation.

This process of creating an artifact in place of a true person is thought to be in sharp opposition to ideals requiring that, within certain ill-defined limits, we unconditionally accept the results of our reproductive efforts: we are to bond with our children no matter what. A very strong presumption generally couched as an absolute—is the idea that our reception of new human life should not depend on its general "utility" (in a pejorative sense), its particular properties, or the surrounding circumstances. The principal test for judging reproductive innovations is thus the likelihood that the ideal of absolute bonding with our children will be breached, both in specific cases and because of value erosion over time. In short, we should reject such innovations if they are likely to threaten the noncontingent bonds between ourselves and our children—and ultimately each other.211 If one objects that the ideal of noncontingent bonding is itself contingent and that its attenuation or loss is of little moral moment, fine—but that debate is for another forum. For now, I observe only that the ideal of noncontingent bonds is not necessarily inconsistent with our historical ideal of educating and "improving" our offspring through suitable rearing techniques, nor with measures such as pre-natal screening, nor even with geneticengineering. To say that we must accept what we receive does not entail

²¹¹ We can imagine worlds that embrace forms of human interaction quite different from our bonding traditions, and we can ask whether they might be satisfactory forms of human life given specified standards of moral judgment. I do not deal with these issues, or with the underlying matter of whether comparisons of radically different modes of life can even be made, whether by persons internal or external to the differing cultures. This involves questions of incommensurability and nontranslatability. See generally Cass R. Sunstein, Incommensurability and Valuation in Law, 92 MICH. L. REV. 779 (1994) (discussing how incommensurability and different kinds of valuation affect our basic understanding of law); Symposium, Law and Incommensurability, 146 U. PA. L. REV. 1169 (1998).

I think communities have rights to maintain and promote certain basic aspects of their identity, even though other identities may be possible. I am thus taking as a given that certain ways of being human ought to be preserved (or at least that we are entitled to preserve them as against specified alternatives). See Nancy Davis, Manufactured Motherhood: Ethics of the New Reproductive Techniques, Logos, 1998, at 51, 52 ("Commentators from Aldous Huxley to Jonathan Glover have taken pains to remind us that future societies may live comfortably and contentedly with values that we believe (for good reason) to be deeply repugnant."). See also Alasdair C. Macintyre, Whose Justice? Which Rationality? 370-88 (1988).

[[]T]he only rational way for the adherents of any tradition to approach intellectually, culturally, and linguistically alien rivals is one that allows for the possibility that in one or more areas the other may be rationally superior to it in respect precisely of that in the alien tradition which it cannot as yet comprehend.

Id. at 388. Cf. RONALD DWORKIN, A MATTER OF PRINCIPLE 227 (1989) ("The intellectual culture of a community exerts such a profound influence over the preferences and values of its members that the question of whether and how much they would prefer a different culture to the one they have becomes at best deeply mysterious.").

that we refrain from trying in advance to influence what we receive. Nevertheless, such reproductive planning is not risk-free, and this point should underlie the core of the debate on cloning.

The ideal of unconditional acceptance of all children born to us is not an accurate description of what we universally do, nor a complete moral description of an ideal. We have recognized pragmatic compromises, as with giving up children for adoption, and resorting to some forms of institutionalization of children. Perhaps they are viewed as justifiable impairments of the ideal. Alternatively, they might be seen as not breaching the ideal at all, but simply as furthering it in different ways—again, think of giving up a child for adoption or placing her in a suitable facility to promote her best interests. The severing of ties reflects a bond of devotion to one's offspring best served by substituting one particular associational bond for another. On the other hand, as we just saw, one might view prenatal testing of fetuses as a major compromise of the ideal: it rejects bonding with persons by preventing births that would create unconditional duties to bond, whatever conditions or blemishes afflict the child. In many cases, the birth avoidance takes place after fetal diagnosis, and averts further bonding with the potential person, although there may be distress over the loss. Thus, as the argument goes, pre-birth testing that may result in abortion promotes an ethic of discard of persons, despite the fact that there is no actual birth, and no bonding duty to a person arises. 212 To accept new life only on the condition that it bears—or doesn't bear—certain traits arguably reduces that life's value to the value of those traits. It also reflects an initial view of persons as being worth no more than their uses.

Of course, what the traits are makes a huge difference in whether we view such procedures as a breach of a bonding ideal. Among those not opposed to abortion, planning to abort a fetus shown to have Tay-Sachs disease does not seriously compromise the idea of noncontingent bonds. It may even support it in an oblique way, by avoiding even the appearance of parents distressed at their living child's "characteristics," but under the circumstances—the horror of Tay-Sachs—this is a weak point. Suppose, however, that the disorder detected is sickle-cell anemia or some other hemoglobinopathy, or cystic fibrosis, or Down syndrome. None of these is incompatible with functioning life, and one might view abortion here as in tension with the ideal. The tension is even clearer where, assuming we could perform the prenatal screening, one aborts a fetus with no known abnormality other than, say, a port wine stain. Terminating a pregnancy because of that trait does not sit well with the ideal of noncontingent bonding, whatever one's view on abortion.

²¹² See Shapiro, supra note 69, at 91 n.257.

In any event, the idea of "reduction" from personhood to objecthood thus helps to unify analysis of the instrumental harms of cloning and other reproductive innovations. If such reduction is very likely, then technological mechanisms that reduce persons to objects might be seen as inherently harmful or otherwise inherently wrong. Although I do not think this is the best way to describe matters, it seems acceptable if it reflects high probabilities of certain harmful mental and behavioral outcomes, so long as it excludes reliance on some *a priori* definitional connection between process and evil that halts further analysis.

In what follows, I briefly describe several affiliated forms of reduction—some of which have little to do with judgments about cloning—in order to provide context for the use of that concept. For our purposes, the important category is "value reduction."

2. Varieties of Reduction and Their Common Elements

The common element in all forms of reduction is a posit of identity of roughly the following form: "Xs are nothing but or are of the same value as Ys." "X" and "Y" typically range over forms of discourse, forms of existence or reality, and—most importantly for our purposes—ascriptions of value (as in "She or he is nothing but a womb/pretty face/reservoir of athletic ability").²¹⁴

Perhaps this "reduction of reduction" is too simple, but it is enough for present purposes. In any event, the following is an outline of some major forms of reduction.²¹⁵ To complicate matters, some claims of reduction are

²¹³ Note the opposing idea of "antireduction," or denial of reduction, which is sometimes couched in terms of "transcendence." See generally Kevin P. Quinn, Human Cloning After Dolly: What Sort of Creatures Might We Become?, 38 JURIMETRICS 91, 94 (1997) (stating that "transcendence" bears some religious connotations).

²¹⁴ A more general formulation of value reduction might be: "V(X) is nothing but V(Y)," where "V" means "value of." Thus: "The value of a woman is nothing but the value of her reproductive powers." In other domains, the functional notation would concern forms of discourse or of existence: "Talk about Xs is nothing but talk about Ys." "The existence of Xs is nothing but the existence of Ys." So, "F(X) is nothing but F(Y)" would cover not only value reduction, but also most other forms.

I note in advance the problem of including "causal reductionism" as a form of reduction. To say that A causes B precludes our saying that A and B are identical. But to say A causes B might move us to value B as if it were nothing but A. So we might say, "the value of X is nothing but the value of Y, either because X is nothing but Y, or X is caused by Y." Much the same applies to some notions of explanation—"A explains B". Causal reductionism is a subset of explanatory reductionism (again, for certain senses of "explanation"). Any of the forms of reductionism mentioned above could be considered a form of explanation or explanatory reduction. Finally, the claim that "A [causes][explains] B" is meant here to include incomplete causal or explanatory accounts.

115 Compare the linked formulations in the text with the extended accounts in Alan Garfinkel,

²¹⁵ Compare the linked formulations in the text with the extended accounts in ALAN GARFINKEL, FORMS OF EXPLANATION 14 (1981). The text discussion is not meant to address all forms of reductionism or to offer complete descriptions of any of them.

One of the deepest relations that one explanation can have toward another is that of reducibility. The reductionist claims that one class of phenomena, more or less well explained by some body of theory, is really explainable by some other theory, which is

metaphoric. When meant literally, many reductionist claims are necessarily claims of substitutability or even strict identity of X and Y, depending on context.

a. Claims that one sort of discourse (say, biology talk about the structure and function of living things) is equivalent to or strictly synonymous with another (say, that of physics/chemistry).

If seriously meant, this equivalence is a semantic or linguistic claim. There may be related metaphoric claims such as "When you talk about women, you're just talking about baby-making machines and sexual engines."

b. Claims that what appears to be one sort of phenomenon (say, mental activity) is "nothing but"—identical to—another sort (electrochemical activity).

If X is nothing but Y, it is tempting but incorrect to say that Y must be nothing but X; the claim is not necessarily like saying that X = Y entails Y = X. For any given reductionist claim, the direction of reduction may be crucial. If one says that mental activity is nothing but physical activity (compare various forms of reductive materialism), she is unlikely to believe that physical activity is nothing but mental activity (compare the latter to philosophical idealism). A historian may urge that history is nothing but the lives of great persons driving the lesser units of the community, or nothing but the aggregated activities of individuals or institutions, but not both. Historians are likelier to hold less global positions which might combine

thought of as deeper or more basic. This, we might say, reduces the apparent complexity of the world.

Id.

I do not pursue the general question whether this is an oversimplified reduction of reduction. However, for our purposes, an additional qualification is required. One sense of reduction used here concerns downward valuation of persons. This might be viewed as explaining how we deal with each other under various circumstances, but I will not press the point. It may well be that, on suitable explanations of "explanation," some reductions are ontologically and heuristically sound.

Reductionist claims are often expressed by saying that something "is just" (or "is really") something else.

The claim that psychology is reducible to physics or chemistry is expressed as the statement that people "are just" physical objects. The claim that actions are reducible to primitive drives is put as the statement that human behavior "is just" the expression of those drives

The first problem with such claims is understanding what they could possibly mean. What does it mean to say that something "is just" (or "is really") something else?

The examples suggest that what is being claimed is a certain fact about explanation, namely, that the phenomena of the first kind are explainable from the theory of the second kind. The reducibility of psychology to physics and chemistry amounts to the claim that conduct can be explained wholly in terms of physical and chemical phenomena. Similarly in each of the other cases, the claim is that the one theory explains the other phenomena.

Id. at 49.

both directions in a nonreductive way. Some of these nothing-but claims seem to be ontological when taken literally (they can't always be), although some might think that ontological reductionism always reduces to semantic reductionism—or the reverse.

"Operationalism" seems to involve reductionist claims of certain sorts, whether involving objective reality or matters of linguistic meaning. For example, reality (physical or otherwise) might be said to be nothing but a set of human operations (measurement, observation) and their results. Operationalism can also be viewed simply as a heuristic—a pragmatic posit without implications about ultimate reality or linguistic truths, designed to avoid distractions from the tasks at hand.

Operationalist reduction suggests a metaphoric application to cloning: "Women—or particular women—are nothing but baby factories or flowerpots; they are nothing but the sum of their reproductive, sexual, and domestic uses." This can also be taken as a form of value reduction, discussed below.

Finally, ethical theory is an obvious home for a variety of reductionist efforts. Thus, moral reality might be thought reducible to the nonmoral, as in ethical naturalism.²¹⁷

In short, any claims about what is really real or about what some form of discourse means can amount to, or be subject to, a variety of reductionist claims.²¹⁸

²¹⁶ Put otherwise, "operationalism" may amount to particular kinds of reality or semantic claims. See P.W. BRIDGMAN, THE LOGIC OF MODERN PHYSICS 5 (9th ed. 1961) ("In general, we mean by any concept nothing more than a set of operations; the concept is synonymous with a corresponding set of operations.").

It might be urged either that reality is defined (constituted) by certain operations—human observations and other processes—or that our goals are facilitated by ignoring ultimate reality and dealing with observation/measurement statements.

See John Dupré, The Disorder of Things: Metaphysical Foundations of the Disunity of Science 96 (1993) (discussing the naturalistic fallacy in moral theory). Here, Dupré contrasts the idea of supervenience with that of reduction. "The proposal that one domain of phenomena . . . supervenes on another . . . is intended to capture the idea that although there are no systematic links between the two domains [for example, moral and nonmoral properties], the former depends entirely on the latter." Id. For our purposes, however, supervenience can be taken as a soft claim of reducibility. See also Courtney S. Campbell, Prophecy and Policy, Hastings Center Rep., Sept.-Oct. 1997, at 15, 16. "Religious thought reminds society that the moral life cannot be reduced to chosen, contractual relationships, and that prospective parents frequently do not engage in risk-benefit methodologies prior to procreation." Id. On ethical naturalism, see John F. Postl, Naturalism, The Cambridge Dictionary of Philosophy 596 (Robert Audi ed., 2d ed. 1999).

Reduction and elimination are not necessarily the same. The former is said to connect one theory or body of discourse with another, likely to be deemed more fundamental, but this does not mean that one can or should eliminate all talk using the former theory or discourse. Eliminativism, however, simply eliminates whatever reality is presupposed by the former. Cf. Paul M. Churchland, Matter and Consciousness: A Contemporary Introduction to the Philosophy of Mind 43 (1984) (contrasting "inter-theoretic reduction" with "eliminative materialism," and referring to cases of "the outright elimination of the ontology of an older theory in favor of the ontology of a new and superior theory").

- c. Reduction based on causality or common causal mechanisms.
 - i. Reducing one process or phenomenon to another because the latter is the cause of the former.

This sort of reduction cannot be a strict ontological or semantic claim of identity—indeed, it would be absurd to think that it was. If X causes Y, X is different from Y, and propositions about the one cannot be substituted in all contexts for propositions about the other. Thus, if electrochemical activity "causes" mental functioning, it cannot be mental functioning.) "Causal reductionism" thus cannot really be a strict reductionist claim, though with usage, it may "evolve" into one or be taken as a clumsy way of making such a claim. The more specific the knowledge of causal pathways, the likelier the evolution to full reduction. With cloning, we have a clearer mental picture of some of the causal antecedents driving a particular person: her genome is no stranger to the world, and it cut a prior and perhaps continuing lifepath. That path, as we saw, is seen by some as so causally constraining that it challenges autonomy, individuality, and identity.

ii. Reducing one entity or process to another because they share common causal mechanisms—at least at a level of high abstraction.

Here, the causal mechanisms are not themselves what anything is "reduced" to—they simply connect diverse sets of things and phenomena that are then reduced *inter se* by means of expansive leaps. Thus, since humans and other primates share a common evolutionary ancestry ("cause"), they must be fundamentally alike (in what respects is unclear), if not precisely the same. Therefore, since machines and vegetation are either built or replicated, as are human clones, these clones are like—or just *are*—mere machines or vegetables.

The point can be put more broadly: think of the "deterministic" claim that theoretically identifiable physical/material processes, and/or possibly mental processes cause all apparently "free" human actions. Since our lives are "determined"—just as are the operations of machines, plants and animals—we are reduced in value to such artifacts and lower forms of life ("We are just machines/animals/vegetables"). Thus, establishing causation of human physical and mentational processes may in some eyes reduce us—not to those causal agents—but to other forms of life or to machines sharing the same deterministic causal origins. Here too, the applications to cloning are easy to see. The cloned offspring will likely know that they are genomic reruns made possible by a manufacturing process, and that they will be dealt with as reruns/machines/products by custodial parents and

others. These circumstances might be taken to be a particularly "binding" set of causes.

iii. Reducing the value of one entity to the value of another because their respective behaviors or structures are all fully determined by antecedent causes (even if different).

If the behaviors of all machines and living organisms are perceived as sharing the same dominating characteristic—being fully determined by their causal antecedents—then all these entities and their constituent processes are presumably of equal value. Whether humanity is downgraded to a lower level or inhabitants of the lower level are upgraded—or both—all the entities and processes are of the same worth. We are no better than those other things and possibly not even descriptively distinct from them in any important way. There are, of course, explicit and implicit normative premises embedded in this claim. The premises assign prime importance to certain versions of "freedom" and "determinism" in characterizing and comparing the "worth" or value of different entities, and this is a highly controversial matter. Coherently or not, some entities are judged more or less free or determined than others. This is not quite the end of "commoncause" claims. They may lead to reduction in the senses discussed below in (value reduction and human nonuniqueness).

d. Viewing a person's value as deriving only from a limited set of her characteristics or functions (reproductive capacity, physical appearance, athletic abilities, and so forth) rather than her whole being; and (possibly) actually dealing with her on that basis through "mere use." 219

Such a value claim in any given case may be metaphoric or meant literally. (It is hard to take literally as an ontological claim.) "She is nothing but her money"; "he is nothing but the two facts that he is over seven feet tall and can dunk"; "you are your role and function in life"; "you are what you wear." Dealing with the person in such a way is also reduction, and may also generate a family of related descriptions—"exploitation," "dehumanization," "objectification," and so forth. Before flatly condemning all such remarks as inappropriately reductive, recall that specific reference to traits has multiple meanings and effects. Think of football tryouts, where coaches might yell, "Hey you, with the arm"; or

²¹⁹ We might identify a subcategory of reduction in which the "traits" to which one is reduced rest in turn on the utility of certain cells and tissues bearing certain molecular structures. *See* Campbell, *supra* note 217, at 16 ("The achievement of somatic cell mammalian cloning is unquestionably a significant research breakthrough, but testimony on the scientific and philosophical analysis of the prospects for human cloning tended to depersonalization, reducing human beings to valued cells, tissues, and organs."). Perhaps this is a sort of double reduction in value.

auditions for fashion models—"The people with red hair, line up over there"; or efforts to locate someone—"Jane? She's right over there, with the tattoos on her arms." The ascriptions straddle both reduction and positive evaluation, and, depending on context, may be useful or at least unobjectionable.

In any case, value reduction involves how a person is viewed or treated. Of course, how one is in fact viewed may not in all cases track how one is treated, and vice versa. Former slavemasters, for example, may continue to view the freed persons as nothing but smart animals or machines that can unfortunately no longer be legally owned or abused.

Finally, one might view global ascriptions of someone's value as nothing but summations of her particular uses. On this view, personal worth is identical or reducible to one's utility to others.

e. Viewing persons as nonunique, nonindividuated persons because they were created as full genomic reruns; "reduction" to another person.

Although we have yet to encounter human clones, the current discourse about them suggests that they would be viewed by some (at least in the short run) as "nonunique, nonindividuated persons" because of their replicated genomes. Even without clones, however, there are existing human practices that suggest the reduction-via-nonuniqueness problem—for example, dealing with a set of persons as if its members were all alike. Indeed, this is at the core of "stereotyping" in its pejorative sense (which is not the only one). Here, although the person is not (fully) reduced to objecthood, her separate identity has been "merged" into some collective, whether a commune, a movement, a group of slaves, or any assemblage. Individual distinguishing features are removed: one discerns the merged, aggregated entity only.

With human cloning, the offspring's purported coalescence is with a specific person or lineage, all bearing virtually the same genome. One might say the person is valued for herself only because she is thought to be identical to or a close replica of prior holders of the genome. Perhaps we should say, then, that she has been reduced to another person, rather than to objecthood. However, it goes too far to say she is not valued as a person at all and is reduced to an object: nonuniqueness is not the same as objecthood. She is valued for her distinctive characteristics, as were her genomic predecessors, including the first one—and these characteristics are indeed *hers*. She may be under *possibly* unfortunate pressures, but it would be misleading even to say that she has been reduced, not to objecthood, but to other persons.

Viewing persons as persons only at the most abstract level by attending to the "whole person" and striving to exclude differentiating features: reduction by elevation.

This form of person perception is not often mentioned as a form of reduction and it may even seem perverse to describe it that way. After all, we are trying to elevate personhood as such, and seem to be moving in the direction opposite to reduction. But if this concept is rigorously adhered to, it can represent a diminishment of particular persons precisely because it erases the distinguishing features that make them unique individuals.

The path away from this paradox is to differentiate contexts of human appraisal and provide an adequate theory for the differentiation. For purposes of preserving voting rights in general elections, for example, we consider the relevant characteristic as being a person (with citizenship and competence constraints). For purposes of hiring musicians, we consider musical talent and skill (and, in certain settings, appearance) to be the relevant characteristics.

Still, efforts to restrict human valuation to personhood as such risk reducing persons to entities indistinguishable from others of the same sort. Here, de-individuation coincides with reduction. Evaluating this prospect requires us to identify the circumstances—relating to culture, norms, and underlying moral, political, and philosophical structures—in which individuating traits are rightly suppressed, and those in which they are rightly emphasized. Competing notions of equality suggest different patterns of trait suppression. (Some law professors select research assistants on the basis of traditional merit measures—exam grades, diligence, classroom performance, prior training and accomplishments. Others hire on a first-come, first-hired basis. What should we make of this?)

Viewing persons as nonunique forms of existence because they share crucial traits with other life forms and with (certain) machines; persons are thus not uniquely valuable residents of the universe—indeed, the universe is radically egalitarian.

The similarity between this proposition and that of reduction via common causal mechanisms²²⁰ is obvious, but the two are not the same. The present claim does not rest on common-causality or other causal claims, 221 but on having certain shared attributes. (For such descriptions to be accurate, they would have to be formulated at high levels of generality say, to comprehend both human linguistic capabilities and nonhuman forms of communication.) This sort of reductive nonuniqueness suggests parity

²²⁰ See supra Part VI.B.2.c.ii. ²²¹ See supra Part VI.B.2.c.

along several scales. Thus, humans and certain nonhumans might be said to have equal personal worth because of various shared characteristics—for example, the capacity to experience pain and pleasure. The human and nonhuman entities might also be considered equally free or unfree—although such (un)freedom would be manifested differently. Such parity might be taken either as a form of human reduction, or as a form of animal/plant/machine elevation—or both or neither.

Value reduction and human nonuniqueness are closely linked, and seem separable from the semantic and ontological forms of reduction listed earlier. They directly or implicitly involve moral devaluation; being linked to forms of reduction involving causal notions may also reinforce this value-reductive pull.

So, different reductionist claims seem linked by the idea that "[r]eductionism, plainly and intuitively, is the view that one thing [including value of one sort or another] is nothing but another more fundamental thing [including some 'true' value]." If "nothing but" is taken not only in a literal sense but also metaphorically—as when we say that workers in a factory are nothing but their physical strength or skills and are thereby reduced to their utility—then the quoted account links all the senses of reductionism mentioned above.

If one were to focus principally on value reduction, a more explicit formulation might take form, "X is no more valuable than Y, either because X is nothing but Y, or X and Y share common causes or major traits, or X is caused by Y."

Rationales and Risks of Reduction; Reduction as Reality in Place or as a Temporal Process

Why do we "reduce" in any of these forms? Plainly, this depends on the particular form of reduction at issue. Both scientists and nonscientists may prefer a simplifying framework that eases their path. Indeed, if they believe in either ontological or semantic reduction as applied to any specified domain, they are likely to feel scientifically or professionally obliged to adopt such a framework. Think of behaviorists who wish to avoid the complexities of dealing with what they see as inaccessible (or nonexistent) mental phenomena and who thus focus on what is "observable."

A proposed reduction may also reflect new findings or understandings of causal connections and conceptual relationships among various phenomena. In this sense, reduction may be a powerful heuristic for innovation. For example, the now vast field of molecular biology might be

²²² Russell E. Vance, *Heroic Antireductionism and Genetics: A Tale of One Science*, 63 PHIL. SCI. S36 (Supp. 1996).

viewed as a partial outgrowth of the supposition that "biology talk" is reducible to "physics/chemistry/molecular structure talk," and that, in reality, all biological activities, processes and structures (physical and mental) are just aspects of the structure of the universe and nothing more.²²³

Even strong "nothing but" types of reductionism—like metaphor—both reveal and hide, and their revelatory features are tied to their suppressive ones.²²⁴ Like metaphor, they can be both scientifically and rhetorically useful.225

But value reduction poses special problems. It is one thing to say that all perception is really nothing but physical processes: assuming this claim is meaningful at all, its truth or falsehood is independent of what anyone says about it or of whether anyone even exists (except perhaps in situations described in quantum theory). It is quite another to say that Mr. X (or some set of persons) is reduced to a set of specific uses to others; this requires "value reduction perceivers"—moral agents who judge actions, situations, and processes.

But to which of a person's many traits are we to reduce her? The multiplicity of uses for our traits and the variety of merit assessments we make of them suggest that a person will be reduced differently by different observers. Of course, any reduction of a person to the intrinsic or instrumental value of her particular traits radically oversimplifies our view of both the person and her traits. It may also downgrade our valuation of the moral elements and perquisites of personhood. If persons are nothing but the sum of their "uses," how can we harm them as persons by merely using them? We are simply fulfilling their functions. Perhaps they would be harmed if we did not use them. (Note the meaning conveyed by "use" here. Do participants in consensual sex "use" each other?) On this view, there are either no intrinsically valuable persons to harm, or whatever intrinsic value

²²³ See generally GARFINKEL, supra note 215, at 15.

The pull of reductionist views is very strong. They give us a kind of understanding that we regard as profound. . . . The same sort of conceptual power [as reflected in Newton's laws], the ability to change the way we see a large class of phenomena, makes reductions very attractive, be they physical, biological, economic, sexual, or any other kind.

Id. See also Nigel Williams, Biologists Cut Reductionist Approach down to Size, 277 SCIENCE 476 (1998).

See George Lakoff & Mark Johnson, Metaphors We Live By 10 (1980).

The Property 12 (1976) ("Hohn Stuart

²²⁵ Cf. HOWARD RACHLIN, BEHAVIOR AND LEARNING 12 (1976) ("[John Stuart Mill's] thinking was clearly influenced by the advancing science of chemistry. The younger Mill suggested that simple ideas might interact in a way analogous to a chemical process rather than by simply mixing together like salt and pepper."). See also Arnold S. Kaufman, Behaviorism, in ENCYCLOPEDIA PHIL. 268, 272 (1967). "[I]t is generally recognized that the fact that a scientific theory can be eliminated does not render it irrelevant. In particular, it may be scientifically fruitful because it provides a means of simplifying complex relationships without which limited human intelligence could not function effectively." Id.

they have is modest and easily surpassed by the benefits of using them for their traits.

If we think persons have no value in the abstract and that their only source of value is through an aggregation of specific attributes, we might (but need not) be inclined toward the mere use of persons—although the very notion of "mere use of persons" has been washed out by our assumption: there is not much personhood (abstract or concrete) to impair, and moral arguments about how persons must be treated seem inapplicable. If we take such reductive claims to be sound, we blunt moral arguments against our proposed uses—and doing so reflects and exacerbates a view of persons as things subject to mere use.

This reduced account of reduction is far from capturing the technical discussions in philosophical and scientific literature. We now deal in more detail with value reduction and the behaviors associated with it. This may be the most important topic in human cloning. It seems more promising than tossing around abstract conclusions about the loss of the individuality, autonomy, and identity associated with human personhood.

Value reduction deals with how we see and treat each other as individual, autonomous persons. It rests on psychological mechanisms and their connected forms of conduct. It can be viewed as a process, as the product of the process, or simply as a claim about static moral reality rather than a transformation over time. On the last view, people have not actually been reduced from true persons to things—they never were anything but things. Similarly, the reduction of mentalist talk to materialist talk reflects a view about enduring reality, not some process whereby mentalist talk (or things) became materialist talk (or things). But temporal processes come into play when nonreductive attitudes are altered, and these processes of attitude change require attention as part of cloning's plausible risks.

Would human cloning, on any given scale, in fact make us veer away from seeing persons (whatever they "really" are) as intrinsically valuable both as persons and as persons with particular traits, rather than as mere depositories of functions—a set of appliances to be impressed into service?

²²⁶ See Barry Brown, Reconciling Property Law with Advances in Reproductive Science, 6 STAN. L. & POL'Y REV., 1995, at 73 (noting that courts have been reluctant to extend property rights into the area of reproductive authority).

For additional commentary, see generally Garfinkel, supra note 215, at 49-74; John F. Post, Metaphysics: A Contemporary Introduction 95 passim (1991); Dupré, supra note 217, at 85-167; Ned Block, Reductionism: Philosophical Analysis, 4 Encyclopedia Bioethics 1419 (1978); Ruth Macklin, Reductionism: Ethical Implications of Psychophysical Reductionism, Encyclopedia Bioethics, supra, at 1424.

Just how would such a practice, when observed by a community, move its members toward seeing persons as X, or nothing but X, as in "We see her as a portable crèche, as nothing but a baby-making machine, or as a flower pot"?

- 4. Paradoxes of Reduction/Valuation; the Equivocal Meanings of "Valuation"; Perfection as Reduction
 - a. Reduction as valuation, and vice versa.

Isn't reduction exactly what we want? How else could we be valued or admired if not for our particular characteristics? Abstract persons can be admired only abstractly. We want to be admired and rewarded for our major "merit attributes" such as knowledge, accomplishment, mental and physical abilities, and/or for other wealth-attracting attributes (meritorious or not) such as physical attractiveness.

One might thus argue that *moral* valuation²²⁹ of a person's character and actions may in fact *require* something resembling reduction and seems incoherent without it—but we are not likely to call it "reduction." One sees a person's characteristics and behaviors and makes inferences from them; as many have observed, one does not see the essential person or her traitless soul. Although some forms of reduction seem clearly inconsistent with the appropriate valuation of persons, kindred forms of person perception are necessary for it. There are certainly many contexts in which all persons are said to have value that lies simply in their being persons. This seems especially apt when we speak of basic political and moral rights, and of matters of everyday moral behavior and civility. But in other domains, it is impossible to value someone without *some sort* of reference to her traits: reference to her traits is a constitutive aspect of reduction as well as positive valuation. The two are intimately connected.

²²⁸ Michael H. Shapiro, Who Merits Merit? Problems in Distributive Justice and Utility Posed by the New Biology, 48 S. CAL. L. REV. 318, 325-47 (1974) (describing merit attributes as favored traits forming the basis of desert claims, and for that and other reasons, serving as wealth- or resource-attractors).

attractors).

229 I will leave "valuation" largely undefined, except to note that, unless indicated otherwise, I am referring to evaluation of merit or to moral evaluation generally rather than to a determination of market price. See 19 THE OXFORD ENGLISH DICTIONARY, supra note 14, at 415 (defining "valuation" as "[a]ppreciation or estimation of anything in respect of excellence or merit"). It is admittedly clumsy to lump matters of merit attributes with moral evaluation. Some might say that most merit attributes are viewed as such not to mark anyone's moral virtue or character but to identify more clearly various resource-attractive traits—e.g., abilities, skills, or appearance.

I will sometimes use the term "positive evaluation" to distinguish nonreductive processes from reductive ones. This does not mean that such valuations constitute "favorable ratings." We can positively value someone as a chess player of modest skills. Contrast this with "she's nothing but a chess warrior, earning money for her agents."

But it is one thing to draw structural parallels between apparently different ways of viewing persons. It is another to specifically address the divergences. Failure to do so is masked by equivocal uses of "valuation." That immensely loaded term ranges from simple monetary measures ("the value of this toaster is \$30") to overall assessments of character.

value reduction involves several steps (not necessarily chronological). The first is trait identification: a person is fully characterized as a finite designation of traits; whatever values are assigned to these traits, and however they are summed or aggregated, the combined result exhausts the person's value—nothing is left over. If there were some value left over, what would it be?-or so a "reducer" would ask. More narrowly, a person can be precisely characterized as a small subset of all her traits—only those which distinguish her in some way, for ill or good; one need not go through the entire trait list, however it is constructed.

But there is no way to identify this subset of one's traits without a valuation process—that is, substantive valuation of the traits, which requires identification of the criteria for valuation. In its usual pejorative sense, reduction rests on designating traits and assessing them—and the person—by reference to their usefulness to others. This usefulness might be measured in monetary or other economic terms, in general utilitarian terms²³⁰ ("utiles," happiness, satisfaction, and so on), or by resort to other metrical or orderable concepts. A lesser, possibly benign, form of reduction would not be confined to matters of usefulness to others, but would restrict a person's value231 to some aggregation of her more salient traits—those that have a strong merit, wealth-attractive or even moral component (ability, courage, beneficence).

In general, then, value reduction involves reduction to a finite set of traits chosen on the basis of their utility or moral/merit status. Where persons are reduced to their morally best or worst attributes, (the heroic rescuer; the war criminal), we are unlikely to use or even think of the term "reduction"; I mention this simply to suggest a structural similarity between true reduction and positive valuation, and to illustrate the Janusfaced nature of the problem.

231 It would be useful to trace the links between ideas of moral valuation and merit assessment, but this cannot be done here. We only need to note again that in many contexts, merit and desert assessments are moral issues. Still, borders are hard to define. Merit and desert are concepts used to describe criteria for employment and advancement, but do not necessarily have an exclusively economic or commercial meaning even in those contexts.

HeinOnline -- 9 S. Cal. Interdisc. L. J. 135 1999-2000

²⁰ This use of "utilitarian" reflects its loose, ordinary language, pejorative sense (as used by various critics of cloning). If used in the broader moral/philosophical sense, reduction in a strained sense can become a form of positive moral evaluation, because utilitarianism generally covers the promotion of whatever is defined as intrinsically good. This might include virtues of character identified by focusing on particular dispositions. Thus, one is "reduced" to one's virtues. But this usage may be the undoing of the distinction drawn between reduction and positive valuation.

The varieties of value reduction have a basic commonality: they confine a person's value within a certain trait-defined framework, rather than leave it roaming in the infinity of abstractions. Both economic and moral evaluation refer primarily to specific traits, perhaps only a small number of them. There is thus an understandable but confusing tendency to reduce merit and moral desert assessments to measurements of utility (narrowly understood), or at least to see them as overlapping: "When we hire by merit, we abstract from all facts about the applicants except their ability to perform well at the relevant tasks." But this is context-dependent: "merit hiring" is commerce-laden, and the term "merit" is a confusing amalgam of estimates of usefulness and desert—a more morally laden term. (Don't you deserve the job if you would prove more useful than other prospective hirees?)

Reduction that involves a relatively small set of traits selected for their usefulness, however measured, is the most pertinent here. This form of reduction rests on attitudes and behaviors reflecting a sort of "metonymy" in which an entity's commercial or moral value rests on *some* of its particular aspects—aspects that of course only partly characterize it. "The fighting machine known as Evander Holyfield opened his training camp today." "There goes The Womb—she has done six surrogacies over the last decade." "There goes the duplicated nucleus who thinks he is a regular person." This sort of specificity both creates risk of reduction and forms an element of positive valuation. Since we cannot help viewing and dealing with each other by reference to our attributes, both processes may be in progress at the same time within any given observer, with respect to the same person being observed. Our inevitable references to specific characteristics are central to both. For nonreducers, however, there are always more traits, and even if they "run out," there is still value left over.

b. More on the equivocality of "valuation"; simultaneous reduction and valuation.

The clash between reduction and nonreductive moral or merit evaluation cannot be described adequately by merely saying that the former involves computation to a maximum sum and then stops, while the latter goes beyond sums and never stops, entering some mysterious realm of value beyond perception. The apparent paradox—the overlap between reduction and moral/merit/desert appraisal—trades in part on this ambiguity of "valuation." Both reduction and valuation share the core

²³² GEORGE SHER, DESERT 121 (1987).

²³³ "Metonymy" is defined as "[a] figure of speech which consists in substituting for the name of a thing the name of an attribute of it or of something closely related." 9 THE OXFORD ENGLISH DICTIONARY, *supra* note 14, at 696.

concept of specificity of view. Such specificity in focusing on traits is partly constitutive of both reduction and moral or merit evaluation. They are not merely similar, but logically interlocked.

The valuation involved in reduction, in the eyes of nonreducers, is not simply a rival form of valuation—it is the *antithesis* of the morally required valuation of persons. Reductive valuation of persons applies some unit of measure or rank-ordering to some or all of their traits—expected monetary value, expected production of utiles, and so forth. In this sense, "Michael Jordan is valuable" means no more than "Michael Jordan is a wealth-attractor and wealth producer, based purely on the future economic value of his fame as the greatest basketball player or even greatest professional athlete of all time."

In their polar forms, reduction and nonreductive valuation thus reflect different universes of valuation. These linked processes embody huge gulfs in moral views about how to perceive and behave toward other persons. Valuation-by-reduction embraces a perspective that accepts and promotes what its opponents would call mere use, in the Kantian sense. It suggests that the selected traits are the only ones that matter and that they "matter" solely for utilitarian purposes. The person has no mysterious, ineffable, residual value. Reduction robs her of her very personhood by locating her full value in the usefulness of particular traits. Despite the structural resemblances between these different forms of valuation, their moral differences are so great that the term "valuation" should not be used in these varying contexts unless its sense is explained.

But there is no simple linear pull of opposing "commercial" and "personhood-value" vectors here. Reduction and valuation are not global, mutually exclusive, and all-or-nothing processes; the two thus do not always run in different directions, wholly or partially canceling each other out. There is thus no necessary contradiction between the processes: a person may be reduced in some respects and positively valued in others. Financially rewarding someone for her talents, character, or appearance does not (necessarily) displace her threshold worth as a distinctive person.

Our inevitable appraisals of persons based on their traits can thus be both desirable and baleful in different respects. We do not see people whole or in their entirety—we see clusters of traits, some vividly presented, others more a matter of inference from behavior and appearance. We value persons—as persons—for their traits, and most persons wish to be valued in this way. We also value them for what use they can be to us—perhaps on the basis of those same traits. This seems unexceptionable if the "personhood baseline" is not eroded as a result. Put otherwise, we want to be positively valued for our traits both monetarily and nonmonetarily, but not reduced to them via the easy crossover between economic and moral

evaluation. The tension can be easily, if loosely, illustrated. Think of a wealthy sports fan who owns a professional team whose biggest star is his best friend. The demands of corporate duty and friendship may easily diverge.²³⁴

Note the link between reduction as involving a whole-to-part notion and the idea of dividing a process into specific elements and revising their configuration—as is done in all forms of assisted reproduction. One might say that such reproduction physically implements and reflects the psychological and behavioral forms of reduction described here. The result, however, is likely to be far from "reduction" in its most undesirable forms.

c. Perfection as reduction.

I mention one more oddity involving reduction: in the context of reproduction, "perfectionist" goals might seem more consistent with reduction—and thus objectification—than with positive valuation/elevation of persons as particular individuals. Recall the practice of prenatal and parental screening for adverse traits, followed by abortion, embryo selection, or birth control. Another example is affirmative intervention to enhance traits, whether through the germ line or for existing persons, fetuses or embryos. All these interventions may reflect a limited perfectionist ethic, but it carries an aura of reduction: many think less of a professional athlete whose skills were augmented by steroids. Many think that owners of professional sports franchises view such augmentation as little more than improving on a machine's design rather than helping persons perfect themselves. This is a sort of perfectionist paradox: 235 although there is an elevated moral ring to "perfectionism," it may concern reduction or mere use or objectification more than exaltation and moral desert.

²³⁴ The preceding account of reduction has some parallels to Garfinkel's discussion of microreductions.

I want to focus on one particular archetype of reduction: the reduction which is said to hold between a whole and its parts, between an object and the stuff or things which comprise it. In such claims, called *microreductions*, a certain object can be explained as just the sum of its parts. In microreduction the upper level object [for our purposes, the valuation of the person-as-a-whole] is explainable by the (lower level) microthreory [here, the individual uses which can be made of the person, usually based on the sum of *some* of her parts]. Therefore, the upper-level explanations [a whole-person explanation of valuation] can in principle be eliminated in favor of the microexplanations.

GARFINKEL, supra note 215, at 51 (discussing microreduction in scientific discourse).

235 See the discussion on the paradox of perfectionism in Shapiro, supra note 69, at 34-36. In some contexts, "perfect" may simply mean "no imperfections" or possibly "normal." Cf. Zaner, supra note 104, at 131 (asking "[i]s not every normal baby perfect, for its parents?").

5. Mechanisms of Value Reduction and Their Connection to Mere Use and Objectification

How does value reduction relate to objectification, devaluation, mere use as means, and so on?²³⁶ Are some of these terms criteria for others, synonyms, or what? When do they refer to end results and when to processes? And what difference does it make?

There are obvious links between objectification, the violation of Kant's injunction against using persons merely as means rather than as ends, reductionism, and the other processes and results mentioned. A claim that someone has been reduced to the value of some of her traits suggests that she is, has become, or is seen as an object. This in turn suggests that she may, should be, or has been used merely as a means and not an end. And it further suggests that our bonds to her and our related commitments to her welfare are either contingent on her utility, or are simply nonexistent. (But, as always, recall that reductive processes may—and in most contexts are likely to be—incomplete.)

The uncertainty about the comparative logical/semantic status of these terms is less alarming than it seems; each seems to shed light on the others in a multiple-concept relationship. (Or perhaps what we have is multiple aspects of one concept.) Although I take "reduction" as a foundational term, the Kantian "mere use as means" concept seems of roughly equal status. Each has advantages as the "basic" or "primitive" term: the former parallels reductionism in science, philosophy, history, and so on; the latter suggests markets, machines, and lesser forms of life. Terms such as "objectification" and even "devaluation" are too obscure to be foundational, and so I take them as inferential or bottom-line terms, resting on the more fundamental notions of reduction or mere use. In the end, some questions will still remain indeterminate: is something an object just because it is merely used, or is it merely used just because it is an object? How did it get to be an object, if that is what it is? Are the answers, if any, different in different contexts?

²²⁵ This discussion enlarges on remarks made in Shapiro, supra note 17, at 1189-90, 1093.

[&]quot;"Act in such a way that you always treat humanity, whether in your own person or in the person of any other, never simply as a means but always at the same time as an end." THOMAS E. HILL, JR., DIGNITY AND PRACTICAL REASON IN KANT'S MORAL THEORY 38-39 (1992) (citation omitted) (describing this statement as "the second formulation of the Categorical Imperative"). Cf. CLONING HUMAN BEINGS, supra note 9, at 73 ("[T]o objectify a person is to act towards the person without regard for his or her own desires or well-being, as a thing to be valued according to externally imposed standards, and to control the person rather than to engage her or him in a mutually respectful relationship.").

a. Reducing—destroying?—personal value through technological revision of human processes and structures, particularly via market mechanisms; efficiency.

Earlier, I referred to one form of reduction as viewing a person's value thinly, as if it rested on a small defined group of qualities rather than on some global worth as a person. Depending upon local law and custom, one may on this view treat persons in various respects as if they were objects for mere use and manipulation. Such actions may thus reflect and reinforce the actor's idea that persons are nothing but empty bearers of traits such as reproductive or sexual prowess, tissue compatibility allowing for effective organ transplantation, and so on.

It would be too simple to say that actions reflecting such "nothing but" reductive attitudes treat persons as mere means. They often do, but whether one is merely used in any given case may depend on the attitudes of several actors: it may take more than one morally regrettable attitude to make a transaction morally regrettable. If a scientific investigator views her subjects as things to be manipulated for scientific and personal advancement, her interaction with them does not necessarily render the overall transaction a violation of the Kantian imperative. A network of actors and institutional protections surround biomedical research. Although they may often fail as protectors, they more often succeed. Where others act with due care under governing standards, a lone investigator generally cannot taint the research enterprise, except in egregious cases; she impeaches only herself.²³⁸ (We might say that by her attitude and intention alone she violates the Kantian imperative, but that this violation is confined within a network of practices that respect personhood and do not torch the entire research project.)

Nevertheless, if an actor sees persons as nothing but some of their useful functions, this certainly raises the probability that these persons will be used by her as mere means (assuming she has the power to do so). How the actor came to this view may be hard to say. Perhaps the persons were presented to the actor as objects that had always been objects (slaves, for example). Perhaps, within their culture, they forfeited their personhood value through some sin and are being punished by being treated as things (though punishment in some senses respects personhood). Perhaps the actor was predisposed to see persons this way. It also remains unclear whether

²³⁸ This analysis of the meaning of the no-mere-use injunction is also pursued in Shapiro, *supra* note 17, at 1144-49, 1179-80, which discusses the application of Kant's no-mere-use imperative in cases of complex interactions involving many parties in a network of rules and practices. Even if particular parties have attitudes towards others—for instance, experimental subjects—that are inconsistent with the Kantian maxim, these subjects are not necessarily being used, given the network of persons and perspectives in the overall community.

one is reduced by mere use or one is merely used because she is already reduced. In any case, the close—possibly definitional link—between reduction and mere use seems clear, and the more opaque idea of objectification appears to rest on reduction/mere use.

Value reduction and mere use thus depend heavily on attitudes and behaviors and are in theory the principal harm of reproductive innovation.²³⁹ One might urge that reduction generally accompanies the deliberate severing and rearranging of integrated life processes. After all, the decision to thus rearrange the world as we know it—and the social relationships built on that world—presupposes some notion in which particular "pieces" of a life process are to be broken off and placed elsewhere. Such maneuvers are *defined* by attention to discrete traits or functions that we believe are identifiable and adjustable through technological means. We often associate this kind of design and construction with the assembling of artifacts.

The link between dealing with artifacts, on the one hand, and with novel reproductive technologies, on the other, seems especially strong for cloning, germ line engineering, and the enhancement of living persons. These biological reconstruction projects inspire fear of reduction because of the intentional shift of attention from the whole to manipulable parts. Of course, the weakness of the objection lies partly in accepting the shift of attention from whole to part as a clear, stark, all-or-nothing matter.

In the view of cloning opponents, all of these supposed threats to respect for personhood are compounded by the fact that cloning is located in the free market. Of course, the market, as usually defined, is a "public entity," even when transactions take place "in private." The placement of assisted reproduction in the market, then, reflects the public aspect of assisted reproduction and thus its regulability by the community.

A review of the properties and critiques of market behavior is not called for here; all that is needed are some summary observations. Attacks on market mechanisms are often as fuzzy as the claims of inherent harm, dehumanization, and loss of individuality supposedly attending new modes of procreation. However, there may be some benefit in reciting and then responding to these complaints.

Markets are meant to implement human preferences; we buy and sell to get what we want and avoid what we do not want. To refer to what is bought and sold with the single term "commodities" serves a purpose in exposition. However, to tar every economic exchange as if it were an empty relationship between humans as things would be far off the mark. Paying

²³⁾ See generally id. at 1180-99 (criticizing arguments based on reductionism, objectification, and violation of Kant's formula on avoiding the mere use of persons).

your physician and the hospital for helping you deliver your baby does not make objects out of you, your baby, or the physician and her associates.

Moreover, the much-maligned idea of market efficiency²⁴⁰ simply compares various ex ante and ex post circumstances with respect to whether persons are better off or worse off after certain market-affecting maneuvers. This does not rest exclusively on money matters even when doing pure economics. In this sense, efficiency is simply a form of rationality within a given framework of goals. For example, the Pareto formulation of efficiency posits circumstances in which no one can be made better off without anyone being made worse off. If the condition holds, the system is efficient—though not necessarily fair, just, egalitarian, or even the most efficient among all theoretical options. "Better off" and "worse off" are variable terms that can take many forms. They rest on the satisfaction of preferences, promotion of one's best interests, or some other form of being better or worse off (including having one's rights vindicated and being treated as a person). For example, a standard as (seemingly) simple as the "least restrictive alternative" is-in United States constitutional culture—an efficiency criterion: if the government wants to achieve some goal, it must (in theory) pick a method that is among the least burdensome on important personal rights and interests. Efficiency is thus a component of justice, fairness, rationality, and the proper fulfillment of one's duties. Much of the same principle of efficiency applies in selecting medical treatments. Selecting brain surgery to treat depression before trying antidepressants and electroconvulsive therapy is both malpractice and generally unethical because it is grossly inefficient: it may advance one's goals but creates risks ("costs") far in excess of the available alternatives, which may also be effective. Properly understood, efficiency is a concept of medical ethics, and a central one at that. It is a component of basic rationality in every domain. To reach the Pacific Ocean from Los Angeles, one goes west, not east, although continuing east will eventually—though inefficiently—get one there. But if the goal includes circumnavigating the globe before reaching one's destination, then traveling east is the rational choice. (Whether the goal is rational is another question, to be answered within a larger framework of goals and values.)

Yet the bioethics literature is littered with remarks that *reduce* a general term like "efficiency"—which characterizes the relation between means and goals—to "nothing but" matters of money, wealth maximization, or securing consumer goods. Because the idea of efficiency is a function of either social or individual goals (depending on context), it cannot be *contrasted* with moral considerations because these goals *generally include*

²⁴⁰ "Efficiency, of course, is a market value, not a precept of medical ethics." Annas, *Human Cloning: A Choice or an Echo, supra* note 23, at 260. As indicated in the text, this is not so.

preferences for maximizing the good and minimizing the bad, however one understands these moral concepts. Efficiency is thus a component of all moral analysis—consequentialist, nonconsequentialist, and whatever moral tertium quid is left over.

In this light, saying that "[e]fficiency, of course, is a market value, note a precept of medical ethics," reflects a deep misunderstanding of moral and economic theory generally and of the particular terms in question. "Efficiency" is defined with respect to furthering social and individual goals, *including* those concerning autonomy, individuality, distributional equity, and rights and duties of various sorts. It is thus also defined by reference to the reinforcement or attenuation of various attitudes, beliefs and values that reflect and implement these goals, *including* those dealing with interpersonal bonding. Of course, efficiency can no more be lumped with rational moral evaluation than it can be split off from it. They are connected in complex ways.

So, if it could be shown that we are indeed at risk for losing certain moral values because cloning and/or other forms of assisted reproduction are practiced, then these practices would be *inefficient*—and thus immoral—because they interfere with reaching our moral goals by making them more difficult and morally costly to attain and preserve. If our moral goals include maintaining person-respecting attitudes and behaviors and these are likely to be eroded by cloning, then permitting cloning would be *presumptively inefficient*—and in this context, unjust, unfair, irrational, and a violation of our duties to ourselves and others.²⁴³ Tossing efficiency aside

²⁴³ Cf. Frank I. Michelman, Ethics, Economics, and the Law of Property, in ETHICS, ECONOMICS AND THE LAW 3, 4 (J. Roland Pennock & John W. Chapman eds., 1982). "The efficiency of private property is a hypothesis dependent, not only on behavior rationally directed toward satisfying individual wants, but on questions about the contents of the wants and the social propensities of their bearers" Id. The failure to see this point partially explains comments that characterize the use of reproductive technologies to promote fertility as "a multibillion dollar business that is itself dominated

²⁴¹ *Id*.

²⁴² Consider an example from constitutional law. As I said, efficiency is a protean concept at the core of rational, goal-directed activities, and so underlies much of value theory. It is thus relevant to many applications of any given basic value. These values are often sharply and wrongly contrasted with efficiency, to the latter's detriment. Do we have important rights? Certainly. May they be impaired to further state interests? Yes, but If state program X promotes the interest while causing greater damage to one's rights while program Y promotes the interest just as well but with less damage to those rights, efficiency—and therefore, in this context, justice and fairness—dictate that program Y be chosen. If program Y costs the government more than program X, then the efficient choice depends on the importance of the opportunities lost—the community's ultimate goals, defined by its comparative valuations of different interests. Even important rights may be qualified to avoid huge harms-harms that may themselves impair individual rights and interests. (Think of the compelling state interest test in constitutional law.) If people highly value certain rights, they will not be willing to maximize wealth (narrowly confined to economic/commercial value) but only to maximize their full set of goals, with priority assigned to those rights over money. For them, that would be the efficient course. In this context, it would be absurd to say that having rights is "inefficient." Economists understand that highly particularized accounts of efficiency in economic models are not in principle confined to matters of counting money or utiles.

in a snit because it also comprehends getting the greatest revenue at the least cost (a horrible thought) would be inconsistent with medical ethics itself. Efficiency is not only *not outside* medical ethics, it is one of its constituents. It is simply too simple to dismiss as belonging to another universe.

b. Reduction and "failed perfection."

Many persons are loosely identified with the disorders or anomalies that afflict them. ("Watch out for that blind man.") If this characterization is coupled with a belief that the person retains no significant merit attributes, and this belief arises through perception of the condition, the very existence and observation of the condition reduce the person in the eyes of the perceiver.

Suppose that prenatal screening followed by abortion could have "prevented the condition"—no person, no adverse trait. The availability of such measures highlights the existence of these conditions and the deficiencies associated with them. Why else would we develop such techniques if not to avoid those specific conditions by allowing informed prevention of birth? In this way, technology arguably intensifies reduction because it calls attention to what might have been avoided. The very prospect of directed alteration of certain human traits and conditions emphasizes their value or lack of value. This is not to say they went unnoticed before. Technological developments are not always mere happenstance; the development of prenatal screening was not an accident. Its possibilities were clearly foreseen and sought out in order to avoid the known effects of certain disorders and conditions heavily dependent on genetic and gestational factors. But the actual arrival of the technology can sharply escalate the salience of a feared anomaly and thus strengthen the reductive process.

c. The asserted nonuniqueness of being human.

Suppose someone says that there is no useful sense in which humanity is unique or special when compared to other life forms—or even machines. (Perhaps some would extend this to nonorganic works of nature.) The issue here concerns knowledge of or belief in the claim itself (however hazily understood) and its relationship to reduction. The question for us is whether

not by the medical ideology of the best interests of patients and their children, but by the market ideology of profit maximization under the guise of reproductive liberty." Annas, *Human Cloning: A Choice or an Echo, supra* note 23, at 272. The bigger the business, however, the likelier it is that human preferences for reproduction are being fulfilled. The existence of the market and the industry *implement reproductive liberty*. The attitude of the providers is no doubt, in large part, to make money. A physician wants to make money off patients, but this does not mean she is violating the no-mere-means imperative any more than a professor is merely using her students to maintain her lifestyle.

human cloning would accelerate human reduction by invigorating the belief that humans are just another aspect of malleable existence, no better (and possibly worse) than other aspects. This seems to be a form of reductivist claim: humans are "no more than" a limited set of traits largely shared with other life forms, artifacts, and perhaps the natural universe.

If there is nothing special about humans as compared with other life, gadgets, or products of nature, does it follow that human personhood is of no major moral consequence? If personhood is morally inconsequential, would privacy, autonomy, and certain other moral ideals lose most of their moral and legal force? (A few shreds might remain as instruments needed to keep the peace.)

But the nonuniqueness claim can't do that much work. It is beset by a major difficulty: it trades on levels of generality in describing the properties of different things and begs questions about the moral importance of these various properties. Compare "only humans can engage in complex thought" with "all living things engage in adaptive behavior, of which complex thought is simply *e pluribus unum*." Humans are unique under the former description, but not the latter. But why select the latter as the correct description? What moral or other theory tells us how to answer the obvious question: unique or nonunique with respect to *what*? The nonuniqueness claim once again is circular.

Reduction resting on nonuniqueness thus never goes beyond mere abstract description and never leads to any plausible conclusions about human value. All it can do is point to properties described in various ways and say we share this particular group of them with other entities. The nonuniqueness argument seems to deny the value-relevance—or any theory—of differences in the form and strength of properties shared with other life forms, contrivances, and products of nature.

Because it is not locked into a specific level of description, the nonuniqueness argument need not address the particular strength of a trait—what counts is its general nature. Even though humans seem to have more analytic abilities than (most?) other animals and are probably more adaptable than any presently existing machine, this counts for little. What does count for reductivism-as-nonuniqueness is the general nature rather than the precise strength of a trait. If an animal has *any* aptitudes, a capacity to feel pain, fear and other emotions, and so on, then it is on all fours with us. "Lumping" (identifying ourselves with other things) dominates "splitting" (differentiating ourselves from other things) and suggests that we are no more valuable than other forms of existence because we are just like them.

What explains the selection of this higher, dominating level of abstraction? Picking a level of abstraction partially depends on one's purposes and cannot rest on matters of pure description. One description is as good as another where no theory or goal informs our observations. We are alike or not alike depending on what hat we wear. As Cook-Deegan has stated:

People perceive inconsistencies between the biological description of a living machine and the religious concept of humans as only slightly flawed knockoffs of divinity. . . .

. . .

Teasing out the aspect of "dignity" that makes humans special seems a daunting task. From my biologist's perspective, I am not so sure we are all that special.²⁴⁴

A "biologist's perspective" is not a universal, preferred perspective, as I expect Cook-Deegan would agree. Claims of nonuniqueness are not neutral descriptive commentaries, but rest on valuations of goals and means—and of persons, animals, vegetables, implements, mountains and rivers. If one believes that (certain?) animals share a moral right to life with humans, then the huge differences in revealed cognitive capacities between humans and nonhumans are of little or no moment, depending upon context. If one wants to be moved by poetry, one looks to a poet, not King Kong.

Now, how does human cloning promote a reduction-via-nonuniqueness stance? The notion that we are more properly lumped with other life forms and with machines than split from them is further validated—for reductivists—when we move from the immediately observable to "interior" matters. These include the various genomic sequences we share with many life forms—not to mention the very idea of having a governing genome of any sort running our lives; the isomorphisms between the genetic *code* and computer software; and the parallelism between humans and the intricacies, forms, structures, and evaluations of nature and its components—which after all are constructed of the same basic subatomic entities that we are.

The cries of alarm over Deep Blue's defeat of Garry Kasparov illustrate the point:²⁴⁵ Deep Blue is a mere thing, an artifact running on a fixed algorithm, making no independent choices. Deep Blue beat "us" (Kasparov is our representative, the best we have to offer) and it—and possibly many other or even all machines—are thus equal to or better than we are. If Deep Blue is thinking, it's thinking better than we are. If it's not thinking, whatever it's doing, it's better than human thinking. If Deep Blue is equal

²⁴⁴ Robert Mullan Cook-Deegan, Mapping the Human Genome, 65 S. CAL. L. REV. 579, 594-95 (1991)

<sup>(1991).

245</sup> Deep Blue is the computer program that defeated world chess champion Garry Kasparov. See Steven Levy, Garry Sings the Blues: The Machine that Beat Kasparov Can't Think. So Why Don't We Feel Better About Its Victory?, NEWSWEEK, May 26, 1997, at 84.

or superior to us, we are equal or inferior to it; we are (or are no better than) things or artifacts, and we might be worse.

Of course, this argument is hopelessly invalid, trading on equivocations, non sequiturs, and suppressed premises. But something like it underlies both our fears of and claims about nonuniqueness. Computer chess and human cloning—it is all the same thing and we are reduced to dust.

d. Reductive attributions: incomplete accounts of causation, especially of human conduct.

We regularly seek, or at least wonder about, the causes of human thought and conduct—our specific behaviors, traits, beliefs and attitudes. Some might argue that any such searches—whether styled as pursuit of causes, explanations, or reasons—are reductive in the sense that they assimilate human beings to fully controllable and predictable artifacts. But such broad claims need not be pressed here. The narrower point is that highly simplified (and thus highly inaccurate and perhaps offensive) forms of causal attribution may seem to reduce humans—or specific persons—to a highly particularized set of influences, motivations, and physical or psychodynamic processes.²⁴⁶

For example, a surrogate mother's motivations might be pinned on a desperate need for money. This "cause" occupies the field: she acted out of economic coercion rather than free choice and is being manipulated by others who trade on her helplessness. She might be seen as a member of a needy caste of dependent persons to be used by wealthier persons. A biomedical researcher might be viewed (perhaps mistakenly) as being moved by *nothing but* a desire for academic tenure, fame, fortune, prizes and power. He might also be using human subjects merely to further his goals, depending on his intentions and actions. In treating persons as mere means—things of low moral value—he reveals himself to be of deficient character.

A final example derives from efforts to enhance the performance of living persons—a point raised earlier in discussing a perfectionist paradox.²⁴⁷ We might attribute a successful athletic performance to "external" technological antecedents such as steroids (to help acquire strength and bulk) or beta-blockers (to steady one's hand or voice). Such an

²²⁵ The idea of "attribution," as discussed in cognitive psychology, seems relevant here. *See generally* SUSAN T. FISKE & SHELLEY E. TAYLOR, SOCIAL COGNITION 11 (2d ed. McGraw Hill, Inc. 1991) (1984). "Attribution theories describe people's causal analyses of or attributions about the social world. For example, an attribution can address whether someone's behavior seems to be caused by the external situation or by the person's internal disposition." *Id.* The link between attribution theory and causal reductionism seems clear.

²⁴⁷ See the discussion of the paradox of perfectionism in Shapiro, *supra* note 69, at 34-36.

attribution reduces the performance and the person to an artifact—the result of an outside causal agent displacing the natural person as the actor.²⁴⁸ These attributions blunt ascriptions of merit or desert. "Here's to Mark McGwire's . . . body-building powder of choice, androstenedione, the same substance that got Olympic shotput champion Randy Barnes banned for life."

e. More on reductive attributions: identities and roles; enhancement by reduction and reduction by enhancement (in certain senses of these terms); merit evaluations generally.

I said earlier that we often refer to persons by their roles, functions, or work. This is generally benign and even efficient. Referring to Ted Williams as "the splendid splinter" is not rightly viewed as serious reduction, but it reminds us of the parallels between reduction and positive merit evaluation. Williams is not fully reduced to his dominant aptitude and accomplishments, but much depends on who is witnessing his career. To the owners and managers of the Red Sox and some fanatic fans, he might have been nothing but a wealth-attracting instrument or chauvinistic emblem for Boston. It is highly unlikely, however, that Mr. Williams looked upon himself and his talents in that way; he was not a slave providing entertainment on command. He was and is admired as a person for his skills and efforts. If he is loosely "identified" with his skills and successes, this is still far from person-compromising reduction. Whatever we call it, being sought after and praised for certain attributes and performances is not inappropriate reduction; it is generally a desirable or even essential component of a free, civilized society. Much of what many people want in life is precisely to be recognized for ("identified with") their accomplishments or some role they assumed. They do not generally view it as a reductive identification.

Still, the entanglement between concurrent strands of exploitative reduction and appropriate recognition of merit remains and causes confusion. For example, think of the term just mentioned—"exploitation." Was Williams exploited, at least to some extent? Or is the term wholly inapt here? Some well-known persons resent public scrutiny and their loss

²⁴⁸ See Shapiro, supra note 69, at 56.

[[]I]f change comes externally, we are controlled by forces other than ourselves (assuming we remain "ourselves" at all); our victories are not ours because they are not caused by ourselves. Our performances and perhaps our identities may be reduced to their technological antecedents, and these precursors will be put in place of our performances or ourselves in a kind of synecdoche: we will be the machines and drug delivery systems that accounted for our success.

Id. (footnote omitted).

²⁴⁹ Mike Penner, 1998 Thrills & Ills: Every Captivating Sports Event of Year Seemed to Also Have Some Catch to It, L.A. TIMES, Dec. 25, 1998, at D1.

of privacy, but this is not evidence of reduction by exploitation; in fact, it may suggest the opposite, depending upon the circumstances.

Does an act of human cloning reduce the participants by exploiting them—the nuclear source, the gestational mother, the cloned offspring, or his custodial parents? ("Exploitation" is not synonymous with "mere use" or "objectification," but it is sufficiently connected so that an independent discussion is unnecessary.)

In any case, this moral metonymy, this substitution of the part for the whole, has an improper reduction/mere use/exploitation arm. But we saw that this arm is interlocked with another arm: the rewards for ability, skill, diligence, and accomplishment. The "reduction" of the Splendid Splinter reflects an all but universal ambition or fantasy. Some Nobel laureates no doubt protest—not too heatedly—the fact that the award effectively changed their names: "Nobel Laureate Marshall Artz stated in an interview that because time is quantized we all move in tiny jerks." Do the prizewinners believe they are reduced, merely used, objectified, or otherwise seriously wronged by the constant references to a single achievement or discrete body of work? Unlikely. Some may be uncomfortable that their other work is less noticed; others may be uncomfortable believing that they are valued only for their intellectual abilities. It's a tough world out there. But this is not about true, pure reduction. This is about seeing once again that reduction and the recognition of desert are dual aspects of "success." To be thought of as meritorious is enhancing, not reducing-although one could say, very loosely, that one is enhanced by reduction and reduced by some forms of enhancement. Perhaps some traits are worth being reduced to, at least in certain contexts, and at a certain price.

Being identified with certain specific functions is of course not an unadulterated good. Much depends on the nature of the function—how it is described, what its social status is, or what it reflects in ability and other merit attributes. Seeing someone as a waiter is not eo ipso an immoral reduction. Whether a waiter or anyone else is improperly reduced and used merely as a means depends on variable circumstances. Sartre's discussion of how we see a waiter (perhaps as nothing but a waiter) and how the waiter sees himself is not the only plausible description of the encounter.²⁵⁰ Being

^{2'0} See JEAN-PAUL SARTRE, BEING AND NOTHINGNESS 102-03 (Hazel E. Barnes trans., 1956). [The waiter] is playing at being a waiter in a café. . . . [He] plays with his condition in order to realize it. This obligation is not different from that which is imposed on all tradesmen. Their condition is wholly one of ceremony. The public demands of them that they realize it as a ceremony; there is the dance of the grocer, of the tailor, of the auctioneer, by which they endeavor to persuade their clientele that they are nothing but a grocer, an auctioneer, a tailor. A grocer who dreams is offensive to the buyer, because such a grocer is not wholly a grocer. . . . There are indeed many precautions to imprison a man in what he is, as if we lived in

viewed as an entertainment star valued largely for one's attractive physical appearance is an evanescent status, but while it lasts

We now need to confront the idea that clones are reduced both by their mode of creation and their treatment by others. What does it mean to see a clone as "nothing but" a clone or a "replicant" of X? If clones are indeed full-fledged human persons whose fates are not sealed by any genome, new or old, then to be nothing but a clone is to be nothing but a person. But if a clone is "imprison[ed] . . . in what he is, as if we lived in perpetual fear that he might escape from it, that he might break away and suddenly elude his condition," then we are the cause of this—not through allowing his creation but by making his existence miserable. We thus realize our own prophecy about the horrors of cloning. Whatever the clone notices on his own about his origin, its moral and social relevance will be taught to him by others. To say, in opposition, that the clone's status and condition is not simply created by how we treat him, but derives from an indelible, ineradicable feature of his existence, built into it by his origins, forever governing and debasing him, and so on, is prattle once again.

f. A summary: reduction/mere use/objectification/the passing of noncontingent bonds.

It seems clear that there are intimate (if confusing) connections among these concepts. "Mere use" seems to refer to an ongoing process rather than an outcome. All the terms can refer to learning processes and outcomes as well as matters of interpersonal behavior and their effects. To use a person merely as a means is to reduce her either to the value of specific traits—or, at most, to a global utility (as of a slave without a specialty) that nevertheless falls far short of valuing her as a person. It is also likely to reflect a pre-existing reductive attitude on the part of the user. He enters the transaction already viewing the used party as a thing—as the object behind her false appearance of personhood. Such a threshold perception invites mere use.

perpetual fear that he might escape from it, that he might break away and suddenly elude his condition.

Id. at 102.

²⁵¹ Id.

²⁵² Cf. Katz, supra note 10, at 20. "So long as the public and the lawmakers do not succumb to hysteria and popular misunderstandings regarding what it means to be a clonal individual, children born as the result of asexual reproduction should, indeed must, enjoy complete membership in the human community." Id. See generally Justine Burley & John Harris, Human Cloning and Child Welfare, 25 J. MED. ETHICS 108, 110 (1999). "The source of the harm [the results of discrimination against clones] is not the clone's parents, it is not they who do something wrong by cloning the child, rather it is other members of society who commit a moral wrong. Think of inter-racial marriage in a society hostile to mixed-race unions." Id.

Here we can again invoke the idea—and ideal—of noncontingent bonding to whomever nature delivers. All reduction and reduction-affiliated attitudes and practices reflect tension or flat inconsistency with this ideal. The more reduction we embrace and pursue, the looser the recognition of noncontingent bonds becomes. Mere use suggests that if the subject is no longer of use, we are done with it. The "bond"—a mere connection—was contingent on the subject's usefulness. In turn, this means that the subject is dealt with largely as an object. So reduction, mere use, objectification, and many related terms—all have a shared meaning element: wherever these terms rightly apply, there has been a breach of the ideal of noncontingent bonding and whatever it entails—devotion, affection, care, sacrifice of other interests, and so on. That seems to be the most basic of the concepts. If the person is not merely being used and is treated as an end in herself, then it is hard to see how she has been significantly reduced or objectified.²⁵³

But there are differences in meaning among the terms. If a lost child is cloned, one might say that the "replacement" is reduced to the favored traits of his predecessor—or simply to that predecessor, whatever his traits. The idea of being reduced to another person is a bit odd, however. One thinks of arguing that because the prior person was—or potentially was autonomous and individuated, anyone reduced to him is similarly autonomous and individuated. But reduction—particularly reduction—is not necessarily about strict identity. To say that one person is reduced to another is to suggest that the former's autonomy and individuality has been compromised—absorbed into that of the other party. Whatever degree of reduction is involved, however, it does not necessarily entail mere use or objectification. If the second child is viewed either as literally identical to the prior child or simply as a very similar successor, this does not mean that the second child is merely being used. Nor will it do to say that the second child is simply being used to satisfy some grotesque desires of his parents. For one thing, to condemn their desires

²⁵³ Still, one who *appears* to be treating her as an end in herself rather than a mere means might be doing so only from fear of the law (for example, rules governing the use of human subjects in biomedical research). He in fact regards her as a thing to be used, and she is thus an object from the user's standpoint. Is this enough to justify saying she is reduced to objecthood when in fact all protective rules have been followed and most others associated with the study do not see her as a mere tool? "Mere use" plainly has subjective and objective strands of meaning which require attention in a more extended treatment.

Compare the problem of objectification via sex. See generally Nussbaum, supra note 84, at 275-76 (criticizing Kant's view that sex reduces a person to those bodily parts inspiring the other party's participation). As usual, context may be decisive. Consider the differences between standard sexual practices and sado-masochistic ones. With the latter, at least in some forms, the risk of reduction/mere use seems elevated. See generally ROGER SCRUTON, SEXUAL DESIRE: A MORAL PHILOSOPHY OF THE EROTIC 123, 178 (1986). He states that in the most deviant form of sadism (that of De Sade himself), "the other is reduced to his body, becoming the mere instrument of my pleasure." Id. at 178.

begs the question. For another, what they desire is not that different from what parents generally want. We are not *merely using* our children simply because we intend to enjoy the benefits of their companionship.²⁵⁴ Inferring reduction from mere use generally seems to be more plausible than inferring mere use from reduction, at least in some restricted senses of "reduction."

Finally, the child's reduction, such as it is, is fully compatible with the ideal of noncontingent bonding. One might argue that the parental bond is contingent on the present child's being almost exactly like his deceased sibling—particularly if the sibling had lived well into childhood or adolescence. There is no data base on this, but it seems similar to the risks involved when a later sibling does not follow the path of an older one. Perhaps replacing a lost child is not the ideal reproductive purpose, but it falls far short of being disastrous.

g. Distinguishing reduction, mere use, and objectification from shaping children pursuant to a particular vision of their personhood; "open" and "closed" futures.

Analysis of reduction and its allied notions should not obscure a basic observation: within limits, one can properly enclose a child's world to shape her path. Indeed, again within limits, there is a duty to do so. But "shaping" entails constraints—some actions and lines of development are largely closed off, while others are opened up. Although there are major difficulties in formulating the concept of an "open" rather than a "closed" future, it suggests a general way of judging different paths of child development, at least in a liberal democratic state. Such a standard may move us to reject some of these paths because they impair certain forms of autonomy, or limit opportunities for experience, self-fulfillment, individuality, and so on. These rejected avenues of training do not necessarily amount to reduction/mere use/objectification of the child. It does not objectify a child if her parents teach her that their religion frowns on independent thought, condemns all technology as evil, and prohibits contact with nonbelievers. From a liberal democratic perspective, the child's future seems unduly closed off. From the religious perspective, however, that child's future is opened up because it makes it likelier that the child will follow the correct path. Whatever futures are closed off for the child are thus rightly closed. Of course, most parents try or at least want to close off some directions of child development.

But a mode of child rearing does not have to constitute mere use or objectification in order to be morally wrong or questionable. A

²⁵⁴ See generally Shapiro, supra note 17, at 1110-19 (critically discussing claims that certain reasons for having children are selfish or irresponsible).

reproductive genetic plan does pose risks of heavy-handedness in child rearing and thus of impairing a child's autonomy and self-fulfillment. It can also work in the *opposite* direction—depending on what senses of "autonomy" and "self-fulfillment" are used. ²⁵⁵ There are open futures and open futures. Some futures may be *too* open or unplanned—as when parents have limited expectations of their children or provide insufficient direction. Such excessive openness may itself result in undue closure of future lifepaths because of the child's inadequate training. Of course, doors to the future are likely neither to be entirely shut nor entirely open. The point here is that openness of futures may promote *or* impair autonomy, depending on the circumstances.

h. Reduction/mere use/objectification and loss of individuality and autonomy.

It seems obvious that most forms of reduction, mere use, and objectification are inconsistent with most forms of autonomy and individuality. This is the main reason reduction and related concepts are discussed so extensively here and elsewhere. However, the one set of occurrences (reduction and objectification) is not simply the negation of the other (being an autonomous individual): persons can lose individuality without being objectified and one can be reduced or objectified in the eyes of others and remain autonomous. Perhaps some opposition to cloning is based less on the risks of reduction and more on threats to autonomy and individuality, despite the close links between the former set and the latter. That is, the dominant argument should be that human cloning reduces or destroys autonomy and individuality—not just that it reduces people and merely uses them as objects. Of course, this is also consistent with maintaining that many forms of reduction, mere use, and objectification do compromise autonomy and individuality. If we are fully reduced to things, however individuated these things are, our human individuality or personhood has evaporated.

²⁵⁵ See generally McGee, supra note 107.

The parent who opts for such systematic control over the creation of a child puts faith in the ability of "genetic parenthood" to create a child that has particular traits. The more ordinary ways of parenting offer no such systematic options. The hereditary possibilities in "conventional" parenthood revolve around a mixture of similarities (traits already in our family), over which we have little control.... By contrast, genetic parenthood seems to offer a different kind of control. Here, parents could utterly abandon similarities, replacing them with choices that are reasoned in advance....

^{...} The sin is in understanding a child to be the result of systematic choices, and thus allowing genetic choices to define the child's telos....

How do we distinguish between responsible hopes and overbearing ambitions in reproductive enhancement?

Id. at 18-19.

But there is an intermediate position: a cloned offspring may in general be viewed as a person who is being *rerun*, either literally (based on misconceptions about the nature of cloning) or by how she is viewed and treated by others and by herself. She has been reduced, not to an *object*, but to another *person*. Her individuality is compromised, though her autonomy is less clearly affected: whoever she is or is perceived to be, she may still be fully in charge of her life.

This possibility of reduction to a specific person rather than an object is, as we saw, one more illustration of the conceptual difficulties we have encountered in dealing with the reduction family. Suppose one says that a cloned offspring has been created in order to be governed by the life lived during her genome's previous tour, rather than by her own independent lights. (Some think this will be the inevitable effect, whatever the purpose.) This may be a reduction to the prior person, and may constitute a loss of individuality and of autonomy, but, as suggested, it is not an obvious case of mere use or objectification. None of these processes and statuses—deindividuation, loss of autonomy, objectification, and mere use—is an all-ornothing matter. There is still no slam-dunk case against or for asexual reproduction.

To conclude this tour of reduction and its neighboring concepts, I suggest that many claims of reduction running riot are overblown. Consider McKibben's question: "What will it mean to come across a rabbit in the woods once genetically engineered 'rabbits' are widespread? Why would we have any more reverence or affection for such a rabbit than we would for a Coke bottle?"²⁵⁶

We addressed the argument-from-manufacturedness before. Evidently the engineered rabbit is viewed as a thing, sharing the trait of objecthood with Coke bottles. It has been reduced to thinghood because it was tampered with through adjustment or replication of its genome. By extension, humans who are tampered with in certain ways are things. Human cloning is a form of tampering. Therefore, human cloning should be prevented in order to prevent the conversion of persons into things.

The claim can be reconstructed and expanded: because we can select and alter a living work of nature, just as we can select raw materials and assemble an artifact, all life will become reducible to—i.e., no different from or better than—virtually any form of nonliving existence. If we can "make" rabbits as we make Coke bottles, made rabbits and Coke bottles

²⁵⁶ BILL McKibben, The End of Nature 211 (1989).

must be pretty much the same sort of thing when it comes to moral valuation. Why, then, would we value the rabbit more than the Coke bottle?

Is this a hard question? A genetically engineered rabbit is *still a rabbit*—a complex living entity. There is *no* case to be made for the idea that a genetically engineered person or animal is *eo ipso* a *mere* thing, unworthy of respect; nor is there any case for believing that a human clone is a nonperson, though perhaps more complex than the manufactured rabbit. We may view the made bunny somewhat differently from regular bunnies, but this is not obviously for the worse. If the genetically engineered rabbit can solve algebraic equations, more power to it. (If we are dealing with a transgenic rabbit-*cum-X*, much the same applies—a point briefly mentioned later.)

How we will view a germ-line-altered person may be quite different from how we will view a clone. Of course, neither should be viewed as a non-person. If the claim is that merely departing from natural reproductive processes reduces the living entity to a miserable artifact, the claim remains unproven, and probably unprovable (although not all claims made by cloning's opponents are meaningless in the sense of being unprovable one way or the other). Indeed, it remains to be cogently argued rather than simply asserted.

Reflective moral analysis is one thing; how people view each other is another, although the two obviously interact. Elemental respect for personhood is at best spotty among human beings; many of us have little or no difficulty in viewing others as disposable objects simply because they are "other" in any of several senses. Perhaps we are at risk for further incremental reduction—every time we develop a new way to revise life processes or build something that seems to behave like a person in some ways (Deep Blue, for example). Reduction diminishes us to things, while creating artifacts such as artificial intelligence mechanisms brings those artifacts up to our level. When the collision occurs, everything will be things, or everything will be persons. The distinction will no longer have much meaning.

It is hard to believe, however, that the risks of objectification will expand enormously beyond present baselines simply because of changes in the origins of human beings. In its simplest form, the argument from objectification is that implementing and perceiving such novel procreational acts will intensify the disrespect towards persons that inspired the regrettable reproductive plan in the first place. The world of Blade Runner²⁵⁷ will then arrive sooner or later, if not forthwith.

²⁵⁷ BLADE RUNNER (Warner Bros. 1982) (concerning "Replicants" who are used to serve the colonies outside Earth).

The ways in which we see and evaluate other persons may change under the impact of reproductive (and other) technologies, but such change is not necessarily for the worse. In any event, such change does not necessarily involve mere use and reduction to objecthood. Whatever reduction occurs may be partial or incomplete, and thus objectification may be partial or incomplete. 258 I not only admit, I insist that under ordinary circumstances human cloning is not the ideal for human procreation, and have outlined some of the risks, avoiding all-but-useless claims of dehumanization and the like. But it does not appear that cloning seriously risks making any existing persons worse off; it may make some persons (such as the custodial parents) better off; and, most importantly, the offspring is not harmed herself unless, from her viewpoint, her life is not worth living. There is meager support for believing this to be likely. The possibility of a mishap that does not result in fetal death but a life of immense pain and suffering is remote. For some, this bare possibility is enough to justify a ban on human cloning. This view is likely to be founded partly on the idea that the damaged being could not consent to the risk of such an outcome. Yet it was her only chance for existence. Lack of opportunity to consent is the wrong normative hook to invoke here.

The preceding discussion of reduction focused on conceptual links and differences in how we appraise persons. The next section refers to a body of theory and data or person perception that might aid the assessment of reduction risks. The reduction team gets one more at-bat.

C. THE REDUCTION OF REDUCTION: "PERSON PERCEPTION" AND CLAIMS OF INAPPROPRIATE REDUCTION

1. In General

It is easy to identify historical cases of full or partial human reduction, mere use, or objectification: slavery, rape, coerced human experimentation, and so on. But other purported examples are strongly contested: there is no consensus on whether surrogacy, prostitution, participation in randomized clinical trials, and pornographic modeling represent full or even partial reduction. The lack of consensus seems attributable both to gaps in what we know empirically, and—of at least equal importance—to conceptual confusion about the meanings of "reduction" and allied terms. We nevertheless have to ask just how assisted reproduction constitutes or produces reduction, mere use, and hence objectification, if it does at all.

²⁵⁸ See Margaret Jane Radin, Market-Inalienability, 100 HARV. L. REV. 1849, 1933-36 (1987); MARGARET JANE RADIN, CONTESTED COMMODITIES 102-14 (1996).

As we saw, the central reductive notion is that a person's value may improperly be based on or identified with particular traits that are useful to others, or with her overall usefulness given all her traits, if no specific ones are emphasized. Supposed examples are common in the relevant bodies of literature. Some say a surrogate mother's value is reduced to her service as a gestation machine. Or, she may be perceived from the start as nothing but a womb, which thus attracts bidders for its use. Prostitution is said to reduce a woman's total value to her usefulness in satisfying sexual urges. Similarly, gamete donors of either sex are simply considered sources of "biologics" to aid reproduction for commercial profit, although women are used more than men are since extracting ova is not much like collecting sperm. Many hold that the enhancement of particular traits through drugs, gene therapy, or germ line engineering reduces the value of persons to the particular traits that are enhanced. If these examples are sound, they involve no "antireductionist" vector for positive valuation; the uses exhaust the person's value, in any sense of "value."

Despite my earlier attacks on such views, arguments from reduction are worth considering. I am not simply dismissing claims of improper reduction attributable to assisted reproduction. Indeed, because of the deficiencies in the literature, I am trying to make the best case I can for this ground of opposition to it, and I think there are plenty of technological uses that pose serious threats of human reduction.²⁵⁹ The very focus on traits—with the goal of precision in identifying and controlling them rather than leaving matters to chance—may elevate the perceived importance of any given trait and thus alter how we rate each other. We have already seen the deep irony here: our individual versions of important traits distinguish us from other persons—they keep us all from being reduced to some set of fungible human entities. Yet attention to these traits is also the foundation for fears of reduction.

For example, think of the self-view of a child (usually male) whose parents insist on giving him human growth hormone. Perhaps he will be likely to overestimate the moral worth of height and physical stature generally, and not just its practical utility in getting jobs and dates, or even in earning simple respect. Perhaps he will also see himself as a "construct," built to satisfy his parents and an irrational world. (Recall the argument that building artifacts requires assembly by tools, as does human

²⁵⁹ Cf. Philip J. Hilts, Agency Faults a U.C.L.A. Study for Suffering of Mental Patients, N.Y. TIMES, Mar. 10, 1994, at A1 (discussing how researchers are said to have pursued study of relapse by withholding medication for prodromal symptoms without informed consent of subjects or their proxies).

See generally Shapiro, supra note 69, at 92-93, 100-06 (discussing possible effects from the directed change of traits). Cf. David B. Allen & Norman C. Fost, Growth Hormone Therapy for Short Stature: Panacea or Pandora's box, 117 J. PEDIATRICS 16, 19 (1990) ("For both children [those who are deficient in growth hormone and those who are not]... dependence on exogenous hormones for growth sends the same message: shortness (and implicitly each of them) is bad.").

cloning; therefore cloned offspring are, or are like, artifacts.) Moreover, our predispositions to reduce may be strengthened by the revelations of biological psychiatry and molecular genetics, which not only confirm the general idea that human thought and behavior are linked to physical processes (which we already knew) but offers increasing, vivid precision about just what those causes are. "For the first time, we humans are reducing ourselves down to DNA sequences."

Arguments from reduction are thus at least colorable where trait enhancement or selection is undertaken, a process that includes asexual reproduction. Once cloning becomes practicable, there is no way to avoid *some* enhanced emphasis on specific traits in evaluating each other. It is thus not off the wall to argue for a complete ban: a regime that permits some cloning but prohibits those that seek to "renew" particular traits of successful persons (the usual Mozart and Michael Jordan examples) may, by the very fact of its less-than-total prohibition, unduly emphasize the social importance of merit and wealth-attracting attributes.

The qualification "unduly" in the preceding sentence immediately suggests one of the significant weaknesses of the argument from reduction: its frequent all-or-nothing formulations and the resulting tendency of irate commentators to announce, in effect, that "not a single clone shall pass this way." Such polar rhetoric reflects and inspires conclusory views about how we see persons—either as persons or objects, with nothing in between. Some observers assert that a dead pregnant woman who is kept on life support in order to bring her fetus to term is reduced to a "flowerpot." But

²⁶¹ Nicholas Wade, *The Struggle to Decipher Human Genes*, N.Y. TIMES, Mar. 10, 1998, at F1 (quoting scientist Robert Weinberg). Dr. Robert Weinberg is not speaking literally, nor is he endorsing some literal form of reduction.

[&]quot;For the first time, we humans are reducing ourselves down to DNA sequences," said Dr. Robert Weinberg [a cancer biologist]. "We're not talking about how butterflies fly or trees grow; we are dealing here with the mystery of the human spirit. Analysis of these sequences will not define the essence of humanity, but aspects of human beings that have hitherto been as awe-inspiring will be reduced to rather banal biochemical explanations, and that's not altogether heartening—maybe the mystery is good."

Id. But the "mystery" of human character is not going to disappear with cloning.

Hilde Lindemann Nelson, Dethroning Choice: Analogy, Personhood, and the New Reproductive Technologies, 23 J. Law, Med. & Ethics 129, 134 (1995). "To what extent . . . should the common good of refusing to perpetuate images of women as maternal backgrounds or flowerpots constrain a prospective father's preference for sustaining a postmortem pregnancy for more than a few days?" Id. This, of course, is simply a reference to "images" and I may be making too much of it. Still, it is an image—a false one—of total reduction, even if meant metaphorically. It is also an unfortunate one. By its noisy omission, it expresses contempt for a countervailing value—the continued life of the fetus and its development into a child. It also downgrades the father's interests in reproduction. And it is difficult to see how the common good is promoted by keeping secret the fact that only women gestate fetuses, and by objecting to images that convey this information. The author does not even bother to ask what the dead woman's prior preferences might have been, and barely even alludes to the idea when presenting, apparently for disapproval, a suggestion by Robert Veatch that a deceased pregnant woman who carries an organ donation card has impliedly consented to sustaining her pregnancy after death. See id. at 129.

it is misleading to view certain features of a transaction in isolation, drawing seriously incomplete analogies. A standard example is observing the exchange of money for children in surrogacy, and concluding that the child is (by definition, or by a perceptual process leading to some form of learning?) *merely* an object of commerce. This clumsy argument trades on a grossly incomplete process of perception and comparison. The result is often a non sequitur:

[One's sense of dignity or moral worth] will be reduced by treating the human body as an amalgamation of parts rather than as a person. . . .

. . . .

If dignity is reduced when society treats individuals as collections of body parts, then dignity is similarly reduced when science is allowed to create clones of existing people. The view individuals have of themselves as potential clones, as well as the view society has of them if cloned, echoes the idea that people will feel commodified if they alienate their bodies.²⁶³

Well, you can say it. Who is "alienating" what? How does cloning automatically treat the human body as an amalgamation of parts rather than as a person? These matters are left unexplained for a good reason: There are no credible explanations. We are talking about traits, not body parts. There is no legitimate inference from, say, reductionist tendencies amplified by the practice of organ transplantation to reductionist tendencies amplified by cloning as such. (Cloning to assure a supply of compatible body parts is another matter that can be dealt with through specific regulatory schemes.) Cloning persons to produce humans to be used solely as medicine boxes is too easy to knock down and is not the prime issue. The claim is not supported simply by setting it in ink on paper. One must look to see and register as much as one reasonably can; it is not enough to look only for the features one is determined to find. You don't have to look too hard to see that the "flower pot"—the dead pregnant woman—is growing a human being, not a plant.

Our general question, then, is: What do we, will we, or should we see when we look at human cloning? How can we tell if we are seeing something inappropriately? If we can tell, how do we revise what we see—if we should do so at all?

²⁶³ Amer, supra note 9, at 1675-76. See also Kolehmainen, supra note 23, at 561.

Cloning would encourage the commodification of humans. . . . Cloning would turn procreation into a manufacturing process, where human characteristics become added options and children, objects of deliberate design. . . . It produces no benefits and it undermines the very basis of our established notions of human individuality and dignity.

Id. No extended arguments are offered in support of these conclusions. Those who wish to clone as part of family formation are not likely to agree that the satisfaction of their preferences is not a benefit, at least to them.

2. Person Perception and Stereotyping

a. In general.

How do we perceive and value persons? What does it mean to say that we value the "total person," rather than localizing her value in a restricted set of traits, or in her global utility resting on an amalgam of traits? What is a total person? Can we even see a total person, rather than an accumulation of traits? Would we want to? Once again, we do not seek the company of disembodied "total" entities, but of particular persons with particular attributes. Without a focus on particular traits, all persons would be fungible for purposes of interpersonal relationships. Persons are fungible only (if anywhere) at the higher levels of generality dealt with in political theory: for example, we are all equally entitled not to be denied the right to vote or speak freely on racial or ethnic grounds. But this sort of fungibility is not called that: it concerns political equality based on personhood, and does not presuppose interchangeability. It presupposes the opposite: if we were all the same, only one (or none) of us would need to vote.

The recognition of these general "personhood rights" is fully consistent with the protection of noncontingent bonding with any particular child we receive from the reproductive lottery. The ideal of noncontingent bonding is, in important respects, parallel to the significance of threshold personhood in various moral and political theories. Just as we are obliged to let a person vote just because she is a person, we each are obliged to bond with our respective children just because they are our children, regardless of their attributes. Of course, we bond to specific children and do not regard them as interchangeable with others. Here, as in all walks of life, we interact with each other both on the basis of our status as persons and as particular persons. We certainly see persons as persons when we assign voting rights in general elections. Perhaps we also see particular "total" persons as aggregations of their main distinguishing traits, rather

²⁵⁴ Cf. JONAS, supra note 51, at 161.

[[]I]t is no less an exaggeration of the cerebral aspect as it was of the conscious soul, to deny the extra-cerebral body its essential share in the identity of the person. The body is as uniquely the body of this brain and no other, as the brain is uniquely the brain of this body and no other. What is under the brain's central control, the bodily total, is as individual, as much "myself," as singular to my identity (fingerprints!), as noninterchangeable, as the controlling (and reciprocally controlled) brain itself. My identity is the identity of the whole organism, even if the higher functions of personhood are seated in the brain. How else could a man love a woman and not merely her brains? How else could we lose ourselves in the aspect of a face? Be touched by the delicacy of a frame? It's this person's, and no one else's. Therefore, the body of the comatose, so long as—even with the help of art—it still breathes, pulses, and functions otherwise, must still be considered a residual continuance of the subject that loved and was loved

Id.

²⁶⁵ Cf. Nussbaum, supra note 84, at 262 n.19.

than of those traits that simply mark them as persons. We certainly see particular traits in particular persons. How do these varieties of perception relate to reduction and valuation?

Although I do not press this inquiry very far, I refer now-with standard reservations²⁶⁶—to the cognitive psychology literature on "person perception," and the related concepts of "schemas," "stereotyping," and "attribution" without fully investigating these ideas or trying to compare or unify them.

Stereotyping in particular seems to be viewed as a constitutive element of person perception, and the use of "role schemas" seems to be one path toward stereotyping. 267 As one source suggests:

The notion that stereotyping is the focal or central process in the perception of others has gained considerable impetus from a variety of investigations . . . which have shown that judges either become less accurate with increasing information, or that they tend to disregard most of the potentially useful information, relying instead upon two or at most three of the items available from the mass at hand.268

The authors add: "[S]tereotyping is one of the processes which assists in reducing or editing sensory input into meaningful wholes."269 It is "a central process in cognition."270

²⁵⁵ The reservations concern two things: first, I have no expertise in cognitive science—either in its conceptual structure or its empirical methods; second, this and other behavioral or social sciences, even when they generate specific metrical findings, can only weakly predict or explain matters of complex human behavior.

I thus assume for the sake of argument that the body of material I refer to has a reasonably coherent structure and that its methods are consistent with behavioral science standards. I similarly assume that many of its empirical claims are reasonably accurate.

267 See generally FISKE & TAYLOR, supra note 246, at 119.

A social role is the set of behaviors expected of a person in a particular social position, so a role schema is the cognitive structure that organizes one's knowledge about those appropriate behaviors. Role schemas function as do other kinds of schemas, to influence people's understanding of schema-relevant information. [The authors then distinguish achieved roles acquired by effort and ascribed roles acquired at birth (for example, race), or "automatically," as by aging.]

^{...} Role schemas based on such ascribed roles are one plausible way to account for stereotyping. . . . [S]tereotypes are "nouns that cut slices"; they are the cognitive culprits in prejudice and discrimination.

Id. The authors go on to discuss event schemas ("scripts"), which "describe appropriate sequences of events in well-known situations." Id. The term "prototype" seems to be an alternative term for "schema." See generally DAVID J. SCHNEIDER ET AL., PERSON PERCEPTION 166-69, 267-69 (2d ed. 1979); PERSONALITY AND PERSON PERCEPTION ACROSS CULTURES (Yueh-Ting Lee et al. eds., 1999).

^{*}S ROBERT A. STEWART ET AL., PERSON PERCEPTION AND STEREOTYPING 14-15 (1979) (citations

²⁶⁹ Id. at 5. The authors also observe: "[S]tereotyping is composed of two distinctive, time ordered phases: perception or recognition, followed by judgement or evaluation which, depending upon circumstances, may instigate overt behaviour." Id. at 28.

[[]A] complex stimulus, consisting of many parts, is translated into a single abstract rating which can be used to effect meaningful comparisons between entities, which (or who) differ from one another in ways which are subjective or difficult to quantify. Thus a complex

The idea of person perception through stereotyping also applies—not necessarily in the same ways—to self-perception and self-attribution, and these topics are part of a full assessment of reductive processes resulting in objectification.²⁷¹

One would think there is nothing remarkable in these asserted insights, given the long-held belief that our perceptual processes generally involve filtering of various sorts—something we begin to learn at birth, if not before. But the idea that we perceive persons through an internal editorial process that filters out much of the "data" barrage our senses provide is a multi-edged weapon in our context. On the one hand, it seems to support the fear that human cloning will lead to accelerated reduction. After all, if we already perceive and value each other—morally and economically—by filtering and stereotyping in order to create order, cloning may accelerate our descent down the steep, greasy slope toward full objectification. Why quicken our descent by offering still more opportunities for stereotyping through excessive attention to the specific traits that inspire any given decision to clone?

Even more alarming, suppose "that stereotypes are capable of being systematically adjusted in accordance with the prevailing circumstances" (contrary to "the notion that stereotypes are inherently rigid").²⁷² Given a

physical or behavioural reality is translated into a simple psychological rating which represents the entity as a whole.

Id. at 30. The authors also suggest the possibility that stereotyping may be "fine grained" rather than "categorical." Id. at 69-70. The former would seem to be simply more refined categorical thinking, so the distinction turns on how "large" or "small" the categories are. For purposes of comparison, the authors derive a definition of stereotyping from the then-existing literature:

From the traditional vantage point . . . stereotyping is conceived to be a form of categorising behaviour—in which a single characteristic or label serves to elicit a set of expectations or attributions which are (1) too simple to describe accurately the class of person in question (or any of its members) and, at the same time, are (2) too broadly generalised to individuals to have more than occasional validity. Additionally, it is sometimes assumed [an assumption that the authors criticise] that stereotypes are (3) particularly rigid and resistant to change.

Id. at 2 (citations omitted). See also SCHNEIDER ET AL., supra note 267, at 15.

Our impressions of another person are also a form of stereotype; we abstract certain aspects of his or her behavior, organize them around certain dispositions, and develop a picture of the person. This process permits the development of meaning in our experience of other persons. It can also restrict our awareness of some of another's behavior. Group and individual stereotypes do create stability and meaning, but they may well do it at the risk of inaccuracy.

Id.

²⁷⁰ STEWART ET AL., *supra* note 268, at 5 (emphasis omitted). The authors later characterize their efforts by saying "that the most enduring and meaningful results from investigations of person perception centre, not on the correct or valid evaluation of target persons (i.e., the unachieved ideal), but rather on the cognitive organisation and processes which the subjects employ in arriving at a judgement." *Id.* at 64.

²⁷¹ See SCHNEIDER ET AL., supra note 267, at 86-116.

²⁷² STEWART ET AL., supra note 268, at 7-8. Still, the idea of "cognitive inertia" remains an important one. See HOWARD MARGOLIS, PATTERNS, THINKING, AND COGNITION: A THEORY OF JUDGMENT 117 (1987) (referring to habitual and deeply entrenched thought patterns). See also Scott Altman, (Com)modifying Experience, 65 S. CAL. L. REV. 293, 326-27 (1991) (discussing belief

few more years of accelerating reproductive innovation, humanity's descent from personhood to objecthood may be complete, despite the current strength of the "stereotypical" view of humans as individual, autonomous persons. Perhaps this is just what should be expected, given the confusion caused when we confront processes and entities that do not track well within our conceptual systems, and given the perceived parallels between manipulation of life and the assembly of artifacts. For some observers, it is a small step to import objectification into their description—and their very definition of assisted reproductive technologies.

On the other hand, if person perception necessarily rests on stereotyping—perhaps a kind of heuristic process²⁷³—and we still haven't completely gone to hell after all these years, does assisted reproduction really change anything? If we indeed have more going for us in terms of mental functioning than most other forms of life and most (other?) machines, we will perceive this. If we remain uncomfortable knowing of parallels between human life, other life forms, and machines, we will either stress and stretch the differences between ourselves and them, or decide that these parallels should have little or no effect on how we treat each other as persons. Just because we come to believe that animals "think" in some plausible sense does not entail that we will (or should) treat each other as we generally treat animals. Perhaps the main effect will be to improve our treatment of animals.

perseverance and the maintenance of false beliefs despite evidence to the contrary—issues that are relevant to the assimilation of novel experiences into existing category systems).

⁷³ There is a conceptual link between reduction, stereotyping, schema formation, "satisficing," and positive valuation. See generally David M. Grether et al., The Irrelevance of Information Overload: An Analysis of Search and Disclosure, 59 S. CAL. L. REV. 277, 301 (1986). "[T]he information overload idea—that too much information causes dysfunction—is a myth. Instead, when choice sets become large or choice tasks complex relative to consumers' time or skill, consumers satisfice rather than optimize." Id. For the classic account of satisficing and "bounded rationality," see HERBERT SIMON, ADMINISTRATIVE BEHAVIOR: A STUDY OF DECISION-MAKING PROCESSES IN ADMINISTRATIVE ORGANIZATIONS xxviii-xxxi (3d ed. 1976). The idea of satisficing seems similar to that of "cognitive miserliness," as used in the social cognition literature. See, e.g., FISKE & TAYLOR, supra note 246, at 13 ("The idea is that people are limited in their capacity to process information, so they take shortcuts whenever they can."). The term "heuristic," to the extent it overlaps "bounded rationality" and "satisficing," might also be applicable here. See generally Bruce Bower, Simple Minds, Smart Choices: For Sweet Decisions, Mix a Dash of Knowledge with a Cup of Ignorance, 155 SCI. NEWS 348, 348 (1999) (discussing research on heuristics). The comparison can be pressed too far, however: Our minds learn to make coherent perception possible through "filtering," without our conscious control. But heuristics significantly covers the conscious selection of decision strategies. Such conscious selection of heuristics may bear a structural parallel to that of unconscious perceptual filtering, but both processes must be examined as separate phenomena. On the distinction between algorithms and heuristics, see CHURCHLAND, supra note 218, at 111-12.

The notion that information overload is a myth seems to rest on a misunderstanding of the content of the supposed myth. Few claim that having an abundance of information forecloses efficient decision making. The issue is the psychic burden of having a large range of possibly feasible choices—for example, regret over lost opportunities, demoralization over having to make difficult comparisons and calculations, a (probably mistaken) sense of limited time for optimal choice, and so on.

The malleability of stereotypes may be evidence of our ability to make rational satisficing²⁷⁴ adjustments when faced with changing circumstances. (It might even be evidence of advances in our moral sensibilities, although this plainly cuts two ways.) Stereotype flexibility is neutral as far as human valuation is concerned. If we discover that our ways of seeing persons (as in seeing a woman as nothing but her childbearing capacities) become overly reductive because of new reproductive practices, these ways of perceiving may be alterable through new educative experiences. The processes of asexual reproduction and other forms of assisted reproduction do not *force* us to see anything about the nature of human beings in any particular way—nor do they set up irresistible dispositions. One of the chief deficiencies of the cloning literature is that it seems to assume otherwise: talk about inherent/intrinsic harms-in-themselves seems to entail that we *must* see things certain ways. The very force of the transactions under scrutiny has an effect on us and there is no escape, or so it is thought.

Again, this is not to say that human cloning is risk free: I have already mentioned some dangers of genetic planning and of cloning's displacement of a relatively coherent kinship system. But whatever it is that we are forced or predisposed to see when looking at cloning or other reproductive technologies, it cannot itself be a direct perception of mere use or objectification. Moreover, despite the malleability of stereotypes, it is hard to dislodge long-standing ways of thinking—including both respect and disrespect for persons. Again, this cuts two ways. There is "cognitive inertia" that helps preserve respect for personhood—but if such inertia is overcome, it is hard to reverse the disrespect for personhood that may be induced by observing and participating in certain practices. In any case, the malleability of schemas, stereotypes, and attributions is a matter of central importance in assessing reductive processes associated with the use of innovative technologies.²⁷⁵

b. Restating the link between reduction and positive valuation in light of ideas about person perception.

We encountered this connection earlier.²⁷⁶ Think of questions such as "Why do you like this person?" or "Why do you love your spouse?" or "Why did you marry me?" Leaving aside one-liners such as "hormones"

n6 See supra Parts V.B.4, VI.B.4.a.

See supra text accompanying note 273.

to the formation of scientific hypothesis—although the former and latter are used and "(dis)confirmed" in quite different ways. See, e.g., FISKE & TAYLOR, supra note 246, at 150. "Well-developed schemas generally resist change and can even persist in the face of disconfirming evidence." Id. On the other hand, "[h]aving an incorrect schema is costly, so it behooves the social perceiver to be alert to the possibility of being wrong Schemas vary in their potential for change; some are more easily disconfirmed than others" Id. at 152 (citations omitted) (discussing models of schema change).

(causal/attributional reduction) or "her hair" (reduction to a trait), we may not know how to respond. We are likely to intuitively feel that to answer specifically is to reduce. References to particular traits may seem to trivialize or lessen the value of the described party. Although we do not generally like or love others for no reason at all, we usually try to avoid attributing our bond with another to a small set of identifiable characteristics. Doing so seems to diminish the loved person and invites additional impertinent questions, inviting further reduction: "What if she had trait Y instead of trait X?" "Will you still love her when she's sixty-five?" As McCormick says, "Cloning would tempt people to try to create humans with certain physical or intellectual characteristics . . . elevating mere aspects of being human above the 'beautiful whole that is the human person."

What beautiful whole? We do not devote ourselves to other persons on the basis of some incomprehensible totality: even "gestalt" judgments seem trait-connected, although the traits may be perceived indistinctly or nonconsciously. In our better moments we may try to avoid selecting each other purely on the basis of particular traits such as physical attractiveness, sexual prowess, wealth, family, and so on. However, we do not see people as featureless wraiths inhabiting a dimensionless world. In fact, attaching ourselves to persons without noticing specific traits would seem to be an acme of objectification, subtracting all distinguishing attributes, rendering the persons identical and thus interchangeable. (If there are any traitless beings at all, there is only One.) This is not how we select our mates, friends or business associates. To the extent that the matter is effable at all, it seems to be a blend of seeing the person as a person; as a total particular person; and, by fixing only on certain traits, as a distinctive separate person. This secular trinity seems to capture at least part of the idea of person

²⁷⁷ Niebuhr, supra note 55 (quoting Father Richard McCormick).

²⁷⁸ See SCHNEIDER ET AL., supra note 267, at 153 (discussing the work of Asch). "Asch preferred a second model [of 'impression formation'], which states that the traits are immediately organized to form a whole, or Gestalt." Id. The authors go on to discuss hierarchies of traits—whether they are more central or peripheral—and how traits are interrelated. See id. at 153-61. The trait-connectedness of Gestalt formulations is also suggested by the commentaries on resolving "inconsistencies" when "different kinds of information" are combined "to produce an overall impression The relational tendency hypothesis suggests that traits are combined to produce a meaningful Gestalt and that this Gestalt arises from the unique meaning relationships among the traits." Id. at 175. See also the discussion of "resolution of contradictory information." Id. at 175-80. Some commentators contrast "elemental" and "holistic" frameworks in social cognition, viewing Gestalt psychology as "[drawing] on these initial holistic insights." FISKE & TAYLOR, supra note 246, at 4 (citations omitted). Again, one thinks of "lumpers and splitters": "Although both the elemental and holistic groups drew on introspections, Gestalt psychologists focused on people's experience of dynamic wholes, and elementalists focused on the expert's ability to break the whole into pieces." Id.

Despite being trait-connected, however, holistic perception theory is not necessarily simply "additive." As Fiske & Taylor point out, "[c]ontext provides a different Gestalt or configuration that alters the meaning of the individual elements. Hence, the whole is more than the simple combination of its parts." *Id.* at 99.

perception. In the last phase (these "phases" are not necessarily chronological), we reduce by taking the part—specific traits—for the whole; in the first phase, we erase the whole by omitting all but the most general traits (bipedal, capacity to communicate via language, and so on). As for the middle phase—seeing total particular persons—it seems simply to be a bridge from the most abstract to the less abstract. We cannot value persons as separate individuals without attending to their traits; but to attend to traits risks reduction—trivialization of someone's personhood—even if the traits are favorable. The very process that reduces is, as we saw, also (partly) constitutive of morally desirable valuation. What remains to be done—but not in this Article—is to chart the variables that distinguish an unacceptable reductive process in our perception of persons from an acceptable and indeed essential aspect of valuing them.

Finally, in person perception, much depends on the vividness or clarity²⁷⁹ with which we see particular traits, and this is a function of many variables—cultural, physiological, and local-contextual. The overall salience of given traits clearly changes when we shift from one sort of interaction to another: what we look for and see in a mate is not entirely the same as what we look for and see in a business associate—or in a surrogate mother or nuclear source for cloning. More importantly, what we see and look for in a newborn delivered by nature's lottery is not entirely the same as what we see and look for in a clone or a child born of a germ line engineering project. For our purposes, no aspect of assisted reproduction is more central than this. Although all of us benignly reduce others—and ourselves-in unavoidable ways, we rarely dwell on it. We may on occasion criticize our friends' bad habits: "Don't select your spouse solely on the basis of looks, class standing, wealth," and so on. But few complain about referring to someone as "Galen the physician" or "Moshe the Rabbi."280 These are methods of quick identification and communication, and if they are reductive, they are ordinarily of little consequence. To borrow from Kant, they are not merely reductive.

What assisted reproduction may do, then, is place various attributes in relief by dealing with them in unusual ways—for example, hiring a surrogate's womb, or purchasing her ova, or altering the traits of her

Yet another important area of empirical research in cognitive psychology concerns the role of "salience" in impression formation generally and person perception in particular. See SCHNEIDER ET AL., supra note 267, at 242-46; FISKE & TAYLOR, supra note 246, at 145. "The category that sets a person apart from others in context is especially likely to cue a schema For example, the only woman in an all-male firm is more likely to be gender-stereotyped than is a woman in a more balanced environment . . . "Id. (citations omitted). The authors also discuss the role of vividness in salience, but state that "there is little empirical evidence for vividness effects." Id. at 255 (citation omitted). "Salience," "vividness," and "clarity," seem to be linked but not interchangeable ideas.

²⁸⁰ "[Some] role schemas are customarily provided by labels introduced early ('This is my boss,' 'This is Jennifer; she's a doctor.')." FISKE & TAYLOR, *supra* note 246, at 126.

children via the germ line. Similarly, performance enhancement on living persons entails centering our attention on specific attributes, as when human growth hormone or steroids are used for physical augmentation. It is one thing to satisfice by using schemas in our perceptual processes—a virtual inevitability given our cognitive structures. This is an integral part of our daily perceptions of things and of persons and their actions. It is something else to *compound* these inevitable reduction-like processes by doing things—cloning, enhancement—which are not inevitabilities or necessities. We are stuck with processes necessary for perceiving, thinking, and acting—and these processes are both dangerous and essential to the beneficial use of our minds; we are not similarly stuck with assisted reproduction. We can choose to disavow it in some forms in order to avert its dangers.

D. REDUCTION AND CLONING

1. In General: Acceptable Motivations, Purposes, and Goals; Remarks on Moral Theory²⁸¹

In certain respects, the idea of reduction allows us to sharply distinguish cloning from all other forms of assisted reproduction, save those accompanied by germ line engineering. In stressing this distinction, the adverse commentary on cloning is at least partially correct: the defenders of cloning "overlump" it as just an "extension of existing techniques for assisting reproduction and determining the genetic makeup of children." But cloning is not simply another form of fertility control.

Analysis of the motivations for given acts of cloning suggests some incremental risk of reduction; cloning opponents can probably establish this much. The explanation has already been stressed: the very purpose of cloning may rest on goals and expectations concerning specific traits or—mistakenly—notions of a shared/continuous identity attached to a common genome. Most of us act in some way to implement our plans—if indeed we can call them plans rather than just vague hopes. Failure to do so may be taken as a sign of sloth, weakness of will, or mental impairment. To realize reproductive purposes that focus on replicating specific traits or of fulfilling specific hopes risks intrusions on the child's development into an individual autonomous person with authentic preferences. This in turn risks problems of weakened self-image and independence and their dysfunctional effects.

²⁸¹ For extended commentary on the idea of "illicit motivations," see Shapiro, *supra* note 17, at 1110-19 *passim*.

²⁸² Kass, *supra* note 13, at 20. I assume the reference is to preconception and prenatal investigation and testing, not germ line engineering.

So, cloning and germ line engineering may enlarge whatever risks of reduction are created by assisted reproduction. Both cloning and germ line engineering are meant to effect precision in assuring the nature of the next generation's genomes. Both can fairly be said to transform the nature of reproduction in important respects, and our perceptions of it. We move from accepting nature's dictates to "building" something to suit certain specifications of the forthcoming genome—and of the forthcoming person—however unrealistic the expectations concerning the clone's life may be.

The question, then, is whether this alteration of the nature and perception of human reproduction is wrong, not because it is intrinsically evil, but because it unduly enhances risks. What risks? We have already encountered them. One risk is to the ideal of noncontingent bonding to our children, mates, and each other. A related risk is the possibility of fraying our ideals of autonomy and individuality and of respect for persons generally. A third intertwined risk is that of reduction/mere use/objectification.

The degree to which these risks are enhanced should be the prime criterion for determining whether a given motivation for cloning—or any form of reduction—is illicit or unacceptable. (Once again, the articulation of these risks captures the only meaning I can assign to arguments that cloning is either intrinsically or instrumentally evil.)

Concentrating on such incremental risks might be attacked to the degree that it rests on vulnerable moral theories embracing autonomy as self-directed independence. Nevertheless, responding to such an attack by defending the moral status of autonomy or any other value is not required here. I am simply stating a hypothetical imperative: *if* we wish to preserve certain norms and the behaviors they contemplate, then we should consider whether our practices and institutions put them at risk. The value of preserving these norms is a discussion that belongs elsewhere.

This hypothetical imperative comprehends a wide variety of values, including respect for persons, acting justly and fairly toward them, and preserving their individuality and autonomy. All of these values count in the moral evaluation of human cloning. They count even if our hypothetical imperative is implanted into a consequentialist framework: for example, causing injustice is not barred from being considered as a grave moral harm or consequence. Resting on notions of inherent evil is thus not the only path to vindicating basic values. "Utilitarianism"—a swear word for some—is a particular form of consequentialist moral theory and is, for most of its partisans, a broad and protean moral account of the good. The

²⁸³ Recall the utilitarianism of rights, *supra* note 87.

idea that it is exclusively about wealth maximization via market exchange, and that it fails to attend to matters of justice, fairness, and duty *at all* is incorrect. Whether it attends to them in the best way is another question. A utilitarian may resolve a conflict between the overall demands of maximizing the good (however defined) and a particular claim of injustice in one way, and a Kantian in another.

This is not to say that all arguments based on intrinsic wrong are incorrect. Sooner or later every moral theory, including utilitarianism, stops on at least one criterion and thus presupposes that something has intrinsic moral value. Certain forms of human cloning are indeed intrinsically wrong—if anything is. Consider cloning solely to provide "spare parts" for transplantation, allowing the offspring to develop into a full-fledged person who is then dismembered. (The permissibility of stifling the cognitive development of the cloned offspring so that he will never satisfy the philosophical standard of personhood is another question.²⁸⁴) But ascriptions of such intrinsic wrong hardly apply across the board to all forms of cloning. Talking about violations of our "given nature" gets us nowhere, despite its limited service in securing our attention. Our given nature includes the capacity and inclination to order and subdue the world to suit our purposes. If behavioral biologists and evolutionary theorists are right (they are), it also includes the drive to expel or massacre others. No serious commentator on applied technology thinks that "can' implies 'ought,'" but one has to do much more than rail against cloning by invoking the "givenness" of "our nature." There may be many things that we are bound to do or avoid because of our nature, but assisted reproduction isn't one of them: no argument from given nature requires or prohibits the pursuit of assisted reproduction.

To continue this inquiry into incremental risks to important norms, one must do what Kass disdains:²⁸⁵ examine the nature of cloning plans by

Id. (footnote omitted).

²⁸⁴ See generally Michael Tooley, The Moral Status of the Cloning of Humans, in HUMAN CLONING, supra note 10, at 65, 91-92.

²⁸⁵ See Kass, supra note 13, at 21 (complaining of cloning being "reduced to a matter of motives and intentions, rights and freedoms, benefits and harms, or even means and ends"). Contrast this with Nelson, supra note 165, at 724.

In looking at the ways in which cloning might complicate the jobs families undertake in completing the reproduction of persons, I have found a good deal that troubles me, but nothing that quite counts as an ethical smoking pistol—no evident and inescapable violation of accepted rights, no unambiguous and grave harm inevitably attached to human cloning as such. What we have, instead, are a number of worrisome scenarios, and many concerns that need to be carefully balanced. For if there is no clear ethical barrier uniformly outraged by human cloning, so too there seems to me no plausible case that developing and disseminating human cloning technologies is demanded by any unmistakable moral imperative.

addressing to their motivations, purposes, goals, and circumstances; and by relating them to near- and long-term consequences.

Before taking up some examples, more should be said about the idea of the moral illicitness of reproductive aims: ²⁸⁶ although we can easily identify cases of plainly unacceptable rationales, there is generally no sharp gulf between favored and disfavored reproductive purposes. Indeed, the two often run in parallel. ²⁸⁷ Consider, for example, the usual motivations of persons using in vitro fertilization ("IVF"). It is expensive, ²⁸⁸ yet many not-so-wealthy couples enthusiastically pursue it. They are sometimes criticized for being "selfish" or "obsessive" and for reducing their children to products expected to yield a handsome return on investment. ²⁸⁹ They are said to want children too much. How much is that? Parents who have spent small fortunes and mothers who have been jabbed and prodded may hope with special fervor for a wonderful child. They may also be thrilled with whatever child they receive. One can live a meaningful life without ever reproducing or adopting children, but this concession does not provide a measure for excessiveness in wanting children.

It is thus inappropriate to regard investment in IVF as constituting or causing reduction by commodification—i.e., objectification in a commercial context. If the would-be parents intensely want their child to develop into the best possible person, their desires are not much different from what most parents want.

There are, of course, degrees of fervency that edge into fanaticism. Extravagant hopes can lead to inappropriate forms of nurture. This risk might be marginally increased by IVF. However, there is no qualitative difference in kind between the hopes and expectations of parents who had children the regular way and those who used IVF. (I know of no empirical studies to the contrary.) If IVF parents are selfish, so are all persons who want children, for whatever reason.

We can certainly describe extreme cases of illicit (or silly) motivations, such as creating a clone who develops into a person while being maintained for spare parts. There is little to be said for cloning Sgt. Alvin York with or without over his concurrence in order to produce armies of Alvins who, after victory, will be disposed of as public dangers or kept in tow until the next war or crime wave. This is a very inefficient way to construct an army,

²⁸⁵ See Michael H. Shapiro, Send in the Clones: Legal Issues Should Be Resolved before Human Genetic Replication Is Possible, L.A. DAILY J., Mar. 5, 1997, at 6. For a more extensive selection and discussion of examples, see Robertson, Liberty, Identity, and Human Cloning, supra note 10, at 1419.

²⁸⁷ See generally Shapiro, supra note 17.

²⁸³ "The average cost of an IVF cycle in the United States is \$7,800." American Society for Reproductive Medicine, *Frequently Asked Questions About Infertility* (last modified June 19, 1998) http://www.asrm.com/patient/faqs.html>.

²⁸⁹ See generally Davis, supra note 211.

as many have said. Even if the latter-day Sgt. Yorks turn out to be uniformly and irremediably happy, we may still think they are wronged—not by their creation, but by their subsequent treatment. Of course, there would usually be no cloned offspring but for the special purposes of those involved in the cloning. But an illicit purpose does not entail an illicit life, and we can always prohibit implementation of the purpose in extreme cases.

Suppose next that X and Y plan to clone Mother Theresa. Person X's purpose in doing so is to help remedy the shortage of nice persons; person Y's purpose is to produce a happy slave indentured to serve the poor so that he will not have to serve them himself. Here, one could properly say that cloning for Y's purposes would, when implemented after birth, wrong the cloned offspring: she—the selfsame person with Mother Theresa's genome—could instead have been born for X's benign purposes. If Y's purpose governs but is abandoned after the child's birth, the child is not wronged—although the act that produced her was wrong, given its motivations. She is not tainted by such improper motivations.

Because cloners are likely to act on their motivations, however, we could easily justify a flat ban on all cloning meant to produce slaves. On the other hand, if we were restricted to the child's perspective and it was certain that the proposed enslavement would occur, then the familiar nonidentity problem arises: if the happy slave has no alternative existence, she is not harmed simply by coming into existence. Even so, she is continuingly wronged by being enslaved. I happily leave the happy slave problem here. Later, I return to the discussion of separating the clone's perspective from that of others in order to explain why we can legitimately ban cloning to create slaves, even though the slave-clone is not necessarily harmed by her existence.

Finally, it has been suggested that some of the motivations likely to underlie cloning lead to objectification because the projected offspring are seen as "fungible." Robertson argues that where cloning does not contemplate rearing by the initiating couple, "[i]t seems to treat children like fungible commodities produced for profit without regard to their wellbeing. It should not be deemed part of the initiating couple's procreative liberty."

Suppose, then, the initiator is the nuclear source, and she will not rear the clone. Where is the fungibility? From whose standpoint? Custodial couples may prefer *her* clone to those of others. Even if the source does not contemplate rearing, it is unlikely she would view her clone as fungible

^{2,3} Robertson, *Liberty, Identity, and Human Cloning, supra* note 10, at 1399. Here I discuss only the connection between objectification and fungibility. For the constitutional analysis of procreational autonomy, see *infra* Part IX.

with any other person, clone or not. The fact that she contemplates transferring her clone to someone else—whether she gestates it or not—does not treat the clone as fungible.

Where someone other than a nuclear source is the initiator, but neither she nor the nuclear source will rear the clone—say, where the idea is to benefit a third party—there is again no fungibility from anyone's standpoint. The third party is likely to have been "selected" as a prospective parent of a clone because of who she is and who the nuclear source is. Again, a claim of objectification via fungibility seems off the mark. (The absence of fungibility, however, does not eliminate the possibility of objectification. Nonfungibility—uniqueness—is consistent with either treating someone as a person or merely using them as an object; objects can be different *inter se*.)

The key point here is to separate different perspectives and then to consider them as an aggregate network. From this "network of relationships and purposes" standpoint, the cloned offspring is not fungible at all. Indeed, it seems to be the polar "opposite" of fungibility because of the initiators' focus on particular traits.

2. Motivational Networks

Motivations are most clearly ascribed to particular persons. Even in its simplest form, however, human reproduction remains collaborative and so we must deal with the motives of several individual parties, and perhaps of the collaboration itself, despite the difficulties of "aggregating" separate purposes. What happens when some motives are benign and others are questionable—both within and across individuals?²⁹²

To recall an earlier example, consider human subjects in clinical research. Suppose one principal investigator regards the subjects as fancy mice, and another views them as persons to be respected as praiseworthy risk-takers acting voluntarily and knowledgeably. It seems extravagant to say that Kant's no-mere-use injunction has been violated solely because of an errant investigator whose conduct does not impair the network of subject-protective rules and their applications.

Much the same can be said here. Possible parents may differ sharply in their reproductive goals and expectations. In some cases, a questionable motivation by a key party—say, a secret purpose to mine a clone for spare

²⁹¹ For a discussion of the role of networks of perspectives in interpreting Kant's no-mere-use imperative, see Shapiro, *supra* note 17, at 1144-49.

²⁹² See Robertson, Liberty, Identity, and Human Cloning, supra note 10, at 1419 ("Ordinarily, the

⁵² See Robertson, Liberty, Identity, and Human Cloning, supra note 10, at 1419 ("Ordinarily, the existence of ulterior or mixed motives for wanting children does not cast doubt on the ethical acceptability of reproduction, for they do not prevent parents from loving children for themselves or respecting them as persons in their own right.").

parts—may "taint" the entire venture. But matters are generally not so clear. In any event, thought experiments about cloning should attend not just to assessment of individual motivations—which will themselves involve multiple strands—but to networks of persons, institutions, and their overall goals.

Consider next some common examples of possible motivations of cloning initiators and rearers of cloned offspring.

a. Parents who have lost a child and want to "replace" her.

This possibility is discussed extensively in the cloning literature. A more complete and accurate description of it would be that the parents not only valued the lost child greatly but believed she would flourish, and they wish to offer another child of that sort a chance at a flourishing life. Why does it have to be a child "of that sort"? Because that's what the parents want. It is not obviously evil, perverted, demented, psychotic, or an ignorant effort to bring the dead back to life, and the thoughtless commentary presenting this view should cease. There is no reason to recognize a presumption against allowing parents to do this. The only serious moral and legal issues concern not the supposed insanity or depravity of the intention, but what the real-world effects of carrying out such an intention might be.

Does the couple's purpose reflect too "specific" a reason? Is it any more specific than, say, deciding to encourage a second child to follow in the footsteps of an exceptionally successful sibling? If our first child is a talented flutist, our second may be a prodigious cellist (Hilary and Jacqueline Du Pré, for example). Such a purpose bears risks, but the enterprise is hardly beyond the pale. Those risks will probably escalate with cloning—with the caveat that using the term "risk" is risky because circumstances that may imperil autonomy and individuality in some cases may promote them in others by matching preferences with aptitudes.

And what exactly are the true risks? Perhaps there is an elevated possibility that the parents will *intrusively* try to track the child to match her predecessor.²⁹³ "Intrusively" is emphasized because parents are rightly *expected* to do a fair amount of tracking. (I will have to bypass fully analyzing the term here and rely on rough intuitions.) Will they realize that the child will be a different person from the deceased, living in a somewhat different environment, and likely to develop significantly differently—even if raised in much the same way? Will the child believe she is valued solely as a replacement—where "replacement" is taken to mean that the second child is not treated as an independent identity, and is instead reduced or

²⁵³ Cf. Macklin, supra note 96, at 65.

assimilated to the first child? Will the child resent being brought into existence as a clone?²⁹⁴ (Of course, he cannot exist any other way.²⁹⁵)

These speculations are not crazy, but why credit the contemplated outcomes as inevitable or even highly likely? It remains unclear why it should be taken as a sign of disorder to want to clone rather than rely on the genetic lottery.

There is also the view, encountered earlier, that replacement cloning indicates that the parents view children as interchangeable commodities.²⁹⁶ But which children are thought to be interchangeable with which children? If all children were viewed as interchangeable by their parents, why would they insist on cloning the lost child rather than simply having more children-or adopting? Wanting the next child to be just like her one and suggests the uniqueness predecessor no else noninterchangeability of the lost child. Indeed, that is exactly why she is being cloned. If the parents do not see the second child as the first child resurrected and do not raise the new child intrusively, what is the instrumental harm?

Still, one can claim that the cloned offspring is indeed viewed as interchangeable with her late sibling. This leads us to empirical questions about how, in fact, parents would view and raise such children. Hurling colorful adjectives ("fungible") without adequate explanation cannot work—though it seems to be the state of the art in opposing human cloning and other forms of assisted reproduction.

Here, then, are some questions for assessing replacement cloning: First, does the parental plan to recreate their late child's genetic template bespeak, in their case, an unacceptable goal of intrusive molding, thus putting the new child's autonomy and individuality at risk? (So seriously at risk that it would be better off had it remained unborn?) Perhaps the parents would try too hard to avoid supposed mistakes made with the first child, thus closing off some important opportunities on the theory that if something went wrong before, it will be repeated with the cloned child. Second, will the parents' bonding with the child be contingent on whether her development closely matches that of her deceased sibling, or because the parents are burdened by the memories of the lost child that will so vividly confront them every day? Third, might the same sorts of constraints that affected the predecessor sibling in certain ways work differently even on a genomically identical person?

²⁹⁴ See Kass, supra note 13, at 19.
²⁹⁵ See infra Part VI.E. for a discussion of this point.

²⁸⁶ See Annas, Human Cloning: A Choice or an Echo, supra note 23, at 260.

These questions are about the environmental risks to the autonomy, individuality, and independence of the new child. Some have argued that the reproductive autonomy of the *lost* child is impaired because she cannot assent to reproduction. Annas argues that "[e]thical human reproduction requires the voluntary participation of the genetic parents, and this is impossible for the young child. . . . Humans have a basic right not to reproduce, and human dignity requires that human reproduction not be equated with that of farm animals or even pets."²⁹⁷ (This claim does not fully fit with his earlier claim that "[c]loning is replication, not reproduction . . ."²⁹⁸) He also observes that "it is not the parents who are replicated, but the child."²⁹⁹

Assume that a competent person has a right not to be compelled to deliver up her genome so that others can replicate it in another person. Whether cloning is reproduction or replication, I will assume for purposes of argument that presumptively no one can properly be required to engage in it—or to be without remedy against persons who appropriate one's DNA—any more than one can be required to reproduce sexually. (There are some asymmetries here: the right to clone is not likely to be protected as strongly as the right to reproduce sexually; and the right to clone, if any, may be weaker than the right not to be cloned.)

We are, however, dealing with a deceased or dying child who may not have reached the point of even understanding the nature of reproduction, and whose parents strongly wish that her genome have another opportunity at life. The usual presumption against coercion to reproduce in any form seems misplaced here; the concept of asking permission here makes no sense—and the absence of permission is not logically equivalent to a "No." No harm is likely to befall the deceased child simply from being a clone. It is hard to see what overwhelming interests militate against cloning the dead

²⁷⁷ Annas, Human Cloning: Should the United States Legislate Against It?, supra note 23, at 80. If someone clones herself, should she have to secure the permission of her genetic parents because her clone will be, just as she is, the "genetic offspring" of her parents? Put otherwise, have the woman's genetic parents reproduced twice, producing different-age identical twins—their daughter and the cloned offspring? See Silver & Silver, supra note 35, at 609 (observing that this reasoning would inflict genetic parenthood on the identical twin of a parent).

What are we to make of Annas's comparison of lost child replacement with the use of "farm animals or even pets"? This is a lamentable characterization. It bears an accusatory tone, suggesting that parents embarked on replacement are child abusers of sorts. One need not rigorously define "farm animal" or give a complete account of "being a pet" to condemn treating persons as mere sources of meat or milk or as fuzzy playthings. How does cloning a dead child instead of having another one through sexual processes turn the parents into farmers or pet owners, and the cloned offspring into a thing to be sold or consumed for nourishment, or to be casually toyed with as an entertaining diversion? Wouldn't Annas's characterizations apply even to a couple who, having lost a child, decide to have another one the regular way when they otherwise wouldn't have, because they want to "make up for the loss"?

Annas, Human Cloning: Should the United States Legislate Against It?, supra note 23, at 80. This earlier claim is discussed in Part II.B.1.a, supra.

Annas, Human Cloning: Should the United States Legislate Against It?, supra note 23, at 80.

child. I do not know how to answer the counterfactual, "What would the dead child have wanted if she could have considered the matter?" The answer is not obviously "Do not clone me," and even if it was, it does not establish the wrongness of doing so.

Perhaps this response proves too much. After all, how are the dead harmed if their gametes are retrieved and used in procreation without their advance permission? But this may not be a proves-too-much case after all. Such retrieval and use might be permissible—perhaps even over the known or inferred objections of the deceased. In any case, replacement cloning is not the same. The lost child is not like the posthumous parent in such a story. Whatever the situation with gamete retrieval, replacement cloning does not impair any interests of the child cloned.

Finally, consider by way of summary Newman's claim that "[t]he proffered solution [for example, cloning to replace a dying child] misses the basic point that people are irreplaceable. Parents motivated by the desire to re-create a lost child would soon be confronted with the fact that the new child is not the same as the child they lost."

As I said, there is little reason to assume that all or even many such parents believe they will be recreating or retrieving the selfsame child. If we say instead that they are trying to "replace" the child, what does "replace" mean here? The term bears a variety of interpretations, as the prior discussion suggests. If parents do not think they are getting their child back, what do they think? There is a plausible sense in which the deceased child is replaced: the parents have a specific child they otherwise would not have had, although they might have had other children. But perhaps their intent to replace means they intend to have a child who is not thought literally to be the selfsame child restored, nor to be just another genetic child, but rather to be a child of the same general structure of the nuclear source. Why? Because the parents were wholly taken with what they took to be (consciously or not) genetically influenced propensities and do not want to take a chance with the lottery. And if their dreams are realized, the late child is replaced in this sense. Thus we are back to our previous question: What exactly is so wrong with this kind of replacement that it should presumptively, or absolutely, be prohibited? Their preference for a sort of "continuity" rather than variety poses the risks described earlier, but they are far from prohibitive.

Stephen A. Newman, Human Cloning and the Family: Reflections on Cloning Existing Children, 13 N.Y. L. SCH. J. HUM. RTS. 523, 529 (1997). Newman also refers to parents trying "to create a fantasy 'replacement' child." Id. at 530. Dr. Wilmut has made a parallel claim. See Miller, supra note 63 (stating that "The image is that you bring a child back. You don't do that.... [He added that] to try to make a baby into the person someone else was would be a tragedy,").

b. Parents clone a living child one or more times to generate sequential "twins." ³⁰¹

Here we deal not only with the interests of the clone(s), but of the preexisting child who is the ultimate nuclear source. Given the earlier discussion, there is no need for a review of the risks to the clone, except to say that in some cases these risks may be greater than in the preceding case of cloning a lost or doomed child. Again, the fact that there is no alternative existence for the clone makes it very difficult to say that she has been harmed. For what it is worth, each sequential clone could provide compatible tissue for the others.

The impact on the nuclear source is another matter. Here, as in surrogacy, the effect a reproductive choice has on existing siblings might be a relevant consideration. There is no perfect story to tell the siblings of a newborn about to be transferred out of the family, and the story to be told to the child who is a sibling nuclear source is no closer to perfection.

What are the risks to the source, then, and do they justify a ban on cloning—or a ban on cloning *in those specific circumstances*? The best way to explore this question is to inquire into the motivations of the parents, determine how these motivations will be acted upon, and assess what likely effects these determinations may have on the source. Tales of the alarm with which older children view their younger siblings are more than rumors, and it is possible that the appearance of a clone would present even greater terror. The question, "Why another me?" is bound to hang heavily. The answer may be "I'm so cool my folks wanted another one. But if it's another one of me, who the hell am I? Have I been used up? Will they throw me away if the next one is better?" The analogy to natural twins is weak because they are the same biological age (whatever the birth order), and are usually the product of accident. (Delayed birth of embryonic twins might raise some parallel questions for the children.)

Suppose the rearing parents clone a child to assure that the two (or more) clones could provide compatible tissue for each other. It is unlikely that any given person will need transplantable tissue at any time in her life. One might well ask, "For this you went to the trouble of cloning?" The possibly elevated developmental risks to the clone might also make one

²⁰¹ See id. at 528 (discussing the possibility or sequential "twins").

For a discussion of the possibility of cloning in order to secure tissue from a developing fetus or even a young child before certain levels of development, see Jeff McMahan, Cloning, Killing, and Identity, 25 J. MED. ETHICS 77 (1999). See also Julian Savulescu, Should We Clone Human Beings? Cloning as a Source of Tissue for Transplantation, 25 J. MED. ETHICS 87 (1999).

³⁰² See Newman, supra note 300, at 527.

This child [being raised with a physically identical sibling] might have the feeling that she is not a truly separate individual, but one whose path has been pre-marked by the "original"

wonder why it would be worth it. On the other hand, if the cloning versus sexual reproduction decision is based on the transplant plan, rather than a follow-in-the-source's-footsteps plan, the developmental risks to autonomy and independence might in some ways be lessened. As in the Ayala case, 303 though there is a risk of reduction, it seems generally outweighed by the relative unlikelihood of mere use, given the concurrent benign motivations.

These are all plausible questions, but their answers neither justify a complete ban on cloning nor provide a basis for a rush to begin doing it. If the risks justify anything, it would be a ban on cloning a living child.

This last point bears additional mention. It reflects the more general question about non-voluntary procreation generally and non-voluntary cloning in particular. If non-voluntary procreation is generally wrong, is non-voluntary cloning *a fortiori* wrong? Although I argue that it is procreation, it is clearly a different form of procreation.

Cloning a dead or dying child is quite different from cloning one who is expected to go on living. However we describe it, most persons would agree that the production of a new person genetically identical to a living one should be disallowed without the person's permission, and if the person is not of age, it should not be done, if at all, until he or she is able meaningfully to be consulted. I do not think the argument for this position is a slam-dunk, though I will not address the issue extensively. One could easily argue—as many do concerning our very lives—that we are not masters or owners of our genomes, but merely their temporary custodians. We cannot rightly claim pride of authorship or craftsmanship, and—the argument goes—all genomes "belong" to the human race. Whatever this means, it does not follow that non-voluntary procreation in any form is morally or legally permissible. In any case, we do not act on these "ownership by the species" ideas in any simple way. The argument as it stands applies even to ordinary procreation, and we know that no one can constitutionally or morally be forced to reproduce—to "give back" to the human race. I see no reason to inquire here into the philosophical, cultural, and historical roots of this conclusion. The merits of nonvoluntary sexual or asexual reproduction will have to be dealt with elsewhere. I will thus proceed on the assumption that our strong traditions of personal control over our gametes extend to the disposition of our diploid nuclei, despite the

on genetically influenced attributes.

version of herself. For her, footsteps have been laid down; not following them may incur the disapproval of parents, siblings, teachers, relatives, or others aware of her clone status.

Id. Such procedures may be only partially effective to the extent that the need for transplantation rests

²⁰³ See James J. Rodriguez, Woman Leads Fight to Save Sick Children, L.A. DAILY NEWS, Jan. 31, 1996, at SC1, available in 1996 WL 6544981 (discussing the Ayala situation, where a child was conceived with the hope that the newborn would have bone marrow compatible with that of an older sibling in remission from leukemia; the plan worked).

vast differences between the two forms of procreations. Procreational autonomy as a "right-against" should thus apply to possible nuclear sources, including children.

c. Replacing a lost spouse.

The idea here is fairly simple. The widow or widower, if young enough, can realistically consider having a "replacement spouse." The survivor wants to raise a person fascinatingly similar to the deceased spouse.³⁰⁴ I do not discuss this possibility, except to suggest that the risks of intrusive rearing seem particularly elevated. If the survivor does the rearing, there is a strong element of social (not biological) incest.

d. A person of remarkable accomplishments is cloned to raise the odds of generating the traits supposedly linked to her success: more on "matching" preferences with aptitudes; origins of preferences.

Who is the contemplated rearer? Compare the strengths of the various parties' interests under different circumstances. If the nuclear source is the rearer, we have a possible concurrence of procreational autonomy and family formation. If someone else is to do the rearing, consider two questions: first, are the nuclear source's interests weaker?; second, what constitutional interests do the prospective rearing party or couple have? Recall Robertson's suggestion that where cloning does not contemplate rearing by the initiating couple, "[i]t seems to treat children like fungible commodities produced for profit without regard to their well-being. It should not be deemed part of the initiating couple's procreative liberty." Even if the conclusion is sound, however, it does not follow from the premises: as we saw, "fungible" is not an apt characterization here.

As argued later, if the nuclear source is to rear the child, then there is a case for some degree of constitutional protection beyond minimal rationality. One might also argue that it is a part of the prospective rearer's liberty interest in family formation—though this may not yield any significant protection, considering the analogy to adoption.

Whoever does the rearing, we have already seen the overbroad claim that virtually any form of nurture of a clone compromises autonomy and individuality. Autonomy is a complex concept, and being autonomous has an uncertain connection with happiness and satisfaction. Autonomy is strongly (though hardly exclusively) connected with opportunities to pursue

³⁰⁴ The "returning husband" is discussed in Nelson, *supra* note 165, at 722.

one's preferences with some prospect of success, based on both one's characteristics and the surrounding circumstances.

Suppose, however, that one's preferences do not parallel one's aptitudes. Autonomy as a function of opportunities to pursue one's preferences might be heightened if one's preferences and aptitudes "match" in significant ways. If our aptitudes do not match our inclinations, we may not only be unhappy or dissatisfied, our opportunities may actually be less than they might have been with a better match. We may be less autonomous—other aspects of autonomy held constant. In particular, if a major aptitude is unmatched by preferences for developing and using it, there may be a foregone enhancement of autonomy, and of happiness or satisfaction—opportunity costs, of sorts.

Return to the common example of the Mozart clone. It would be quite unfortunate—for both the clone and his parents—if he were not introduced to music of some sort and provided with opportunities to pursue whatever musical talents and predilections he has. We might bend over backwards to avoid interference with his authentic development. But if this results in failure of major career opportunities, his long-run autonomy, happiness, and satisfaction might be compromised. Indeed, it might be compromised if we *do not* affirmatively push him, despite his reluctance (if any). Of course, the idea that parents should often try to bring preferences and aptitudes into alignment applies in all forms of reproduction.

There is obviously no precise way to tell when some degree of compulsion ceases to promote autonomy and begins to impair it. Paternalism is clearly called for in early child development, and probably in advanced childhood and adolescence. One would think something went seriously amiss if the Mozart clone ended up as a doorman, even if he was blissfully happy. But that outcome might be the result of either too loose or too strict an upbringing (or of neither).

It is clear that the risk of intrusive, autonomy-impairing measures increases with most forms of cloning. Here, contrasting parental expectations with hopes, as Kass does, is exactly the right move.³⁰⁷ Of

³⁰⁵ Cf. RICHARD DAWKINS, What's Wrong with Cloning?, in CLONES AND CLONING, supra note 3, at 54.

[[]W]ouldn't a new Einstein, say, suffer terrible psychological problems? . . . But he might turn out even better than the paragon. Old Einstein, however outstanding his genes, had an ordinary education and had to waste his time earning a living in the patent office. Young Einstein could be given an education to match his genes and an inside track to make the best use of his talents from the start.

Id. at 56.

377 See Kass, supra note 13, at 20. See generally Katharine Lowry, The Designer Babies Are Growing Up, L.A. TIMES MAG., Nov. 1, 1987, at 7 (reporting that at the time she was writing, forty-one babies had been born of sperm inseminations from the now defunct "Nobel sperm bank"). Some of the statements in this article suggest risks of genetic planning or indeed nongenetic alteration or

course, both the risk of harm and chance of benefit are difficult to estimate because of the uncertainty in discerning aptitudes and preferences and choosing appropriate forms of molding and shaping. Moreover, as we saw, there is no algorithm for specifying when molding and shaping become intrusive, nor for measuring intrusiveness. (On the other hand, perhaps the very way in which we describe the offspring illustrates the reductive risk: "the Mozart clone"; "the Saddam clone.")

We can say that we have crossed the intrusiveness threshold when a person's preferences are rightly called inauthentic, but this is just a definitional inference and tells us little. We have already encountered the serious difficulties in tracing and morally characterizing the origins of preferences. Preferences do not arise from nothing, and even if they did, why would we say they were authentic-or nonauthentic? If we could identify specific causal influences on preference formation, would this automatically render the resulting preferences nonauthentic? That would seem pretty extravagant: it proves far too much—that we have no authentic preferences. But all preferences develop as a function of both genetic and environmental influences. As we saw, if we are going to retain the idea of authenticity, it cannot rest on distinguishing caused from uncaused preferences, but rather on differing causal lines.³⁰⁸ Assessing these causal lines, however, is precisely what we must do to ascribe intrusiveness. Brainwashing and conditioning are not the same as baseline parental supervision, yet no adequate theory defines the distinction.

Despite conceptual and empirical uncertainties, the instrumental risks of cloning are more than minimal because of the degree of planning and implementation involved. Serious plans are made to be pursued, and most planners would be unhappy if their hopes did not pan out. Even if cloning a specific person with specific trait clusters is simply run as an experiment to

enhancement. Whether these remarks are aptly applied to the Nobel repository children is unclear; the article does not claim to be a scientific report.

"I'm not sure that any of these children will grow up to be geniuses—or even grow up to be happy. Parents so concerned with achievement and intellect could have a tendency to smother and indulge their child too much on the one hand, while pressuring them with exorbitant demands on the other."

Id. at 8 (quoting child psychologist, Lee Salk). Lowry continues that one "repository mother [had] lost custody of two non-sperm-bank children years earlier because of her relentless and abusive demands for perfection." Id. The husband of one of the repository mothers, responding to complaints about "tampering with reproductive fate," reportedly asked: "Why it is OK for people to choose the best house, the best schools, the best surgeon, the best car, but not try to have the best baby possible?" Id. at 9-10. The report concludes with descriptions of various repository children, all reported to be highly intelligent. See Id. at 30-32. The bank was not limited to Nobel prize winners but, according to Lowry, consisted largely of respected scientists who have made important contributions. See id. at 30.

Note Gerald Dworkin's instructive remark on the free will position as a "strong definition—the unchosen chooser, the uninfluenced influencer.' . . . 'It seems as if [such] autonomy is impossible." Gerald Dworkin, The Nature and Value of Autonomy (unpublished paper), quoted in Robert S. Morison, The Biological Limits on Autonomy, HASTINGS CENTER REP., Oct. 1984, at 43, 43 (alteration in original).

see what would happen—a planned lack of a plan—we would at least have to closely observe the results, much as we do with machines we have built or animals or plants we have bred. On this view, Isaac Newton II and Leonardo da Vinci II might be used as mere means—although they may lead satisfying lives nonetheless. (The fact that I have given them these designations is for convenience only; I am of course not suggesting that they be raised with those names nor forced to view themselves as bound to continue in the respective paths of their nuclear sources.)

Still, wouldn't it be interesting—to us and to the cloned offspring—to see what someone with da Vinci's or Newton's genome would do in the modern world? The Isaac and Leonardo clones may very well thrive and be immensely thankful for their genomes, believing that the use and enjoyment of their endowments outweigh the adverse effects of any sense of pressure to excel under best-of-the-millennium standards. And of course, Isaac and Leonardo are not around to hound or instruct their genomic successors—which may or may not be a good thing. One uncomplimentary characterization of the Isaac/Leonardo project is that it may be instituted in part for entertainment purposes. Is this indeed mere use of the offspring? If it is, what of it, so long as the clones are raised within the boundaries of decent parenting?

The fact that some observers would find this reproductive process incomprehensible and repulsive is a fact that we are obliged to investigate. The investigation so far reveals that cloning, despite certain added risks it brings, is compatible with the clone's autonomy, individuality and satisfaction. In fact, the more human cloning there is, the less likely that the cloned offspring will feel singled out as bizarre, and the more likely that he will enjoy a sense of autonomy, individuality, and satisfaction. Its very rarity and current unconventionality create much of the risk to these persons. In a deep irony, then, the way to prevent many of the perceived evils of cloning might be to encourage its wider practice.

e. Someone with dispreferred traits, including those viewed as disabilities in mainstream life, is cloned in order to maximize the offspring's capacities for certain tasks; the clone is then trained ("conditioned"?) to prefer such work; distinguishing the clone's point of view from that of his observers'; 300 the idea of genetic diminishment. 310

Think of short-statured persons being cloned to explore small caves, or fit into tiny space satellites or planet-bound vessels. (This is a high-tech version of the "happy slaves" problem.) Would this scheme be a form of "genetic bondage" or "genetic diminishment"? Or would it enhance autonomy (and happiness and satisfaction) by matching preferences with abilities in special contexts?

This is as good a spot as any to discuss a rarely made but important distinction mentioned earlier: the viewpoint of the cloned offspring as opposed to the viewpoints of others, including the relevant communities. (Again, I ignore the problem of "collective" intentions.) Consider the idea of "happy slaves" as an illustration.312

Suppose we produce such persons—happy even though their lives, to their own knowledge, reflect "mere use" in the Kantian sense. Many observers would say that the slaves' "knowledge" is burdened by "false consciousness." This is an ill-defined notion that, for our purposes, means they were not exposed to, did not learn, or were conditioned not to appreciate the life-path opportunities available to others. They were confined to an impermissibly narrow view of the prospects that might have been open to them. To make matters worse, once they are trained it may be impossible to revise their preferences and "free" them—or let us so assume. For example, upon learning the truth, a real Truman Burbank (the main character in The Truman Show movie) might not want to leave the

²⁰⁰ Recall Hume's views on the importance of recognizing and dealing with separated viewpoints. See HUME, supra note 190, at 581-82.

^{&#}x27;[T]is impossible we cou'd ever converse together on any reasonable terms, were each of us to consider characters and persons, only as they appear from his peculiar point of view. In order, therefore, to prevent those continual contradictions, and arrive at a more stable judgment of things, we fix on some steady and general points of view; and always, in our thoughts, place ourselves in them, whatever may be our present situation.

Id. See also BRICKE, supra note 194, at 138.

For a reference to such "diminishment," see Robertson, Liberty, Identity, and Human Cloning, supra note 10, at 1453-55 (referring to the movie Blade Runner). See also Shapiro, supra note 17, at

^{1134-41.}To ran extended analysis of this idea, see Pizzulli, supra note 8, at 517-25.

Slaves: Genetics Exploitation and Morality, 312 D.H.M. Brooks, Dogs and Slaves: Genetics, Exploitation and Morality, 88 Aristotelian Soc. Proc. 31 (1987-1988) (analyzing the possibility of happy slaves).

immense television stage where, for over thirty years, his life—without his knowledge—was filmed and broadcast as a continuous, live program.³¹³

Many of us are likely to think that the possible happiness of the slaves does not make the case for creating and using them, and the fact that Mr. Burbank flourished in his ignorance does not justify the fraud perpetrated on him. Still less does it make the case for molding small spelunkers, who might have serious difficulties in "mainstream" life if released. We do not want to see people treated in this way, partly because of a moral preference for living life as a Socrates rather than as a flourishing pig; and partly because practicing and preserving such treatment may impair basic norms of justice, autonomy, and respect for persons, placing us and our successors at risk for losing what we value—an independent, authentic existence.

This distinction between perspectives is useful in appraising human cloning. Make two assumptions—both quite reasonable: first, it is improbable that a cloned offspring's life would be so blighted that life would not seem worth living from her viewpoint; second-and more important for present purposes—her viewpoint is not the only viewpoint that counts. Communities—at least those not evil down to their foundations—have some rights, powers, and possible duties to preserve their essential aspects. 314 The happy-slave scenario, while it poses important moral and conceptual puzzles, is rightly condemned on standard moral theories concerning the protection of communities as communities and their individual constituents. We learn from observing and participating in our institutions. The community may thus be incrementally conditioned for the worse—by tolerating or endorsing slavery, and extending it to those already inured to civilized freedom. The visibility of the practice—even the bare knowledge of its existence—reinforces many of the worst traits we have. 315 Humanity does not need any new institutions to reinforce its longstanding disposition to use and discard people or simply kill them off as offensive or dangerous pests. To so condemn particular forms of cloning is consistent with holding that cloning as such is not intrinsically wrong or

THE TRUMAN SHOW (Paramount Pictures 1998). For an account of false consciousness as applied to the happy slaves problem, see MICHAEL ROSEN, ON VOLUNTARY SERVITUDE: FALSE CONSCIOUSNESS AND THE THEORY OF IDEOLOGY 80-81 (1996). For a general account of false consciousness, see *id.* at 30-100. For a brief discussion of autonomy and false consciousness, see Shapiro, *supra* note 147, at 390-91.

³¹⁴ This is hardly free of controversy, but seems to be widely accepted. See WILL KYMLICKA, CONTEMPORARY POLITICAL PHILOSOPHY: AN INTRODUCTION 206-07 (1990).

A communitarian state can and should encourage people to adopt conceptions of the good that conform to the community's way of life, while discouraging conceptions of the good that conflict with it....

On the liberal view of the self, individuals are considered free to question their participation in existing social practices, and opt out of them

Id. Kymlicka also discusses "[d]uties to protect the cultural structure." Id. at 217-19.

315 See Shapiro, supra note 204, at 696-98.

instrumentally wrong under all likely circumstances. Communities are not obliged to accept every conceivable practice that can be linked to a fundamental liberty interest, and this is reflected in constitutional adjudication and rights analysis generally. We can thus limit or even ban certain uses of human beings because such uses, and the institutions supporting them, threaten the community and its constituent individuals, despite the absence of direct physical or emotional harm to the persons in use.

Even from the perspectives of those happy with their mere use, the practices in question are not necessarily benign. First, whatever the motivation for procreation, once the new persons exist it is a plain assault on autonomy and a gross injustice to block all paths other than those envisioned by their creators. The fact that they have no alternative existence but as clones created to be slaves does not immunize the actual practice of slavery. That original intention should be displaced and slavery avoided *ab initio*. The slaves could obviously assert that *now that they are here*—whatever the reasons underlying their genesis—they must not be placed in slavery. If the would-be overseers say that inability to pursue their objectives would reduce or eliminate the incentives for cloning, and that these ungrateful slaves would never have been born—so what? No one is injured by not being conceived—and the community is protected against erosion of fundamental moral principles and the resulting harm to its present and future members.

Second, the fact that matching talent to preference is often desirable does not immunize all methods of achieving the match, and there are plenty of matches we want to avoid. We would not want someone with a native aptitude for lethal combat to crave serial killing; that sort of autonomy maximization—if we can call it that—we can live without. It seems likely that even imperfect talent/preference matchups outside a slavery context may promote greater autonomy, individuality, happiness, and satisfaction than within slavedom. Most institutions of slavery, after all, are neither devoted to nor result in the general betterment of the enslaved.

Suppose, however, that we are not dealing with slavery. Instead, we have cloned persons with traits generally thought to be impairing (dwarfism, for example) in hopes that appropriate incentives—not coercion—will lead the clones to their most efficient uses, perhaps as space station residents or galactic voyagers boldly going forth. One might recommend that the plan be aborted as mere use of persons, but this is risky. For one thing, the entry of the clones into the mainstream world may be hampered by their physical conditions, given how the world is presently set up. For another, unless the plan is abandoned early on, the group may have become inured to their prior placements, where their "disabilities"

were empowering. A sudden encounter with autonomy and individuality can be dangerous if one has never known either of them.³¹⁶ (This observation itself poses some dangers of unduly delayed or restricted emancipations.)

But even though the clones have no existence but as clones, and even though they are in a strained sense "empowered" by non-mainstream traits tailored for use in narrow circumstances, their lives are morally burdened by their use as slaves. If their release would be traumatic, it is nevertheless outweighed by the evil of continuing enslavement, and we would be bound to assist them in their transit to freedom.

If there is a bottom line here, it is not that cloning is inherently wrong, but that some forms of cloning—insofar as they bear certain purposes—are both inherently and instrumentally harmful and should not be undertaken.³¹⁷ If they are, then the cloned offspring are morally owed not only the termination of the practice, but affirmative societal assistance to cut their losses in joining the emancipated.

f. Any given person clones herself to see how her genomic identity would do next time around.

Would it constitute genetic bondage of the clone if the nuclear source viewed her as a literal extension of herself? Would the offspring view her identity—her very selfhood—as merged with that of her predecessor(s)? Here, an earlier suggestion seems apt: plans-entail-expectations-entail-intrusive-tracking—or at least intense observation. The risks to the nuclear source may also be substantial. If she conflates herself with her genome and her clone fails at whatever, the nuclear source may thus come to believe that her genome is hopelessly inferior.

Still, though the lets-see-what-will-happen motivation suggests that the clone is just being used for entertainment, it is nonetheless akin to some ordinary parental attitudes and is reflected in common discourse. If anyone is impertinent enough to ask parents why they had children, the parents may reply that "we just felt like it—we wanted to see what would happen." It is far from ideal that children are created by accident or as a lark, but if it happens, it is far from certain that they will lead blighted lives.

³¹⁶ Cf. COLETTE DOWLING, THE CINDERELLA COMPLEX 143-44 (1981) (discussing the difficulties that women might have in dealing with their rapidly enhancing autonomy).

³¹⁷ See David McCarthy, Persons and Their Copies, 25 J. MED. ETHICS 98, 103 (1999). "One possibility is that it will be revealed to the clone that he or she will or is likely to die prematurely or suffer from a horrible disease. But this establishes, at most, that cloning certain sorts of people would be morally wrong." Id. See also Lipschutz, supra note 39, at 107 (concluding that "[p]erhaps the question should be changed from 'Is cloning wrong?' to 'When is cloning wrong?").

g. Cloning to avoid a serious genetic risk borne by one or both members of a couple.

This is often suggested as the most benign example of cloning; one might say it is just another form of fertility treatment. But it is not, and the critics of human cloning are right to stress this.

Why would anyone resort to this form of "fertility treatment"? Perhaps adoption would not satisfy their interest in having a genetically connected child—although the resulting genetic connection to the offspring would be pretty strange: full genomic identity to a single nuclear source rather than a genome related to one male and one female through sexual recombination. To the extent that it is possible for those with fertility problems to use their own gametes for in vitro fertilization ("IVF"), followed by prenatal screening, one would expect that they would prefer this procedure. (This would not work, however, where the adverse trait is dominant, unless its expression or penetrance is highly variable. In that case, only the unaffected party would be cloned. The IVF procedure also would not work where neither party has useable gametes.) To prefer cloning where such screening is possible would suggest that the couple's motivations go far beyond simply remedying infertility. (The "infertility," of course, is not an inability to conceive or maintain a pregnancy without undue risk to the fetus or the mother, but an unwillingness to risk having to abort an affected fetus.)

h. Cloning to improve rearing through the enhanced empathy supposedly entailed by "raising oneself."

Here, a person or couple does not choose cloning because of any particular trait(s), but because one wishes to raise another person with identical genetic endowments to oneself or one's partner. The somewhat shaky rationale is that it would be easier and better to raise someone with the same "infrastructure." ("Shaky" might be an understatement: some persons should not raise anyone, least of all "themselves.") Or perhaps the venture is a lark, though a pretty irresponsible one. In any event, assume one or both members of a couple clone themselves to form a nuclear family. Even though such cloning would not involve the specific trait-oriented motivation in creating, say, the Mozart clone, there is still a risk that the genetic forbear would unduly intrude on the child's development.

But there is an even more disturbing risk. The kinship anomaly puzzles and even alarms us. The wife's son is a younger genomic replicant of her husband; the husband's daughter is his wife's younger genomic replicant. One thinks of the possibility of confused, incestuous parenting. There is also the amazing prospect of the "duplicate" couple, who cannot be genetic "siblings" in the usual sense, and who eventually get married. (We can

assume arguendo that such "social"—rather than genetic—incest would be legal. Is the marriage "replicated" ("cloned"?).) After all, the male offspring may want a girl just like the girl that married dear old dad. And the female offspring's preferences might be precisely parallel. (How did this semi-incestuous idea of wanting to marry a woman just like your mother wind up in our culture anyway?) If mom and dad get divorced before all this happens, would custody battles be affected by who was whose clone?

This is confusing and alarming, even if darkly comical. It is hard to say what might happen in such cases, but, again, notions of evil and pollution most foul don't get us anywhere. The greatest risk—existing in tandem with the greatest promise—would be the inclination to fix the child's course, either to match her parent/nuclear source, or to prevent her from taking paths now regretted by "mom" or "dad." To make matters worse, the constant presence of one's genetic antecedent may maximize the pressures felt by the offspring. There is also the ever-present risk created by observers who condemn the couple's reproductive maneuvers. Perhaps all these risks are sufficient to justify counseling any couple against doing this. (A requirement of counseling as a precondition for such cloning would probably be considered permissible under any likely ruling by the Supreme Court on the constitutional status of cloning.)

But there is no intrinsic wrong here; the risks concern the nature of the nurture of the children and the effects of community observation and intrusion—the self-fulfilling prophecy problem. Neither risk is sufficient to justify flatly disallowing cloning under these (and many other) circumstances.

i. Cloning as a technique of parenthood for gay couples.

Cloning is of course not the only family-formation option for gay and lesbian persons and couples—or for persons who are unable or unwilling to find mates. Females need only find a source of sperm for insemination. Males need to find an ovum source and a womb—and would of course need a womb for cloning also, pending the development of artificial gestation.

In any case, suppose cloning is used to establish nuclear families in which the custodial parent or parents are gay. Whatever the risks of cloning might be, they are probably not appreciably changed—as cloning risks—under the supposed circumstances. There is, however, an additional consideration: to the extent that sexual preference is affected by genetic influences, there is an elevated likelihood that cloned offspring will share the sexual preference of the nuclear source. This may be expected and hoped for—and so the possibility of "shaping" arises, in order to help

assure that any genetic predisposition for the favored sexual preference is realized. Whether this shaping is autonomy-impairing because it is too constraining or is autonomy-promoting because it helps bring preferences in line with behavior depends both on matters of fact and on our understanding of autonomy. ("Reverse" shaping is also a possibility: some gay parents may dislike their sexual preference, and seek to block its development in their cloned offspring.)

Finally, for those who believe that departures from the paradigm of nuclear family structure are already unduly and dangerously stretched when same-sex couples raise children, the addition of cloning may compound the problem. But it remains unclear just what harms, if any would be occasioned by this particular departure from the paradigm.³¹⁸

Selling one's DNA for cloning/rearing by others; taking someone's DNA for cloning.

The implicit question here concerns a person's right to control the disposition of her genome. (There are related questions, perhaps with different answers, concerning the control of one's gametes—even enucleated ova.) I see no gain in investigating whether we ought to call this a "property" interest. Our discussion concerns the allocation of rights to control. Holding a right to control X in various ways does not entail that X is anyone's property, and some limitations on one's right to control X are consistent with X being property.

I think there is a consensus that we should be able to prevent others from using our procreative powers without our permission, a possibility mentioned earlier in discussing "replacement" cloning.319 The common view is reflected in cases such as Davis v. Davis, 320 which involved conflicts over the disposition of cryopreserved embryos formed during a marriage that failed, and Hecht v. Superior Court, 321 which entailed conflicts over disposition of a deceased's sperm. Prevailing sentiments allowing the sale of sperm and ova do not, however, extend to sale of stored embryos.

If we can sell our sperm and ova—our haploid gametes—does it follow that we should be able to sell our diploid somatic nuclei? After all, they

20 Cal. Rptr. 2d 275 (Ct. App. 1993) (awarding sperm of deceased to his designated woman companion).

³¹⁸ See generally William N. Eskridge, Jr. & Edward Stein, Queer Clones, in CLONES AND CLONES, supra note 3, at 95.

See supra Part VI.D.2.a.

^{320 842} S.W.2d 588 (Tenn. 1992), cert. denied sub nom. Stowe v. Davis, 507 U.S. 911 (1993) (involving the disposition of cryopreserved embryos, and ruling that the former husband could not be required to take the risk of becoming a genetic father over his objection). The court, somewhat disinclined to talk of "property rights," indicated that at bottom, the dispute involved competing assertions of a right to control. See Davis, 842 S.W.2d at 597.

contain all our genomic instructions, not just half of them. Perhaps we should be able to sell our nuclei, but this doesn't strictly follow from how we deal with gametes; what holds for gametes doesn't necessarily hold for diploid nuclei. We already know that cloning is radically different from standard reproduction because it replicates an entire genome intact, rather than merging separate genomic complements from two different genomes. Consider an analogy to theft, rather than sale: Inaccurate though it may be, we may sense that stealing gametes is linked to stealing one's children, but that stealing a person's diploid nuclei for cloning is stealing that person. But which way should this cut? Should we assign greater protection to transmission of half our genome than to its entirety-or the reverse-or neither? And how would we enforce protections against cloning with surreptitiously acquired somatic DNA? It is much easier to acquire our full genomes from our body cells than our half-genomes from our sex cells, and we could be cloned not only over our objections but without our knowledge.

Our present notions of control over "body parts" require sharp distinctions among kinds of parts and among the circumstances and purposes involved. Hair clippings in a barber shop are one thing; stem cells, bone marrow, and whole organs are another; and sex cells are yet another, so different that it seems misleading even to lump them into the category of body parts. The continuing development of new uses for human bits and pieces will require us to rethink matters of control and disposition of biological materials. Why would "stealth" cloning—by using cellular leavings or painlessly and secretly appropriating some diploid cells—be morally and legally impermissible? Still, why should any one person have exclusive "title" to a particular genome? After all, sooner or later it will be of no use to her, and she had no hand in its design. (The right to control a deliberately altered genome is still another issue.)

On the view that we are not masters of our genomes, it does not breach our rights if our genomic duplicate is constructed from our cells—with or without our permission or knowledge. (This assumes we cannot be charged with responsibility for the offspring.) Yet we are also very likely to sense a breach of the integrity of our identities when, without our permission, others duplicate a core aspect of our being. I will leave the issue here except to say that the possibility of stealth cloning, whether alone or in combination with other risks, is not sufficient to ban cloning in toto.

k. Cloning to secure genetically compatible tissue.

This possibility is often cited by both opponents and proponents of human cloning.³²² Saving or prolonging lives through tissue and organ transplantation is generally viewed favorably, but not all means to this end will do. We disallow the kidnapping, killing, and pillaging of human beings for their organs, though it probably happens. We have far more difficulty with routine salvaging of cadaver organs, using the organs of executed prisoners, selling organs—and now cloning entire human beings to be mined for organs when needed by their respective nuclear sources or others.

Few, if any, seriously propose that we treat cloned offspring simply as spare part receptacles. Still, the cloning literature raises the possibility of placing cloned offspring in sensory isolation so complete that their capacity for perception and cognition would be miniscule. In that case, they arguably would not be persons—in the philosophical rather than the legal sense. Nor would they be sentient beings of any sort. If clones are not persons, the argument goes, they can be mined for parts as long as they are insulated from undergoing any serious pain. If it were possible to undo and correct the lifetime of damage, however, would we be obliged to do so, thus foreclosing the moral propriety of taking what we need?³²³

There is only a remote real-life analogy—the well-known reproductive/therapeutic project of the Ayala family. There, a father reversed his vasectomy and he and his wife conceived a child hoping that it would have bone marrow compatible with that of an older daughter in remission from leukemia. The project worked. Although it was unsettling—which explains the publicity—some rough consensus emerged that simultaneous motivations may be acceptable and even desirable, even where one motivation standing alone (securing spare parts) would not. The fact that the project was pursued within the borders of a close-knit family helped blunt the public's perception of risk to the integrity of personhood and family through mere use of a person.

Suppose the concurrent motivations are to clone someone—generally one's offspring or oneself—to acquire tissue to be used therapeutically shortly after the clone's birth, and thereafter to raise the child in the conventional way as an integral part of the nuclear family. The scale on which such activities would occur bears on whether such a practice would put moral norms about the integrity of personhood at risk. We might, for

²⁴ See generally Rodriguez, supra note 303.

³²² See Wachbroit, supra note 78, at 67.

One thinks here of aspects of the animal rights and welfare debate and possible obligations to enhance the clone's mental abilities—an argument based on "potential." On the latter, see, for example, MICHAEL TOOLEY, ABORTION AND INFANTICIDE 191-93 (1983). For a brief discussion of arguments from potential, see Shapiro, *supra* note 69, at 108-11.

example, be less inclined to applaud what the Ayalas did if the practice increased and the resulting children were poorly cared for, especially if the contemplated therapy failed. On the other hand, cloning involves dead certainty about a specific trait—tissue compatibility—and this greatly enhances the chance of therapeutic success.

For the present, I leave this example aside with the following idea: [T]here is no reason to assert that one who has a child because this child will save the life of another is doing anything other than two good deeds—having a child and saving the life of another. . . . 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. Such conduct should be encouraged rather than discouraged.³²⁵

Finally, the issue might become moot by developing techniques—possibly using stem cells—that result in duplicating specialized tissue or even whole organs.

3. What the Examples Suggest

I have said that the central risks of human cloning arise from the very specificity of the incentives and reasons for reproduction that cloning makes possible. Germ line engineering aside, all other forms of reproduction reflect the usual vague reasons for having children. Most of us do not even think in terms of highly specific reasons—we reproduce with comfortably hazy and pleasant thoughts, mixed with terror, about the companionship and rearing of our children. It is not that we have no specific ideas, hopes or expectations at all: we may daydream about showing our children how to throw a ball or write an essay. But these anticipations may become crystallized into firm plans when we deal with fully duplicated genomes; our anticipation of genomic certainty may increase the driving force of these congealed intentions. Cloning will not happen by accident or without something that counts as deliberation, however ill-considered or irrational, based on expected genetically influenced attributes. It is this particularity of expectation (held by the custodial parents, the nuclear source, the offspring, or others), perhaps coupled with the aura of manufacture, that risks reduction and mere usethe core of objectification. We know we will not be dealing simply with a chip off the old genetic block but with the whole edifice, and we are very likely to act on this knowledge when the child arrives. If we trouble to clone Jascha Heifetz, he had damn well better be a violinist, right? And if

³²⁵ Broyde, *supra* note 39, at 533. The reference to the press concerns coverage of the Ayala case. The press did not universally condemn the transaction, however; there was both neutral coverage and substantial support for it. *See* note 303, *supra*.

we cloned Beethoven, there is no way we would let him be a rock star (although becoming a jazz artist would be a distinct possibility).

To what extent do such prospects indeed constitute a risk? We are *supposed* to mold our children. We are *supposed* to try to direct their preferences toward their aptitudes, in order to promote both their autonomy and their overall well-being. Perhaps the chances of benefit where we have a full successor block, rather than a chip, outweigh the risks of intrusion. And as we saw, intrusive shaping, despite obvious examples, is a seriously indeterminate idea as applied to the nurturing of children.

Still, to tie in earlier strands of discussion, how do the enhanced probabilities of intrusiveness bear on reduction, mere use, and objectification? Does the solidification of purpose itself-apart from the chances that the purposes will be rigorously pursued and realizedconstitute the (partial) reduction and devaluation of the child or child-tobe? Is there a risk that the nuclear source, the custodial family, the clone herself, or anyone, will see the clone as "merged" (fully reduced) into the identity of all those with her identical genome? (A brief report in the Los Angeles Times refers to elderly identical twins who preferred to be considered as "one person," but this seems pretty unusual.326) If the planners' intentions are firm, would their familial acceptance of the child be contingent on the success of their plan? Before, we were bound to accept whatever we received from "nature." Now, the risk is that the model of animal use-cloning a champion milk-producing cow, or developing animal models for some physiological condition to aid research—will inform our reproductive efforts.

Finally, recall that some forms of cloning may be intended to create persons with socially desirable traits that augur a satisfying, successful life for the clone, and corresponding benefits to the community. This might well be appreciated by the offspring, who will perceive herself as worthy, desirable and *chosen*. But it also brings the risk of disdain toward and discrimination against mere "genetic lottery types." And the latter, in turn, may wish to move against the genetically engineered.

How serious are these risks—and potential benefits? We may never know unless we embark on cloning—after which the consequences may be impossible to reverse. Yet there is something of a built-in "safety factor" in our reproductive actions: cloning produces individual *persons* who are likely to be perceived as such, whatever their origins. The two Ayala sisters

³²⁶ See Beverly Beyette, Double-Take on a Special Bond Between Brothers, Sisters, L.A. TIMES, Jan. 6, 1999, at E3. "We prefer to be thought of as one person, because that's exactly how we feel.' Never married, they have always lived together, eat identical meals, sleep in the same bed and have twin poodles as pets." Id. (quoting sixty-five year old twins, Alice and Clarice Rainer). I doubt that something like this awaits clones, but even if it did, a flat ban on cloning would still be unjustified.

are both doing well and are highly valued by their family and community.³²⁷ The younger child's worth was not exhausted in anyone's eyes by the prime—and exceedingly unusual—inspiration for her creation.

Still, our preexisting framework of respect for persons may change under the impact of the new practice, and it may change for the worse. No defender of cloning can reasonably deny this.

- E. HARM TO THOSE WHO CANNOT EXIST EXCEPT AS CLONES; MORE ON DISTINGUISHING INDIVIDUAL AND "COLLECTIVE" PERSPECTIVES 128
- 1. The Argument from Harm to the Clone
 - a. Why some harm arguments make sense despite the no-alternative-existence-therefore-no-harm argument (the "nonidentity" problem); increasing the likelihood of creating a morally satisfying life even where failure to do so would not render the person's existence a harm from her viewpoint.

In preceding sections, the argument that cloned offspring might be harmed was taken seriously, despite the oft-made retort that they cannot be harmed simply by their creation. The two claims are perfectly consistent. Depending on who is arguing what and in what context, this no-harm-fromexistence response might not be to the point. The fact that someone had no alternative existence is no excuse for battering him. Arguments about impaired autonomy and individuality, as I said, do not properly rest on matters of intrinsic or inherent harm associated with a person's genesis, but on the results of intrusive rearing and thoughtless heckling, or worse. These results are largely avoidable, at least in theory—a rather large qualification, to be sure. Arguments about such harms to the offspring thus entirely bypass the no-alternative-existence-therefore-no-harm (no-harm-fromexistence) defense of cloning. Those who are willing to tolerate cloning but wish to minimize its instrumental risks are simply saying, in effect: If you are going to clone someone, go ahead, but the fact that her existence as such is not a harm to her is no reason not to optimize the quality of her life. If necessary, the plan that hatched the cloned offspring must on moral grounds be abandoned—even if this discourages the birth of clones.

³²⁷ See Rodriguez, supra note 303. "My sister... knows she is the queen and princess who saved my life." Id. (quoting Anissa Ayala-Espinosa, the sister who was saved by the bone marrow transplant).
³²⁸ There is a substantial body of literature on what might be called paradoxes of existence, as well as many "wrongful life" cases. See, e.g., Turpin v. Sortini, 643 P.2d 954 (Cal. 1982) ("rejecting" wrongful life theory and denying general damages, but awarding special damages nevertheless); DAVID HEYD, GENETHICS: MORAL ISSUES IN THE CREATION OF PEOPLE (1992); DEREK PARFIT, REASONS AND PERSONS 351-79 (1984); Joel Feinberg, Wrongful Life and the Counterfactual Element in Harming, 4 SOC. PHIL. & POL'Y 145, 158 (1984).

b. When instrumental harm is thought to be unavoidable: the no-harm-from-existence argument revived.

Suppose, however, someone insists that benign outcomes are improbable with cloning, so the likelihood of an impaired life—whether as a happy slave or an unhappy Socrates—is monumental. Out of a thousand clones, perhaps no more than one—if that—will be truly autonomous, individuated, unreduced, unobjectified, and treated as an end in herself rather than being subjected to mere use.

Now we must ask again: Does it make sense to oppose human cloning and other new forms of reproduction because they risk high-probability instrumental harms to the child? Every nonstandard form of reproduction has been attacked on this ground, among others, and some observers believe that it is a decisive consideration against attempts at human cloning, at least before further experimentation yields more information about physiological risks. (The evaluation of the research methods—which at some point would have to involve human nuclear cells and embryonic material—I leave aside. I note only that, on certain views, there is no acceptable way to generate the very information needed to show that the ultimate goal-human cloning-will satisfy the risk/benefit constraints defining the limits of permissible investigation and of ultimate use. In that case, cloning would be indefinitely foreclosed unless unethical experiments were undertaken. Even then, cloning might be opposed on the ground that the knowledge acquired should not be used because its acquisition was tainted—one form of an argument from evil.)

The response to this attack is the "nonidentity" argument mentioned above: if a more-or-less normal child is born into tolerable life circumstances—whether through cloning, in vitro fertilization, a surrogacy transaction, and so on—then *from the child's viewpoint*, her existence cannot be a harm to her of any sort. This is because the avoidance of any of these reproductive innovations will also avoid her existence.³²⁹ Either the cloned offspring exists as a clone, or she does not exist at all.

Perhaps in rare cases the very same cloned person could have been born as a result of quite different motivations. Assuming (heroically) one can clone the not-so-recently deceased, suppose someone suggests that Jeremy Bentham's stuffed remains be searched for a complete genome (intact or assembled from different cells), and that he then be cloned. (This is just a thought experiment; I am not claiming this is possible now or ever will be.) The express purpose is to so constrict the clone's education that he becomes fanatically oriented toward utilitarian moral theory. (Compare James and John Stuart Mill. See generally Mill, supra note 154.) Then suppose someone protests that this is too much like indentured servitude and instead proposes cloning Bentham "just so we can watch a developing genius at work, educated in a non-monolithic way, and learn from him." Cloning for this reason would be less objectionable, and it is possible that the planner in good faith would adopt and implement this plan. One could say of the clone, born to be a utilitarian godhead, that he should have been born of the other plan; he had, in a restricted sense, an alternative existence. Compare this to Roberts's arguments on multiple cloning. See infra note 351.

On the other hand, there are possible persons who would prefer nonexistence.³³⁰ Tay-Sachs victims are obvious examples—perhaps paradigm cases. One can coherently claim that such persons are indeed harmed by coming into existence. Perhaps this can be roughly captured by saying that they have a right not to come into existence because doing so will harm them. If it seems odd to speak of rights of unconceived entities not to be brought into existence, so be it. The "oddity" does not torpedo the "wrongful life" argument.

This argument—that despite adversities, few offspring of assisted reproduction would be harmed by just existing—has been derided for several reasons. One critique is that it countenances bringing persons into the world solely to be used and possibly harshly abused. Another is that it proves too much: it establishes, so it is urged, that all nonexistent entities have a right to be born because existing is generally better than not existing. "[The no-harm-from-existence argument] presupposes that children born of cloning are waiting in the void of nonexistence to be summoned into existence and that if they do not receive the call to life, they are harmed." "331

Neither of these claims is sound. To take the latter objection first: it is a non sequitur that reflects a serious misunderstanding of the argument. The no-harm-from-existence argument states simply that, if one is planning some form of assisted reproduction, harm to the offspring is generally not a sufficient condition for showing that the plan is morally wrong. There is no pro-natalist imperative at work. It does not follow that because existence is generally better than nonexistence for the existing person, that the nonexistent have a right to be born, and that we have a corollary duty to try to get them born. The attempted *reductio* gets nowhere. We simply have no duty to "better the status" of the nonexistent by bringing them forth.

³³⁰ The idea of preferring nonexistence is not simple. A central puzzle is to separate "subjective" and "objective" aspects of the person's life. Compare, for example, the current subjective viewpoint of someone with treatable suicidal depression who thinks her life is not worth living, with the external view that she is simply mistaken about her life and about the permanence and rationality of her present feelings. This is a situation that a well-crafted assisted suicide law would screen for. However, it would be hard to articulate a general theory of what circumstances to include or exclude in determining whether a person's existence is from her standpoint worse than oblivion. Perhaps, for present purposes, all that needs to be said is that the issue is a function of "intrinsic" attributes (matters of physiology, whether genetic or nongenetic, or some blend) and possibly of externally contingent matters (as whether one is born into a slave society using torture as an instrument of control, or whether some medical condition is treatable). However, it is the contingency of these conditions that weighs against using them to define the inherent quality of the person's life for purposes of determining whether it is preferable to nonexistence from that person's viewpoint. Slave societies can be overthrown, hostile parents can be replaced, and so on. As applied to cloning, the anticipated hostile reaction of the observing public may indeed involve such overbearing intrusion that the clone may feel a strong desire to leave this life. But it seems odd to say that a contingent reaction, however likely, renders the person's life not worth living from her viewpoint.

National Advisory Board on Ethics in Reproduction, Report on Human Cloning Through Embryo Splitting: An Amber Light, 4 Kennedy Inst. Ethics J. 251, 258 (1994).

Yet the argument in defense of cloning—that existence is rarely a harm, and that a given reproductive act is not wrong simply because the children born will bear elevated risks—seems counter-intuitive to some and is often ignored. Many will protest that of course the poor clone is harmed—look at him, trying to live up to his father (the nuclear source), in love with his mother, living under the sort of obscene scrutiny that besets United States presidents. And look at her, brought into the world to be three feet tall so she could comfortably and efficiently travel to Neptune. The latter is just the sort of situation envisioned by the attempted reductio above—that persons are coming into existence only to be abused. More generally, many of us would recoil—this is our viewpoint—at the prospect of having children who are impaired or likely to suffer serious harms because of their life circumstances, even though their conditions are compatible with a life worth living from their respective viewpoints. This perspective applies to all cloning, not just to extreme mere use or bizarre-relationship situations, although such circumstances are far more odious.

This reaction is amplified when we sense that the child was born, not in the normal course of events, but as a result of choosing to "bypass" nature: "This did not have to be," we are likely to say. Harms that occur during natural or traditional processes that we choose to pursue are one thing (though strictly speaking they "did not have to be" either); those that come about through our choice to use technological or social innovations are another—or at least so it might seen. We are likely to feel more responsible when suffering arises from what we need not have done. (This underlies some of the emotional pull of the action/omission distinction.) It seems unrealistic to expect that those who see suffering to dismiss it by saying to themselves that the suffering parties had no other way to exist—that the only way to prevent the pain was through preventing existence. If this reaction is irrational, shouldn't we try to correct it? What if we fail? Should be avoid or ban certain practices because they will inevitably be misunderstood?

2. Separating Viewpoints

We need now to separate viewpoints.³³² Just because potential persons would believe their lives worth living does not establish their right to be

³⁷² I think that moral analysis resting partly on a separation of viewpoints is consistent with Brock's criticism of the argument from no-harm-to-a-specified-person-caused-by-her-existence, also known as the nonidentity problem. See Brock, supra note 51, at 156-67. The latter description stems from the fact that to avoid generating a person in dire straits, one cannot arrange for that specific person to be born via other arrangements. He discusses the issue at greater length in Dan W. Brock, The Nonidentity Problem and Genetic Harms—the Case of Wrongful Handicaps, 9 BIOETHICS 269 (1995). He offers a revised version of a problem discussed in PARFIT, supra note 328, at 351-79. Parfit discusses the nonidentity problem via the example of a woman advised that if she reproduces during a given time span, her child will have a serious impairment (although consistent with a life worth living),

born. Likewise, it does not establish that the community cannot take steps to reduce the number of persons suffering even though the lives of the sufferers are, to them, preferable to nonexistence. But why does the community's point of view matter here? Why should X, who suffers knowing that possible person Y will suffer, be able to prevent Y's existence? (What sorts of steps the community can constitutionally take is another question.) We can easily acknowledge that X's suffering upon seeing Y's suffering is presumptively a harm to X. However, accepting the moral relevance of individual or community preferences such as X's does not commit us to recognizing plenary power to prevent "blighted" existences by banning the offending reproductive ventures. As I argued elsewhere, ³³⁴ if we were presented with a choice of pushing Button P (where a healthy child would be born into tolerable life circumstances) and Button Q (where a seriously impaired child would be born), no one's rights would be infringed by our pushing Button P. Indeed, our rights would arguably be impaired if we were required to push Button Q. If we rationally believe that a critical mass of suffering humanity would gravely demoralize the community that sees it, or stretch its resources, or risk a brutalizing attenuation of norms, then we can rationally prefer the childrens' nonexistence and prefer the existence of another cadre of persons not similarly at risk. One might think, for example, that "clonal reproduction might put too great a strain on the family, an institution already laboring under the substantial pressures of modern life." The community can rationally prefer to inhibit certain kinds of person-creation even if it understands that from the sufferers' viewpoints their existence is not worse than oblivion. And that view holds even if we acknowledge that invoking threats to the institution of the family begs too many questions about what forms "families" or other affiliations can take. Our rational preference is based on harms external to the children's viewpoints—the baleful effects of our reactions, whether our reactions are entirely sound or not. Without a countervailing duty, we are not obliged to inflict or tolerate injuries on ourselves or put our existing institutions at risk if we do not want to. The question is whether they are the sorts of risks that justify interfering with

but if she waits until the time-window closes, her child—a different one—will not have this impairment. He argues the impaired child is not wronged because it is implausible under the circumstances to say that from the child's viewpoint her nonexistence is preferable to life. Id.

³³³ Note that in referring to "the perspective of the community," I do not mean to suggest that there is some simple homogeneous social entity with views that can be easily characterized. In any event, I doubt that there is a truly monolithic community perspective either for or against cloning.

³³⁴ See Shapiro, supra note 17, at 1138-39. This analysis seems consistent with Parfit's view that "[i]f in either of two outcomes the same number of people would ever live, it would be bad if those who live are worse off, or have a lower quality of life, than those who would have lived." PARFIT, supra note 328, at 360. However, he does not take this as an absolute. Illustrations of this are offered in Burley & Harris, supra note 252, at 109-10 (observing in effect that in some cases, maximizing welfare might ratify improper behavior—for example, prejudiced actions against clones).

335 Newman, *supra* note 300, at 524.

certain individual choices that create those risks: there may indeed be a countervailing duty of noninterference mandated by the Constitution, as well as by purely moral considerations.

Does this separation of perspectives fit with standard moral theory? I can't work this out fully here, but some lines of inquiry can be mentioned. If choosing Button Q would create a seriously impaired child and this would cause widespread emotional distress or other harms, simple utilitarianism would suggest the immorality of pressing that button. Utilitarianism, on this view, counsels one to press the Button P because that's the one that produces the greatest surplus of happiness (or whatever the good is).

But this is a bit too simple. There remains the issue of whether our reaction should simply be accepted rather than revised. And the question whether the community should *compel* what it considers the (supposed) morally correct choice can itself be morally contested. As a community, why don't we require far greater care in reproductive decisions generally? The short answer seems to be that—also as a community—we wish to maximize individual autonomy over what is considered, despite its obvious externalities, an intensely private decision. Moreover, preserving this broad view of reproductive autonomy may, for all we know, create a greater net surplus of the good than would forcing reproductive restraint. The autonomy/privacy/rights-oriented view of procreation reflects long-standing tradition and informs constitutional analysis. Utilitarian standards may also be satisfied if the satisfaction of parents' preferences are, as they must be, part of the calculus.

If we wish to rewrite our current reproductive script, then we are free to debate it—but that debate, once again, does not rest on protecting persons with no alternative existence. It rests instead on what harms to ourselves and to the community we wish to avoid—and how these considerations weigh against claims of reproductive autonomy. We are not morally bound to tolerate any and all forms of reproduction just because the offspring are rarely harmed by virtue of their existence alone. The no-harm-from-existence argument says only this: when considering all the personal and communitarian reasons for or against reproduction, existential harm is irrelevant unless the life involved is not worth living from the viewpoint of the person living it.

Nevertheless, to the extent that our external viewpoint *fails* to take account of the no-harm-from-existence argument, it is flawed. Insisting on that argument's relevance to overall moral analysis of the situation does not, standing alone, commit us to permit or require one to reproduce in a given way, or beg any questions about whether any unconceived persons ought to be born.