7 Constitutional Constraints?

7.1 Traditional Reproductive Technologies versus Technologies of Reproductive Control

Many Americans regard procreative decisions as a quintessentially private choice. This is especially true of prospective parents, advocacy groups, and ART professionals. Widely held beliefs in the area of reproductive medicine tend to translate into the presumption that procreative choices should receive constitutional protection against government interventions. Rules and regulations promulgated by a new regulatory entity are therefore likely to trigger judicial review. In light of this possibility, it is worthwhile exploring in some detail what legal reasoning may warrant granting or denying constitutional protection to procreative choices involving the use of assisted reproductive technologies.

No matter what a regulatory intervention in the area of reproductive medicine is designed to achieve, one of its most likely effects is to limit the access to these technologies and in some cases to nullify some individuals' desires to have a progeny. There is little doubt that laws and regulations are indeed likely to restrict the access to assisted reproductive technologies, at least in part, but their constitutional import varies considerably depending on the type of restriction and reproductive technology involved and the likely impact on prospective parents. Making the access to in vitro fertilization excessively difficult may be a much more problematic proposition than banning reproductive cloning, for example. How regulatory interventions may be ranked in terms of their constitutional import is the subject of this chapter.

Since Louise Brown was born more than 25 years ago, the number of available reproductive technologies has expanded greatly. Assisted reproductive technologies nowadays include IVF, GIFT (gamete intrafallopian transfer), ZIFT (zygote intrafallopian transfer), IUIs (intrauterine insemination with washed sperm), intravaginal culture, oocyte and sperm donation, and micromanipulations such as ICSI (intracytoplasmic sperm injection), among others.[1] The ultimate purpose of all these medical procedures is identical: They are designed to help couples and individuals to start a family. None of these technologies was designed to meet specific parental desires other than to have a child. For this reason, in the following discussion we speak of traditional assisted reproductive technologies.[2]

In a different category are assisted reproductive technologies designed not merely to facilitate procreation but to customize it. Customization may mean different things, ranging from selecting an embryo free of a particular genetic disease to giving birth to a baby for the purpose

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[1] A partial discussion of these procedures can be found in Centers for Disease Control and Prevention, "2002 Assisted Reproductive Technology Success Rates: National Summary and Fertility Clinic Reports," p.3.

[2] We have introduced this category and discussed some of the ethical issues raised by these types of procreative technologies in chapter 4.

of saving the life of an older sibling. Pre-implantation genetic diagnosis is commonly used in both cases. Customization may also mean fulfilling a desire for a girl or a boy, a desire whose fulfillment technologies such as MicroSort are making both possible and affordable. A more problematic illustration of customized conception has been provided by a couple of deaf individuals that wished to have a deaf child.[3] This category also comprises any ART that facilitates selecting embryos for higher traits, a fairly remote possibility at this time but one that, given the speed of scientific progress, should not be underestimated.[4] In this chapter, we refer to procreative technologies that facilitate meeting specific parental desires as technologies of customization.

The distinction between technologies of customization and traditional assisted reproductive technologies is crucial.[5] The former are not designed primarily to overcome a physiological condition (infertility) that impairs the procreative capacity of an individual, man or woman. Rather, these technologies expand the prospective parents' ability to control the procreative process itself. Unlike regulatory interventions in the area of traditional ARTs, laws and regulations pertaining to technologies of reproductive control have a much more limited impact on prospective parents. They may restrict the range of available procreative options but do not constraint the ability to procreate per se. In other words, interventions in this area target specific reproductive goals, for example elective sex selection, but do not in any way question the legitimacy of an individual or a couple's desire to start a family.

Laws and regulations in the area of traditional assisted reproduction are more likely to impinge upon a basic desire to have a progeny; these interventions, in addition to making the access to traditional ARTs somewhat more difficult and costly, are also likely to limit the range of available reproductive options, possibly making it impossible for certain couples and individuals to fulfill their reproductive dreams. Consider, for example, a ban on the free trade of oocytes. Prohibiting commercial practices in this area is likely to reduce the availability of oocytes and make it impossible for some couples to have a progeny. Older women in particular may discover that the scarcity of oocytes tends to put them at a disadvantage.

Marital status and the type of intimate relationships involved in a procreative project represent a second dimension of our discussion. ART services are no longer requested only by traditional families (i.e., by married heterosexual couples). Single individuals, both women and men, unmarried couples, as well as homosexual couples of both sexes are increasingly seeking out the services of the ART industry. Laws and regulations in the area of reproductive medicine

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[3] Spriggs, "Lesbian Couple Create a Child Who Is Deaf Like Them."

[4] In a recent review of the scientific literature in this area, the Genetics and Public Policy Institute suggests that targeted genetic modifications may become possible much earlier that anticipated just a few years ago Baruch et al., "Human Germline Genetic Modification: Issues and Options for Policymakers."

[5] In chapter 4, we introduced a somewhat finer classificatory grid. Consistency would require that we use the same classificatory scheme in this chapter. However, doing so would have made our discussion exceedingly lengthy and complex. To keep this chapter from becoming unwieldy, we have decided to focus on the distinction that is in our view is of fundamental importance – the distinction between therapeutic uses and technologies of reproductive customization.

are likely to limit the number of reproductive options available to some of these couples and individuals, or to make the access to them more difficult. For example, regulations governing access to sperm banks may stifle a single woman's desire to have a baby. Surrogacy laws may prevent a single man or a homosexual couple from having a genetically related child. To the extent that laws and regulations restrict access to reproductive options for certain couples and individuals, they are also likely to be reviewed by the courts.

The combination of different reproductive technologies and diverse family relationships and reproductive goals gives rise to a bewildering array of distinctive situations. Examining each and every possible combination is well beyond the scope of the present discussion. Here, we limit ourselves to examining two sets of fairly homogenous cases, regulatory interventions targeted at traditional assisted reproductive technologies and regulations limiting the availability of technologies of customization.[6]

The distinction between regulatory interventions targeted at traditional assisted reproductive technologies and interventions limiting the access to technologies of customization is informed by the view that each type of intervention impinges on qualitatively different individual choices, and calls upon different standards of state justifications. Government interventions in traditional forms of assisted reproduction may be more problematic than regulations designed to restrict the access to technologies of customization. Treating different procreative projects differently already suggests that a broadly defined fundamental right of procreation may not exist, if this right is supposed to protect access to ARTs independently of their purpose, of the technological means envisaged, and of the individuals involved. This is an important point worth emphasizing. It is certainly not our intention to deny individuals an opportunity to procreate. At the same time, we believe it would be wrong for the courts to discover a broad new class of fundamental rights.

As we show below, neither the U.S. Constitution nor case law provides an especially strong justification for recognizing a broad class of new fundamental reproductive rights. The public and its elected representatives should have the opportunity to extensively debate the relative merits of protecting individual liberties vs. honoring majoritarian societal values as expressed by federal and state laws and regulations, before the Supreme Court is called upon to adjudicate societal controversies. A Supreme Court ruling recognizing the existence of a broadly construed

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[6] Like any classificatory scheme, the distinction between these two classes of assisted reproductive technologies is not always unambiguous. For example, is egg donation for women in their 40s and 50s an instance of a traditional assisted reproductive treatment or a case of reproductive control? One could argue that age is not a medical condition, and therefore that egg donation in this case should be considered a technology of reproductive control. On the other end, this treatment can hardly be described as a technology of customization, so perhaps it should be considered a more or less traditional instance of assisted reproductive treatment. That it may not always be possible to unambiguously characterize each and every case as either an instance of assisted reproductive treatment or as an example of customized conception is not a specific limitation of our classificatory scheme, but simply an illustration of the conventional nature of any system of classification. Barnes, "On the Conventional Character of Knowledge and Cognition."; Barnes, Bloor, and Henry, *Scientific Knowledge: A Sociological Analysis*; Bloor, *Wittgenstein, Rules and Institutions*.

procreative right, unlikely as it is, would preclude any such debate, and would likely be regarded by the public and the Congress as undemocratic.[7]

7.2 Questions of Constitutional Interpretation

7.2.1 Selecting a Level of Generality

In deciding whether a right qualifies as fundamental, the Court applies what has become known as the "substantive due process" doctrine. The term stems from the interpretation of the due process clause of the Fifth and Fourteenth Amendments. The Court has long held the view that due process consists of both a procedural and a substantive component. Substantive due process is indispensable to protect certain fundamental rights from lawfully being taken by the state. The due process clause then requires not only that the state follow certain rules and procedures in taking away a "person's life, freedom, or property," but also that it provide a rational justification for doing so. Unfortunately, it is not entirely clear how the Court applies this doctrine.

Substantive due process remains an extremely controversial legal doctrine.[8] During the so-called Lochner era, the Court made extensive use of substantive due process to invalidate state laws restricting economic activities.[9] With Griswold v. Connecticut (1965), the Court sanctioned a fundamental right to privacy partly on substantive due process grounds that laid the basis during the 1970s and 1980s for an expansive interpretation of privacy rights. It is not too difficult to appreciate the reasons for the controversial nature of this legal doctrine: It affords the Court an extremely powerful tool of political intervention. How the Court should go about determining whether an asserted liberty interest is fundamental is not entirely clear. Two distinctive approaches can be identified, one based mainly on case law and the other on societal traditions. We examine each in turn.

Crucial to the determination whether an asserted fundamental right is consistent with early rulings is the selection of what constitutional scholars refer to as the appropriate "level of generality."[10] This concept can best be explained with an example. Consider the case of a couple

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[7] In passing, we should mention that this is not an issue of conservative versus liberal politics. To our knowledge, only the United States among modern democracies has introduced a right to terminate a pregnancy by judicial means. Every other country that has legalized abortion has done so through the legislative process.

[8] James W. Ely, "The Oxymoron Reconsidered: Myth and Reality in the Origins of Substantive Due Process," *Constitutional Commentary* 16 (1999); John Harrison, "Substantive Due Process and the Constitutional Text," *Virginia Law Review* 83 (1997); Stephen A. Newman, "Human Cloning and the Substantive Due Process Riddle," *Southern California Interdisciplinary Law Journal* 8 (1998).

[9] See 198 U.S. 45 (1905). The Court found a New York law limiting the number of hours a baker could work each week unconstitutional on the grounds that it was a violation of substantive due process and called it an "unreasonable, unnecessary, and arbitrary interference with the right and liberty of the individual to contract."

[10] Bruce Ackerman, "Levels of Generality in Constitutional Interpretation: Liberating Abstraction," *University of Chicago Law Review* 59 (1992); Frank H. Easterbrook, "Presidential Review," *Case Western Reserve Law Review* 40 (1990); Laurence H. Tribe and Michael C. Dorf, "Levels of Generality in the Definition of Rights," *University of Chicago Law Review* 57 (1990).

that has been denied access to pre-implantation genetic diagnosis for a non-therapeutic use – elective sex selection, for example. The couple decides to challenge this regulation in court on the grounds that the federal statute banning elective sex selection violates its right to privacy. How is the Court to determine whether the couple has a legitimate liberty interest in this matter, and if so what criteria should inform the Court decision as to whether this interest constitutes a fundamental right? The latter question is often at the center of cases involving reproductive rights. Surprisingly (to us at least), no coherent methodology exists to determine whether an asserted right should be considered fundamental.

The Court can seek guidance, first of all, in the Constitution itself. A narrow reading of the case under consideration would lead to the (obvious) conclusion that the Constitution offers no guidance whatsoever on the use of PGD for elective sex selection. Absent any guidance at this extremely low level of generality, the Court could select a somewhat higher level of generality. It could do so by scrutinizing its own judicial record. The Court could consult opinions involving the use of other reproductive technologies of customization, of which PGD for elective sex selection is an example. Once again, the Court would not be able to find any relevant precedents. The justices could select an even higher level of generality by turning to cases pertaining to the use of assisted reproductive technologies in general. Unable to find relevant precedents, the Court could simply review cases involving procreative rights narrowly defined, or even procreative rights in general (in other words, rights to procreate or not to procreate).

Unsatisfied with an interpretation of case law based on reproductive rights, the Court could explore an altogether different line of reasoning involving privacy rights. These rulings, not coincidentally, include (but are not limited to) several rulings pertaining to reproduction. Should the Court determine that PGD for elective sex selection really revolves around privacy rights, it would explore which activities in the past have been deemed private, and whether the case under consideration may be described as another instance of a private activity the government can only infringe by meeting a strict scrutiny test.[11] But the Court could also determine that neither its rulings on reproductive rights nor those pertaining to privacy really shed much light on the present case and decide to explore an altogether different line of reasoning.

To say that selecting the most appropriate level of generality is a task fraught with difficulties is an understatement. As our brief discussion demonstrates, it may be possible to select more than one line of Court rulings consistent with the case under review. Worse, the Court may find that cases raising seemingly analogous questions have received rather different answers. That under these circumstances the Court is far more likely to "discover" new fundamental rights is not entirely surprising. For this reason, in recent times, the Court has resorted to what a commentator has labeled "due process traditionalism."[12] In banning physician-

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[11] The Court applies the "strict scrutiny" test to government intervention in matters deemed fundamental. In principle at least, the government is not prevented from infringing upon a fundamental right, but the intervention in this case must be motivated by a "compelling state interest." In addition, the state must demonstrate that the proposed intervention is a necessary and narrowly drawn means to pursue a compelling state interest.

[12] Cass Sunstein, "Is There a Constitutional Right to Clone?," *Hastings Law Journal* 53 (2002), p.989.

assisted suicide, the Court has established that practices protected by substantive due process must meet two specific requirements: (a) that they be "deeply rooted in this Nation's history and tradition" and "implicit in the concept of ordered liberty," such that "neither liberty nor justice would exist if they were sacrificed," and (b) that there be a "careful description" of the liberty interest being asserted.[13] An asserted right, then, is deemed fundamental if there exist specific, longstanding societal traditions that uphold it.

The most articulate advocate of this approach has been Antonin Scalia. In Michael v. Gerald (1989), the Court was called upon to determine whether a natural father had visitation rights to a child conceived with a women married to another man. The Court found that protecting the integrity of the family trumped the father's interest in visiting with his child.[14] Justice Brennan, dissenting, argued that the Court should have focused on "parenthood" rather than on the right of natural fathers, per se. In a now-famous footnote, Justice Scalia replied that the Court in its ruling had selected the most specific level of generality at which a relevant tradition protects or denies protection to an asserted right.[15] Had the Court majority followed Justice Brennan and selected the much broader category of parenthood, perhaps the father's interest in maintaining and developing a close relationship with his child would have been recognized. But because a societal tradition with regard to the rights of the natural father of a child adulterously conceived existed, it was not necessary for the Court to select the much higher level of generality implied by the concept of "parenthood."

Several Court cases have been decided by invoking historical traditions at the lowest possible level of generality. For example, in Moore v. East Cleveland (1977), the Court determined that a woman had a right to live with her two grandsons in one apartment even though a local ordinance limited occupancy of a dwelling unit to members of a single family. In finding against the city of Cleveland, the Court noted that "Our decisions establish that the Constitution protects the sanctity of the family precisely because the institution of the family is

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[13] See 521 U.S. 702, 721 (1997).

[14] Note the ambiguity built into this argument: The "family" to be protected in this case is implicitly defined in legal terms, whereas the relationship between the father and his child is reduced to a mere matter of "visitation rights."

[15] Justice Scalia formulated his reply to Justice Brennan as follows:

> We do not understand why, having rejected our focus upon the societal tradition regarding the natural father's rights vis-à-vis a child whose mother is married to another man, Justice Brennan would choose to focus instead upon "parenthood." Why should the relevant category not be even more general – perhaps "family relationships"; or "personal relationships"; or even "emotional attachments in general"? Though the dissent has no basis for the level of generality it would select, we do: *We refer to the most specific level at which a relevant tradition protecting, or denying protection to, the asserted right can be identified*. If, for example, there were no societal tradition, either way, regarding the rights of the natural father of a child adulterously conceived, we would have to consult, and (if possible) reason from, the traditions regarding natural fathers in general. But there is such a more specific tradition, and it unqualifiedly denies protection to such a parent. 491 U.S. 110, footnote 6, emphasis added.

deeply rooted in this Nation's history and tradition."[16] In Snyder v. Commonwealth of Massachusetts (1934), a case involving procedural matters in a criminal trial, the Court found that "The commonwealth of Massachusetts is free to regulate the procedure of its courts in accordance with its own conception of policy and fairness, unless in so doing it offends some principle of justice so rooted in the traditions and conscience of our people as to be ranked as fundamental."[17] And in Washington v. Glucksberg (1997), the Court ruled that bans on assisted suicide are deeply rooted in the nation's history.[18]

Due process traditionalism offers what at first may be regarded as an impartial methodology for selecting the most appropriate level of generality, a way out of interpretational ambiguity and constitutional arbitrariness. Unfortunately, specificity does not necessarily eliminate interpretative ambiguity. If in Michael v. Gerald the Court were unable to identify a specific societal tradition for the rights of fathers of children adulterously conceived, it might have tried to identify a societal tradition regarding the rights of natural parents (instead of fathers) of children adulterously conceived. Arguably, this level of generality is just as specific as Justice Scalia's suggestion that the rights of natural fathers in general by consulted, but it is clearly distinct.[19] Justice Scalia's proposal cannot resolve this fundamental ambiguity without appealing to rules and criteria external to the Constitution.

Historical traditions have a disciplining effect on the Court; they force the justices to exercise considerable self-restraint in granting fundamental new rights not explicitly recognized by the Constitution. Does this mean that the Court should not recognize new fundamental rights absent a relevant tradition? Hardly. In Loving v. Virginia (1967), for example, the Court struck down a Virginia law that prohibited interracial marriage. It did so not by identifying a specific societal tradition, which obviously did not exist, but by invoking substantive due process. In this case at least, the absence of a specific historical tradition would have been a problematic justification for upholding a state prohibition of interracial marriage. Several other reasons exist for considering with some skepticism traditions as the sole source of constitutional legitimacy.[20]

Where does this discussion lead us? One obvious conclusion imposes itself. There is little hope to identify a method of constitutional interpretation that avoids injecting in the legal reasoning moral values, personal orientations, and political preferences.[21] This observation should not be taken as a demonstration that constitutional law is dominated by arbitrariness and political considerations. Selecting a level of generality may not be a problem solvable by universally accepted rules; this does not mean that the selection process is necessarily arbitrary,

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[16] See Moore v. East Cleveland, 431 U.S. 494, 503.

[17] See Snyder v. Commonwealth of Massachusetts, 291 U.S. 97, 105.

[18] See 521 U.S. 702, (1997).

[19] For a detailed discussed, see Tribe and Dorf, "Levels of Generality in the Definition of Rights," p.1090-91.

[20] For a discussion, see Newman, "Human Cloning and the Substantive Due Process Riddle."

[21] For a classic examination of this claim, see John Hart Ely, "On Discovering Fundamental Values," *Harvard Law Review* 92, no. 1 (1977).

or that there are an infinite number of possible interpretations. One simply has to recognize that in this as in many other areas of the law, professional and political judgment is inevitable.

7.2.2 From Levels of Generality to Principled Interpretation

The choice of the "appropriate" level of generality may also be described as the choice of a general principle of interpretation. The best-known and most general formulation of this problem has been offered by the late Ludwig Wittgenstein. In a much discussed passage of the "Philosophical Investigations," Wittgenstein asked what is the correct continuation of the number series "1, 2, 3, 4, … " One obvious answer is "5, 6, 7, 8, … " but this is not the only correct answer. Arguably "4, 3, 2, 1" is also a correct continuation, and so is "1, 2, 3, 4, 1, 2, 3, 4, … ." What about "!, @, #, $, …"? At first, few would be inclined to consider this a correct continuation of the original number series. But a perceptive reader may recognize that the latter series obtains from the original one simply by hitting the "shift" key of a QWERTY keyboard, so perhaps "!, @, #, $, …" should also be considered a correct continuation of the original number series.

While there may be several correct continuations of this number series, their number is not infinite and they all display internal coherence. Which continuation is considered to be the correct one depends in large measure on the societal context in which this determination is made. In a primary school class, the first answer is the one most likely to be chosen. By contrast, a group of computer geeks may find the last solution much more natural. The point here is simply that there are several correct answers to this question. Which rule is thought to generate the correct number series is a question that can be answered only in the context of prevailing norms, values, and orientations.

In the next two sections, we discuss two opposite approaches to selecting a level of generality, one illustrated by the Supreme Court in Bowers v. Hardwick (1986), the other by the concept of presumptive procreative liberty as advocated by Professor John A. Robertson and other libertarians. Both provide an illustration of a principled approach to the discussion of procreative liberties. Neither one of them, in our view, provides a suitable template for adjudicating future disputes over the access to assisted reproductive technologies.

7.2.3 An Idiosyncratic Approach to Constitutional Interpretation

In Bowers v. Hardwick, the Court was called upon to rule on the constitutionality of a Georgia statute that criminalizes sodomy.[22] This case provides an excellent illustration of constitutional interpretation at an exceedingly low level of generality. The actual ruling in this case is less interesting than the methodology used by the Court to reach its conclusions. The Court asked whether "the Federal Constitution confers a fundamental right upon homosexuals to

[22] See 478 U.S. 186 (1986). It should be mentioned that this ruling was recently reversed. In Lawrence v. Texas, the Court found that the right to privacy does indeed extend to homosexual sex.

engage in sodomy […]." [23] By a five-to-four majority, the Court answered this question in the negative.

A crucial element of the Court ruling was its interpretation of case law. After noting that Pierce v. Society of Sisters (1925) and Meyer v. Nebraska (1923) were cases dealing with "child rearing and education," that Prince v. Massachusetts (1944) focused on "family relationship," Skinner v. Oklahoma (1942) on "procreation," and Loving v. Virginia on marriage, that Griswold v. Connecticut and Eisenstadt v. Baird (1972) were concerned with the use of contraceptives, and that Roe. v. Wade (1973) concerned abortion, the Court concluded that none of these opinions bore any resemblance to an asserted fundamental right to engage in acts of sodomy.

The Court opinion makes clear that the justices interpreted their own record in a very narrow, almost literal way. There is no particularly compelling reason for interpreting case law literally other than in so doing, any continuity between earlier Court rulings and the present case vanishes. Every case appears to be unique and disconnected from other cases – including the case under consideration. At this particular level of generality, the Court was quite correct to proclaim that cases pertaining to child rearing and education, family relationships, marriage, procreation, contraceptives, and abortion bear little resemblance to homosexual sodomy.[24] Absent relevant precedents, the Court turned to societal traditions as a possible source of constitutional guidance. The Court, however, concluded that homosexual sodomy is neither part of the concept of ordered liberty nor a fundamental aspect of the nation's traditions.[25] Sodomy, in other words, cannot be considered a practice "deeply rooted in this Nation's history and tradition."

The legal reasoning used in Bowers v. Hardwick is of some relevance to cases involving reproductive rights. At a very low level of generality, assisted reproductive technologies bear no resemblance to any other Court ruling. The only case involving positive procreative rights, Skinner v. Oklahoma, pertains to the natural ability of a man to procreate; it says nothing about the rights of a couple to access assisted reproductive technologies, or technologies of customization for that matter.[26]

The Court could have determined that Bowers v. Hardwick was to be decided on privacy grounds. At this (higher) level of generality, several Court rulings exist. "Marital privacy" may not be relevant in this case, but perhaps "intimate associations" are. We are not claiming that the ruling necessarily would have been different had the Court selected a higher level of generality.

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[23] See 478 U.S. 186, 190.

[24] The Court acknowledged that in the past, it often has granted fundamental status to rights not explicitly contained in the Constitution by interpreting the due process clauses of the fifth and fourteenth amendments substantively rather than procedurally, but it quickly resolved this tension by noting that deciding a case on substantive due process grounds involves much more than "the imposition of the Justices' own choice of values on the states and the federal government. See 478 U.S. 186, 191.

[25] See 478 U.S. 186, 191-192.

[26] Nor could the Court offer any guidance on this matter, because it ruled on this case in 1942.

What is obvious is that the Court simply decided to ignore these and other rationales offered in earlier rulings, opting instead for a literal interpretation of the case law.

We believe that the approach taken by the Court in Bowers v. Hardwick does not provide a suitable template for cases involving assisted reproductive technologies. By selecting the lowest possible level of generality, the Court would make sure that no new reproductive rights could ever be recognized. We are not arguing that they should. As pointed out earlier, it seems to us that societal and political debates should precede Supreme Court rulings on matters as delicate as procreative rights. But to treat each new case pertaining to reproductive technologies as a unique situation unrelated to past Court reasoning seems to us an abdication of the Court's responsibilities.

7.2.4 Robertson's Concept of "Presumptive Procreative Liberty"

The constitutional protection that Robertson and other libertarian scholars would like to afford to ARTs is predicated on interpreting case law at a very high level of generality – precisely the opposite of the approach taken by the Court in Bowers v. Hardwick.[27] Robertson's concept of presumptive procreative liberty is based on a key assumption: Even though the Constitution does not explicitly recognize a procreative right, the Supreme Court is likely to recognize "coital reproduction" as a fundamental right deserving constitutional protection, at least for married couples. Robertson then infers from this narrow definition of procreative liberty that access to most, if not all, kinds of assisted reproductive technologies should be considered a liberty protected by the Fourteenth Amendment.

There are two rationales for Robertson's assumption, an early and a more recent one. In the 1980s, Robertson took the absence of any Court opinion on matters concerning procreative liberty as a strong indication that this right was taken for granted.[28] More recently, Robertson has justified the presumption of a right to coital reproduction by pointing to several Court rulings. These include Meyer v. Nebraska (which affirmed the right to "marry, establish a home, and bring up children"); Skinner v. Oklahoma (which asserted procreation as among "the basic civil rights of man"); Stanley v. Illinois (1972) (that "the rights to conceive and raise one's children have been deemed 'essential,' 'basic civil rights of man' and […] far more precious than property rights"); and the much quoted Eisenstadt v. Baird ("If the right of privacy means anything, it is the right of the individual, married or single, to be free of unwarranted governmental intrusion into matters so fundamentally affecting a person as the decision whether

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[27] John A. Robertson, *Children of Choice: Freedom and the New Reproductive Technologies* (Princeton: Princeton University Press, 1994); John A. Robertson, "Embryos, Families, and Procreative Liberty: The Legal Structure of the New Reproduction," *California Law Review* 59 (1986); John A. Robertson, "Procreative Liberty in the Era of Genomics," *American Journal of Law and Medicine* 29 (2003).

[28] Robertson, "Embryos, Families, and Procreative Liberty: The Legal Structure of the New Reproduction."

to bear or beget a child.”).[29] Legal scholars generally seem to agree that the Court is likely grant fundamental status to coital reproduction, at least for married persons.[30]

Robertson, then, distinguishes between procreative means and ends. Various ARTs, both old and new, are simply the technological means to achieve the all-important procreative end. Accordingly, presumptive procreative liberty includes both coital and “non-coital” procreative techniques, such as sperm, egg, and embryo donation and even surrogacy. ARTs ranging from traditional IVF to ICSI should also be protected, as should more recent techniques such as pre-implantation genetic diagnosis and reproductive cloning, if the technique in question is the only way to achieve reproduction. Robertson goes so far as to argue that there might even be a constitutionally protected right to genetically engineer babies.[31]

How can such sweeping generalizations be justified? Robertson grounds his concept of presumptive procreative liberty on evolutionary biology. In his view, parental desires are not preferences shaped in large measure by social expectations, but biological instincts produced by evolutionary pressure. Evolutionary biology then explains not only why parents have procreative desires, but also why parents may wish to have a baby of a certain sex or with certain traits. For example, beauty is explained in terms of a desire for healthy children. Stamina and strength are key requisites for effectively protecting the familial unit.[32]

Assisted reproductive technologies do not simply help prospective parents fulfill their procreative dreams; they help them implement evolutionarily successful procreative strategies. Since evolutionary biology seems to provide an *a posteriori* rationalization of each and every procreative whim, it is not difficult for Robertson to conclude that access to both old and new reproductive technologies should be granted not only to married couples, but also to unmarried couples, single individuals, and homosexual couples – in short, to anyone.

Does evolutionary biology provide an adequate account of why some parents may prefer a first-born male over a female, or why other parents would want to have a child taller than average? More generally, can parental desires for children with any of what contemporary America considers desirable traits be adequately explained by evolutionary biology? The short answer to this question is no. Evolutionary biology may account for a deeply felt urge to procreate, but just as it does not explain why people may prefer one brand of toothpaste over another, it does not provide an adequate account of prospective parents’ preferences for certain physical and cognitive traits. Parental desires for a successful progeny can perhaps be described as the outcome of natural selection, but natural selection alone does not inform contemporary notions of “success” or the “good life.” Evolutionary biology is an inadequate basis for

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[29] Robertson, "Procreative Liberty in the Era of Genomics," p.452-54.

[30] Carl H. Coleman, "Religious Values and Legal Dilemmas in Bioethics: Assisted Reproductive Technologies and the Constitution," *Fordham Urban Law Journal* 30 (2002), p.61; Ann MacLean Massie, "Regulating Choice: A Constitutional Law Response to Professor John A. Robertson's "Children of Choice"," *Washington and Lee Law Review* 52 (1995), p.150-51.

[31] Robertson, "Procreative Liberty in the Era of Genomics," p.453-54.

[32] Ibid., p.8-10.

generalizing from a strong but generic urge to reproduce to specific uses of assisted reproductive technologies.

7.3 A Different Perspective

The Court has ruled repeatedly on matters pertaining both to reproduction and to privacy. These cases have been quoted so often by the Court itself and by commentators as to warrant a brief review. They are discussed in more detail in Appendix I. The only case specifically dealing with a positive right to procreation is Skinner v. Oklahoma,[33] a case involving a compulsory sterilization law, not procreative liberty per se. It focused on whether it is constitutional for the state to deprive a man of his capacity to procreate. The Court found that the Oklahoma statute was unconstitutional, but it did so by virtue of equal protection, not on substantive due process grounds. In dictum, however, the Court noted, "We are dealing here with legislation which involves one of the basic civil rights of man. Marriage and procreation are fundamental to the very existence and survival of the race."[34]

In Meyer v. Nebraska, the Court found that families have the right to determine what constitutes the best education for their children. Pierce v. Society of Sisters involved the parental rights to send children to a school of their choice, including a private school, a right the Court affirmed. That the education of children is considered an aspect of family life worthy of constitutional protection was reaffirmed in Prince v. Massachusetts and again in Stanley v. Illinois.[35] Also pertinent to this discussion is the right to marry, as sanctioned, for example, in Loving v. Virginia.[36]

Cases specifically focused on negative reproductive rights (i.e., on the right not to reproduce) also might be relevant to the present discussion. Griswold v. Connecticut famously established the right of married couples to use contraceptives by identifying the realm of "marital privacy" as an area the state cannot enter.[37] Eisenstadt v. Baird extended this right to unmarried couples,[38] and Carey v. Population Services International (1977) afforded the same right to young adults 16 years of age and older,[39] whereas Roe v. Wade sanctioned a woman's right to terminate a pregnancy,[40] a right reaffirmed in Planned Parenthood of Southeastern Pennsylvania v. Casey (1992).[41]

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[33] See 316 U.S. 535 (1942).
[34] See 316 U.S. 535, 541 (1942).
[35] See 321 U.S. 158, 166 (1944); 405 U.S. 645 (1972).
[36] See 388 U.S. 1, 8 (1967).
[37] See 381 U.S. 479 (1965).
[38] See 405 U.S. 438 (1972).
[39] See 431 U.S. 678 (1977).
[40] See 410 U.S. 113 (1973).
[41] See 505 U.S. 833 (1992).

The emphasis placed by the Court on matters concerning the family, the education of children, and contraception and abortion suggests that a state intervention intruding upon natural procreation may have to meet or exceed a strict scrutiny standard. Natural procreation involves several values central to Court jurisprudence, including privacy, bodily integrity, marital intimacy, and integrity of the family unit. These values would be threatened at least in part by a state intervention in this area. For this reason, some commentators believe that natural procreation is likely to fall within the realm of the constitutionally protected private sphere.[42]

Recognizing that the desire to procreate is central to family life does not necessarily afford constitutional protection to each and every type of assisted reproductive technology. While a state intervention in natural procreation likely would trigger strict scrutiny, regulations restricting the availability of ART services are unlikely to raise the same constitutional concerns. The Court may well recognize the centrality of reproduction to family life and personal identity, but avoid extending constitutional protection to each and every assisted reproductive technology, especially when the state has a "compelling interest" in regulating an ART. One such compelling interest is the health and well-being of ART children.

Whether an outright ban of an ART procedure would be declared unconstitutional depends, of course, on the state interests involved, and is a question that cannot be answered in general terms. What is clear is that the Court is very unlikely to generalize broadly from a presumptive right to natural procreation. The jurisprudence of religious freedom provides a useful illustration. Religious freedom, just like freedom of speech, is explicitly recognized as a constitutionally protected liberty. Yet the Court has ruled time and again that certain practices motivated by religious beliefs do not enjoy constitutional protection. Obviously, freedom of religion requires that both freedom of belief and freedom to practice a religion be protected, but the protection afforded to religious practices is far less comprehensive than the absolute protection enjoyed by religious beliefs. The Court has recognized that state interests may override practices dictated by religious beliefs, as for example when it upheld universal immunization requirements and antipolygamy laws against religiously motivated objections. And it might do so without holding these laws to a strict scrutiny standard of review. These precedents demonstrate that the health and well-being of children can override parental desires, even if these enjoy constitutional protection.

Our discussion so far has simply underscored the fact that the Court is extremely unlikely to recognize broadly defined procreative rights. We have not shown how the Court might reason in these cases. Societal traditions, at a very low level of generality, might provide some guidance. Michael v. Gerald is an example, as is Washington v. Glucksberg, a case in which the Court found that our traditions are wholly incompatible with a right to assisted suicide. Resorting to societal traditions will obviously invalidate any claims to new procreative rights. There simply

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[42] Coleman, "Religious Values and Legal Dilemmas in Bioethics: Assisted Reproductive Technologies and the Constitution."; Massie, "Regulating Choice: A Constitutional Law Response to Professor John A. Robertson's "Children of Choice"."; Radhika Rao, "Reconceiving Privacy: Relationships and Reproductive Technology," *UCLA Law Review* 45 (1998).

are not any societal traditions that may guide the Court on matters as novel as access to specific assisted reproductive technologies. More importantly, it is not entirely clear why the Court should focus on societal traditions rather than on its own record. Case law pertaining to reproductive rights and privacy rights may be just as relevant to cases involving assisted reproductive technologies as societal traditions.

There is one major difficulty in defining "reproductive rights" as the most appropriate level of generality. "Reproductive rights" cases generally focus on the right not to reproduce – i.e., they are cases involving the use of contraceptives or the access to abortion services. Whether negative reproductive rights can be generalized to include positive procreative rights is not entirely clear. People have a right to decide whether to interrupt a pregnancy and to use contraceptives, but that does not necessarily imply that they also have a right to choose any technological means to procreate. To put it in starker terms, the use of contraceptives and the access to abortive procedures uncouple procreative choices and recreational sex; Negative reproductive rights cases sanction a right to recreational sex. By contrast, restricting the access to assisted reproductive technologies pertains to the implementation of a positive procreative decision, so to speak.

Restrictions in this area may not prevent a couple or an individual from having a baby; they may simply make the access to a suitable ART procedure more difficult and/or more costly to come by. Regulatory interventions that merely increase the burden of access to an assisted reproductive technology are less likely to raise constitutional concerns: Restrictions to the availability of ART services may be acceptable if they do not represent an undue burden for the couple.[43] In some cases, however, a banned ART treatment may well be the only realistic option to have a child. But even when a ban would prevent some couples and individuals from pursuing their reproductive projects, it is not obvious that the ban by itself would create a serious constitutional concern, especially if the state can offer compelling reasons for the ban.[44]

An alternative to procreative rights could be "freedom of intimate association." It has been suggested that privacy-related Court cases could consistently be interpreted as extending constitutional protection to activities and choices made in the context of intimate associations.[45] For example, the right to marry protects the desire of two individuals to form a family against state intrusion rather than the right of each individual to marry. Neither one of the individuals involved would be able to exercise this right without their partner's consent. The right to raise children is a familial right – a relational right, so to speak, not an individual right. The right to use contraceptives presupposes two consenting individuals. As soon as conflicts arise between the partners to an intimate association, the state has a legitimate role to play.

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[43] Coleman, "Religious Values and Legal Dilemmas in Bioethics: Assisted Reproductive Technologies and the Constitution."

[44] Sunstein, "Is There a Constitutional Right to Clone?," p.993-94.

[45] Rao, "Reconceiving Privacy: Relationships and Reproductive Technology."

Selecting "freedom of intimate association" as the most appropriate level of generality does seem to provide a fairly consistent reading of privacy-related rulings. If used to interpret ART-related cases, it would draw some sharp cutoff points. Reproductive technologies that involve one or more commercial transactions, as in the case of sperm, egg, and embryo donation as well as surrogacy, are unlikely to be granted constitutional protection. In these cases, procreation may involve up to three individuals external to a familial relationship – a sperm donor, an egg donor, and a gestational mother. A fertility clinic is also involved, and perhaps a sperm bank as well. In all these cases, the procreative act is not performed in the context of an intimate relationship. The fact that procreation involves several individuals external to an intimate relationship greatly undermines the intimate nature of the procreative project. A Court relying on this interpretative principle is unlikely to extend constitutional protection to these forms of assisted reproduction.

Whether the concept of "intimate association" would extend to traditional ARTs, is not entirely clear. As long as a couple requires ART services merely to mix their own gametes, one could argue that procreation takes place in the context of an intimate association. In this case, the ART specialist plays merely a facilitating role in an otherwise intimate project. Obviously, the act itself is not intimate, but the Court in Paris Adult Theater I v. Slaton (1973) found that "the constitutionally protected privacy of family, marriage, motherhood, procreation, and child rearing is not just concerned with a particular place, but with a protected intimate relationship. Such protected privacy extends to the doctor's office, the hospital, the hotel room, or as otherwise required to safeguard the right to intimacy involved."[46] Whether the Court would be inclined to define a procreative act facilitated by an ART specialist and performed at a reproductive clinic as private is not entirely clear.

Less problematic is the application of this interpretative principle to cases of customized conception. One may legitimately wonder whether technologies of customization really preserve the intimate nature of a reproductive project. Customization of conception changes the relationship between prospective parents and medical personnel. ART practitioners in this case no longer play a facilitating role: They are not simply in the business of removing physiological obstacles to natural procreation. One might say that they are tasked with "designing" a baby according to parental specifications. Admittedly, this statement amounts to an exaggeration, but only a slight one –moreover, one that is becoming more accurate by the day. Technologies of reproductive customization redefine the very meaning of procreation by "outsourcing," in part or entirely, the process to ART specialists. Some may speak of a "joint venture," but "intimate association" is certainly not the attribute that comes to mind in considering this process. Where exactly a reproductive choice stops being an intimate project and becomes a technological enterprise is not altogether clear. What seems fairly obvious is that the Court would not treat traditional ARTs and technologies of customization as equal.

One may wonder whether the concept of intimate association should be further circumscribed to include activities taking place within the confines of the home, consistent with

[46] See 413 U.S. 49 (1973) at 66 n.13.

the First Amendment's protection of peaceful assembly and the Fourth Amendment's protection of the home.[47] At this relatively low level of generalization, natural reproduction is likely to be considered a fundamental right, access to traditional ARTs would be somewhat less likely to receive constitutional protection, and technologies of customization would be very unlikely to warrant protection by the Court. Roe v. Wade would present a difficulty, of course, and so would other rulings in which the Court reaffirmed certain rights to privacy as extending beyond the private home. On the other end, by this reading, Bowers v. Hardwick would deserve to be re-examined. Indeed, the Court, in Lawrence v. Texas (2003), reversed this earlier ruling.

The New York State Task Force on Life and the Law has identified several additional values that are likely to affect a Court ruling on matters pertaining to assisted reproduction. Among them are bodily integrity, marital intimacy, the importance of being a parent a raising a child, genetic relatedness, religious aspects of the decision to procreate, and a woman's interest in gestation and giving birth. The task force concluded that procreative choices involving most or all of the values listed above are more likely to be afforded constitutional protection than cases in which only one of these values is involved.[48]

Much depends, of course, on the justifications invoked by the government for banning or restricting access to ART treatments. One can anticipate at least some of these arguments by reviewing the legal reasoning offered for banning reproductive cloning. The arguments most likely to survive a rational review or strict review test are those centered on potential harm to ART children. Professor Robertson has argued that possible harm to ART children should not trump procreative liberties because children born through ARTs do not really have any other choice but to live with the limitations imposed by their parents and ARTs, the only alternative being not having been born in the first place.[49] We very much doubt that the Court would find this argument compelling. Pushed to its ultimate consequences, this reasoning would relieve the ART industry of any duty of care. Preventing human suffering, then, is an obvious argument not only against ART procedures such as human reproductive cloning, but also against other innovative reproductive treatments that have not been demonstrated to be safe and effective. In the latter cases, the evidence showing physical harm, while maybe more limited, would certainly be sufficient to meet at least a rational review standard.

Technologies of reproductive customization could also undermine the individuality of the child-to-be. It has been argued that because individuals are shaped as much by their genes as by their environment, this argument is not likely to withstand a rational review, let alone strict scrutiny. This argument is not convincing. That individual experience and the social environment

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[47] Tribe and Dorf, "Levels of Generality in the Definition of Rights," p.1108.

[48] New York State Task Force on Life and the Law, "Assisted Reproductive Technologies. Analysis and Recommendations for Public Policy," (New York, NY: 1998), p.144-46. See also Coleman, "Religious Values and Legal Dilemmas in Bioethics: Assisted Reproductive Technologies and the Constitution."

[49] Robertson, *Children of Choice: Freedom and the New Reproductive Technologies*, p.75. See also John A. Robertson, "Liberalism and the Limits of Procreative Liberty: A Response to My Critics," *Washington and Lee Law Review* 52 (1995), p.250-52.

contribute to shaping individuality does not invalidate the argument that being born as a means to an end rather than as an end in itself could jeopardize the development of a sense of individual identity. Whether the Court would consider this argument compelling depends, of course, on the specific ART involved.

Also relevant to the present discussion is the argument that a customized baby would suffer psychological harm. In the case of reproductive cloning, it may be detrimental for a child to be confronted daily with an older replica of him or herself – to be able to learn at an early stage how one is likely to develop, primarily physically, but to some extent psychologically as well. A child in this situation could easily come to the conclusion that his or her life is pre-ordained, a state of mind that certainly does not promote healthy mental development. This argument is particularly relevant in cases pertaining to reproductive customization. For example, some parents may wish to endow their children with the genetic assets of a top athlete like Michael Jordan, a Hollywood star like Julia Roberts, or a celebrated musician such as Yo-Yo Ma.[50] In all these cases, the children may be treated as means to some parental ends, and not as ends in themselves. Whether the Court would apply a rational review test or the much more demanding standard of strict scrutiny is anyone's guess. What can be said is that the state interests invoked in the cases discussed above would most likely withstand rational review, and perhaps strict scrutiny as well.

In the last section of this chapter, we turn to survey data on the relative importance of biological procreation and genetic relatedness versus adoption. This data is of considerable interest to the present discussion for two reasons. It puts in perspective many assumptions about the centrality of biological procreation and genetic relatedness. And the reduced importance of genetic relatedness to the procreative experience may induce the Court to hold state interventions to a rational test rather than to strict scrutiny.

7.4 Procreative Drive or Familial Desires?

The concept of presumptive reproductive freedom is predicated on the assumption that biological reproduction is a fundamental element of any person's biography and sense of identity. This observation is probably accurate in general form, but it sheds little light on the relative importance of various forms of biological procreation compared to other forms of reproduction – non-biological reproduction such as adoption in particular. Adoption is a particularly interesting case because it is both a well-established practice in all Western countries and is heavily regulated. A recently conducted survey provides several important insights into this question.

The hypothesis to be explored in this section is simply stated: If biological reproduction is as central to an individual's sense of identity as commonly assumed, then adoption should be the

[50] Admittedly, these are not technologies available today. But as pointed out in chapter 4, genetic engineering – defined as the ability to purposefully modify the human genome – has made considerable progress over the last few years. For a discussion, see Baruch et al., "Human Germline Genetic Modification: Issues and Options for Policymakers."

least preferable among all forms of reproduction (biological as well as non-biological). More specifically, ART treatments that afford at least partial biological relatedness should be preferable to adoption. To explore this hypothesis, we used survey data gathered by RESOLVE, a leading national advocate for infertility patients.[51] The survey was conducted in late 2002 and included three samples: 976 RESOLVE members ages 18 to 45, 231 members of the Harris Interactive Chronic Illness Panel, and a representative sample of the U.S. population consisting of 1,034 adults, also ages 18 to 45. The U.S. sample is representative for sex, age, race and ethnicity, education, region, and income. The survey was designed mainly to elicit both the interest and level of information about embryo adoption and embryo donation. It also contained several questions directly pertinent to the present discussion.

A first, startling result emerging from this survey is that biological relatedness is far less important than one might assume. Respondents were asked to determine which reproductive option they would be extremely or very likely to consider if they were unable to have children. As Table 4 demonstrates, adoption is the preferred choice for infertile couples and individuals by very large margins. Adoption – i.e., non-biological reproduction – is preferable even to partial biological relatedness as provided by egg and sperm donation.

% Likely to Consider	*U.S. Population*	*Harris Chronic Illness Panel*	*RESOLVE Members*
Adopting a child	66	71	74
Using donated embryos	27	35	34
Using donor egg	23	32	42
Using donor sperm	19	30	39
Surrogacy	13	16	20

Table 4: Relative importance of biological versus non-biological parenthood.

Interestingly, in all three samples, embryo donation is preferred to surrogacy by a factor of two. Considering that surrogacy could actually ensure complete biological relatedness, the strong preference for donated embryos suggests that the experience of giving birth is at least as important if not more so than biological relatedness. Unfortunately, no data is available on the relative importance of ART treatments that would ensure complete biological relatedness. Nevertheless, these remain rather surprising results. They suggest that the urge to reproduce biologically is perhaps not as consuming as industry representatives and advocates for the infertile seem to believe.

One could argue that these are largely hypothetical answers produced by speculative questions, and that actual behavior would tell a different story. To test this hypothesis, we looked at actual birth rates versus adoption rates of very young children. According to the Census Bureau, in 2000 (the most recent year for which data is available), 1.3 percent of all children one

[51] RESOLVE: The National Infertility Association, "Embryo Donation Research: Select Findings," (Bethesda, MD: 2003).

year of age or younger living in a U.S. household, or 41,795 children, had been adopted.[52] In the same year, according the CDC National Summary and Fertility Clinic Report, 35,025 babies, or 1.1 percent of all children one year of age and younger, were born through ARTs.[53] This means that in 2000, the number of very young children adopted exceeded the number of babies born through ARTs by 19.3 percent. If it had been possible to compare the number of adopted small children to children born through one of the three ART treatments listed in Table 4, this difference would have been even larger.

There may be several reasons for this difference. It is safe to assume that ART treatments that ensure full biological relatedness would be preferable to adoption, but it turns out that adoption is not a measure of last resort. Asked about the reproductive options they had actually considered, respondents with a history of infertility and those with a partner suffering from infertility offered answers consistent with the above findings. As Table 5, Table 6, and Table 7 demonstrate, survey respondents in each panel considered adoption far more often than all other available ART treatments.

Reproductive Method	*% that considered each step*
Adoption	41
Embryo donation	2
Surrogacy	2
Donor egg	3
Donor sperm	2

Table 5: U.S. population.

The data provides strong evidence that once a couple is incapable of reproducing naturally, ART treatments that merely offer biological relatedness are of almost no importance compared to adoption. This is an important finding worth emphasizing. Biological reproduction seems to derive its profound meaning from the union of the parents' egg and sperm. If, for whatever reason, either the prospective father or the prospective mother cannot contribute his or her gamete, biological relatedness loses much of its appeal. In this sense, the term "biologically related children" is misleading. It merges forms of reproduction that are not at all commensurable.

Reproductive Method	*% that considered each step*
Adoption	60
Embryo donation	13

[52] U.S. Census Bureau, "Adopted Children and Stepchildren: 2000," (Washington, D.C.: U.S. Department of Commerce, 2003), p.7. The Census Bureau does not provide data about adoption rates of younger children.

[53] Centers for Disease Control and Prevention, "2000 Assisted Reproductive Technology Success Rates: National Summary and Fertility Clinic Reports," (Atlanta, GA: National Center for Chronic Disease Prevention and Health Promotion, Division of Reproductive Health, 2002), p.11.

Surrogacy	16
Donor egg	14
Donor sperm	14

Table 6: Harris Interactive Chronic Illness Panel.

The data also suggests that the quest for reproduction is only partially grounded in biology. Access to reproductive technologies that deliver only biological relatedness may well be of secondary importance compared to ART treatments that provide a reasonable chance to produce full biological descendents. Pregnancy and biological relatedness are only two and perhaps not the most important aspects of parenthood. In short, adoption is far more important than any ART treatment involving extraneous gametes or donated embryos.

Reproductive Method	*% that considered each step*
Adoption	70
Embryo donation	21
Surrogacy	17
Donor egg	30
Donor sperm	13

Table 7: RESOLVE members.

One could argue that different levels of knowledge and information may explain the popularity of adoption over certain kinds of ART treatment. Adoption is almost as old as humanity itself, whereas embryo donation is a new option for which little information is available. The empirical evidence suggests that knowledge and information do not significantly affect reproductive preferences. The RESOLVE survey includes questions designed to determine whether members of the three samples had received adequate information about various reproductive options (Table 8). It is safe to assume that RESOLVE members are the most knowledgeable of the three samples included in the survey. Among the members of this panel, an almost identical percentage had not received sufficient information about adoption, donor egg, and donor sperm (24 percent, 26 percent, 25 percent, respectively). In other words, for each of the reproductive technologies under consideration, RESOLVE members were provided with an inadequate but very similar amount of information. This means that their preference for adoption cannot be explained in terms of information differentials. As for members of the Harris Chronic Illness Panel and the general population sample, they generally were better informed about adoption than about egg and sperm donation.

Table 8 suggests that information does have an impact on preferences, but not a differential one. Members of the RESOLVE panel, clearly the most knowledgeable of the three samples, are much more likely than members of U.S. population sample to consider egg or sperm donation as viable reproductive options. However, they are also more likely to consider adoption – 70 percent versus 41 percent of the general population. Thus, differences in knowledge and

information do not provide an adequate explanation for the far greater popularity of adoption over egg and sperm donation.

% who indicated they did not have enough information about option to make an informed decision	*U.S. Population*	*Harris Chronic Illness Panel*	*RESOLVE Members*
Pursued an Adoption	37	28	24
Donor Egg	53	40	26
Donor Sperm	55	30	25

Table 8: Levels of information.

If information does not explain the strong preference for adoption, perhaps cost differentials do. The costs associated with adoption can vary considerably depending on the agency and the origin of the child. According to the National Adoption Information Clearinghouse, an office within the U.S. Department of Health and Human Services, a domestic public agency could charge anywhere between zero and $2,500 for foster care adoption, whereas reliance on a domestic private adoption agency could cost between $5,000 and $40,000 or more.[54] By comparison, the American Society for Reproductive Medicine recommends compensating an egg donor with up to $4,000 for one egg and a sperm donor with $100. These are recommended prices; the market price for a donated egg is often much higher. The costs of ART services are charged separately and are significant; they range from $8,000 to $25,000 per cycle, depending on the reproductive services provided, the reputation of the ART program, and its location. Based on the available data, it appears that cost differences are not large enough to explain a strong preference for adoption.

An additional consideration is red tape. Adopting a child in the United States is a lengthy and bureaucratic process that can last several years. By comparison, an ART treatment is a fairly straightforward, transparent, and predictable procedure. Thus, neither the relative costs of ART treatments versus adoption procedures nor differences in transaction costs explains the preference for adoption displayed by the members of the three panels.

One could also argue that the strong preference for adoption documented in Table 4 through Table 7 may be explained by relative differences in the availability of these services throughout the country. A back-of-the-envelop analysis shows that availability differentials cannot account for the popularity of adoption. According to the most recent data on success rates published by the CDC, there are more than 400 fertility programs in the United States. Over the last 25 years, the number of ART programs has been increasing steadily. On the other end, an online search of the Gale Encyclopedia of Associations reveals that in 2005, there were less than 200 organizations devoted to adoption issues, many of which provide lobbying rather then actual adoption services. Thus, differential availability of reproductive services would favor egg and sperm donation over adoption.

[54] For additional information, visit http://naic.acf.hhs.gov/pubs/s_cost/s_costb.cfm (accessed April 26, 2004).

To recap, the survey data shows a strong preference for adoption over ART treatments providing only partial genetic relatedness. It appears that in making procreative choices, biological relatedness is not as important as commonly assumed. On the other end, given the importance attached to adoption and its roots in the "history and traditions of this country," one could argue that adoption should be considered a fundamental right deserving of constitutional protection. If this were the case, the Supreme Court would likely require any state regulation limiting access to adoption services to pass a strict scrutiny test, a test not many regulations are likely to survive. Instead, every state has laws regulating key aspects of the adoption process, including data collection, payments, and parentage.[55]

The data also suggests a broader point: Procreative decisions are based on several considerations, only one of which is genetic relatedness. Other values – such as the importance of being parents and raising children, the experience associated with pregnancy and childbirth, and procreation in the context of a familial unit – are central aspects of a procreative choice, and can be as important or more important than genetic relatedness. Perhaps not coincidentally, many of the Court precedents discussed in this chapter pertain precisely to these aspects. They also overlap with the considerations identified by the New York State Task Force on Life and the Law as crucial to any Court ruling pertaining to reproductive medicine. Taken together, these observations suggest that the Court is very unlikely not only to extend constitutional protection to technologies of procreative customization, but also to deny fundamental status to several, more traditional ART treatments.

[55] Lori B. Andrews and Nanette Elster, "Adoption, Reproductive Technologies, and Genetic Information," *Health Matrix: Journal of Law-Medicine* 8 (1998).

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