The Biological Alteration Cases

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SHELDON GELMAN

I. INTRODUCTION

State interventions such as drugging dangerous prisoners to "alter the chemical balance in the brain,"1 sterilizing women involuntarily,2 or, more modestly, compelling vaccination in order to modify someone's immune system,3 employ a remarkable and problematic technique. The government biologically alters4 an individual to suit official policy, tailoring the person's

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4. "Biological alteration" refers to physical or biological interventions that produce substantial, sustained changes in human capacities or functioning. See discussion infra part II.
very physical constitution to conform with some public objective. Even when the objective is worthy, such as preventing disease, the technique remains troubling. For in the process of biological alteration, government transforms individuals into instruments of state policy. Focusing on the handful of Supreme Court decisions involving the technique, this Article examines the constitutional issues that surround biological alteration. It also attempts to explain the Court’s remarkable tendency to make this extraordinary technique appear ordinary and unexceptional.

The Supreme Court has resolved four biological alteration controversies.\(^5\) \textit{Jacobson v. Massachusetts},\(^6\) a 1905 decision,

\[^5\] This number does not include Riggins v. Nevada, 112 S. Ct. 1810 (1992). \textit{Riggins} reversed the conviction of a defendant drugged against his will with antipsychotics to render him competent for trial. The Court refused to “finally prescribe . . . substantive standards” to govern such cases. \textit{Id.} at 1815. Rather, the Court reversed the conviction because “the District Court allowed administration of . . . [the drug] without making any determination of the need for this course or any findings about reasonable alternatives.” \textit{Id.} at 1815-16. Thus, \textit{Riggins} stands for the minimal, and obvious, point that some findings about the need for drugging are required, whatever the substantive standard. \textit{Riggins} describes a standard that “certainly would have satisfied due process,” namely, that the treatment be “medically appropriate and, considering less intrusive alternatives, essential for the sake of [the patient’s] own safety or the safety of others.” \textit{Id.} at 1815. This standard is clearly more stringent than the one set forth in \textit{Harper}, 494 U.S. at 214. See discussion \textit{infra} part IV.B.3.c. The phrase “less intrusive alternatives” and the word “essential” suggest strict scrutiny. Yet \textit{Riggins} does not mandate that standard; nor does it hold that a less stringent standard would be inadequate. \textit{But see Riggins}, 112 S. Ct. at 1826 (Thomas, J., dissenting) (suggesting that the Court may have adopted strict scrutiny).

Interestingly, the author of the \textit{Harper} opinion, Justice Kennedy, wrote separately in \textit{Riggins} to suggest “doubt” that a state could ever make the “extraordinary showing” that the Due Process Clause requires in trial competency cases, “given our present understanding of the properties of these drugs.” \textit{Id.} at 1817 (Kennedy, J., concurring). Justice Kennedy sharply distinguished between the prison and competency to stand trial settings. For example, he found that “chemical flattening of a person’s will” by drugs would be fatal to a fair trial because it “can . . . lead to . . . loss of self-determination undermining the desire for self-preservation,” \textit{id.} at 1820 (quoting Brief for National Association of Criminal Defence Lawyers as \textit{Amicus Curiae}, at 42), and because it affects demeanor, \textit{id.} at 1819. It seems, by contrast, that “chemical flattening of a person’s will” and loss of “the desire for self-preservation” are not fatal to a constitutionally tolerable life in prison.

The Court has disposed of other cases without deciding the substantive issue. \textit{See, e.g.}, Perry \textit{v. Louisiana}, 498 U.S. 38 (1990) (remanding, for reconsideration in light of \textit{Harper}, a case of forced drugging to render an inmate competent to be executed); Rennie \textit{v. Klein}, 458 U.S. 1119 (1982) (remanding a mental hospital,
sustained a criminal sentence imposed for refusing vaccination against smallpox. Vaccination would have altered the defendant's biological functioning, albeit subtly and probably benignly, in the interest of public health. *Buck v. Bell,* a 1927 decision, authorized the forcible sterilization of an institutionalized "imbecilic" woman in order to prevent her "from continuing [her] kind." The state disabled her reproductive organs to further a public policy of eugenics. *Skinner v. Oklahoma,* a 1942 equal protection decision, struck down a program of involuntary, eugenic sterilization for habitual felons. Although *Skinner* did not overrule *Buck,* Justice Douglas' majority opinion introduced the concepts of "fundamental right" and "strict scrutiny" to modern Fourteenth Amendment jurisprudence. The "fundamental right," however, involved raising and nurturing a family—not freedom from biological alteration.

The Court did not resolve another biological alteration controversy until *Washington v. Harper,* a 1990 decision that upheld forcible administration of "antipsychotic" drugs to "alter the chemical balance in the brain[s]" of mentally ill and dangerous prison inmates. *Harper* represents a number of "firsts": the first Supreme Court decision on biological alteration since *Skinner* and the revolution in Fourteenth Amendment interpretation that *Skinner* helped to launch; the first alteration decision since World War II's revelations of biological atrocities; and the first refusal class action for reconsideration in light of *Youngberg v. Romeo,* 457 U.S. 307 (1982); *Mills v. Rogers,* 457 U.S. 291 (1982) (resolving a mental hospital, drug-refusal controversy with a unique, abstention-type remand); *Vitek v. Jones,* 445 U.S. 480 (1980) (resolving a prisoner's transfer to a mental facility for "behavior modification," apparently with antipsychotic drugs, as pure transfer issue, without discussion of the drugs).

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7. 274 U.S. 200 (1927).
8. *Id.* at 207.
9. *Id.* at 205 ("[T]he welfare of society may be promoted in certain cases by the sterilization of mental defectives . . . .").
11. *Id.* at 538.
12. *Id.* at 541.
13. *Id.* ("Marriage and procreation are fundamental to the very existence and survival of the race.").
15. *Id.* at 214.
Supreme Court decision to uphold an act of biological alteration since *Buck v. Bell*. *Harper* is a constitutional landmark in still another respect: it sustains the most severe consequences that the Court has ever allowed a state to inflict upon individuals, with the exception of cases upholding the military draft and capital punishment. Along with the intended—though poorly understood—changes in prisoners' brain chemistry, the drugs induce an irreversible neurological disorder "characterized by involuntary, uncontrollable movements of various muscles" in ten to twenty-five percent of its recipients. The drugs' other side-effects include mental distress, tremors, symptoms of Parkinson's disease, and, in rare cases, death. *Harper* defines a high-water mark for constitutional, state-inflicted harm.

*Harper* attracts little attention in casebooks or from commentators, except, perhaps as a prison or "law and psychiatry" case. Nor do the other biological alteration cases receive at-

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17. See Callins v. Collins, 114 S. Ct. 1127, 1127-28 (1994) (Scalia, J., concurring in the denial of *certiorari*) (reviewing recent caselaw upholding the death penalty). *But cf.* id. at 1138 (Blackmun, J., dissenting from denial of *certiorari*) (concluding that "the death penalty, as currently administered, is unconstitutional").


19. These figures describe the side-effects when drugs are administered continuously. The disorder is unlikely to result from a few days, or even a few months, of drugging. See Sheldon Gelman, *Mental Hospital Drugs, Professionalism, and the Constitution*, 72 GEO. L.J. 1725, 1742-43, 1752-57 (1984) (discussing this side-effect). On the other hand, these drugs are administered on a continuous basis, so the figures are a realistic estimation.


In law reviews, *Harper* receives occasional consideration as a prison case or as
tention as decisions with general constitutional importance apart from *Skinner*—and *Skinner* enjoys recognition because of its strict scrutiny methodology, not because it struck down an act of biological alteration. Indeed, current doctrines do not sharply distinguish biological alteration from other infringements of liberty or privacy. Thus, *Jacobson, Buck, Skinner*, a problem in law and psychiatry. See e.g., Jeannette Brian, Comment, *The Right To Refuse Antipsychotic Drug Treatment and the Supreme Court: Washington v. Harper*, 40 BUFF. L. REV. 251 (1992) (arguing that *Harper* affords profoundly inadequate protection of the right to refuse antipsychotic drugs); Jami Floyd, Comment, *The Administration of Psychotropic Drugs to Prisoners: State of the Law and Beyond*, 78 CAL. L. REV. 1243 (1990) (arguing that after *Harper*, some arguments for drug refusal in prison remain viable); Delila M.J. Ledwith, Note, Jones v. Gerhardtsein: *The Involuntarily Committed Mental Patient's Right To Refuse Treatment with Psychotropic Drugs*, 1990 WIS. L. REV. 1367 (examining a Wisconsin Supreme Court decision on the rights of committed mental patients to refuse drugs and arguing that legalistic remedies are often inadequate); Brian Shagan, Note, Washington v. Harper: *Forced Medication and Substantive Due Process*, 25 CONN. L. REV. 265 (1992) (pointing out, correctly I believe, that *Harper*'s substantive tests for forced drugging are so lenient that drugging of mentally ill, dangerous prisoners will be upheld regardless of what procedures are employed).

22. Indeed, *Jacobson v. Massachusetts*, 197 U.S. 11 (1905), frequently is miscited as a case of religious refusal of vaccination. *See*, e.g., Employment Div. v. Smith, 485 U.S. 660, 671 n.13 (1988) (mistakenly citing *Jacobson* as a Free Exercise Clause case). In fact, Mr. Jacobson offered no religious objection to vaccination. The Court referred to religion only in *dictum*, noting that, despite the right to liberty, a person "may be compelled...without regard to his personal wishes or his pecuniary interests, or even his religious or political convictions, to take his place in the ranks of the army of his country..." *Jacobson*, 197 U.S. at 29 (emphasis added). This misreading not only gives *Jacobson* an undeserved place in freedom of religion jurisprudence, but it obscures *Jacobson*'s standing as the first Supreme Court decision to uphold acts of biological alteration. If religious refusal was *Jacobson*'s pivotal issue, then the constitutionality of compulsory vaccination was either already well established or too obvious a question for discussion. For further discussion, see Sheldon Gelman, *Jacobson v. Massachusetts*, in *ENCYCLOPEDIA OF LAW AND RELIGION* (Paul Finkelman ed., forthcoming 1995).

23. Contemporary constitutional doctrine recognizes protected "liberty interests" in matters of bodily integrity. *See*, e.g., *Planned Parenthood v. Casey*, 112 S. Ct. 2791, 2846 (1992) (Blackmun, J., concurring in part and dissenting in part) (arguing that the Court has recognized a right against "substantial physical intrusions and significant risks of physical harm"); *Cruzan v. Missouri Dept of Health*, 497 U.S. 261, 269 (1990) (referring to an individual's "possession and control of his own person") (quoting *Union Pac. R.R. Co. v. Botsford*, 141 U.S. 250, 251 (1891)); *Parham v. J.R.*, 442 U.S. 584, 626 (1979) (Brennan, J., concurring in part and dissenting in part) (observing that "intrusive treatment" in a mental hospital "may violate the[ ] right to bodily integrity" especially if the treatment is "unwarranted"). Bodily integrity includes refusal of medical treatment. *Cruzan*, 497 U.S. at 269-70. The right to bodily integri-
and Harper appear not as a single, coherent line of cases, but as random and minor examples of "privacy" or "liberty" jurisprudence.\textsuperscript{24} Lost among these broader rights is what makes biological alteration extraordinary and distinctive.

The threads that link Jacobson, Buck, Skinner, and Harper include a right of human biological integrity, an ideal of human (biological) equality, and the threat that biological alteration poses to both. Alteration constitutes a unique breach of the right of biological integrity. The government does not merely invade a body but reconstitutes a person's physical constitution to suit its purposes. The government also supposes that biological differences among human beings not only exist, but have significance for political action—a profound breach, if sometimes a warranted one, in ordinary principles of equality. Given the nature of these infringements, it is not surprising that biological intrusions are thought of as hallmarks of politically oppressive regimes, and that biological alteration itself is the stuff of science fiction.

Yet the Supreme Court never has acknowledged biological alteration as a distinctive technique or considered a distinctive constitutional approach towards it.\textsuperscript{25} Rather, within the confines of each era's prevailing doctrine, the Court portrays alteration as an ordinary method of state action. This portrayal leads to remarkable examples of tortured opinion writing because alteration is, in fact, extraordinary.

\textit{Jacobson}, a decision from the \textit{Lochner}\textsuperscript{26} era, examines compulsory vaccination as a problem of "liberty,"\textsuperscript{27} and upholds it as

\textsuperscript{24} But see Michael H. Shapiro, \textit{Legislating the Control of Behavioral Control: Autonomy and the Coercive Use of Organic Therapies}, 47 S. CAL. L. REV. 237 (1974) (a pioneering account of how the Constitution should apply when states use "organic" therapies to change someone's thinking).

\textsuperscript{25} See discussion \textit{infra} part IV.B.2.b. \textit{But cf.} Skinner v. Oklahoma, 316 U.S. 535, 546 (1942) (Jackson, J., concurring) (suggesting that "[t]here are limits" on a majoritarian government's right to conduct biological "experiments" that threaten the "dignity and personality and natural powers of a minority").

\textsuperscript{26} \textit{Lochner v. New York}, 198 U.S. 45 (1905).

\textsuperscript{27} \textit{Jacobson}, 197 U.S. at 26 (discussing the defendant's constitutional liberty interests).
an aspect of the state's "police power." The Court did not regard alteration with the same suspicious eye that it used for social and economic reforms, like wage and hour laws. Rather than closely examine the medical technique, the Court in Jacobson announced that the judiciary has no place in assessing claims about a vaccination's efficacy. The Court then appended a footnote spreading over four pages to demonstrate that vaccination works and that the procedure is safe.

Buck defined state power so broadly that sterilization—and, by implication, other eugenic measures—easily fall within ordinary constitutional limits. One is obliged to serve in the military and possibly lose one's life; therefore, Justice Holmes concludes, a state can also call for "lesser sacrifices," such as the reproductive organs of an institutionalized woman. Infamous for its declaration that "[t]hree generations of imbeciles are enough," Buck is actually more remarkable for its forthright abandonment of the premise of biological integrity. The opinion portrays the taking of life and the alteration of individuals as ordinary techniques within the arsenal of a state. The Court spoke not in indirect or implicit terms, as in other opinions, but made its point expressly. Holmes' rhetoric suits his conclusion:

28. Id. at 25 (discussing the police power of states).
29. See, e.g., Lochner, 198 U.S. 45 (holding a state labor law unconstitutional as interfering with the liberty right to contract).
30. Jacobson, 197 U.S. at 35 (noting that courts "cannot decide that vaccination is a preventive of smallpox") (quoting Viemeister v. White, 72 N.E. 97, 99 (N.Y. 1904)); see discussion infra part IV.B.3.c.
33. Id. at 207 ("We have seen more than once that the public welfare may call upon the best citizens for their lives.").
34. Id.; see G. EDWARD WHITE, JUSTICE OLIVER WENDELL HOLMES, LAW AND THE INNER SELF 405-06 (1993) (describing Holmes' analysis as a "singular combination of familiar Holmesian arguments and non sequiturs" inasmuch as a military draft is not the same as calling on persons for their lives and the "best citizens" remain unidentified).
35. Buck, 274 U.S. at 207. The Court was wrong about the mental capacity of Carrie Buck. Neither Ms. Buck, nor her mother, nor her daughter were "imbeciles." Steven J. Gould, Carrie Buck's Daughter, 93 NAT. HIST. 14 (1984), reprinted in 2 CONST. COMMENTARY 331, 338 (1985) (concluding that "there were no imbeciles, not a one, among the three generations of Bucks" and that invidious attitudes toward the poor explain Ms. Buck's treatment).
within the space of a half paragraph he marshalls three different images of death—by combat,\textsuperscript{36} by starvation,\textsuperscript{37} and by execution.\textsuperscript{38} If \textit{Buck} gives moral offense, it does so in good part because biological alteration is an extraordinary technique of state intervention.

In contrast to Justice Holmes' opinion in \textit{Buck, Skinner}\textsuperscript{39} is remarkable for its indirection. Justice Douglas identifies human procreation as fundamental,\textsuperscript{40} yet he never suggests that biological alteration represents an extraordinary assault on the right to procreate. To the contrary, a literal reading of \textit{Skinner} leads to the conclusion that surgical sterilization is no more suspect than segregation of the sexes in prisons because both measures prevent human reproduction. Prisons, however, can constitutionally prevent inmates from procreating during their prison term—by strict segregation of the sexes, for example, combined with a bar on conjugal visits—and a prison term may constitutionally last a lifetime.\textsuperscript{41} Such rules prevent procreation, but they hardly seem equivalent to surgical alteration, even if fully reversible. Nor is \textit{Skinner} generally read to suggest otherwise.\textsuperscript{42}

\begin{enumerate}
\item 36. \textit{Buck}, 274 U.S. at 207 ("The public welfare may call upon the best citizens for their lives.") (emphasis added).
\item 37. \textit{Id.} (observing that it is preferable to sterilize incompetents than "to let them starve for their imbecility").
\item 38. \textit{Id.} (observing that it is preferable to sterilize incompetents than to "wait[] to execute degenerate offspring for crime").
\item 40. \textit{Id.} at 541 ("Marriage and procreation are fundamental to the very existence and survival of the race.").
\item 41. See, e.g., \textit{Turner v. Safley}, 482 U.S. 78, 87, 96 (1987) (discussing, with apparent approval, prison restrictions on contact visits and noting that "most inmate marriages are formed in the expectation that they ultimately will be fully consummated" because "most inmates eventually will be released"); Hernandez v. Coughlin, 18 F.3d 133, 136-37 (2d Cir. 1994) (holding that "[t]he Constitution . . . does not create any protected guarantee to conjugal visitation privileges while incarcerated" and citing \textit{Skinner} for the proposition that "inmates possess the right to maintain their procreative abilities for later use once released").
\item 42. See, e.g., Hernandez, 18 F.3d at 136-37 (refusing to recognize a right to conjugal visits and citing \textit{Skinner}); Smith v. Matthews, 793 F. Supp. 998, 1000 (D. Kan. 1992) (refusing to recognize a right of spousal prison visitation); see also \textit{Goodwin v. Turner}, 908 F.2d 1395, 1398 (8th Cir. 1990) (upholding the refusal to allow an inmate to produce sperm in order to artificially inseminate his wife, and treating the right to procreate in prison as an open question); Kristin M. Davis, \textit{Note, Inmates and Artificial Insemination: A New Perspective on Prisoners' Residual Right To Pro-
Yet such rules are fully the equivalent of sterilization, if *Skinner* truly rests on the right to procreate.\textsuperscript{43} Rules against procreation

\textit{create}, 44 WASH. U. J. URB. & CONTEMP. L. 163, 172 (1993) (arguing for a right of artificial insemination even though "virtually all courts uphold restrictions on contract visitation . . . [and] agree that prisoners have no constitutional right of consortium").

If a fundamental right to remain free from biological alteration exists, as I argue it does, the scope of the right should not be diminished in prisons. *Turner* held that a reasonableness standard, rather than strict scrutiny, applies to prison decisions that abridge "inmates' constitutional rights." *Turner*, 482 U.S. at 89. *Harper* declares that *Turner* 's test governs fundamental rights in prisons. *Harper*, 494 U.S. at 223-24. Despite this seemingly unequivocal language, lower courts have held—persuasively, I think—that *Turner* does not apply to every exercise of constitutional rights in prison. See, e.g., Jordan v. Gardner, 986 F.2d 1521, 1530 (9th Cir. 1993) (observing that, despite *Harper*'s sweeping language, the Supreme Court has never applied a reasonableness standard to cruel and unusual punishment claims and concluding that *Turner* 's standard does not apply); id. at 1557 (Trott, J., dissenting) (agreeing that *Turner* is inapplicable to a claim of cruel and unusual punishment). In particular, lower courts apply heightened scrutiny to prison discrimination claims. See, e.g., *Pitts* v. *Thornburgh*, 866 F.2d 1450, 1453-56 (D.C. Cir. 1989) (applying heightened scrutiny to an equal protection claim by women prison inmates and distinguishing *Turner*); *Klinger* v. *Nebraska Dep't of Correctional Servs.*, 824 F. Supp. 1374, 1387-88 (D. Neb. 1993) (following *Pitts*); cf. *White* v. *Morris*, 832 F. Supp. 1129, 1132 (S.D. Ohio 1993) (implying that heightened scrutiny applies to claims of race discrimination in prisons but also citing *Turner*).

Writing in *Pitts*, Judge Starr concluded that *Turner* was inapplicable to prison discrimination claims because of the Supreme Court's emphatic endorsement of heightened scrutiny in the area; because the constitutional errors that underlie invidious discrimination are the same in prisons as elsewhere; and because an equal protection claim is simply unlike "challenges to limitations upon personal rights that *Turner* subjects to review." *Pitts*, 866 F.2d at 1454-55. Justice Scalia, a member of the *Turner* and *Harper* majorities, has expressed the same view. "Strict scrutiny must be applied to all governmental classification by race," according to Justice Scalia, and so "only a social emergency rising to the level of imminent danger to life and limb—for example, a prison race riot, requiring temporary segregation of inmates"—justifies an exception to the principle of racial neutrality. City of Richmond v. J.A. Croson Co., 488 U.S. 469, 520-21 (1989) (Scalia, J., concurring) (emphasis added). Thus, Justice Scalia applies strict scrutiny to racial measures in a prison.

If race discrimination in prisons triggers strict scrutiny, biological alterations should do so as well. Alteration and racism raise similar constitutional issues and, if my argument is correct, victims perceive them in similar ways. See discussion infra part IV.B. Certainly, *Skinner* v. *Oklahoma*—the first, and, to date, the only Supreme Court decision that applies strict scrutiny to an act of biological alteration—did not relax its level of scrutiny because the proposed object of alteration was a prisoner.

43. Conceivably, the Court in *Skinner* would have regarded a eugenic—or racist—mandate for sex segregation in prison as something that did warrant strict scrutiny. When *Skinner* was decided, on June 1, 1942, information about Nazi World War II atrocities was available in the United States. DAVID S. WYMAN, THE ABAN-
differ fundamentally from sterilization because biological alteration differs fundamentally from mere prohibitions on behavior, even prohibitions that are effective. *Skinner* declared a fundamental right to procreate when it should have recognized a fundamental right against biological alteration.

*Harper* is extraordinary for some of the same reasons as *Buck*. The Court measured drugs against the usual constitutional test for prisons, coldly asking, in effect, whether alteration of prisoners' brains was "reasonably related to legitimate penological interests." In reviewing the right of prisoners to refuse drugs, the Court did not even consider the serious harms that drugs threaten—harmst more serious than virtually any the Court has allowed a state to inflict. Such harms receive brief attention only later in the opinion, in connection with procedural issues, after Justice Kennedy had already dismissed a right to drug refusal.45

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44. *Harper*, 494 U.S. at 223 (quoting the constitutional test formulated in *Turner v. Safley*, 482 U.S. 78, 89 (1987)); id. at 224 (similarly quoting *O'Lone v. Estate of Shabazz*, 482 U.S. 342, 349 (1987)). *Harper* does not preclude the possibility that a stricter standard applies to forced drugging outside of prison. See id. at 221-22 (describing the "liberty interest in avoiding the unwanted administration of antipsychotic drugs" as "significant"); id. at 223 (noting that the reasonable-relationship test applies "even when the constitutional right claimed to have been infringed [in prison] is fundamental, and the State under other circumstances would have been required to satisfy a more rigorous standard of review"); see also *Riggins v. Nevada*, 112 S. Ct. 1810 (1992); supra note 5 (discussing Riggins).

45. Compare *Harper*, 494 U.S. at 229-30 (briefly describing drug side effects in connection with the procedural due process issue) with id. at 221-22 (in connection with the substantive issue of drug refusal, identifying the constitutional "liberty" interest without mention of drug-induced harms). The only consideration of specific harms in the early, substantive portions of the opinion deals with guards who may suffer injuries "while putting . . . [physical] restraints on [undrugged prisoners] or tending to the inmate who is in them," and prisoners who can "have serious physical side effects" when "resisting" these physical restraints. Id. at 226-27. Thus, state-inflicted brain alterations fade beside the risk that someone will be hurt in the
These opinions eventually note the harms that vaccination, sterilization, and antipsychotic drugs cause, but the Court does not regard those harms more warily as the results of biological alteration. To the contrary, Harper seemingly discounts the constitutional significance of harms associated with alteration. Clearly, the Court would not tolerate nonbiological techniques that produced similar consequences, such as a period of solitary confinement so long and oppressive that the prisoner emerged with his limbs permanently shaking. Yet Harper sustained such harm as an incident of biological alteration.46 Apparently, the Court's constitutional scales tilt in favor of biological alteration.

The Court has gotten it backwards. Biological alteration is so distinctive a technique, so dangerous, and so contrary to ordinary political and constitutional principles, that it always warrants the strictest constitutional scrutiny, even within the confines of a prison or mental hospital. Some state measures, including forcible vaccination against disease, satisfy strict scrutiny;47 but state programs for sterilization48 and the usual antipsychotic drugging measures49 do not. Indeed, biological alteration warrants the same constitutional onus in substantive due process theory that racial classifications receive in equal protection theory.50 Unlike other government measures, racist and alterationist measures, like distinctions based on gender, depart from a fundamental premise of biological equality.

I do not attempt to resolve every constitutional problem connected with biological alteration. Although I argue that strict scrutiny applies, for example, I do not explore the question of precisely what kind of prison drugging, if any, strict scrutiny might tolerate in emergencies.51 This more narrow question can await recognition of the idea that strict scrutiny applies at all.

Nor do I analyze every alterationist technique that states
have employed since the late nineteenth century, when medical advances first made biological alteration possible without crude surgical amputation or outright torture. By the end of the nineteenth century, state mental hospitals had surgically removed the ovaries of women patients as a supposed remedy for nervous disorders—a procedure apparently performed thousands or tens of thousands of times.\(^{52}\) Beginning in the 1930s, the same hospitals mutilated patients’ brains via lobotomy,\(^{53}\) an operation recognized by the 1950 Nobel Prize in Medicine and one that remained popular through the early 1950s.\(^{54}\) Today, outside the field of psychiatry, measures for limiting women’s reproduction through the use of long-acting contraceptive implants are receiving attention,\(^{55}\) as is castration as a possible substitute for, or adjunct to, imprisonment of sex offenders.\(^{56}\) Other government

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52. Lawrence D. Longo, *The Rise and Fall of Battey’s Operation: A Fashion in Surgery*, 53 BULL. HIST. MED. 244, 253, 259 (1979) (noting that some doctors advocated removal of the ovaries “for all cases of insanity” in women and that, although estimates of 150,000 seem inflated, ovariectomy was performed approximately 15,000 times). See generally Carroll Smith-Rosenberg & Charles Rosenberg, *The Female Animal: Medical and Biological Views of Woman and Her Role in Nineteenth Century America*, 60 J. AM. HIST. 332, 335 (1973) (noting that doctors “saw woman as the product and prisoner of her reproductive system” and supposed that “woman’s uterus and ovaries controlled her body and behavior from puberty through menopause”). Smith-Rosenberg and Rosenberg quote a physician who, expressing the dominant view, explained in 1870 that it was “as if the Almighty, in creating the female sex, had taken the uterus and built up a woman around it.” *Id.* at 335 (quoting M.L. Holbrook, *Parturition Without Pain: A Code of Directions for Escaping from the Primal Curse* 14-15 (1882)).


56. See, e.g., State v. Brown, 326 S.E.2d 410 (S.C. 1985) (invalidating three criminal sentences that made male castration a condition of reduced time in prison); Kimberly A. Peters, Comment, *Chemical Castration: An Alternative to Incarceration*, 31 DUQ. L. REV. 307 (1993) (reviewing cases and also concluding that castration represents a useful option); Comment, *Help for Sex Offenders*, NEW YORKER, Mar. 7, 1994, at 6-8 (surveying recent controversies about castration and urging that sex offenders have the option of consenting to the procedure); see also Robert Wright,
measures, such as spraying pesticides over large inhabited areas, raise questions of possible alteration as a byproduct of a nonalterationist policy. None of these programs has produced a decision from the Supreme Court, and all raise issues of their own. It seems to me that the proper approach to these matters depends, in the first instance, on more general questions of strict scrutiny for biological alteration, which I examine in this Article.

Part II defines biological alteration. Part III argues that it presents distinctive moral and constitutional problems. Drawing parallels between alterationist and racist measures, Part IV examines freedom from alteration as a substantive constitutional right, and as a right of equality, and argues that it warrants the strictest constitutional scrutiny. Although the thrust of my argument is simply that strict scrutiny should apply, Part V briefly sketches what strict scrutiny is likely to mean for various alterationist techniques. Finally, Part VI speculates about why the Court has treated biological alteration as an ordinary technique of the state. I believe that much of the answer has to do with an overly broad conception of "liberty," and an underdeveloped concept of constitutional "life."

II. A DEFINITION OF "BIOLOGICAL ALTERATION"

For purposes of this Article, "biological alteration" refers to: (1) biological or physical interventions into a human being's functioning that (2) alter, rather than sustain, a person and (3) produce substantial biological effects (4) for the purpose, wholly or in part, of realizing a public benefit (5) without meaningful


58. Consider, for example, the consequences of unintentional alterations or the effects of making alteration a condition of welfare eligibility or probation.
consent from affected persons. These five elements constitute a definition, not an argument, at this point. With the definition's elaboration in this Part, differences between alteration and other techniques will emerge more clearly.

The definition also supplies a foundation for later argument. Under established doctrine, interferences with "bodily integrity" or privacy do not necessarily trigger strict scrutiny; rather, courts assess the seriousness of bodily intrusions on a case by case basis. The elements of the definition also will lend content to the strict scrutiny technique. Whether an alterationist

59. See also Shapiro, supra note 24, at 262. Shapiro proposed "intrusiveness" as a constitutional test for involuntary, organic psychiatric therapies. His definition of "intrusiveness" included, among other elements, "the extent to which the resulting psychic state is 'foreign,' 'abnormal' or 'unnatural' for the person in question, rather than simply a restoration of his prior psychic state" and "the scope of the change." Id. Parts (2) and (3) in my definition of "alteration" parallel these elements. More generally, Shapiro's multi-part constitutional test remains a model of how to think about constitutional problems in this area.


Dissenting in Breithaupt v. Abram, 352 U.S. 432, 442 (1957), Chief Justice Warren suggested a sharp constitutional line protecting the body, at least in police searches. At issue was an alcohol blood test. Chief Justice Warren wrote:

We should, in my opinion, hold that due process means at least that law-enforcement officers in their efforts to obtain evidence from persons suspected of crime must stop short of bruising the body, breaking skin, puncturing tissue or extracting body fluids, whether they contemplate doing it by force or by stealth.

Id.; see also Schmerber v. California, 384 U.S. 757, 778-79 (1966) (Douglas, J., dissenting) (asserting that a person's skin should constitute an impenetrable constitutional barrier to the state and that "[n]o clearer invasion of . . . privacy can be imagined than forcible bloodletting of the kind involved here"); id. at 779 (Fortas, J., dissenting) (describing the drawing of blood as an act of state "violence upon the person").

measure satisfies strict scrutiny may depend on how closely the measure comes to falling outside of the definition. For example, something that almost sustains a person might satisfy strict scrutiny when a more clear act of mutilation would not.\textsuperscript{62}

Many serious intrusions fall outside of the definition, but I am not suggesting they warrant less than strict scrutiny on that account. Nor am I implying that a measure that almost satisfies the definition should receive a lower level of scrutiny for that reason. Forcibly pumping someone's stomach,\textsuperscript{63} for instance, almost satisfies the definition, but it lacks sustained effects on biological functioning. Hence, it will not qualify. Stomach pumping remains, however, a repulsive exercise of state power that probably warrants strict scrutiny. In general, the case for strict scrutiny may become stronger as a measure comes closer to the definition. At this point, however, it suffices to note that the definition is a device for triggering strict scrutiny, not one that rules it out.

Finally, questions exist about the definition's scope and reach—questions that the definition itself cannot settle. I raise some of these issues, without attempting to resolve them, in the sections below. After we decide the core questions, we can argue profitably about others. Worry about what strict scrutiny entails is needless until we decide whether strict scrutiny applies at all.

\textbf{A. Direct Interventions into Human Biological Functioning}

The use of direct physical or biological means—injectons, surgery, or drugs—is the first feature of the definition. Of course, anything that affects a person probably has biological effects: even words, sights, and smells must leave a physical trace, however slight or fleeting, in the body or brain. But those traces do not compare to penetrating the skin, affecting someone by direct manipulation of the biological mechanisms upon which that person depends. A strict reductionist deems human thoughts and actions as nothing more than physical states of an organism,\textsuperscript{64} but even reductionists can distinguish between

\begin{itemize}
  \item \textsuperscript{62} See discussion infra part V.B.
  \item \textsuperscript{63} See Rochin v. California, 342 U.S. 165 (1952) (invalidating an act of involuntary stomach pumping to recover narcotics that a criminal suspect had swallowed).
  \item \textsuperscript{64} See generally Rebecca Dresser, Personal Identity and Punishment, 70 B.U. L.
words or sounds and the point of a surgical instrument inserted into someone's brain, or the point of a needle that contains a substance that alters the brain's chemical balance.65

Restrictions on someone's choice of religion, school, clothing, or expression arguably interfere with things that define "personhood."66 I find the argument persuasive. Those intrusions work indirectly, however, and any interference with the "person" seems almost metaphorical. Biological alteration uniquely alters personhood. There is nothing metaphorical about altering a prisoner's brain chemistry or sterilizing a woman.

B. Altering, Rather Than Sustaining, a Person

The definition requires that the state alter the organism, not sustain it. This requirement distinguishes biological alteration from activities like supplying food to prison inmates. It probably also distinguishes alteration from measures such as surgical removal of foreign objects from the body (putting aside the risks of surgery).67 To sustain an organism, in this sense, is to maintain

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65. On other occasions, a government prohibits individuals from making decisions about their own biological processes. Such prohibitions may warrant strict scrutiny, but they are distinguishable from government mandated alteration. At the same time, when the state refuses to allow consent to beneficial acts of biological alteration, similar concerns about biological equality and dignity arise—especially if the state's refusal affects a particular, biologically-defined group.

66. For example, Justices O'Connor, Kennedy, and Souter explain that "choices central to personal dignity and autonomy...[that] define one's own concept of existence, of meaning, of the universe, and of the mystery of human life" also "define the attributes of personhood." Planned Parenthood v. Casey, 112 S. Ct. 2791, 2807 (1992) (joint opinion). See generally Lovisi v. Slayton, 539 F.2d 349, 356 n.2 (4th Cir.) (tracing the constitutional concept of "personhood" to Paul Freund, who defined it in a speech as "attributes of an individual which are irreducible in his selfhood"), cert. denied, 429 U.S. 977 (1976); TRIBE, supra note 23, §§ 15-2, 15-3 at 1304-12 (discussing personhood as a constitutional and political construct); Jed Rubenfeld, The Right of Privacy, 102 HARV. L. REV. 737, 752-82 (1989) (examining the role of "personhood" in the theory of the right to privacy).

67. In Winston v. Lee, 470 U.S. 753 (1985), a state sought authority to surgically remove a bullet from a criminal suspect. Viewing the proposed surgery as a Fourth Amendment "search," the Court regarded it as "unreasonable" under the circumstances, in large part because of "uncertainty about the medical risks." Id. at 764.
or restore it to its natural state. Surgical amputation of a diseased organ alters a body, for example, whereas surgical reattachment of a detached finger sustains it.

At issue here is not benefit to health—the amputation may save a life, and thereby produce far greater benefits than reattaching a finger—but the nature of the procedure. Sustaining measures do not implicate biological equality, at least they do not once the individual's need for the sustaining measure is established. Nor do they implicate biological integrity in the same way as alteration, although a sustaining measure may involve a bodily invasion. Sustaining measures also may infringe the Constitution: a state may act mistakenly to sustain a person who does not need it, the benefit may not warrant the invasion, or the right to choose one's own destiny may be infringed. Yet these infringements differ from that of biological alteration.

Advocates of alteration, particularly advocates of psychiatric alterations, often claim that the procedure does sustain people in this sense—or, at least, that it almost sustains them. I learned the importance of this distinction, "almost sustains," when I represented state mental patients during the late 1970s. To justify drug use, and also as a rationale for ignoring or downplaying side effects, some ward doctors described schizophrenia as a "shortage of Thorazine in the brain;" Thorazine being the best-selling antipsychotic drug of the time. Were that true, Thorazine would constitute a measure that sustained a person, not an alteration but brain food for the mentally ill, in effect. Were that the case, fewer legal protections would be in order. A further consequence of that view, one that doctors enthusiastically embraced, was that side effects should be attributed less to the drugs than to patients. Just as colitis is not a "side effect" of food so much as it is a condition of the sufferer, drug side effects became attributes—and even the responsibility—of patients.

Moreover, the state inadvertently can cause bodily alterations. For example, accidently serving inmates tainted food may result

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in permanent, bodily injuries. An action not designed to alter anyone may risk alteration as a side effect. Government pest eradication programs, for example, spray toxic chemicals that can cause serious biological effects, and prisons may assign a prisoner to a cell where there is a risk of tuberculosis infection.

These inadvertent alterations raise concerns about biological integrity and equality. At some point, government willingness to tolerate biological consequences deserves the same treatment as purposeful infliction of those consequences. It seems premature, however, to worry about where precisely to draw this line, given the lack of constitutional recognition for even the clearest acts of biological alteration.

C. Producing Substantial Effects

Third, the definition stipulates substantial, persistent biological effects. These effects turn nonsustaining biological interventions into biological alterations. In *Rochin v. California*, by contrast, police arranged for a doctor to pump the stomach of a criminal suspect who had swallowed evidence. This state action, though repulsive, did not entail substantial biological effects. It did not sustain the organism, but neither did it produce significant, persistent change. Although every event in life may have enduring consequences, the distinction between pumping a stomach and removing an organ certainly remains clear.

This element requires that the change persist for a period of time. If, instead of pumping someone's stomach, the government engineered biological changes that allowed it to make an individual throw up on command, that would constitute an act of biological alteration—even if the government did not issue the command. Alteration, however, need not be permanent: the possibility of later reversing the procedure does not change its status

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69. For discussion of pest eradication programs and their dangers, see sources cited supra note 57.
70. See, e.g., Inmates of the Suffolk County Jail v. Rufo, 12 F.3d 286, 294 (1st Cir. 1993) (discussing inmate's claim of tuberculosis risks from living in close prison quarters).
as an act of alteration. A once-popular distinction between anti-psychotic drugs and lobotomy, for example, was that drugs had no permanent effects (it was said), while lobotomy was irreversible.\textsuperscript{72} This distinction has disappeared because we now acknowledge the drugs' permanent effects. The fact that psychiatrists once drew the distinction, however, demonstrates its power; it supposedly justified stringent legal treatment for lobotomy and lenient treatment of drugs.\textsuperscript{73} At the same time, even if these drugs lacked irreversible effects, the fact that psychiatrists administer them for months, years, and, very often, lives, is enough to satisfy this criterion.\textsuperscript{74}

In \textit{Schmerber v. California},\textsuperscript{75} the Supreme Court upheld alcohol blood tests that entail inserting a needle into a vein and withdrawing a small amount of blood. Such brief intrusions and \textit{de minimis} loss of blood do not qualify as biological alteration.\textsuperscript{76} On the other hand, the prolonged redirection of an individual's blood flow would satisfy the definition.\textsuperscript{77}

\textsuperscript{72} See, e.g., Michael L. Perlin, \textit{The Right to Refuse Treatment in New Jersey}, 6 PSYCHIATRIC ANNALS 91 (1976), reprinted in PSYCHIATRISTS AND THE LEGAL PROCESS: DIAGNOSIS AND DEBATE 323, 325 (Richard J. Bonnie ed., 1977) (distinguishing drugs from lobotomy because of the latter's "irreversibility" and suggesting that patients who seemingly object to "excessive medication" probably only want to be "consult[ed]" about the "formulation of [their] treatment plan"); see also Gelman, supra note 19, at 1753-54 & nn.136-39 (describing the incredulous and incredible responses of leading psychiatrists to claims that drugs cause widespread, permanent side effects).

\textsuperscript{73} E.g., Perlin, supra note 72.

\textsuperscript{74} In Sullivan v. Flannigan, 8 F.3d 591 (7th Cir. 1993), cert. denied, 114 S. Ct. 1376 (1994), for example, the inmate plaintiff wanted a drug-free trial period to demonstrate that his condition—undrugged—no longer met Harper standards. Doctors continued drugging. \textit{Id.} at 593. Indeed, they asserted that the plaintiff "must be on some sort of anti-psychotic medication for the rest of his life." \textit{Id.} Rejecting the inmate's argument, the court concluded that "[w]hile there is something disturbing about the prospect of a prisoner forever surrendering to prison doctors his right to be free of unwanted mind-altering drugs ... Harper sanctioned this possibility." \textit{Id.} at 592.

\textsuperscript{75} 384 U.S. 757 (1966); see also Breithaupt v. Abram, 352 U.S. 432 (1957) (a pre-
\textit{Schmerber} case that upheld a criminal conviction obtained after defendant had been subjected, while unconscious, to a blood test for alcohol).

\textsuperscript{76} \textit{Schmerber}, 384 U.S. at 771-72.

\textsuperscript{77} It is debatable whether the incidents of general surgery, including the general anesthetic, qualify as biological alteration. In many cases, including lobotomy, the question is moot because the entire procedure has an alterationist purpose. Other kinds of surgery, however, will sustain a person without any kind of alteration, other than transient effects of the surgery itself. That was true in Winston v. Lee,
Imagined variations on *Schmerber* will help demonstrate that alteration is distinctive. Suppose that instead of drawing blood, the state operated on a person’s liver, reengineering it so that the skin produced an identifiable, but small and not grotesque, mark when the blood alcohol level exceeded a certain point. Even if the surgical procedure itself carried no danger, and even if there was no risk of liver impairment in the future, this intervention differs significantly from a blood test. Or, to eliminate the possibility that one’s reaction to the two cases is somehow influenced by the surgery, suppose that a state can achieve the same result by injecting a harmless substance into the blood—a substance that, thereafter, produces the same mark in the same circumstance. Even if the government is allowed to inject the substance, clearly the procedure represents a more serious threat than a simple blood alcohol test. Once again, heightened constitutional concern results not from any additional danger to the person, but simply from the element of alteration and abhorrence at the idea of reconstituting individuals to suit the state’s convenience.

For another example, suppose that a drug permanently and painlessly altered the stomach in such a way that if one ate an otherwise harmless blend of herbs, vomiting resulted. I submit that the administration of that drug represents a graver constitutional affront than stomach pumping does, even if stomach pumping is a more unpleasant procedure.78 In this example, as

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470 U.S. 753 (1985), for example, where the state sought surgical removal of the bullet lodged within the body of a criminal suspect. Although the state’s purpose was to obtain the bullet as evidence, it was also true that the operation might sustain the person by removing a foreign object from his body. *Id.* at 765. Arguably, the surgery itself would change a person’s biological processes for state purposes; yet it is also arguable that surgery does not last long enough to qualify as an act of alteration. Then again, if the surgery was otherwise warranted, whatever justifies the surgery itself might also justify the use of a surgical anesthetic (assuming the average dangers of anesthesia). On the other hand, mental hospitals once used “sleep therapy”—chemically inducing periods of prolonged sleep, days or weeks in length, for amelioration of mental illness. See *Valenstein*, *supra* note 53, at 34-35 (describing the treatment and the claims made for it). This “treatment” could amount to a hospital’s objecting to the biological state of wakefulness. As is true of other borderline cases, however, the proper treatment of these examples can await settlement of the larger issues of biological alteration.

78. Courts have upheld procedures similar to stomach pumping despite the *Rochin*
in the previous ones, an alterationist measure carries a distinctive onus because of the type, rather than the amount, of harm it causes.

D. For the Purpose, Wholly or in Part, of Realizing a Public Benefit

In *Jacobson*, *Buck*, *Skinner*, and *Harper*, a state sought to alter someone for the benefit of the public. Vaccination eliminates a source of potential contagious disease, sterilization supposedly protects society from future criminality and dependency, and antipsychotic drugs enhance public safety by making persons less menacing to others. Yet the same measures also conferred arguable benefits on affected individuals. A vaccinated person is less likely to fall ill or infect others. Sterilization represents a relatively safe and reliable method of contraception. Antipsychotic drugs often mitigate or eliminate psychotic symptoms and delay or forestall relapses. Absent government coercion, many people choose to undergo each of these procedures.

Public and private purposes overlap in these cases. A state does not act entirely for the individual’s benefit when it resorts to compulsory vaccination, sterilization, or drugging, because there remain the public purposes noted earlier. Nevertheless, an individual may, in fact, benefit. On the other hand, the public benefit in these cases is not simply a product of the private advantages realized by those vaccinated, sterilized, and drugged. Fluoride in the public water supply benefits individuals because they suffer fewer dental cavities; the sum total of these individual benefits arguably comprises the public’s gain. But vaccination, eugenic sterilization, and antipsychotic drugs do not produce their public benefits in only that way.

The point is obvious in *Skinner*, where sterilization imparted no private benefit to the defendant: he did not even earn a de-

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decision. See Finer, supra note 60, at 266 (citing a case and briefly discussing the point). Thus, the issue of biological alteration is not merely academic in this context. 79 The public also might benefit, of course, from reduced public or societal expenditures on dental care. On the other hand, dental maladies do not disrupt the social order, and they are not contagious. Thus, the paternalistic motive for fluoride is plausible.
crease in sentence. In *Harper*, prison security gains might result from the benefits that drugs confer on individuals, in the form of their improved mental health, but drugs also benefit prisons in ways that do not necessarily depend on drugged prisoners being better off. Drugs make prisoners less dangerous and more receptive to commands from their guards, thereby easing the institution's burdens. These effects coexist with drug-induced psychological distress, neurological problems, and drug-induced psychosis. Moreover, the same drug actions that render prisoners less dangerous to guards also may reduce their ability to defend themselves against the violence of other prisoners. Additionally, the possibility remains of severe neurological disorder or even death. Thus, drugs could make a prisoner worse off—or certainly no better off—and still produce substantial benefits to the institution.

In *Buck v. Bell*, the state argued that private and public gain converged, arguing, in effect, that sterilization functioned like fluoridation of water supplies arguably does. Virginia contended that the operation would contribute to Carrie Buck's happiness, and she would benefit by gaining her release from the institution. Thus, what benefitted the public—sterility—inexorably benefitted her as well. Virginia's argument was disingenuous, of course, because, if Ms. Buck wished to have children, she obviously would think that childbearing advanced her interests and her happiness.

80. See, e.g., Gelman, supra note 19, at 1750-51 (describing this effect of drugs).
81. *Id.* at 1744-45 (describing drug-induced distress and psychosis and citing authorities); Cichon, supra note 20, at 297-304 (describing some distressing side effects).
82. 274 U.S. 200 (1927).
83. *Id.* at 204 (the issue is "whether the State, in its judgment of what is best for . . . [Ms. Buck] and for society, may through the medium of the operation provided for by the sterilization statute restore her to the liberty, freedom and happiness which thereafter she might safely be allowed to find outside of institutional walls") (argument of counsel). But see Gould, supra note 35, (concluding that Ms. Buck was singled out because of invidious attitudes toward poor women and their supposed sexual license).
84. See STEPHEN J. GOULD, THE MISMEASURE OF MAN 336 (1981) (describing the reaction of Carrie Buck's sister, who also had been eugenically sterilized, upon learning why she had never conceived: "I broke down and cried. My husband and me wanted children desperately. We were crazy about them. I never knew what they'd
Vaccination, too, may produce serious side effects that, by any rational calculation, outweigh the benefit to the individual. Yet with vaccinations, the convergence of state and individual interests is greatest. Imagine a vaccine that, without preventing serious illness in the recipient, did prevent the disease from spreading. In such a case, the state's benefit and the benefit to the individual would not be the same. The vaccine at issue in *Jacobson*, however, protected its recipient against disease and, precisely because of that protection, it protected others as well. Such a benefit to the individual may not be exactly the same as the state's benefits resulting from the sum total of individual benefits, and nothing more; yet the difference, if any, is slight. Accordingly, vaccination passes strict constitutional scrutiny when sterilization and antipsychotic drugging should not.

The requirement of a public purpose seems the most problematic element of the definition. It supposes a distinction between public and private purposes that may be misleading or non-existent, and, as a result, it may carry the wrong implications for an important category of cases. Consider the case of a non-institutionalized, mentally ill adult whose guardian wishes to consent to antipsychotic drugs on her behalf. In some states, judges decide whether drugs should be given in such circumstances, applying a test somewhat like strict scrutiny. State courts have arrived at similar results—strictly scrutinizing parental decisions—in cases of mentally retarded women whose parents wish them sterilized.

Whether parents ought to have more latitude than a state institution—whether courts should review the parents' determi-
nations using a lower level of scrutiny—is a difficult question. Arguably, parents act as agents of society in such matters, no less than the state would. Alternatively, one could argue that parents are entitled to autonomy against state interference in this decision. Again, parental autonomy may be a chimera, given pervasive state decisions about the availability of institutional arrangements, medical care, insurance, and the like. As a result of a series of such governmental decisions, for example, it has become virtually impossible to obtain care or assistance for psychotic persons today—even in nominally private settings—unless the person receives antipsychotic drugs. Consent to antipsychotic drugs obviously is influenced by state decision-making under these circumstances. Yet it remains true that parents are not the state.

Such cases involve difficult questions of liberty and autonomy as well as problems of biological alteration. As with other situations of this kind, I do not suggest any automatic answer. Nor do I argue that only considerations of biological alteration are relevant. I certainly do not think that any definition settles the problem. I do argue, however, that these situations involve biological alteration, whatever else is at stake. An understanding of the core cases of biological alteration is a prerequisite for approaching these other matters, even if this understanding alone does not resolve them.

E. In the Absence of Meaningful Consent

Jacobson, Buck, Skinner, and Harper involve state compulsion. Without this element, the cases represent nothing more

90. Regarding the state hospitals’ insistence on drugging nearly all patients, see Gelman, supra note 19, at 1727 & n.20 (citing authorities). Similarly, in community settings—boarding homes and nursing homes, for example—drugs are the “treatment” for the large majority of the mentally ill. Id. at 1727 & nn.21-23 (citing authorities). Nor will community facilities readily accept persons who refuse drugs. See id. at 1749 (examining the systematic incentives for community facilities to insist on drugs); see also ANN B. JOHNSON, OUT OF BEDLAM: THE TRUTH ABOUT DEINSTITUTIONALIZATION 38-52 (1990) (critically examining the role of drugs in deinstitutionalization). Had states not deinstitutionalized patients and had they not insisted on organizing hospitals around drugging, alternative treatments and treatment settings would be available. Moreover, states could have regulated and limited drugging in community facilities had they chosen to do so.
troublesome than a state providing free vaccinations, contraception, and medication to its citizens and reaping incidental public benefits along the way. Like other elements in the definition, however, the voluntariness criterion raises problems of application.

Seemingly voluntary decisions about alteration can implicate the same principles of biological integrity and equality that government compulsion threatens. Imagine a government so hideously tyrannical that people prefer a lobotomized existence to a fully conscious one. Individual decisions to undergo lobotomy under such circumstances implicate many of the same concerns as an individual's right of freedom from coercive lobotomy. Again, voluntary decisions that result from an individual's own irrational and invidious self-loathing, on account of some perceived biological defect, may not always be entitled to respect. Consider, for example, someone who desired a lobotomy because their I.Q. score was below 135, or below 75, or 50. For that matter, it is conceivable that no one should be permitted to undergo a lobotomy for any reason, no matter how much they want it, because of the nature of the procedure. Moreover, it is commonly observed that people ought not be permitted to sell their organs for a profit.\textsuperscript{91} Such cases involve questions of individual autonomy that lie beyond the biological alteration principle; my point is merely that the biological alteration principle bears on them as well.

At the same time, it remains unclear whether the threshold of consent to government-proposed, biological alteration should always be heightened, for example, through the use of a more rigorous standard of voluntariness or by requiring the use of formal procedures to assure uncoerced consent.\textsuperscript{92} Guarding

\textsuperscript{91} See, e.g., Michelle B. Bray, Note, \textit{Personalizing Personality: Toward a Property Right in Human Bodies}, 69 TEx. L. REV. 209, 241-42 (1990) (surveying arguments against people selling their organs for profit); \textit{see also} Hannah Horsley, Note, \textit{Reconsidering Inalienability for Commercially Valuable Biological Materials}, 29 HARV. J. LEGIS. 223 (1992) (arguing that only body parts with intrinsic value should be inalienable).

\textsuperscript{92} \textit{Compare} Cruzan v. Missouri Dept of Health, 497 U.S. 261 (1990) \textit{with id.} at 301 (Brennan, J., dissenting) (dividing over whether the right of making medical choices \textit{precludes} a heightened standard of proof to establish what an incompetent person would have chosen had she been competent).
against government-engineered, sham consent is important; these occur all too commonly, for example, in state psychiatry. Nor should consent be casual. Yet heightened scrutiny for biological alteration does not always entail heightened standards of consent. The first issue hinges on the nature of the alteration; the second is whether the government is mandating or coercing the choice.

Suppose, for example, that people sixty years old and older are highly vulnerable to a non-contagious, but often fatal disease, while people between forty and sixty years old are only slightly vulnerable to the ailment. A vaccine exists, but it carries substantial dangers of its own: some risk of death (although it represents a lower risk, in both age groups, than the risks of remaining unvaccinated and dying from disease) and some chance of non-fatal debilitation. Also suppose that the risks are such that a court applying strict scrutiny would allow compulsory vaccination of the older group, but not of the younger. Under these circumstances, a person in the younger age group might well wish to consent to vaccination, even though the government could not mandate it. In this situation, imposing heightened consent standards on the younger person seems pointless; it may even intrude on the right to make decisions about one’s own body and health. Although it would represent a grave constitutional infringement if the government did compel the younger person, that does not mean that someone’s consent, voluntarily given, is more likely to be a sham.

People confined to government institutions are in a different situation. There the government’s desire that alteration take place often will vitiate a putatively voluntary consent. Consider mental patients and prisoners whom the government wishes to drug. Government officials have an enormous incentive to use drugs, not least because their own personal safety may be at stake. Given current staffing levels and physical arrangements,

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93. For example, New Jersey mental hospitals at one time considered drugging “voluntary” if the patient acquiesced after the staff threatened force. Gelman, supra note 19, at 1766-67.

94. E.g., In re Valerie N., 707 P.2d 760 (Cal. 1985) (invalidating, because of state and federal constitutional privacy and procreative rights, a legislative ban on sterilization of incompetent, developmentally-disabled persons).
it is virtually impossible to run a mental hospital today without drugging virtually every patient. Thus, if the law requires consent, officials may be bent on obtaining it—even at the expense of the patient and the integrity of the consent process. Meanwhile, patients find themselves in an extraordinarily vulnerable situation because every aspect of their lives depends on the actions, and in many instances, the good will, of the same government officials who wish to drug them. In addition, the impetus that leads to compulsory drugging—the perception of supposed biological differences—may produce the invidious idea that mental patients’ and prisoners’ consent does not matter, either because they are incapable of giving it or because, being biologically different, their share of basic human rights and dignity is different from everyone else’s. For that matter, a state institution’s inmates may consider their situation, like that described above, so oppressive that they will “consent” to almost anything. For that very reason, their consent should be disregarded.

III. THE DISTINCTIVENESS OF BIOLOGICAL ALTERATION

This Part examines the elements that make biological alteration distinctive; the succeeding Part examines particular techniques of alteration and the proper constitutional standard for evaluating them.

A. The Horrors of the Worst Case

Considered as an abstraction, apart from particular techniques such as vaccination, biological alteration is a repulsive concept. Science fiction horrors and Nazi excesses come to mind. Alteration’s worst applications are so horrible, in fact, that their prospect induces a kind of analytical vertigo. One no longer feels confident about distinctions between acceptable and unacceptable, benign and horrific, applications of the technique. Formerly tolerable acts of alteration come to appear tainted. For example, as Nazi biological atrocities became widely known after World War II, public support began evaporating for biological interven-
tions in American psychiatry. Thus, within ten years after the war’s end, lobotomy all but disappeared because of public revulsion.\textsuperscript{96} No new data or medical discovery had discredited the technique;\textsuperscript{97} indeed, an exhaustive, government-sponsored review later found that lobotomy promised benefits and carried an acceptable risk of adverse side effects.\textsuperscript{98} Nor had Nazi Germany

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96. It is commonly said that the advent of antipsychotic drugs in the mid 1950s caused lobotomy’s decline. See, e.g., VALENSTEIN, supra note 53, at 254 (claiming that the “introduction of . . . [antipsychotic drugs] in the mid-1950s provided what the opposition to psychosurgery had always lacked: a viable alternative for treating the major psychoses”). Peter Sterling demonstrates, however, that the number of lobotomies fell rapidly before these drugs came into common use. Sterling, supra note 53, at 135 (observing that lobotomy “peaked in the United States around 1949,” declined “rapidly thereafter,” and “although its decline may have continued into the early 1950s . . . there is no evidence to support the oft-quoted dogma that lobotomy declined only after the introduction of [antipsychotics, which were] not marketed until 1954 and had little impact until 1955”). Thus, there must be some other explanation. Sterling’s otherwise convincing history suggests that lobotomy “died largely of its own weight” because of ineffectiveness and growing medical opposition. \textit{Id.} In 1950, however, lobotomy’s inventor received the Nobel Prize, an event that casts doubt on Sterling’s explanation. Lobotomy received the highest medical recognition at the very time it was rapidly disappearing.

Near the end of his article, Sterling offered a different explanation. “Although people know they are controlled in various ways through the culture,” he wrote, “they are also aware of their power to resist unjust control . . . . [T]his power resides in their brains and they will not give it up in the long run.” \textit{Id.} at 157. I suggest that the awareness of Nazi abuses spurred appreciation of this fact and doomed lobotomy.

Similarly, I suspect that political activism by women in the late century doomed Battey’s operation, the removal of ovaries as a cure for insanity. See supra note 52 and accompanying text. Just as Sterling suggested that lobotomy died of “its own weight,” Longo thought it obvious that “a medical reaction to indiscriminate castration caused Battey’s operation to fall into disrepute.” Longo, supra note 52, at 260. The theory of the surgery was so invidious, however, that it is difficult to understand the procedure’s rise and fall on purely medical grounds.

97. There was, however, the advent of transorbital lobotomy—a procedure in which doctors severed brain connections using an icepick-like object (or in some cases, an icepick) that was inserted through the patient’s eye socket. Transorbital lobotomy was sickening to watch, and, because it did not require a general anesthetic, an opening of the skull, or even an operating theater, it would have allowed a vast increase in the number of lobotomies. Many found this procedure revolting. See generally VALENSTEIN, supra note 53, at 199-220, 268-83 (describing transorbital lobotomy and its use). Lobotomy’s decline, however, encompassed the well established standard as well as new transorbital procedures.

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particularly favored lobotomy. 99 Yet awareness of Nazi depravi-
ties apparently colored Americans' perception of biological tech-
niques in psychiatry.

Like torture, biological alteration also can color perceptions of
an entire political regime. Both techniques reveal the heart of
the society that uses them, or so many think. Thus, we remem-
ber Nazis more for their medical experiments than for their
plans to subject large portions of Europe to one thousand years
of economic slavery. For similar reasons, opponents often appeal
to the basic character of a society as the reason not to perform
an act of alteration.

Such attitudes do not resolve biological alteration controver-
sies, of course. Nonetheless they are not irrelevant. Abhorrence
of alteration, and the horrors of the worst cases, at least suggest
that the technique raises distinctive problems. The following
sections argue that alteration is, in fact, distinctive.

B. Risks of Mistake

Biological alteration creates extraordinary risks of error, mis-
calculation, and misunderstanding. Because of the intricacy of
the human organism, slight alterations can produce serious,
unforeseen consequences. Psychiatric interventions are especial-
ly troublesome because of the intimate, poorly understood con-
nections between biology and an individual's personality or men-
tal life.

Moreover, our impoverished understanding allows disastrous
biological consequences to escape notice. For example, psychia-

99. To the contrary, during the late 1930s Germany commenced mass extermina-
tions of its mental patients on the theory that patients themselves, as well as the
Volk, would be better off if they were dead. Public criticism from some religious
leaders stopped this pre-war program of extermination. See generally ROBERT J.
LIPTON, THE NAZI DOCTORS: MEDICAL KILLING AND THE PSYCHOLOGY OF GENOCIDE
45-79, 82-95 (1986) (describing the exterminations and the opposition to them). Lo-
botomy, on the other hand, represents a considerable investment (it was, after all,
brain surgery) and therefore a quite different approach to the "problem" of the men-
tally ill.
trists long regarded neurological damage induced by antipsychotic drugs as a manifestation of naturally occurring mental illness. Alterationists even have portrayed disasters as biological triumphs. Psychiatrists, for example, once welcomed the neurological side effects of antipsychotic drugs as indications that the drugs were working.

C. The Rarity of Biological Alteration

Biological alteration is a rarely used technique of state. Its rarity, in turn, makes alteration's political and social effects unpredictable—a consideration that parallels the uncertain risks of alteration to individuals. Given the meager history of state-compelled alteration, we cannot confidently rely on experience to identify the technique's political and social dangers. Can a society like ours biologically alter mental patients and prisoners without eventually extending the technique to others or otherwise demeaning our collective life? No one confidently can answer "yes," relying on experience. Our experience, however, is ample enough to inspire fear. In the United States, the history of state biological alteration consists of forced sterilization and forced lobotomy, together with other measures—now widely deplored—affecting women's reproductive organs and mental patients' brains and bodies. That history should be more than sufficient to force us to stay alert to similar, or worse, alterationist measures that might be proposed.

D. Moral Effects

The targets of biological alteration become objects of state action in an extraordinary way. The state relates to them not in their capacity as persons or moral agents, but rather because they are the carriers, or the locales, of impersonal biological pro-

100. See Gelman, supra note 19, at 1757-58 & nn.167-69 (citing authorities).
101. Id. at 1748 n.118 (describing the once widely held theory that antipsychotic drugs produced benefits by causing brain damage as lobotomy had). Similarly, lobotomists praised their outcomes even when a patient suffered severe loss of mental function and became incapable of meaningful work. See generally Sterling, supra note 53, at 150-56 (reviewing studies).
102. See discussion supra part III.B.
cesses. Thus, inoculation enhances public health in the same way that the elimination of mosquito breeding grounds does; and much the same may be said about administering antipsychotic drugs in order to enhance a prison environment. The affected individual might as well be a biological object; the state’s measure would work no differently.

All this remains true even when the affected person’s decisions and actions—that is, his distinctively mental life—prompt the decision to alter biologically. Someone acts angrily or violently, for example, and a state responds with lobotomy or antipsychotic drugs, methods that operate independently of mind, will, and personality. Indeed, when biological alteration responds to an exercise of human will, the insult and affront to the person is worse: the state has refused to relate on a human level. This distinction is another reason why vaccination against disease—which is not a response to human will or personality—constitutes less of an affront than lobotomy.

The status of biological object carries bitter consequences for the moral sense, and the sense of self, of altered individuals beyond the biological damage they suffer. Knowing that the state has altered them, persons generally understand that they have been treated as objects. The feeling is profoundly dehumanizing. Subjects of biological alteration complain of being treated like “animals.” Recognizing the seriousness of the complaint, defenders of biological alteration often claim that people subjected to these procedures lack capacity to feel the moral insult. Consider, for example, Holmes’ observation that, for those who

103. See State v. Perry, 610 So. 2d 746, 766 (La. 1992). In describing a death row inmate whom the state wished to forcibly drug for the purpose of making him competent to die, the court observed:

He will . . . suffer unique indignities and degradation . . . forced to linger for a protracted period, stripped of the vestiges of humanity and dignity . . . with the growing awareness that the state is converting his own mind and body into a vehicle for his execution. In short, Perry will be treated as a thing, rather than a human being . . .

Id. Perry deals with competence to be executed, but the opinion makes a perfectly general point: people drugged against their will become “aware” of being a “vehicle” for the state and of being treated like “a thing.” Id.

104. I represented institutionalized mental patients in New Jersey during the late 1970s. A common refrain among clients being forced to take drugs was that doctors treated them like “animals.”
“sap the strength of State,” (in particular, the women held in large state institutions) sterilization is “often not felt to be [a sacrifice].” 105 That observation would have surprised victims of sterilization who badly wished to have children. 106 Similarly, some psychiatrists suggest that mentally ill persons do not suffer from drug side effects in the way that “normal” people do; rather, those who receive drugs are considered to be fortuitously and specially constituted to feel little or no drug distress—an absurd claim in light of mental patients’ actual experiences and the literature on drugs. 107

105. Buck v. Bell, 274 U.S. 200, 207 (1927). Compare this remark in Buck with the Court’s similar observation in Plessy v. Ferguson, 163 U.S. 537 (1896), that state “enforced separation of the . . . [white and black] races” does not in fact stamp “the colored race with a badge of inferiority” and that the sense of “inferiority” results “solely because the colored race chooses to put that construction upon it.” Id. at 551. Where Buck supposed that biological inferiority precluded a feeling of loss, Plessy acknowledged the sense of racial inferiority but dismissed it as the product of the “colored race[’s]” imagination. In both cases, the Court supposed that a victimized group could not develop a warranted or justified feeling of degradation.

106. Carrie Buck’s sister, for example. See supra note 84.

107. For example, People v. Bobo, 229 Cal. App. 3d 1417 (1990), described the testimony of a psychiatric expert, Dr. Rosenthal, as follows: “[h]e explained that schizophrenia develops because of a chemical imbalance in the brain. This imbalance can be treated with a powerful anti-psychotic drug called Prolixin. A person who does not suffer from that chemical imbalance cannot tolerate the severe side effects of Prolixin.” Id. at 1433 (emphasis added).

The implication is that those who do suffer from the “chemical imbalance” can “tolerate” the drug’s “severe side effects.” It is perfectly obvious, however, that mentally ill persons often suffer tremendously from the drug, which is widely recognized among patients as the worst antipsychotic. See Rennie v. Klein, 476 F. Supp. 1294, 1304 (D.N.J. 1979) (finding that patients who complain about drugs often received Prolixin, a more “unpleasant” drug, as retaliation), modified and remanded on other grounds, 653 F.2d 836 (3d Cir. 1981), remanded, 458 U.S. 1119 (1982); Gelman, supra note 19, at 1744 & n.97 (citing reports that Prolixin was “torture” and the worst thing anyone could experience). Nor is this case isolated. Two doctors who ingested a test antipsychotic dose reported “within ten minutes a marked slowing of thinking and movement . . . along with profound inner restlessness . . . a paralysis of volition, a lack of physical and psychic energy . . . [and an inability] to read, telephone, or perform household tasks of their own will, but . . . [a continued capacity to] perform these tasks if demanded to do so [sic] . . . [as well as] severe anxiety.” Richard H. Belmaker & David Ward, Haloperidol in Normals, 131 BRIT. J. PSYCHIATRY 222 (1977). Mental patients commonly complain about these symptoms. Yet Belmaker and Ward assumed that mentally ill persons do not experience the same symptoms and speculated about differences between the brains of mentally ill and normal people. Id.

108. Estimates of tardive dyskinesia’s incidence range from about 10% to 50% and
Such views dehumanize victims of biological alteration in a manner similar to the practice of racism, and the explanation is the same. The targets of both racism and alteration are thought to lack the full complement of desirable human attributes, which is why the state singles them out in the first place. Yet their fate would be harsh if they had a basic human appreciation of their treatment. So, in addition to their other supposed human deficits, the victims are deemed incapable of feeling moral insult. The falsity and transparent purpose of such arguments only underscore the moral insult.

E. Political Effects

Biological alteration does not affect only the moral sense of individuals, it also bears on political relationships between individuals and states. When a state employs biological alteration, it proceeds as though persons exist to serve government interests, even if this presumption is only for the purpose of a single measure. Ordinarily, governments are constituted to serve the people; with alteration, people are literally reconstituted to serve governments.\textsuperscript{109}
A Bertolt Brecht poem captures the reversal of political principle and its absurdity. Brecht wrote this poem, entitled "The Solution," after the East German government had brutally suppressed a 1953 worker revolt.

After the rising of the 17 June
The Secretary of the Writers' Union
Had leaflets distributed on the Stalinalee
In which one could read that the people
Had forfeited the confidence of the government
And could recover it through redoubled work. Would it
not then
Be simpler, if the government
Dissolved the people and
Elected another.\textsuperscript{110}

In such "solutions," people are instruments of government, and government exercises the powers of "dissolv[ing]" and "[e]lect[ing]" that properly belong to the people. It is true that Brecht invokes a collectivity, the "people," rather than individual persons, and also that the word "dissolve" refers to political, not biological, processes. Yet Brecht's point, and to a large extent his words, fit government biological alteration equally well. The absurdity of a government choosing the "people"—i.e. the citizens, that it wants—is no greater than the absurdity of a government choosing the people—i.e. the individuals it wants—by biologically altering persons. Rather than shop for a new set of people, the government simply repairs those it has.

F. The Slippery Slope

Compounding all of the considerations, and partly resulting from them, is the difficulty of drawing principled distinctions among different kinds of biological alteration. Facing an intri-

cate human biology and a dearth of political precedent, being somewhat dazed, perhaps, by the potential horrors, we find distinctions difficult to make. More ominously, once alteration is regarded as legitimate, the occasions for employing it become potentially limitless.

If biological alteration can ameliorate one public problem, why not others? Virtually every social problem would yield, to a considerable degree, if people were "better" in some relevant respect; alteration promises to make them so. Hardly anyone, however, favors a world in which government acts of biological alteration become commonplace. Little would remain of the biological equality premise or, arguably, of political equality of any kind. Moreover, by replacing human and political responses with biological ones, our entire mode of life would change. On the other hand, if we propose to restrict biological alteration to the involuntary drugging of prisoners and mental patients, for example, some explanation of why is required. Here the slippery slope is severe, and it leads down to a political chasm of unprecedented depth.111

A classic statement of the problem appears in Smith v. Board of Examiners of Feeble-Minded,112 a 1913 New Jersey state court decision. In Smith, Judge Garrison examined a plan to

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111. For expressions of similar concern in related areas, see, for example, Finer, supra note 60, at 273-74 (1991) (arguing that if a state may compel women to undergo cesarean surgery to benefit a "verge-of-birth" fetus, we might "move ever closer to the kind of society Margaret Atwood bitingly satirized in The Handmaid's Tale"); see also TRIBE, supra note 23, § 15-9, at 1335 (regarding bodily invasions, noting that "courts have long recognized the wisdom of acting as though persons could never be used as a means to the needs of others, knowing that any clear departure from that idea could spell the beginning of a disastrous slide"); James G. Wilson, Chaining the Leviathan: The Unconstitutionality of Executing Those Convicted of Treason, 45 U. PITT. L. REV. 99, 169-70 (1983) (expressing concern that the death penalty for treason might lead inexorably to the destruction of traditions of nonrepression). Nor are lawyers the only ones who feel this argument's power. See, e.g., Philip Siekevitz, Letter to the Editor, Experiment Lacked Informed Consent, N.Y. TIMES, Feb. 12, 1994, at 18 (commenting on a 1950s experiment that used radioactive substances to track the absorption of nutrients in the diets of institutionalized children, a professor emeritus of cell biology at Rockefeller University observed that "[i]nformed consent was cast aside, a slippery slope was put into place, and we all know that leading down that slope was a barbaric chasm, a horror I am sure was known to the investigators of 40 years ago").
112. 88 A. 963 (N.J. 1913).
sterilize, for the familiar eugenic reasons, inmates and patients in state institutions who suffered from "feeble-mindedness, epilepsy, criminal tendencies, and other defects." He began by noting the lack of precedent for using sterilization in an effort to achieve the "artificial enhancement of the public welfare." Then Judge Garrison turned to other applications of the technique that seemed no less plausible or well justified. He posited that victims of venereal disease and tuberculosis probably warranted sterilization as much as Ms. Smith, an impoverished epileptic, did. Indeed, Judge Garrison observed that every inheritable disease could—and, on eugenic principles, one would think, should—prompt sterilization. Nor was that all. If sterilization constitutes a social remedy for disease and dependency, it might just as plausibly solve racial problems—by producing the end of a race. Indeed, absolutely everyone should face the prospect of sterilization, the court observed, because the procedure affords a remedy for the problems of overpopulation described by Malthus. As Judge Garrison portrayed them, these terrifying possibilities seem constitutionally and politically indistinguishable—either from each other or from the eugenic measures the state had undertaken already.

113. Id. at 964 (syllabus of reporter quoting the statute).
114. Id. at 965. Judge Garrison noted that the case involved "consequences of the greatest magnitude," id. at 965, because of the "very important and novel question whether it is one of the attributes of government to essay the theoretical improvement of society by destroying the function of procreation in certain of its members," id. at 965-66.
115. Id. at 966 ("If the enforced sterility of this class be a legitimate exercise of governmental power, a wide field of legislative activity and duty is thrown open to which it would be difficult to assign a legal limit.").
116. Id.
117. Id. ("Even when . . . many other diseases . . . have been included, the limits of logical necessity have, by no means, been reached.").
118. Id. Judge Garrison noted that "[r]acial differences" might make some "persons undesirable citizens" in "the opinion of a majority of a prevailing Legislature"—language that anticipates a concurring opinion in Skinner by Justice Jackson. See infra text accompanying note 207.
119. Smith, 88 A. at 966. After eloquently portraying sterilization's potential for abuse, Judge Garrison struck down the statute on surprisingly narrow, equal protection grounds. The statute's constitutional flaw, he held, was that it applied only to institutionalized persons, even though those not institutionalized were more likely to procreate. Id. at 967.
In sum, freedom from biological alteration is a distinctive right. Alteration threatens unprecedented individual harm and undermines fundamental political principles in unique and especially powerful ways. Once alteration gains a foothold, either in an individual or in a society, it promises to be particularly hard to control. These considerations explain the intuitive repulsion and fear that the concept of alteration evokes. They also establish the parameters of the problem that constitutional law must address.

IV. SUBSTANCE, EQUALITY, AND STRICT SCRUTINY

A. Rights of Substance and Equality

Freedom from biological alteration intertwines substantive due process and strands of equal protection. Alteration threatens biological integrity, the substantive right of continuing throughout life as the same biological entity. At the same time, it threatens a person's equal standing as a member of the human race and, therefore, of the body politic.

It is tempting to view the substantive right, biological integrity, as a limit on permissible inequalities. If the state alters $X$, but not $Y$, it does so almost certainly because it thinks that $X$ and $Y$ differ biologically. For purposes of economic regulation, as an example, the Supreme Court has discovered relevant differences between optometrists and opticians who fit eyeglasses; yet no one supposes that the differences are rooted in the nature of the individuals concerned, or, most importantly, that the differences need to run that deep. Because alteration constitutes a significant intrusion, however, its objects seemingly should be significantly *biologically* different. On this view, to say that $X$ has a substantive right not to receive antipsychotic drugs is to say that $X$ is not so different from everyone else as to warrant those drugs; conversely, if the government may force antipsychotic drugs on $X$, it must be because $X$ differs sufficiently from others whom the government cannot forcibly drug to warrant that treatment.

Yet the substantive right is more fundamental than the equal-

ity right. Unless "equality" covers relationships with our (unaltered) ancestors, equality alone will not protect against universal alterations by a government that lobotomizes everyone, for instance. Equality does not preclude a government from altering everyone for any reason at all. Moreover, the freedom from alteration translates into equality principles only after one assumes that acts of alteration require substantial, biological reasons. That assumption, in turn, posits the existence of a substantive right to biological integrity, a right that demands substantial reasons for alteration.

If the Court regarded the biological organization of persons in the same way that it now views the organization of the economy—as an arena for virtually limitless political and public intervention subject only to a minimal test of "rationality"\(^\text{121}\)—in short, if the Court viewed biological integrity as a weak substantive right—the constraints of equality would become virtually nonexistent too. When government can alter anyone for any reason, then any reason suffices for treating A and B differently. In theory, heightened equal protection scrutiny might demand more differentiation between the A's and B's than the substantive right does.\(^\text{122}\) In practice, however, a society would not adopt the weaker freedom from biological alteration if it adhered to the strong equality principle in alteration matters generally: the two would contradict one another.

The moment we recognize a substantive right of biological integrity, however, its powerful links with equality reemerge. Analytically, we again think in terms of biological difference and sameness. From another vantage point, the element of felt inequality also enters into the moral insult that alteration's victims experience. Inequality also exacerbates the political difficulties that arise from alteration, especially if—as in Skinner—legislators effectively exempt themselves from the procedure.\(^\text{123}\)

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121. See discussion infra part IV.B.
122. Suppose, for example, that alteration had unequal racial impacts and that the Court considered such impacts a threat to racial equality.
123. See Skinner v. Oklahoma, 316 U.S. 535, 537 (1942) (noting it was "material" that the sterilization act exempted "offenses arising out of the violation of the prohibitory laws, revenue acts, embezzlement . . . [and] political offenses") (citation omitted).
Equality also helps explain why compulsory vaccination stands on higher constitutional ground than sterilization or antipsychotic drugging. Vaccination raises questions of biological integrity, but, because the measure applies to all, it raises no question of inequality. That characteristic, in turn, makes *Jacobson* less objectionable than *Buck* or *Harper*.124 This difference is, at least in part, a measure of the equality principle's force. Conversely, *Buck* and *Harper* exploit the idea of biological inequality to sustain differential treatment of a minority—something that sounds very much like racism.

**B. Levels of Scrutiny**

The idea of varying "levels of scrutiny" is part of both substantive due process and equal protection doctrine. In the area of substantive due process, "particularly cherished" rights, such as aspects of individual privacy, receive "strict scrutiny."125 To abridge these rights, the government must use means "narrowly-drawn" to accomplish a "compelling" public interest.126 The interests that trigger strict scrutiny are known as "fundamental rights" and the narrowly-drawn means are "least restrictive al-

124. See discussion infra part V.C.1.
125. GUNTER, supra note 21, at 448.
127. *Foucha v. Louisiana*, 112 S. Ct. 1780, 1804 (1992) (Thomas, J., dissenting) (describing a "relatively straightforward" conceptual "framework" for fundamental rights—"strict scrutiny"—which invalidates a measure "unless the State demonstrates a compelling interest and narrow tailoring"); *Roe*, 410 U.S. at 155 (noting that with fundamental rights at stake, "enactments must be narrowly drawn"); *see also The Supreme Court, 1991 Term—Leading Cases*, 106 HARV. L. REV. 163, 210-11 (1992) (describing strict scrutiny as the "substantive due process framework" that demands government actions be "necessary" to further a 'compelling' government interest when infringing upon "fundamental rights") (citation omitted).
ternatives.” Strict scrutiny’s rigor is usually decisive: as Professor Gunther famously said, it proves “fatal in fact” to the government’s measure.

Other substantive rights and interests receive “ordinary scrutiny” or “rational basis review.” This lesser standard requires that the government’s act “rationally relate” to a “legitimate” state interest. More accurately, ordinary scrutiny is an “irrationality” test, because the government must act irrationally—almost crazily—to run afoul of it. Recently, the Court has adopted a balancing test for some substantive, due process issues, weighing individual and state interests against one another. The Court also has developed standards of review customized for particular settings, such as prisons (“reasonableness”) and mental hospitals (“professional judgment”).

129. Cichon, supra note 20, at 354-62 (tracing the history of the least restrictive alternative doctrine and how lower courts apply it to controversies about state psychiatry).


131. See GUNThER, supra note 21, at 457-65 (surveying developments); G. Sidney Buchanan, A Very Rational Court, 30 HOUS. L. REV. 1509 (1993) (examining rational basis review).

132. This is especially true of equal protection controversies where the Court either accepts or rejects the classification. In substantive due process cases, the Court may impose non-trivial constitutional requirements using non-strict scrutiny. Washington v. Harper, 494 U.S. 210 (1990), for example, required that drugs be in the prisoner’s “medical interest.” Id. at 227. Compare id. at 222 n.8 (arguing that the state’s regulation implicitly incorporated a “medical interest” requirement, because the Court “will not assume that physicians will prescribe these drugs for reasons unrelated to the medical needs of the patients”) with id. at 244 & n.11 (Stevens, J., dissenting) (concluding that the state’s rules did not incorporate a “medical interest” requirement). Similarly, non-strict scrutiny in Youngberg v. Romeo, 457 U.S. 307 (1982), led the Court to recognize various rights of mental patients, including limited rights to freedom from restraint and freedom from harm.

133. Ordinary scrutiny weighs competing interests and balances the “liberty interests [of the individual] against the relevant state interests.” Youngberg, 457 U.S. at 321.

134. Turner v. Safley, 482 U.S. 78 (1987) (describing a modified “reasonableness” review that includes consideration of available alternatives as one element); see discussion supra note 42.

135. Youngberg, 457 U.S. at 321-22 (1982) (adopting the professional judgment test for interests in physical liberty and safety in mental institutions); see Susan Stefan,
Strict and ordinary scrutiny also apply in equal protection cases. "Suspect" classifications, like those based on race, and classifications that infringe on a fundamental right, like those that restrict voting, trigger strict scrutiny.\(^1\) Comparable to infringements on fundamental substantive rights, these classifications must be "narrowly tailored" to serve "compelling" state interests. Similarly, ordinary scrutiny in equal protection requires classifications "rationally related to a legitimate state interest."\(^2\) Comparable to low level, substantive scrutiny, this standard is easily satisfied.\(^3\)

There is also an "intermediate" level of equal protection scrutiny, the standard of review in sex discrimination\(^4\) and some alienage cases,\(^5\) and also in cases of "benign," congressionally-approved programs that use racial criteria.\(^6\) Intermediate scrutiny requires that a classification "substantially" advance "important" government interests.

A number of factors have influenced the Court's choice of the

\(\text{Leaving Civil Rights to the "Experts": From Deference to Abdication Under the Professional Judgment Standard, 102 YALE L.J. 639 (1992) (comprehensively examining professional judgment tests).}\)


\(\text{137. Cleburne, 473 U.S. at 439-40 (citing cases).}\)

\(\text{138. See generally Heller v. Doe, 113 S. Ct. 2637, 2642-43 (1993) (describing rational basis review and its tolerance of "generalizations even when there is an imperfect fit between means and ends").}\)

\(\text{139. See J.E.B. v. Alabama, 114 S. Ct. 1419, 1426 n.6 (1994) (applying the intermediate scrutiny requirement of an "important" governmental interest that is "substantially" served by the classification); Clark v. Jeter, 486 U.S. 466, 461 (1988) (describing intermediate scrutiny as being "generally... applied to discriminatory classifications based on sex or illegitimacy"). But cf. J.E.B., 114 S. Ct. at 1425, 1426 n.6 (reserving judgment on whether gender classifications are "inherently suspect"—and therefore require review stricter than intermediate scrutiny—and noting that "while the prejudicial attitudes toward women in this country have not been identical to those held toward racial minorities" there are also overwhelming similarities); Galotto, supra note 136 (tracing the evolution of intermediate scrutiny for sex discrimination and arguing that strict scrutiny should replace it).}\)

\(\text{140. GUNTHER, supra note 21, at 680-88 (surveying cases and authorities).}\)

\(\text{141. Metro Broadcasting, Inc. v. FCC, 497 U.S. 547, 565-68 (1990) (applying intermediate scrutiny to a "benign racial classification... by Congress" for the purpose of "enhancing broadcast diversity").}\)

\(\text{142. Id. at 564-65.}\)
appropriate level of scrutiny. In substantive due process, the importance of a right to the living of a life has been a significant consideration. 143 The Court also has considered a right's historical recognition, or nonrecognition, and its textual support in the Constitution. 144 In equal protection, the invidiousness of discrimination—in effect, the likely impact on an individual and the importance of living a life free from such discrimination—has been significant in the Court's choice of a certain level of scrutiny. 146 This consideration parallels, and may be iden-

143. E.g., Planned Parenthood v. Casey, 112 S. Ct. 2791, 2807 (1992) (joint opinion of O'Connor, Kennedy & Souter, JJ.) (describing constitutional protection for "choices a person may make in a lifetime, choices central to personal dignity and autonomy" and to the definition of "one's own concept of existence"); id. at 2846 (Blackmun, J., concurring in part and dissenting in part) (describing a woman's decisions about family planning as "critical life choices" with a powerful "impact on a woman's life"). See generally Tribe, supra note 23, § 15-3, at 1308 (discussing protection of "those aspects of self which must be preserved and allowed to flourish if we are to promote the fullest development of human faculties"); Gelman, supra note 126, at 682 & n.542 (collecting authorities); Jed Rubenfeld, The Right of Privacy, 102 Harv. L. Rev. 737 (1989) (articulating the affirmative right of privacy as a right to define one's own life).

144. E.g., Michael H. v. Gerald D., 491 U.S. 110, 123 (1989) (Scalia, J.) (plurality opinion) (describing an "insistence" by the Court that "asserted liberty interest[s] be rooted in history and tradition"). But see id. at 141 (Brennan, J., dissenting) (arguing against recognition of "only . . . those interests specifically protected by historical practice"); Casey, 112 S. Ct. at 2805 (joint opinion of O'Connor, Kennedy & Souter, JJ.) (characterizing the strict version of Justice Scalia's position in Michael H. as "inconsistent with our law"). At the same time, a past history of discrimination counts in favor of equal protection strict scrutiny: it demonstrates a failure of ordinary political processes. See City of Cleburne v. Cleburne Living Ctr., Inc., 473 U.S. 432 (1985). Race and gender discrimination would otherwise receive constitutional sanction because of their history.

145. E.g., Bowers v. Hardwick, 478 U.S. 186, 194 (1986) (hesitating to recognize new rights with "little or no cognizable roots in the language or design of the Constitution").

146. E.g., Metro Broadcasting, 497 U.S. at 601 (Stevens, J., concurring) (racial classifications may be sustained if they "imply" no "judgment concerning the abilities of . . . different races . . . [and neither] the favored nor the disfavored class is stigmatized in any way"); City of Richmond v. J.A. Croson Co., 488 U.S. 469, 493 (1989) (describing freedom from racial discrimination as a "personal" entitlement "to be treated with equal dignity and respect"); Korematsu v. United States, 323 U.S. 214, 240 (1944) (Murphy, J., dissenting) (arguing that differences in treatment based on race "destroy the dignity of the individual"); see also Brown v. Board of Educ., 347 U.S. 483, 494 (1954) (striking down racial segregation in public schools because of its effects on the "hearts and minds" of school children and their later "educational
tical to, the "importance" criterion in substantive due process.

Besides importance to an individual, equal protection emphasizes three additional factors: the importance to the "Nation" of eliminating the type of discrimination at issue; to the likelihood that ordinary political processes will prevent abuse of a classification; and the likelihood that the classification reflects real differences among individuals rather than official animus toward a disfavored group. An additional factor, one the Court mentions in some substantive due process and equal protection cases, is relative judicial competence in a sphere of life. When relevant expertise lies elsewhere, such as in the operation of a mental institution, the Court may lower the standard of judicial scrutiny.

All of these considerations point to strict scrutiny for racial classifications. Racial distinctions are invidious and damaging to the individual. They have torn apart society and have produced unprecedented legislative and political abuses. They are extremely unlikely to reflect actual differences among individuals and are likely to reflect racial animus. Moreover, there are no and mental development").

147. See, e.g., Shaw v. Reno, 113 S. Ct. 2816, 2832 (1993) ("Racial classifications of any sort pose the risk of lasting harm to our society."); Croson, 488 U.S. at 520 (Scalia, J., concurring) (describing the practice of racial discrimination as "fatal to a Nation such as ours"); cf. Casey, 112 S. Ct. 2791 (1992) (joint opinion of O'Connor, Kennedy & Souter, JJ.) (suggesting that affirmation of substantive due process precedents was vital to the "Nation").

148. See discussion infra part IV.B.3.b.

149. City of Cleburne v. Cleburne Living Ctr., Inc., 473 U.S. 432, 440 (1985) (noting that strict scrutiny applies to classifications that "are so seldom relevant to the achievement of any legitimate state interest that . . . [they] are deemed to reflect prejudice and antipathy"); see also J.E.B. v. Alabama, 114 S. Ct. 1419, 1424 (1994) (tracing heightened scrutiny of gender-based classifications to "the real danger" that apparently "reasonable" classifications in fact result from invidious stereotypes about gender and the capabilities of men and women).

150. E.g., Cleburne, 473 U.S. at 442-43 (applying rational basis review to classifications that single out mentally retarded persons because, inter alia, "[h]ow this large and diversified group is to be treated . . . is a difficult and often a technical matter, very much a task for legislators guided by qualified professionals and not by the perhaps ill-informed opinions of the judiciary"); Youngberg v. Romeo, 457 U.S. 307 (1983) (applying the professional judgment test to infringements of substantive constitutional rights in mental institutions); see discussion infra part IV.B.3.e.

151. Romeo, 457 U.S. at 321, 324.

152. See Cleburne, 473 U.S. at 440 (observing that racial distinctions are almost
experts in racial differences to whom the courts will defer; legis-
latures, in general, are no better positioned than courts to make
judgments about race.\textsuperscript{153}

This last consideration, judicial competence, may play a
broader role in substantive due process jurisprudence as well. It
is conceivable, for example, that the Justices' willingness to rec-
ognize rights of privacy and family intimacy reflects an intuitive
sense that there are no experts on such matters, which are
equally accessible to all human beings, and that judges, as well
as anyone else, can therefore pass on the questions with confi-
dence.\textsuperscript{154} In those respects, individual privacy would resemble
race, an area where the court also refuses to recognize any war-
rant of outside expertise.

The "levels of scrutiny" apparatus spans a number of disagree-
ments on the Court. Some involve the framework's application to
particular issues. Thus, the Court is notoriously split on whether
strict or intermediate scrutiny applies to "benign" uses of
race.\textsuperscript{155} Broader methodological disagreements exist as well.
Justice Stevens, for example, consistently has doubted the use-
fulness of the framework itself in equal protection cases. He ar-

gues that it is less a working analytical tool than a method of
describing results that follow from "apply[ing] a single standard
of scrutiny] in a reasonably consistent fashion."\textsuperscript{156} Moreover,
the levels of scrutiny apparatus is far less secure in the area of substantive due process. For many years after Griswold v. Connecticut, some Justices denied that any fundamental rights existed under the Due Process Clauses. Today, the views of these Justices remain unclear.

Despite these questions about the levels of scrutiny apparatus, I apply it to problems of biological alteration. In substantive due process, the Court’s hesitation probably results from doubts about recognizing new, non-textual constitutional rights, rather than from qualms about strict scrutiny itself. There is, however, no real question about whether the Constitution’s text protects against biological alteration. Moreover, the Court continues to use strict scrutiny as the framework of dispute in equal protection cases. Even if “levels of scrutiny” represent only a means of expressing conclusions arrived at in other ways, as Justice Stevens suggests, the apparatus is at least useful as a method of expression. Justice Stevens himself invokes an idea of strict scrutiny in his Harper dissent, his one decision about biological alteration. In any event, strict scrutiny has a unique affinity for questions of biological alteration. Finally, the various factors


157. See JOHN H. ELY, DEMOCRACY AND DISTRUST 11-72 (1980) (arguing against recognition of new substantive constitutional rights, such as privacy).

Judge Edith H. Jones recently noted that “[a]lpa part from developing the amorphous ‘right of privacy’ that underlies the abortion cases, the Court has authored no decision expanding substantive due process rights for many years.” Doe v. Taylor Indep. Sch. Dist., 15 F.3d 443, 478 (5th Cir. 1994) (Jones, J., dissenting). Judge Jones noted that the last such decision was Moore v. City of East Cleveland, 431 U.S. 494 (1977) (holding that an ordinance written so as to prohibit a grandmother from living with her grandson violated substantive due process). Doe, 15 F.3d at 478 n.6 (Jones, J. dissenting) (reviewing cases).

158. 381 U.S. 479 (1965).

159. See Gelman, supra note 126, at 592-604 (examining the divergent positions of individual Justices on the issue of substantive due process rights).

160. See id. at 612-80 (arguing that the constitutional right of “life” protects against bodily destruction); see also discussion infra part IV.B.2.b.

161. See supra note 156 and accompanying text.
all seem cogent when applied to alteration, a problem with equal protection and substantive due process aspects.

1. Alteration and Race Compared

Racial classification is the paradigmatic case for imposing strict scrutiny.162 If Skinner produced the first exercise of modern, Fourteenth Amendment strict scrutiny, racial distinctions occasioned the second in 1948. The Court then began elaborating the technique in a series of historic race cases that has not yet come to an end.163 Today, every Justice regards government use of racial criteria as warranting distinctive constitutional treatment, whatever else may divide the Court.164 Race seems sui generis.

Race and biological alteration do not register identically on the criteria for strict scrutiny. Biological alteration does not divide society as race does. Nor does it threaten the same future political and social divisions as race. Two other criteria for strict scrutiny—the likelihood that ordinary political processes will prevent abuses and the possibility that a state's measure reflects real differences among individuals—also apply differently to biological alteration.165 Given the courts' strong inclination to defer to outside expertise in matters of biological alteration, the judicial competence criterion also operates differently in the context of alteration.166

Yet, despite the obvious differences, racism and alterationism share the same animating premise, namely, that among human beings, biological inequalities exist that are the business of government. Sexism, too, is distinguished by this premise. I shall argue that the premise offends the Constitution and that, be-

162. See, e.g., Shaw v. Reno, 113 S. Ct. 2816, 2824 (1993) (noting that strict scrutiny applies to explicit racial classifications and to apparently race-neutral measures that cannot be explained except on racial grounds).
163. See Galotto, supra note 136, at 510-18 (tracing the history of race discrimination cases).
164. See Shaw, 113 S. Ct. at 2846-47 & n.5 (Souter, J., dissenting) (demonstrating that every Justice to address the point applies "at least heightened scrutiny" to racial classifications).
165. See discussion infra parts IV.B.3.b-c.
166. See discussion infra part IV.B.3.d.
cause of this common feature, the freedom from alteration and the freedom from racism register similarly on the criterion of importance to the individual. There are also suggestive historic connections between racism and biological alteration.

Biological alteration begins with the premise that biological divisions within humanity have significance for political and public action. Racism—and sexism, as well—begin with the same premise. What is common, and also distinctive, in these positions is an insistence that biological differences have inherent political importance.

This insistence contradicts the fundamental premise of biological integrity and human equality—the idea that human beings' biological constitution is no matter for the political arena and that, for purposes of coercive government action, all people are "created equal." Today, constitutional attention focuses on particular sources of supposed biological inequality, such as race, or gender; the fundamental premise of biological integrity and equality remains unstated. Yet that premise clearly underlies the constitutional barriers to state racism, sexism, and ethnic hatred. The Declaration of Independence framed the point explicitly by asserting that all people were "created equal;" and Lincoln's Gettysburg Address, as Garry Wills has demonstrated, transformed "the proposition that all men are created equal" into a breath of life that animated the nation.

Neither the familiarity of the language nor our reverence for the texts should blind us to the fact that they posit the biological equality of humanity. Jefferson and Lincoln did not regard humanity as a collection of distinct biological subspecies, the members of which enjoyed equal political rights despite their differences. Rather, human rights derived from our equal

167. See discussion infra part IV.B.2.a.
168. See infra notes 178-82 and accompanying text.
169. THE DECLARATION OF INDEPENDENCE para. 2 (U.S. 1776) ("WE hold these truths to be self-evident, that all men are created equal . . . "). See generally GARRY WILLS, INVENTING AMERICA: JEFFERSON'S DECLARATION OF INDEPENDENCE 209-10 (1978) (describing Jefferson's assumptions about human equality).
170. GARRY WILLS, LINCOLN AT GETTYSBURG: THE WORDS THAT REMADE AMERICA 145-47 (1992) (arguing that the Gettysburg Address "not only put the Declaration [of Independence] in a new light as a matter of founding law, but put its central proposition, equality, in a newly favored position as a principle of the Constitution").
171. Regarding Jefferson, see WILLS, supra note 169, at 210 (noting influences on
creation. Although it is not thought of in the same way as race, gender, or ethnicity, biological alteration implicates that fundamental premise no less.

The real differences between racist measures and biological alteration—and there are many—do not affect the premise of biological inequality that underlies both. For example, biological alteration may be useful to individuals and to society, at least in theory, whereas racism is entirely destructive.\(^ {172} \) Again, alterationist practices sometimes rest on a scientific foundation, where racism is based on fantasy. Mental illness is not an illusion, for example, like imaginary races and racial differences; nor do states merely imagine that smallpox vaccination prevents smallpox. Finally, people often choose to undergo biological alteration (electing to be sterilized surgically, for instance) apart from any coercive government program; virtually no one would voluntarily choose to become a victim of racism. Nor is biological alteration necessarily linked to racist or sexist movements. If there were no racial distinctions, and if women had received equal treatment from time immemorial, programs of biological alteration would nonetheless exist.

These differences warrant careful attention, but they do not change the basic premise. Although they bear on some criteria for strict scrutiny, they do not affect the pivotal criterion of importance to the individual. Thus, the possible uses of alteration,
and the fact that some choose to undergo it voluntarily, do not make one's own decision to refuse sterilization less important. Nor does the possibility of a real biological basis. Lobotomy was not a less serious affront to the Constitution because its proponents claimed a biological basis for it or because it did, undeniably, change the brain's biological functioning. The same is true of the late nineteenth century practice of removing women's ovaries as a psychiatric remedy. If anything, scientific support makes those practices more insidious: it means that even science was unequal to their enormous threat. Moreover, even a secure scientific grounding would not eliminate the side effects and sequelae of these procedures.

Other apparent distinctions between biological alteration and racism do not withstand analysis. It is true, for example, that biological alteration applies the premise of biological inequality to individuals, rather than to groups defined by race. However, one also can create a group out of all the individuals who share a certain biological trait. For instance, if schizophrenia demonstrably resulted from identifiable brain abnormalities, "schizophrenics" would be the identifiable group of people who had those abnormalities. Indeed, racists might say that racial groups are constructed in precisely that way, of those who carry identifiable racial "traits." Nor is it a decisive distinction that racism tends to subsume all of humanity in racial categories, whereas biological alteration—at least today—typically does not. Although relatively few people have been objects of severe biological alteration in the United States, and although racists are notorious for relegating large parts of humanity to an inferior political and social status, these distinctions are practical rather than theoretical. Racists could single out a very small disfavored group, while alterationists might decide that much larger portions of humanity ought to benefit from biological intervention. The logic of biological alteration, in fact, invites an expansive application. Nor is it inconceivable that a biological "defect"

173. In some ways, alteration in the absence of scientific support is still worse. False scientific claims are preferable to mutilating brains for purposes of punishment or hospital management. Yet that kind of government abuse is more easily detected and therefore less likely to occur.
174. See discussion supra part III.F.
affecting everyone will be imagined or even discovered; indeed, vaccination already enhances virtually everyone's immune system. Although the numbers of those subjected to state alteration apart from vaccination are relatively small, with the inclusion of antipsychotic drugging it still numbers in the tens of millions. 175

Racism and alterationism differ in another respect. A cardinal tenet of racism deems the disfavored group irremediably different from the favored one. 176 Members of the "inferior" race cannot change, according to racist theory, nor can biological alteration transform them into members of the "superior" race. Far from favoring biological alteration as a remedy for supposed racial differences, then, the racist denies such a thing is possible. Instead, racists urge social and economic degradation, exile, or expulsion—and, in extreme cases, physical annihilation—of the disfavored group. Alterationists, on the other hand, generally find social and economic remedies inadequate; accordingly, they favor biological alteration. 177 If ordinary custodial measures sufficed, for example, prisons would not drug inmates.

For all that, racism and biological alteration often are linked in practice. Programs of eugenic, racial sterilization are an obvious example: they eliminate disfavored racial groups by sterilizing their current members. Racists also tend to single out the disfavored group for biological alteration, as part of medical experimentation programs, for example. 178 From the opposite vantage point, members of racial minorities frequently see rac-

175. See Cichon, supra note 20, at 307 & n.148, 309 & n.163 (estimating that about three million people receive antipsychotics each year, and that approximately two million persons to date have developed tardive dyskinesia, a permanent neurological disorder).

176. See, e.g., Plessy v. Ferguson, 163 U.S. 537, 551 (1896) (asserting that "[l]egislation is powerless to eradicate racial instincts or abolish distinctions based upon physical differences").


178. The notorious Nazi medical "experiments" on people in concentration camps are an example. See, e.g., Lifton, supra note 99, at 269-302 (surveying such Nazi techniques as sterilization, castration, typhus infection, and starvation); Nancy L. Segal, Twin Research at Auschwitz-Birkenau: Implications for the Use of Nazi Data Today, in When Medicine Went Mad 281 (Arthur L. Caplan ed., 1992) (describing such biological mutilation as physically joining two twins by stitching them together at the back).
ism behind ostensibly even-handed biological alteration programs. Similarly, there are suggestions that women received a disproportionate number of lobotomies because of sexism. The idea of removing women's ovaries as a cure for insanity now appears, almost self-evidently, to reflect a biological prejudice against women.

What explains these connections is the fact that racists do not subscribe to the biological equality premise for members of the disfavored group, whom they view as less than human and whose very existence demonstrates in racist fantasies the falsity of claims for biological equality. Rejecting the principle of biological equality, however, undermines the premise of biological integrity: biological integrity has powerful links with biological equality, and the links run in both directions. Thus, the very existence of supposedly significant, biological differences subverts claims to biological integrity, even though no racist believed that alteration would eliminate racial differences, and no sexist, for example, believed that removal of women's ovaries would transform women into men.

For these reasons, victims of racism (or sexism) reasonably detect racial (or sexual) animus behind programs of biological alteration. The premise of biological integrity is abandoned so rarely that, when it is, one naturally searches for a reason adequate to the enormity of the event. A likely candidate is the state's view of someone as biologically different, unequal, and, therefore, less than fully human. It is hardly surprising if some-

179. See, e.g., Dorothy E. Roberts, Crime, Race, and Reproduction, 67 TUL. L. REV. 1945, 1945-46 (1993) (arguing that "the racial ideology of crime increasingly enlists biology to justify the continued subordination of blacks").

180. Sterling, supra note 53, at 133. (summarizing three studies, including Sterling's own, finding women comprised about 66% to 75% of lobotomy patients, and concluding that surgeons preferred to operate on women because "docility and equanimity"—traits that frequently result from a lobotomy—struck the surgeons as "less incapacitating to housewives than to men who are expected to function in the world at large"). But cf. Elliot S. Valenstein, The Practice of Psychosurgery: A Survey of the Literature (1971-1976), in NATIONAL COMMISSION, supra note 98, app. at I-i, I-88 to I-89 (finding that 56% of lobotomy patients described in research articles were women, a percentage that does "not differ significantly from the sex ratio distribution in . . . [the relevant] diagnostic categories").

181. See generally Smith-Rosenberg & Rosenberg, supra note 52 (describing an invidious biological conception of women).
one deemed less than fully human in one regard (say, in terms of race or sex) was also found to fall short in other biological respects. \(^2\)

2. *Alteration and Strict, Substantive Due Process Scrutiny*

   \(a.\) **Importance to the Individual**

   Importance to the individual is the Court's prime consideration when it identifies the fundamental substantive rights that will receive strict scrutiny. The importance of an individual's biological integrity is self-evident. Moreover, to an individual, the threat of biological alteration will feel like that of racism inasmuch as both abandon biological equality.

   Equally significant is alteration's unique potential to cause serious physical harms, like those threatened by the *Harper* drugs' side effects. \(^3\) These harms are not only potentially severe, but, because of the delicacy of the human organism, they are also very likely to occur. At the same time, the harms accompanying alteration are unpredictable both in individual cases (identifying the side effects a person will suffer and his or her reaction) and in the alteration techniques themselves (identifying the drugs' full range of side effects, particularly in the first years after their introduction).

   The importance of avoiding alteration goes beyond the matter of avoiding harms of a given magnitude. Preventing individuals from having children, for example, causes some degree of personal harm. What distinguishes sterilization of prisoners from a lifetime prison ban on conjugal visits, however, is not the degree or amount of harm to one's ability to procreate. Rather, sterilization is different in kind from a mere rule—even one fully enforceable and enforced—against procreation. \(^4\) That difference, in turn, is an indication of the heightened importance to an individual of the freedom from biological alteration. Nor is freedom from alteration less "important" because particular acts of

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182. See, e.g., *supra* note 52 (discussing the nineteenth-century practice of removing women's ovaries as a treatment for insanity).
183. See discussion *supra* part III.B.
184. See discussion *supra* part I.
alteration are beneficial, and people choose to undergo them. These facts do not diminish the significance of refusing alteration in an individual's life. The importance a person attaches to her own biological integrity is not reduced merely because other people would make different decisions about their biological functioning. If A does not want to undergo surgical alteration of the brain, the fact that B desires a lobotomy is irrelevant; B's decision does not diminish the importance, to A, of her own integrity. Similarly, if C has decided to refuse chemical alterations in brain function, the fact that D benefits from antipsychotic drugs, or that E, a doctor, thinks C will benefit in the same way, or that C will indeed benefit, are also beside the point. Such considerations rationally relate to the decision of whether C should take drugs, but none detracts from the importance, at least to C, of his decision to refuse; they do not make C's current biological functioning less important or less valuable to him.

b. Historic Recognition of the Right

When a right lacks historic recognition, courts are less likely to apply strict scrutiny. The Justices disagree about what it means for a right to retain its identity over time—for it to be the same right as one recognized in the past—and also about whether historic recognition or historic nonrecognition is necessary, or sufficient, in constitutional analysis. This factor carries weight nonetheless.

Because biological alteration rests on technologies that first appeared in the late nineteenth century, there is no national history of tolerating it before the Fourteenth Amendment's ratification. For the same reason, there is no history specifically condemning the practice either. Yet general constitutional references to rights of "life" encompass biological alteration even though the drafters probably did not have the modern possibilities for alteration in mind. As I have shown elsewhere, the Fourteenth Amendment right of "life" protected health, the integrity of the body, and the freedom from bodily "destruction." Thus,

185. See supra note 144.
186. Gelman, supra note 126, at 612-80 (describing the historic meaning of "life" in
it protected against biological alteration. Moreover, it seems unlikely that Americans of 1776, or 1876, would accept the general idea of altering human beings for government ends.187

3. Other Strict Scrutiny Criteria

Because freedom from biological alteration carries an enormous importance in individuals' lives, and because it enjoys historic recognition—or, at the least, because there is no history of nonrecognition—it appears to qualify as fundamental. It is a substantive right that warrants strict scrutiny. I now consider other indicia for strict scrutiny, derived largely from equal protection cases.

a. Importance to the Nation

Applying strict scrutiny to racial classifications, the Court has emphasized the importance to the "Nation" of eliminating racial discrimination.188 Biological alteration's effects on a "Nation" are largely a matter of speculation. I noted earlier a tendency—not universally shared—to reach global judgments about societies and political regimes based on their use of biological alteration.189 Judgments about Nazi Germany are a prime example, but similar tendencies appear in discussions of lobotomy, sterilization, and antipsychotic drugs in the United States. The

the Due Process Clauses).

187. Conservative Justices approach substantive due process looking for specific historic traditions, not general conceptions of a right. See Michael H. v. Gerald D., 491 U.S. 110, 128 n.6 (1989) (Scalia, J.) (arguing that, for purposes of substantive due process, the "most specific level" of a tradition is controlling); supra note 144 and accompanying text. Yet Justice Scalia, the most forceful proponent of this view, finds the absence of any tradition sanctioning compulsory abortion to be a reason for concluding that the Constitution bars such a procedure. Planned Parenthood v. Casey, 112 S. Ct. 2791, 2874 & n.1 (1992) (Scalia, J., concurring in part and dissenting in part). Compulsory abortion, however, resembles an act of biological alteration. Although Justice Scalia is suspicious of general traditions, the historic evidence points to a tradition of no biological alteration before the late 19th-century. On methodological grounds, precluding general traditions is wrong; nor does Justice Scalia do so. In any event, a specific tradition against each act of biological alteration is discernible with identical results.

188. See supra note 147 and accompanying text.

189. See supra part III.A.
idea is that the fabric of our political and constitutional order is incompatible with the alterationist measure in question. Such arguments treat biological alteration as a stain on political life, one characteristic of oppressive societies, and as a politically corrosive and oppressive force in its own right. According to this view, the interests of the "Nation" point toward the strictest scrutiny of alterationist measures.

Other treatments of alteration find nothing so dramatic or significant. If Justice Stevens' Harper dissent invoked the Nuremberg standards, Justice Kennedy's majority opinion treated brain alteration as a run-of-the-mill prison measure that called for only a modest exercise in constitutional oversight. Justice Kennedy saw no larger consequences or implications, either for the nature of prison life in America or for American national life as a whole. With the exception of a concurring opinion by Justice Jackson in Skinner v. Oklahoma, no other Supreme Court decision on biological alteration discerns any larger significance for the Nation in the technique either.

Which of the two views is correct remains a matter for speculation. Judicial opinions simply assume that a technique of biological alteration does or does not have some larger social significance; the point is not the subject of argument or citation. It seems doubtful that any argument or demonstration, whether offered by legal commentators, social scientists, or historians, would change many minds on the point.

Conceivably, those who discern a rational system of rules or values at the core of our society more readily will find broad social implications in the practice. Alteration would reveal a flawed premise or value, a fundamental social mistake, that must undermine a wide array of social practices. On the other hand, those who see social arrangements as collections of customs and practices—even customs and practices working in harmony toward common ends, like social peace—will resist the conclusion that alteration reflects or contributes to any fundamental defect in a society. One harsh custom does not necessari-

190. See, e.g., sources cited supra note 109, infra note 366.
192. See discussion infra part IV.B.3.b.
ly betoken another, nor is there any such thing as a "fundamental" defect in a society: a social order either works or it fails. One could not infer general oppressiveness, for example, from a practice of forcibly sterilizing institutionalized epileptics.

It should be evident that the first view coincides with a picture of biological alteration as a slippery (if logical) slope that leads down to a social abyss, while the second view does not. These views of society also parallel possible views of the human constitution. Either human nature is, or it is not, made up of delicately interrelated components, no one of which can be altered without danger to the whole; either societies are, or they are not, constituted so that a practice like biological alteration reflects a general tendency toward oppression. The first view—of social, as well as individual constitutions—coincides more closely with the view of the Constitution's framers, although it is unclear whether that fact matters under this criterion, which considers the importance of a practice "to the Nation."

Something might be learned from examining biological alteration's history more closely than this Article has. It seems suggestive that until the advent of antipsychotic drugs, all of the major invasive techniques of mid-century psychiatry—electroconvulsive therapy, lobotomy, and insulin coma therapy—had their origin in Europe during the 1930s, an era when high regard for pure power and control made fascism popular. On the other hand, the early eugenics movement was, in

193. David Hume shared this view. See Gelman, supra note 126, at 651-55 (discussing Hume). This attitude also represents the basic outlook of modern structural-functionalism in anthropology. E.g., A.R. Radcliffe-Brown, Structure and Function in Primitive Society (1952).
194. See discussion supra part III.F.
195. See Gelman, supra note 126, at 659-60 (arguing that the drafters of the Due Process Clauses rejected Hume's ideas of liberty and authority and embraced the social contract/natural rights-based theory).
196. See generally Valenstein, supra note 53, at 45 (explaining that four "radical somatic therapies" appeared during this period: lobotomy in 1936, insulin-coma therapy in 1933, metrazol-convulsion therapy in 1935, and electroconvulsive shock therapy in 1938). The men who "discovered" these treatments were a varied lot. Moniz (lobotomy) was a Portuguese aristocrat, id. at 62, who was active in Republican circles, id. at 65-68. The dictator Salzar's reign, however, ended Moniz's remaining political aspirations. Id. at 69. Sakel (insulin coma) was a Viennese doctor from a
some respects, a progressive one. Similarly, the post-World War II movement to ameliorate the plight of state mental patients, an apparently progressive and humane effort, originally favored more electroconvulsive therapy and lobotomy in state institutions. Today many humane mental health reformers urge wider community programs for drugging homeless persons, many of whom do not want to take antipsychotics. Thus, biological alteration does not mesh neatly with social oppressiveness or with a lack of evident concern for those subject to alteration. Much more work is required before firm conclusions on these points are possible.

In any event, the uncertainties about the importance to the Nation do not necessarily militate against using strict scrutiny. Alteration represents a particularly dangerous social practice precisely because we cannot gauge its social ramifications from our national experience. The uncertainties point toward strict scrutiny, not away from it. At the very least, this criterion does not undermine the case for strict scrutiny that emerges from other factors.

rabbinical family with a "strange, withdrawn" personality. Id. at 46. Meduna (metrazol) was a Hungarian with politically conservative views. Id. at 48. Meduna associated with Admiral Horthy in the period before Horthy turned to fascist terror. Id. at 49. Cerletti (electroshock) worked in fascist Italy during the late 1930s. Id. at 50-51. What seems remarkable is that all of these "therapies" debuted in Europe within a single five year period.

197. See CARL N. DEGLER, IN SEARCH OF HUMAN NATURE: THE DECLINE AND REVIVAL OF DARWINISM IN AMERICAN SOCIAL THOUGHT 42-46 (1991) (recounting the involvement of progressives in the eugenics movement at the turn of the twentieth century and characterizing eugenics as "reformist in intention . . . looking] to the intervention of the state in society . . . [and] repudiating] laissez faire"). But see DANIEL J. KEVLES, IN THE NAME OF EUGENICS: GENETICS AND THE USES OF HUMAN HEREDITY 85-89, 106 (1985) (discussing "social-radical eugenacists" in England and noting that "[there was no social-radical counterpart in the American eugenics movement").

198. E.g., ALBERT DEUTSCH, THE SHAME OF THE STATES 183-85 (1948) (describing the "ideal state mental hospital" as including shock-therapy units for carefully selected patients and using insulin, electric shock, and, with necessary caution, frontal lobotomy).

199. See supra parts III.B-C.
b. The Likelihood That Non-Judicial Processes Will Prevent Abuse and the Accommodation of Real Differences

The Court will refrain from strict scrutiny when ordinary political processes can prevent, or, at the very least, when they will not conceal, invidious discrimination. In *Cleburne*,\(^{200}\) for example, the Court concluded that ordinary political processes were protecting mentally retarded persons and declined to extend strict scrutiny to a zoning classification that singled out mental retardation.\(^{201}\) This approach traces back to the famous *Carolene Products* footnote\(^{202}\) that heralded more active judicial review of measures unfairly restricting political participation or unfairly weighing upon "discrete and insular minorities"—racial minorities being the prime example—who could not protect themselves in the political process.\(^{203}\)

This type of consideration has weighed heavily in biological alteration matters. Four years after *Carolene Products*, for example, Chief Justice Stone and Justice Jackson alluded to it in their separate *Skinner* concurrences.\(^{204}\) Chief Justice Stone wrote that "[t]here are limits to the extent to which the presumption of constitutionality can be pressed, especially where the liberty of the person is concerned."\(^{205}\) This reference to his own *Carolene Products* footnote should have meant that a "more searching judicial inquiry" was in order.\(^{206}\)

\(^{200}\) City of Cleburne v. Cleburne Living Ctr., Inc., 473 U.S. 432, 443 (1985) (observing that recent legislative enactments "belie[d] a continuing antipathy or prejudice [toward mentally retarded persons] and a corresponding need for more intrusive oversight by the judiciary").

\(^{201}\) Id. at 446. The Court, nevertheless, struck down the zoning ordinance discriminating against a group home for mentally retarded persons because it could not find a rational basis for the discrimination. Id. at 450.


\(^{203}\) Id. at 153 n.4.

\(^{204}\) Skinner v. Oklahoma, 316 U.S. 535, 543 (1942) (Stone, C.J., concurring); id. at 546 (Jackson, J., concurring).

\(^{205}\) Id. at 544 (Stone, C.J., concurring) (citing *Carolene Prods.*, 304 U.S. at 152 n.4).

\(^{206}\) *Carolene Prods.*, 304 U.S. at 152 n.4. Chief Justice Stone did not undertake that more searching inquiry in *Skinner*. Instead, he would have required hearings before sterilization that inquired into whether individuals had "inheritable [criminal] tendencies." *Skinner*, 316 U.S. at 545 (Stone, C.J., concurring). It appears that an individual could attack the eugenics theory at such a hearing, arguing that he
Justice Jackson also invoked *Carolene Products*, although not by name. "There are limits," Justice Jackson wrote, "to the extent to which a legislatively represented majority may conduct biological experiments at the expense of the dignity and personality and natural powers of a minority . . . ."\[207\] Both Chief Justice Stone and Justice Jackson used the introductory phrase "[t]here are limits" in their concurrences.\[208\] Justice Jackson’s description of sterilization incorporated both prongs of the *Carolene Products* footnote, suggesting the existence of both a discrete and insular "minority"\[209\] and a failure of legislative process in the form of a "biological experiment" by a "legislative-ly represented majority."\[210\] Clearly, Jackson meant to invoke a more rigorous constitutional scrutiny. The usual constitutional requirements of due process and equal protection would apply to such "biological experiments" as a matter of course; therefore, Jackson must have intended to state more than a truism when remarking on "limits." He also was not rebutting a suggestion that "biological experiments" warranted relaxation of the usual, lenient constitutional tests, an almost unthinkable position in 1942, when Nazi atrocities were becoming matters of public knowledge.\[211\] Justice Jackson must have meant that biological interventions deserved distinctive, rigorous, constitutional treatment. Although Justice Jackson later equivocated—he had mentioned limits on biological experiments, the opinion continued, only "to avoid the implication that such a question may not exist because not discussed"\[212\] by the majority—his is the only Supreme Court opinion to ever acknowledge biological alteration, or experimentation, as a distinctive state technique.

In any event, the effectiveness of ordinary political processes is an obvious consideration when thinking about biological alter-

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\[207\] *Skinner*, 316 U.S. at 546 (Jackson, J., concurring).
\[208\] See supra text accompanying notes 205-07. Interestingly, the same introductory phrase appears in one of the Court’s early substantive due process cases, *Mugler v. Kansas*, 123 U.S. 623, 661 (1887) ("There are . . . limits beyond which legislation cannot rightfully go.").
\[209\] See *Skinner*, 316 U.S. at 546 (Jackson, J., concurring).
\[210\] Id.
\[212\] *Skinner*, 316 U.S. at 546-47 (Jackson, J., concurring).
ation. Traditionally, the subjects of selective alteration\(^{213}\) come from despised and socially powerless groups: psychotic prisoners, the chronically ill, and the supposedly eugenically unfit. These groups have not enjoyed political power. Moreover, supposedly scientific theories identify the groups as distinctive, so their members belong to discrete and insular biological groups. Even apart from scientific theory, these people simply seem different.\(^{214}\) For these reasons, they fit easily within the Carolene Products paradigm, as Chief Justice Stone and Justice Jackson suggested.\(^{215}\)

Powerful reasons exist to suspect government measures that target these groups; however, there are also powerful reasons not to apply strict scrutiny. Some groups, such as the ill, warrant occasional distinctive treatment; all of the groups warrant such treatment if one accepts the supposedly "scientific" theories that single them out. Distinctive treatment may inure to their advantage, as, for example, when the chronically ill receive special medical services. More generally, distinctive people may warrant distinctive measures that strict scrutiny rules out.

Reasons of this kind led the Court to reject strict scrutiny in Cleburne.\(^{216}\) According to Cleburne, a legislature sometimes can, and even should, take mental retardation into account. Strict scrutiny would therefore preclude proper recognition of real differences.\(^{217}\) Similar considerations prompted the Court to apply "intermediate scrutiny," which is a heightened review somewhat less stringent than strict scrutiny, to classifications that single out women and to some racial classifications that redress past racial injustice.\(^{218}\) In these cases the Court aims to guard against invidiousness without thwarting government recognition of real differences among people or real historic injustice.

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213. "Selective alteration" refers to techniques that single out particular groups, unlike, for example, universal vaccination programs that affect everyone.

214. See, e.g., City of Cleburne v. Cleburne Living Ctr., Inc., 473 U.S. 432, 442 (1985) (referring to mentally retarded persons as "different").

215. See supra text accompanying notes 204-12.

216. Cleburne, 473 U.S. at 444.

217. Id. at 442-46.

218. See supra notes 137-40 and accompanying text.
Like these other measures, biological alteration responds to supposed differences among individuals at least when the alteration is selective and not universal in scope. Arguably, these differences also should evoke a reduced level of scrutiny. Whatever the merit of this approach for other problems, however, it ignores biological alteration's distinctiveness. Even if government can single out mentally retarded persons without incurring strict scrutiny in zoning matters—the situation in *Cleburne*—it does not follow that a state can single out the same persons for biological alteration. That would ignore the characteristics that make alteration unique.

The temptation is to think of alteration as a problem of equality; to conclude that equality must accommodate real differences; and to ignore the right of *biological* integrity. The Court did not make that mistake in *Skinner*. Rather, it used strict scrutiny for otherwise non-suspect classifications of crime because the state was acting to alter people.

*Cleburne* is inapposite for another reason. The case dealt with matters that the Justices could understand easily: zoning imperatives, the risk to mentally retarded persons of living on a flood plain, and the proper ways, if any, of accommodating irrational dislike of mentally retarded persons by nearby school children. The first two matters generally receive low level, rational basis review because the Court defers to legislatures on zoning. Yet the Justices had enough understanding in the area to detect signs of invidious discrimination against retarded persons amidst zoning rationales, which was what the Court in fact

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220. Washington v. Harper, 494 U.S. 210 (1990), seems the opposite of *Skinner* in this regard. *Skinner*, 316 U.S. at 541. *Harper* reversed that relationship, recognizing a lesser substantive right because the Court viewed the case in terms of equality. *Harper*, 494 U.S. at 210. If one ignores the substantive right to be free of biological alteration, equal protection principles allow the government to single out mentally ill persons and prisoners for special treatment. Thus, thinking of equality only in the abstract—ignoring biological equality—one concludes that mentally ill prisoners warrant special treatment in the form of antipsychotic drugs. The focus on inequality obscures the act of biological alteration.
Detecting an animus against retarded persons, the Court struck down the classification, even though the Justices purportedly used ordinary scrutiny. The third matter, whether and how to accommodate irrational prejudice against the retarded, is something the Court might well decide for itself.

By contrast, the Court does not have the same understanding of internal biological workings that it does of zoning matters. Imagine, for example, nineteenth-century Justices studying ovariectomy, the surgery to remove institutionalized women's ovaries as a supposed remedy for nervous disorders. Today, that practice seems almost self-evidently the result of an animus toward women, but judges at the time would have had difficulty arriving at that conclusion given scientific support for the procedure. The problem would have presented itself as a choice between rival scientific theories, not, as in Cleburne, a judicial search for animus or irrationality in a political measure. The same is true of judges considering lobotomy in 1950, when the scientists developing the procedure received a Nobel Prize. Under the circumstances, judges could hardly have declared with confidence that lobotomy resulted from a profound lack of regard for the mentally ill and their interests.

Nor could a court sensibly apply Cleburne's idea of "recent improvements" in political treatment of mental retardation to problems of biological alteration. Alterationist measures are almost always supposed to be "recent improvements," including, in their own time, lobotomy and ovariectomy. Moreover, although Cleburne had no need to consider whether zoning, per se, was born of official animus, analogous questions about biological alteration measures, like ovariectomy, do arise.

Similar distinctions separate biological alteration from gender

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222. Id.
223. Id. at 450 (finding that the zoning ordinance "appear[ed] . . . to rest on an irrational prejudice against the mentally retarded").
224. For a discussion of related questions of judicial competence, see infra part IV.B.3.d.
225. See, e.g., VALENSTEIN, supra note 53, at 199-283.
226. See id.
227. Cleburne, 473 U.S. at 450.
classifications and remedial uses of race, the other measures that may warrant less than strict scrutiny because of the possible, non-invidious considerations that motivate government action. It is one thing to suppose that women occasionally warrant different treatment from men; it is another to single out women for biological alteration because of any supposed differences.

There is still another distinction between gender discrimination and biological alteration. The Court's unwillingness to apply strict scrutiny to gender discrimination may reflect judicial conservatism, a posture of deference to the United States' history of discrimination based on gender. Overthrowing every vestige of that history may seem too daunting a task for the Court. Yet one does not have to approve of that posture to see that it should not apply to biological alteration controversies. No deeply ingrained, historic practice of biological alteration, comparable to the practices of discrimination against women, now confronts the Court. Moreover, the Court has already dealt a blow to eugenic sterilization,²²⁸ in many ways the most politically menacing of American alterationist practices. Meanwhile, antipsychotic drugging causes severe harms,²²⁹ and does so on a far broader scale than lobotomy ever did. Other proposals, such as compelled contraceptive implants, also sweep more broadly than their historic predecessors. Thus, even were the Justices inclined merely to hold a certain line against biological alteration, events—and the ever expanding alterationist agenda—would be overtaking the Court.²³⁰

²²⁹. See supra notes 18-20 and accompanying text.
²³⁰. Benign racial classifications also may receive less than strict scrutiny. See supra note 155 and accompanying text. The differences that mitigated against strict scrutiny in these cases were not internal to the person. The distinction is that racial minorities have been treated differently in the past, not that they are different.

It is worth noting that the Court's internal disagreements about this issue turn, at least partly, on a point mentioned in connection with the Cleburne case. In Cleburne, the Court thought itself capable of successfully detecting animus against the mentally retarded using a lesser standard of scrutiny. Cf. supra note 221 and accompanying text. By contrast, biological alteration is arcane, with hard-to-understand individual and social consequences. See supra notes 100, 103-07 and accompanying text. It seems that the Justices disagree as to which category better suits "benign" racial classifications. Justices who oppose "reverse discrimination" apparent-
c. Ordinary Medical Processes as Protection Against Abuse: Professional Judgments and Medical Interests

As stated earlier, considerations of the Carolene Products "type" pervade biological alteration cases. The word "type" is appropriate because the modern Court has focused on medical processes, not political ones, to ensure against abuses in this area.\(^{231}\) The argument is not that democratic political processes adequately protect inmates' brain functioning or that prisons may induce brain damage whenever a legislature thinks such damage worthwhile. Rather, the argument is that courts need not apply strict scrutiny to antipsychotic drugging because medical processes and standards prevent abuse. The medical process lowers the standard of constitutional scrutiny. This argument has the same logic as Carolene Products, but it substitutes medical for political processes.

The Supreme Court follows this logic in cases of deprivation of physical liberty within a state institution and in cases testing general institutional conditions. Youngberg v. Romeo\(^{232}\) adopted
a "professional [medical] judgment test"\textsuperscript{233} for such cases. This test requires that infringements of liberty within the institution, such as the use of physical restraints or any condition that affects physical safety, such as the placement of dangerous patients on a ward, result from recognizably professional decisions by institutional staff.\textsuperscript{234} Decisions apparently satisfy the professional judgment test unless they qualify as medically bizarre—not merely as negligent or wrong—or unless they are motivated by non-medical concerns such as personal animus against the patient.\textsuperscript{235}

\textit{Romeo} did not hold that a "professional judgment" standard governs forced drugging, and it never addressed the larger question of fundamental rights in mental hospitals.\textsuperscript{236} Many lower courts, however, apply the "professional judgment" test to mental hospital drugging and, therefore, to biological alteration.\textsuperscript{237} \textit{Harper} employs a functionally similar standard: the "medical interest" test, which also rests on medical assurances against abuse.\textsuperscript{238} Completing the circle, some lower courts extend

\begin{itemize}
  \item \textsuperscript{233} \textit{Id.} at 321-23.
  \item \textsuperscript{234} \textit{Id.} at 321-22.
  \item \textsuperscript{235} \textit{See id.} at 321-23 (stating that "the Constitution only requires that the courts make certain that professional judgment in fact was exercised" and mandating a presumption of correctness for professional decisions); \textit{see also id.} at 331 (Burger, C.J., concurring) (arguing that under the Court's standard, even programs "inconsistent with generally accepted or prevailing professional practice" pass muster if they are "actually prescribed by . . . professional staff"). \textit{But see Susan Stefan, What Constitutes Departure from Professional Judgment?, 17 MENTAL & PHYSICAL DISABILITY L. REP. 207 (1993) (rejecting Chief Justice Burger's interpretation and describing how decisions made by professionals can fail the professional judgment test).}
  \item \textsuperscript{236} \textit{Romeo}, 457 U.S. at 313. \textit{Romeo} effectively reserved judgment on whether "professional judgment" applied to drugging. \textit{Id.} at 313 n.14 (explaining that issues of "severe intrusion[] on individual dignity, such as permanent physical alteration or surgical intervention" were "not present in this case").
  \item \textsuperscript{237} \textit{See Cichon, supra} note 20, at 367-405 (reviewing and analyzing the case law).
  \item \textsuperscript{238} \textit{See infra} notes 253-67 and accompanying text. Many commentators read \textit{Harper} as essentially adopting the professional judgment test. \textit{E.g.}, \textit{Brian, supra} note 21, at 272 (arguing that \textit{Harper} "explicitly applied the 'deference to professional judgment standard'"); \textit{cf.} Sullivan v. Flannigan, 8 F.3d 591, 599 (7th Cir. 1993) (observing that "the Supreme Court . . . surrendered to the medical profession" in \textit{Harper}), \textit{cert. denied}, 114 S. Ct. 1376 (1994). This interpretation, which I share, has explicit support in \textit{Harper}'s discussion of procedural due process issues. \textit{See Harper}, 494 U.S. at 231 ("[A]n inmate's interests are adequately protected, and perhaps better served, by allowing the decision to medicate to be made by medical professionals rather
than a judge."). "The risks associated with antipsychotic drugs are for the most part medical ones, best assessed by medical professionals." *Id.* at 233.

The leading study of the professional judgment test offers a different interpretation of Harper. Stefan, *supra* note 135. Stefan argues that, in general, "professional judgment" provides inadequate protection for civil rights. *Id.* at 667-70. Stefan much prefers Harper's "reasonableness" test to the "professional judgment" standard articulated in Romeo. *Id.* at 683-85 (arguing that Harper produced "more rigorous" substantive and procedural requirements than those "mandated by the professional judgment standard"). *But see id.* at 653-54 (criticizing Harper for its unwarranted reliance on medical judgment).

Stefan’s interpretation overstates the differences between Harper’s and Romeo’s "professional judgment" test. Stefan focuses on Harper’s discussion of substantive due process. *See id.* at 683 n.207 (describing Harper’s procedural standard for drugging inmates). Yet despite its "reasonableness" standard, Harper is barely distinguishable from—and no more generous than—a "professional judgment" decision.

Harper stands for the following propositions: (1) A prison can force a prisoner to take antipsychotic drugs against his will only when doing so is "reasonably related to legitimate penological interests," Harper, 494 U.S. at 223; (2) Given the risks, forced drugging is not reasonable unless the prisoner is mentally ill and dangerous, and the drugs are in the prisoner’s medical interest, *id.* at 227; and (3) In determining an individual’s "mental illness," "dangerousness," and "medical interest" state actors may—and probably should—employ a procedure that relies on professionals to use professional judgment, *see id.* at 231 ("[A]n inmate’s interests are adequately protected, and perhaps better served, by allowing the decision to medicate to be made by medical professionals rather than a judge.").

"Reasonableness," therefore, leads to "professional judgment" by Harper standards. The commingling of "reasonableness" and "professional judgment" is not surprising. The Supreme Court also commingled these two standards when it announced the professional judgment test in Youngberg v. Romeo, 457 U.S. 307, 321 (1982) (holding that in balancing legitimate state interests against individual rights to "reasonable conditions of safety" and "freedom from unreasonable restraints" the Court will only "make certain that professional judgment in fact was exercised") (emphasis added). "In determining what is 'reasonable'—in this and in any [similar] case . . . we emphasize that courts must show deference to the judgment exercised by a qualified professional." *Id.* at 322. In Romeo and Harper alike, "professional judgment" is the constitutionally "reasonable" accommodation of individual and state interests.

Harper’s patient rights seem inferior to Romeo’s in some ways. Harper considered prison security as a factor in drugging decisions, whereas Romeo merely presumed that "professional judgment" would take care of institutional security concerns. *Compare id.* at 324 (stating that a "presumption" that professional decisions are "correct" is "necessary to enable institutions of this type—often, unfortunately, overcrowded and understaffed—to continue to function") with Harper, 494 U.S. at 225 (observing, with approval, that the state drugs prisoners in order to serve "not only [the prisoner's] medical interests, but also the needs of the institution"). Had Romeo allowed mental hospital doctors to consider security factors explicitly, in addition to medical ones, few would argue that patient rights were enhanced by the change. Harper does no more than that, however.

The "reasonableness" test is malleable, and a court inclined to do so could give
Harper to mental hospital drugging, although the Court has not yet decided that precise issue.\textsuperscript{239}

It is a major leap, however, from "professional judgment" and "medical interest" as tests of institutional conditions or physical liberty to the same standards as constitutional tests for biological alteration. To make that leap, one must ignore biological alteration's distinctiveness and consider it as just another institutional technique. In Skinner the Court refused to make that

\textsuperscript{239} Compare Silber, 1993 WL 188309 (holding that the circuit's professional judgment test for forced drugging survived Harper) with J.L. v. Miller, 614 A.2d 808, 811 (Vt. 1992) (holding that Harper does not apply to a civil action involving a state hospital).
leap; instead, it applied strict scrutiny to biological alteration even though, if the state had used the same classification to enhance a deprivation of liberty—by lengthening a prison sentence, for example—ordinary scrutiny would have applied. Romeo observed that a more stringent standard of review than "professional judgment" might make mental hospitals impossible to operate. Whatever one thinks of that observation in a case involving liberty and institutional conditions, it is hardly the same thing as observing that an institution requires biological alteration of its inmates in order to function. Yet, Harper almost makes that point about prisons.

Whether the issue is physical liberty or biological integrity, the Court writes as though deference to medical processes—medical protection against medical abuses—is a matter of constitutional common sense. Yet the strategy is far from self-evident. In fact, the Court is doing something extraordinary in terms of constitutional theory.

It is hardly self-evident that medical processes should perform the function that the Court in Carolene Products allotted to the political process; namely, lowering the standard of constitutional scrutiny. A constitutional commitment to medical expertise clearly differs from a constitutional commitment to democracy. No textual commitment to medicine exists in the Constitution. The idea that democracy is a good way to reach important state decisions does not lead to the conclusion that medicine should play a similar role. Mistakes that result from democracy and medicine have very different implications. A set of horribly mistaken political decisions, for example, does not lead easily to the conclusion that democracy should be displaced by another decision-making mechanism, even with regard to the particular problem at issue. Yet a set of disastrous medical acts might rationally lead to the conclusion that medicine had no solution for the problem. Democracy affords an all but universal solution for political problems, but medicine is not even the universal

241. Id.
242. See Romeo, 457 U.S. at 324.
243. Such arguments sometimes appear. A common example is the argument that democratic institutions suffer severe limitations in national security matters.
solution to human illnesses. Indeed, the very idea of a “solution” is radically different in the two contexts.

The idea of medical processes and standards as a (partial) substitute for political or judicial protections may seem natural today, but it is, in fact, of relatively recent origin. Indeed, the Court declined to confer constitutional significance on medicine in *Buck*,244 *Jacobson*,245 or *Skinner*.246 *Jacobson* treated vaccination’s efficacy and safety as questions uniquely within the legislature’s competence, although legislatures consulted with medical experts.247 The Court refused to rest its result, even in part, on the ground that medical science had vouchsafed vaccination’s safety.248

Nor did *Buck* or *Skinner* endorse medical standards and processes as constitutionally significant. The Court reasoned in *Buck* that if a citizen could be called upon to give up his life to the country in war—a transparently non-medical matter—a woman could be called upon for the “lesser sacrifice[]” of her fertility.249 Thus, non-medical principles about the scope of state power warrant eugenic sterilization. *Buck* made no concession or allowance because of the arguably medical nature of the decision. The Court also avoided the question of medical standards in *Skinner*. The Court stated that it did not have to decide whether eugenic theory met constitutional standards because the state’s measure failed to withstand strict scrutiny under the Equal Protection Clause.250 The Court did not subject the eugenic question to strict scrutiny because the opinion presumed,
sub silentio, that not even eugenic theory would attempt to distinguis, as the Oklahoma legislature had, between the biology of embezzlers and the biology of thieves. Justice Douglas, the opinion's author, simply could not imagine that theft, but not embezzlement, was the product of an inheritable biological defect. Chief Justice Stone, concurring, argued that this evasion of the problem was unconvincing, and Justice Jackson's concurring opinion noted that the Court's failure to discuss the issue did not mean that a question of eugenics' bona fides did not exist. No Justice, however, argued that the Court ought to defer in any degree to medical processes or standards.

_Harper_ constitutes the first Supreme Court decision to lower the standard of scrutiny for biological alteration out of deference to medical processes. A prison could force drugs upon a prisoner, according to the majority, when the prisoner had "a serious mental illness," was "dangerous to himself or others," and the drugs were "in the inmate's medical interest." The addition of a dangerousness requirement does not alter the fact that a medical diagnosis, and a vague "medical interest" standard, form an essential part of the warrant for biological alteration.

Like _Jacobson_, _Harper_ adopts a posture of deference; but where _Jacobson_ gives conclusive effect to legislative judgments about biology, _Harper_ yields to doctors. "The risks associated with antipsychotic drugs," Justice Kennedy wrote, "are for the most part medical ones, best assessed by medical profession-

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251. _Id._
252. _Id._ at 541 ("Oklahoma makes no attempt to say that he who commits larceny . . . has biologically inheritable traits which he who commits embezzlement lacks.").
253. Chief Justice Stone wrote: "If we must presume that the legislature knows—what science has been unable to ascertain—that the criminal tendencies of any class of habitual offenders are transmissible regardless of the varying mental characteristics of its individuals, I should suppose that we must likewise presume that the legislature, in its wisdom, knows that the criminal tendencies of some classes of offenders are more likely to be transmitted than those of others."
_Id._ at 544 (Stone, C.J., concurring).
254. _Id._ at 546-47 (Jackson, J., concurring).
Again, "[t]here is considerable debate over the potential side effects of antipsychotic medications, but there is little dispute in the psychiatric profession that proper use of the drugs is one of the most effective means of treating and controlling a mental illness likely to cause violent behavior." This presumes that a medical consensus should settle the question of whether state agents can biologically alter prisoners for state ends.

In other respects, Harper is a reprise of Buck. Both opinions honestly, even cold-bloodedly, survey the intended effects of the procedure at issue. Just as Buck did not flinch from eugenic sterilization, Harper forthrightly acknowledges that drugs "alter the chemical balance in the brain." Moreover, just as Buck focused on perceived societal benefit, Harper frankly links drug use to institutional, prison concerns. Harper does not pretend that the state is interested only in advancing the drugged inmate's medical interests. Thus, Harper specifically rejects the idea of drugging only those prisoners who, but for incompetence, would have agreed to the drugs.

Yet Harper departs from the earlier case because of its "medical interest" test, which, in turn, reprises an argument that the state had made in Buck and that the Court had then declined to accept. Surgical sterilization would advance Ms. Buck's own interests, the state had argued, because she would be better off for having undergone it. The state urged that Ms. Buck was incompetent and that the state was a de facto guardian of her interests; in the capacity of guardian, the state concluded, it
should be allowed to consent to the surgery.262 Moreover, the state would release her from the institution after sterilization, and, it hinted, no one would interfere at that point with her sexual frolics.263

These contentions were disingenuous, and Justice Holmes’ opinion in Buck ignored them.264 They obscured the fact that eugenic sterilization aims to improve a race, not a person. The state considered itself better off with Ms. Buck and “her kind” sterile, even though she probably wished to have children and might otherwise suffer in the process. Allowing a state bent on eugenics to invade Ms. Buck’s personal interests and act as her “guardian” would be a farce under such circumstances, even were incompetence established. Given the state’s position, it would probably subordinate Ms. Buck’s interests to its own, or, even worse, fail to recognize that she has separate and conflicting interests in the first place. Indeed, the state’s argument portrayed Ms. Buck as better off because of her release from the institution and ability to engage in sex freely, when, by her own standards, she was likely worse off because she was incapable of having children.

The problem with a eugenic state making the decision for Ms. Buck is not merely the conflict of interest, although a conflict of that dimension, standing alone, would ordinarily disqualify a party from acting in the capacity of guardian or fiduciary.265 Beyond that conflict is the fact that the “guardian” has already made dehumanizing assumptions about the “ward.” Deeming Ms. Buck less than fully human, the state would not likely fully protect her interests, nor, as we have seen, would the state even acknowledge that she possessed the full range of human interests and sympathies.266

262. See id. (“The operation . . . can only be illegal when performed against the will or contrary to the interest of the patient. Who . . . is to consent or decide for [Ms. Buck] . . . ?”).
263. See supra note 83.
265. See Woodland v. Angus, 820 F. Supp. 1497, 1517 & n.25 (D. Utah 1993) (holding that a mental hospital and its doctors cannot serve as guardians of patients resisting medication because their “interests . . . likely conflict with [the patient’s] interests”).
266. Moreover, it seems a mistake to justify sterilization on the ground that other
With all of its flaws, Buck did not incorporate such arguments, but Harper did. Harper holds that the prison security concerns and the determination that drugs were in Mr. Harper's "medical interest" satisfy the Constitution. Instead of a eugenically-inclined, institutional doctor intent on sterilization, there was a security-oriented prison doctor intent on using drugs. "Medical interest" apparently meant only that someone else might choose to be drugged under the circumstances and that a state doctor wants to administer the drugs—tests that Buck declined to adopt for sterilization. Indeed, insofar as the state argued that Ms. Buck was incompetent to decide about sterilization, it was proposing a more rigorous test than "medical interest"; Harper, as noted earlier, explicitly declined to require that prisoners refusing drugs be incompetent.

As a constitutional test, "medical interest" would have impact if the Court developed particularized standards—a rule, for example, that it was not in a person's medical interest to receive drugs when permanent, neurological impairment would result. Harper, however, gives no sign of leaving room in the "medical interest" test for such legal standards. If a "medical interest" determination is not wildly implausible, it apparently will stand. Like the "professional judgment" test which it resembles, a "medical interest" standard cannot be violated without a substantial departure from its conceivable benchmarks.

Instead of examining medical processes through a constitutional lens, the Court now uses a medical apparatus to view biological alteration and the Constitution. When an alteration falls
within the shadows of professional judgment or medical interest, the Court sustains it, almost without concern for the consequences to individuals. In particular, because violent persons benefit from becoming less violent and because drugging can reduce violence, Harper's "medical interest" test is easily satisfied. The same test, however, would have warranted lobotomies in the 1940s, sterilizations in the 1920s, or ovariectomies in the 1890s with equal ease.

d. The Question of Judicial Competence

In approaching the argument that judges lack the capacity to render decisions in the technical areas that surround biological alteration, it helps to think of earlier eras in history, or even of other countries. Imagine a court striking down lobotomy in 1950, when the inventor of the procedure received a Nobel Prize. Presumably, the judges who find it absurd for today's courts to scrutinize antipsychotic drugs would find it equally absurd if courts of an earlier day had interfered with lobotomy—indeed, in light of the Nobel Prize award, perhaps more absurd. Or, suppose that a court in 1890 considered constitutional objections to removal of institutionalized women's ovaries. If judges cannot scrutinize antipsychotic drugging now, because they lack the ability, judges presumably should not have examined late-nineteenth century ovariectomy either. For that matter, suppose that prison antipsychotic drugging is at issue, not in the United States, but in the former Soviet Union, or in some oppressive dictatorship. The judges who find judicial scrutiny of drugging inconceivable here might well take a dim view of judges in those

270. See Valenstein, supra note 53, at 199-283.
271. E.g. Rennie v. Klein, 653 F.2d 836, 851 (3d Cir. 1981) (decrying "judges who have doffed their black robes and donned white coats"), vacated and remanded, 458 U.S. 1119 (1982); id. at 859 & n.7 (Garth, J., concurring) (positing that the least restrictive alternative doctrine "would ... require each district court judge to exchange his robe for a medical gown" and also remarking appreciatively on the majority opinion's appropriation of the "robes" metaphor); cf. Burch v. Apalachee Community Mental Health Servs., 840 F.2d 797, 817 (11th Cir. 1988) (Hill, J., dissenting) (bemusedly comparing a former psychiatric patient's lawsuit to a 1930s political anecdote in which the patient recovered and then threw "his crutches at his doctor"), aff'd sub nom. Zinerman v. Burch, 494 U.S. 113 (1990).
countries with a similar attitude. Yet it remains unclear how convincingly one can distinguish biological alterations in other places and times from the alterations taking place, or being discussed, today.

Consider some possible distinctions. The most obvious is a claim that antipsychotic drugs constitute a superior form of intervention—better, for example, than lobotomy. This argument, however, supposes that courts can make intelligent judgments about technical psychiatric matters. Thus, it conflicts with the original premise of judicial incapacity.

More generally, one might claim that contemporary psychiatry, the entire discipline, differs fundamentally from its earlier incarnations. Having become more scientific and more humane, the argument runs, psychiatry's judgments now warrant deference. In fact, psychiatrists do make such claims about their discipline. This argument, however, fares no better than the previous one; it, too, conflicts with the basic premise that courts cannot understand technical matters. Judges, supposedly incapable of making psychiatric judgments, are now supposed to evaluate global claims about the state of psychiatry vis-a-vis other branches of medicine, psychiatry's own history, and brain science. Moreover, similar claims are a constant refrain in the history of psychiatry. Lobotomy, for example, prompted similar encomiums for psychiatric advance. Thus, courts cannot simply take psychiatry's word for it. Nor can courts look to greater social acceptance of contemporary psychiatry. Society has vested psychiatry with enormous power over the supposedly mentally

272. See, e.g., Burch, 840 F.2d at 818 (cautioning that, notwithstanding the story of the patient throwing crutches at the doctor, “other, totalitarian, nations” abuse psychiatry “as a matter of state policy”).

273. See, e.g., Robert Michels & Peter M. Marzuk, Progress in Psychiatry, 329 NEW ENG. J. MED. 552, 552 (1993) (arguing that psychiatry “has undergone a profound transformation in recent years” as the “focus of research has shifted from the mind to the brain, one of the most exciting frontiers in biology” and treatments have implemented a “new medical approach”). But see Stephen Fleck, Progress in Psychiatry, 330 NEW ENG. J. MED. 285 (1994) (Letter to the Editor criticizing Michels and Marzuk's enthusiasm because “we have no drugs such as antibiotics that treat the specific cause [of mental disease]” and lamenting the fact that “[t]reating the patient has taken a back seat to treating the symptoms”—a “deplorable development” since psychiatry “used to be the medical specialty par excellence that dealt with people”).
ill for over a century and a half; no significantly greater acceptance of the discipline exists now.

Another possible distinction is that our society is fundamentally different, both from its earlier incarnations and from other polities. Perhaps nineteenth-century psychiatrists overstepped when treating women, lobotomy was too severe, and oppressive regimes misused psychiatry, but it is different now. Such arguments reach the heights of arrogance because nothing supports them. They obviously conflict with the idea of continuing legal protection for fundamental rights. If we are too good as a society to need protection against state biological alteration, then we are also too good for protections against other impositions on fundamental rights. These arguments would not deserve mention, except for the implicit support they may command.

Suppose that the premise of judicial incompetence is true, and courts in fact cannot make informed judgments about antipsychotic drugs or other alterationist measures. Assume that facts and theories exist that are absolutely indispensable to a rational decision about an alterationist technique and that a court simply cannot learn those facts or master those theories. Rationally, the Court is in the dark. It should proceed, therefore, as if it knew nothing at all about the technique in question. The Court has only two choices: allowing the state and its experts to do as they wish or declaring that the alteration cannot proceed. The first option rests on a constitutional presumption that the state, or the state and its experts together, have a right to alter persons. The second option presumes the opposite. Because the Court is in a condition of total uncertainty about the technique, all the Court knows about is the Constitution. Unless we hold that the Constitution affords no protection against biological alteration, the Court must rule against alteration on constitutional grounds. Thus, if the premise of judicial incompetence is true, it leads to a conclusion directly opposite from the one alterationists urge.

274. Assuming, however, that courts can recognize biological alteration and can apply a definition like that discussed above. See discussion supra part II.

275. Interestingly, the first option reverses the roles of psychiatric and democratic judgments, see supra text accompanying note 243, because it suggests that psychiatry—not democracy—has the presumptively universal solutions to human political
The assumption of total judicial uncertainty is unrealistic. Yet the Court's decisions, particularly *Jacobson* and *Harper*, seem to follow it. *Jacobson* refused to decide whether vaccination certainly or probably worked, or even whether the legislature had acted reasonably, upon a secure base of scientific knowledge. Rather, it treated the question of effectiveness as concluded by the legislature's enactment. *Harper* does little more. Justice Kennedy acknowledged that drugs alter the chemical balance in the brain; noted the problems that dangerous inmates present; and observed that psychiatrists regard drugs as one of the most effective remedies. On that basis, the Court rejected the inmate's substantive constitutional challenge to forced drugging. For its part, *Skinner* went to great lengths to avoid considering eugenic theory or its bona fides. *Buck* also refused to rest on any technical assessments of eugenic theory, although Justice Holmes did seem to endorse the theory as a matter of common sense.

This posture dramatically overstates a court's technical disadvantages. Judges today easily can learn more about antipsychotic drugs than the best psychiatrists knew in 1954 when the drugs were introduced. At that time, the prevailing psychiatric theory held that drugs induced a form of brain damage which either supplanted, or overwhelmed, the effects of other brain diseases, such as schizophrenia. Relatively speaking, it is true that psychiatrists (as a group) will know more than judges (as a group) at any given time. The fact remains, however, that

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276. See *supra* note 248 and accompanying text.
277. See *supra* note 238 and accompanying text.
279. Id. at 225-26.
280. Id. at 226.
281. Id. at 236.
282. See *supra* notes 250-54 and accompanying text.
283. See *Buck* v. *Bell*, 274 U.S. 200, 207 (1927) ("Three generations of imbeciles are enough.").
284. See Gelman, *supra* note 19, at 1748 n.118 (quoting psychiatric authorities of the day, including the co-discoverer of the first antipsychotic drug, Thorazine).
if psychiatrists knew enough in 1954 to prescribe the drugs, judges today probably know enough, or can learn enough, to perform their more limited tasks. Unless psychiatrists were incompetent to act in 1954, the premise of absolute judicial incapacity or incompetence is false. Moreover, the facts about anti-psychotic drugs are simply not all that arcane, and, in any event, judges commonly make decisions in areas no less technical or difficult than psychiatry. Indeed, informed consent theory supposes that patients will make intelligent decisions about many of these same issues in connection with their own care. It is much more a question of responsibility for decision-making than a question of competence. Under the Constitution, judges should have that responsibility in matters of biological alteration.

e. A Summary

Harper is the Court's first biological alteration case to set a lower level of constitutional scrutiny because of the presence of medical processes and standards. Fifty years after deciding to defer to political processes and forty years after declining to defer to biological alteration in Skinner, the Court in Harper deferred to medical processes in order to uphold an act of alteration. The Court treated its maneuver as a natural, logical step. It is, however, no such thing. The Court's maneuver is questionable, even as a general constitutional matter. It is certainly wrong as applied to biological alteration, at least if the rights of biological integrity and equality are to enjoy any real protection.

At virtually every point, the case for strict scrutiny of biological alteration is strong. A person's biological integrity is a matter of significant, personal importance. The right also has powerful support in the Constitution's text and in our nation's traditions and history. Criteria derived from equal protection cases do not suggest a lower level of scrutiny. The "importance to the

285. See David L. Bazelon, Implementing the Right to Treatment, 36 U. Chi. L. Rev. 742, 743 (1969) (observing that judicial scrutiny of psychiatry is not fundamentally different from scrutiny of other disciplines).
286. See Gelman, supra note 19, at 1769-84 (suggesting courts have tried to evade their responsibility).
nation” standard yields debatable results, but nothing conclusive. At the same time, ordinary political processes offer little hope for preventing abuses, a factor that impels the Court toward strict scrutiny, and the objects of selective alteration are, almost by definition, “discrete and insular minorities.” Moreover, ordinary medical processes are no substitute for strict scrutiny. The courts’ supposed incapacity to deal with alterationist matters is grossly overstated; perhaps more importantly, this consideration in fact points toward, not against, close judicial scrutiny of alterationist measures.

V. APPLYING STRICT SCRUTINY

Strict scrutiny is generally fatal to government measures. The test has particular implications, however, for biological alteration controversies. This Part describes those implications; it also briefly examines strict scrutiny’s meaning for the alterationist methods at issue in Jacobson, Buck, Skinner, and Harper.

A. General Implications of Strict Scrutiny

Strict scrutiny has a number of general implications in biological alteration controversies. First, a court more readily will find that a measure qualifies as an alteration. For example, psychiatrists occasionally downplay the alterative quality of antipsychotic drugs by ignoring or minimizing permanent neurological effects and, in an earlier era, describing the drugs as “major tranquilizers.” Faced with only a colorable argument that drugs do not alter persons, a court applying strict scrutiny will reject the argument.

Second, strict scrutiny lowers the constitutional threshold of acceptable pain, distress, and side effects. Using a reasonableness test, for example, Harper tolerates severe side effects as an acceptable cost of the drugs. With strict scrutiny, the result

287. See id. at 1726-27, 1747-49, 1752-57 (describing theories about how drugs operate and psychiatrists’ prolonged unwillingness to acknowledge drug-caused neurological damage).
288. See supra text accompanying notes 44-45; supra note 238.
is different.

Third, strict scrutiny requires that no less restrictive alternative exist. For this reason, Harper's dissenters, applying the "highest order of [constitutional] protection," thought the state had failed to demonstrate the inadequacy of "a more narrowly drawn policy." The majority also considered alternatives, but, without heightened scrutiny, the majority deemed the alternatives inadequate and upheld the use of drugs.

Fourth, strict scrutiny rules out some state objectives that pass ordinary scrutiny. A "legitimate" state interest satisfies ordinary scrutiny, but strict scrutiny demands "compelling" interests. Because the typical interests that states assert in alteration cases—health, institutional order, freedom from crime—are compelling, this factor often lacks practical significance. Yet a court could decide that nonracist, eugenic sterilization serves conceivably "legitimate" but, in light of the remoteness of the problems supposedly solved in future generations, not "compelling" state interests.

Though the preceding factors are important, strict scrutiny's decisiveness rests to a greater extent on another feature of biological alteration controversies. Alterationist theory offers the promise of "better" people who are more resistant to disease, less prone to crime, and better behaved. Pursuing such results is hardly irrational. Thus, judicial acceptance of the theory behind eugenic sterilization, lobotomy, or drugging—a determination by the court that the measure is effective—assures that ordinary scrutiny will uphold the measure. Moreover, ordinary scrutiny readily accepts such theories. At most, the Court searches for a reasonable basis, or, in other words, a demonstration that the theory is not irrational. At worst, the Court conclusively pre-

289. See supra text accompanying notes 126-38.
291. Id. at 247.
292. See id. at 247-49 (discussing the availability of alternatives to drugs in light of Turner v. Safley, 482 U.S. 78 (1987)).
293. For similar reasons, it assures that any alternative will appear inferior to biological alteration in the event a court uses the reasonableness standard of Turner, 482 U.S. 78.
sumes the theory's correctness, as in Jacobson, or else it un-
critically follows the judgments of professionals who promote the 
measure, as in Harper.

Strict scrutiny would not uphold alterationist measures mere-
ly because of theoretical promises or claims. The rationale of 
strict scrutiny is that alteration, in general, conflicts with funda-
mental premises of biological integrity and biological equality. 
Precisely because of alterationist theory's promises, strict scruti-
ny generally rules it out.

In the next Section, I examine how an alterationist measure 
can satisfy the demands of strict scrutiny. Among other things, a 
court scrutinizes the theory's bona fides and the intervention's 
record. Without that, a measure cannot qualify as a least restric-
tive alternative, nor could a court determine that the alteration 
is worth its cost. Were it otherwise, the exception would swallow 
the rule of strict scrutiny, and a court would uphold all 
alterationist measures, provided that the side effects were not 
too severe and the alterationist theory was not absurd. Nonethe-
less, it is not enough that a viable alterationist theory produce 
an effective alterationist technique. If it were, sterilization in 
the horrible cases that Judge Garrison imagined—to eradi-
cate inheritable disease, to control population growth, and even 
to eliminate racial frictions in future generations—would satisfy 
strict scrutiny. Without a more stringent standard, castration 
and other bodily mutilations as remedies for violence would also 
satisfy strict scrutiny. Such measures fail because the least re-
strictive alternative exception is a narrow one, and because 
these measures conflict with the underlying rights of biological 
integrity and equality.

Furthermore, the burden of persuasion falls on the advocate of 
the alterationist measure. If a court cannot understand the alter-
ationist technique (in the sense relevant to constitutional adjudi-
cation) then the court also cannot be persuaded of the technique's 
bona fides. In that case, the technique fails strict scrutiny.

294. See supra note 248 and accompanying text.
295. Smith v. Board of Examiners of Feeble-Minded, 88 A. 963, 965-66 (N.J. 1913); 
see supra notes 112-19 and accompanying text.
296. See discussion supra part IV.B.3.d.
B. How an Alterationist Measure Can Satisfy Strict Scrutiny

The definition of biological alteration, and the concerns underlying it, suggest how alterationist measures can satisfy strict scrutiny. The strongest candidate is a measure that (1) makes an obvious contribution to health, and perhaps even meets a health emergency, (2) entails minimal biological alteration, (3) works in as close to a natural way as possible, or, in other words, nearly qualifies as a measure that sustains, rather than alters, the person, (4) generally has a powerful scientific basis, (5) causes few, if any, serious side effects and, ideally, excuses people facing such side effects from the procedure, (6) applies universally (apart from exemptions granted because of the risk of side effects) and therefore does not compromise the premise of human biological equality, and (7) implicates health, rather than "police" concerns of the state, such as maintaining order or preventing crime, and therefore conflicts only minimally with the idea that state interests are necessarily subservient to individual interests. Measures that meet these requirements produce minimal damage and insult to individuals, and minimal stress in the social fabric.

These seven factors do not constitute a traditional balancing test that registers slight differences in the weight of arguments for, and against, alteration. Rather, in order to satisfy strict scrutiny, a measure must make an overwhelming showing on virtually all factors. The question is not whether the government or the individual makes the better case, on balance; it is, instead, whether the government meets rigorous standards for an exception to an extraordinarily powerful, general principle. A measure that merely "gets by" on four or five of the seven factors falls far short.

297. See discussion supra part II.
298. See discussion supra part II.B.
299. See discussion supra part III.E.
300. A court also may consider the moral offense connected with a particular procedure. Lobotomy, for example, has an especially infamous current reputation and that reputation enhances the moral offense associated with the procedure.
C. Reassessing Vaccination, Sterilization, and Antipsychotic Drugging

1. Vaccination

The Jacobson Court's deference to legislatures seems unnecessary and unwise because compulsory vaccination does satisfy strict scrutiny. Compulsory vaccination fares well on every part of the test. First, it makes an obvious, large contribution to health; it even forestalls emergencies. Second, the extent of biological alteration is minimal. Third, because vaccination mimics the effects of exposure to naturally occurring agents, it almost qualifies as a measure that sustains, rather than alters, persons. Fourth, vaccination rests on a firm scientific basis. Fifth, its side effects are tolerable; moreover, Jacobson strongly implies that people at undue risk from vaccination are entitled to an exemption. Sixth, because compulsory vaccination applies to virtually everyone, it does not suggest any biological inequality among persons. This feature sharply distinguishes Jacobson from the Court's other biological alteration cases. Indeed, the point of compulsory vaccination is that humans are essentially equal in their vulnerability to infectious disease. Seventh, because vaccination does not substitute for ordinary police functions, it does not impugn the political dignity of individuals or distort their proper political relationship to the state.

This analysis adds perspective to points made above. For example, vaccination seemed less objectionable because the protection it afforded to other people resulted from, and was neces-

301. See discussion supra part I.
302. See discussion supra part II.D.
304. Id. at 39. After noting that the statute expressly exempted children who were demonstrably at risk from vaccination, the Court said:

Until otherwise informed by the highest court of Massachusetts, we are not inclined to hold that the statute establishes the absolute rule that an adult must be vaccinated if it be apparent or can be shown with reasonable certainty that he is not at the time a fit subject of vaccination, or that vaccination, by reason of his then condition, would seriously impair his health, or probably cause his death.

Id. The Court rejected as insubstantial, however, Mr. Jacobson's arguments about his own vulnerability to vaccination. Id. at 36-37.
sarily linked to, an improvement in the health of the person vaccinated.\textsuperscript{305} That fact now appears as the result of the first (vaccination's contribution to health) and the third factors (vaccination is almost a procedure that sustains, rather than alters, a person), in combination with the second (minimal alteration), the fifth (minimal side effects) and the seventh (non-police objectives). I also noted that vaccination was not a response to the exercise of human will and that the procedure seemed less objectionable for that reason.\textsuperscript{306} That point, in turn, involves the third (a measure that almost sustains a person) and, especially, the seventh (no police-type objective) factors.

In combination, the factors almost completely eliminate the moral offense of vaccination. Notably, the fact that everyone is subject to the procedure eliminates the issue of human inequality. Universal application also eliminates any danger that the political process will inadequately account for the interests of those facing alteration. Indeed, legislators themselves face the procedure.\textsuperscript{307}

Universal application is not, however, always a decisive consideration. On the one hand, universal measures can fail strict scrutiny. Suppose, for example, a government decided that everyone, legislators included, should undergo lobotomy. Because of the right to biological integrity, such a measure should fail strict scrutiny even though it applies to all. Less fancifully, a future government may mandate genetic alterations for everyone. Despite its universality, that measure also should undergo strict scrutiny review.

At the same time, compulsory vaccination that was not universal in scope might nonetheless satisfy strict scrutiny because it fares so well on other factors. Imagine, for example, that humanity has eradicated every infectious disease except one, and that only certain people are susceptible to the infection. Vaccination's contribution to health and the third factors (vaccination is almost a procedure that sustains, rather than alters, a person), in combination with the second (minimal alteration), the fifth (minimal side effects) and the seventh (non-police objectives) almost completely eliminate the moral offense of vaccination. Notably, the fact that everyone is subject to the procedure eliminates the issue of human inequality. Universal application also eliminates any danger that the political process will inadequately account for the interests of those facing alteration. Indeed, legislators themselves face the procedure.\textsuperscript{305} See discussion supra part II.D. \textsuperscript{306} See discussion supra part III.D. \textsuperscript{307} By contrast, "political offenses" and violations of prohibition laws were excluded from the Oklahoma eugenic sterilization edict that \textit{Skinner} examined. \textit{Skinner} v. Oklahoma, 316 U.S. 535, 537 (1942). Apparently, if legislators could imagine themselves committing an offense, they deemed the supposedly responsible biological trait to be non-inheritable.
nating only those people would be constitutional if the vaccine performed like, and was no more dangerous than, the vaccine upheld in *Jacobson*.

2. *Eugenic Sterilization*

Eugenic sterilization fares poorly on the seven part test. First, it offers variable and often modest contributions to health, which are often matters of conjecture, while its supposed positive effects lie in the remote future. Second, the alteration is not a minimal one, although the surgery usually does not cause far-reaching side effects. Third, sterilization is not a measure that almost sustains a person; indeed, it is designed to sustain a society, or a race, by incapacitating an individual's natural capacity to reproduce. Fourth, the scientific basis for eugenic sterilization is often controversial. For some diseases, patterns of inheritance are well-established, but the same cannot be said about supposed inheritable "criminal traits." Even when a pattern exists, predicting with assurance which offspring will be affected is impossible. Sterilization does fare well under the fifth factor because it usually poses no threat to other biological functions and because those at risk from the surgery can be exempted. In terms of the sixth factor, eugenic sterilization fails absolutely because it overtly, and designedly, conflicts with the biological equality premise. Similarly, it fails under the seventh factor, at least when it has the police objective of eliminating those who "sap the strength of state." In these circumstances, sterilization substitutes biological alteration for crime prevention and social welfare programs.

The sixth and seventh factors alone are decisive. A single society cannot accommodate both the concept of a eugenically fit body politic and the premises of biological integrity and equality; one or the other must go. As Judge Garrison suggested in *Smith*

308. *See generally Degler, supra* note 197 (tracing the rise, fall, and partial revival of biology as an explanation for social and political behavior); Gould, *supra* note 84, (examining false, invidious claims for an inheritable trait of "intelligence"); Kevles, *supra* note 197 (discussing the merits of eugenic and other theories regarding inheritable human characteristics).

v. Board of Examiners of Feeble-Minded, those premises—like the eugenic principles that conflict with them—will eventually expand until they fill an entire social space.

3. Antipsychotic Drugs

Harper sustained a prison's program of antipsychotic drugging in light of the government's interests in prison security and the medical treatment of prisoners. Reversing the Washington State Supreme Court, a six-Justice majority held that competent prisoners had no right to refuse drugs, and, in the case of an incompetent prisoner, that states did not have to prove that the prisoner would have accepted the drug had he been competent. Finally, the majority held that internal prison review procedures satisfied due process. Neither judicial hearings, as the state court had thought, nor administrative or medical decisionmakers independent of the prison were necessary. Dissenting on each point, three Justices thought the drugs "should be treated in the same manner we would treat psycho-surgery or electroconvulsive therapy."

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310. 88 A. 963 (1913) (N.J. 1913); see discussion supra part III.F.
311. Smith, 88 A. at 966. Although eugenic sterilization has waned since World War II, courts are now considering sterilizations that guardians propose for incompetent women, on different grounds. The argument is that sterilization would enhance the woman's life, particularly when she is incapable of caring for a child or understanding human reproduction. These cases raise wrenching issues. See generally Roberta Cepko, Involuntary Sterilization of Mentally Disabled Women, 8 BERKELEY WOMEN'S L.J. 122 (1993) (reviewing the case law and arguing that courts allow sterilization too readily); Elizabeth S. Scott, Sterilization of Mentally Retarded Persons: Reproductive Rights and Family Privacy, 1986 DUKE L.J. 806 (arguing that those who can and those who cannot rear children have different legal interests).
313. Id. at 226 (observing that the "substituted judgment" standard—imposed by the state supreme court—"takes no account of the legitimate governmental interest in treating . . . [an inmate] where medically appropriate for the purpose of reducing the danger he poses.").
314. Id. at 232-33 (upholding the state's procedures).
315. Id. at 241 (quoting Harper v. State, 759 P.2d 358, 362 (Wash. 1988)). Justice Stevens would have reserved decision on the question of "whether . . . the State ever may order involuntary administration of psychotropic drugs to a mentally ill person who has been committed to its custody but has not been declared incompetent." Id. at 250. He also would have reserved on the question of whether "a review procedure administered by impartial, nonjudicial professionals might avoid . . . con-
Had Harper used strict scrutiny, the result would have been different. There is general agreement that strict scrutiny will not tolerate drugging competent persons against their will, at least in non-emergencies, and that courts, rather than institutional doctors, must determine the question of competence. Many courts also preclude the drugging absent a “substituted judgment” determination that the person, if competent, would have agreed to the drugs. Thus, the Court’s divisions in Harper parallel the thinking of state and lower federal tribunals.

316. See Stefan, supra note 135, at 683 & n.210 (noting that “[t]he protections established in Harper are far less extensive than . . . those granted by almost every state court considering the right to refuse treatment” and citing cases); see also Harper, 494 U.S. at 257 n.31 (Stevens, J., dissenting) (citing state cases requiring a judicial determination of incompetence); see generally Gichon, supra note 20, at 357-92 (reviewing decisionmaking alternatives).


318. There is an emerging tendency for courts to announce stringent standards, only to relax them in individual cases. For example, Donaldson v. District Court, 847 P.2d 632, 634 (Colo. 1993), evaluated forced drugging in light of four requirements: (1) demonstrated incompetence of the patient, (2) necessity of drugging to avoid serious deterioration or dangerous behavior, (3) the nonexistence of less intrusive treatments, and (4) a demonstration that the need for drugs is “sufficiently compelling” to “override” the patient’s interests. Id. Each requirement had to be proven by clear and convincing evidence. Id. Yet the court deemed all requirements satisfied despite a finding by the trial court that the patient was not violent, id. at 636 n.2 (Scott, J., dissenting), a lack of evidence of deterioration in health, combined with a psychiatrist’s acknowledgement that the purpose of drugging was to enable the patient to stand trial—to improve his condition rather than prevent deterioration, id. at 636, testimony by state psychiatrists that cast doubt on whether the patient was even psychotic, id. at 637 & n.4, dramatic inconsistencies between clinical observations and the conclusions necessary to justify forced drugging, id. at 637 (calling the conclusions “incredible” in light of the inconsistencies), and unwarranted dismissal of side effects, id. at 638. With regard to side effects, a doctor deemed distortion of the patient’s right jaw, abnormal contraction of his tongue, and a claimed inability to speak or swallow to be acts “feigned . . . in order to avoid further treatment”—even though the doctor did not witness the symptoms, and even
The seven prong test makes it clear why forced drugging fails strict scrutiny. As was true of sterilization, drugging does not fare poorly on every prong, but it does badly enough overall to leave no doubt about the result. As was also true of sterilization, forced drugging fails one or two of the prongs absolutely.

First, the drugs' contribution to individual health is equivocal. Frequently, a strong argument exists for health benefits; perhaps with equal frequency, a strong argument exists that drugs are harmful overall or at least produce no net benefit. This question is troublesome and complex, but it appears that a substantial minority of patients do not benefit from drugs even according to standard medical measures. Considering the likelihood that a drugged person will not place the same weight on orderly behavior that an institution does, and that the person will place much more weight on avoiding distressing drug effects, it becomes clearer that the test of "health" produces equivocal results. As in *Harper*, however, most psychiatrists find these drugs indispensable to the treatment of psychosis. For purposes of this analysis, we may assume that the drugs frequently contribute to an individual's health.
Second, the alteration is generally not minimal. The frequency and severity of drug side effects demonstrate the significant effect, even if nothing else does.322 One cannot be confident that an alteration is minimal when it changes the brain's "chemical balance."323

Third, although psychiatrists often suggest that drugs simply redirect a brain toward its natural state—that is, drugs sustain, rather than alter—the evidence for such claims is slight.324 The "shortage of Thorazine in the brain" theory of schizophrenia325 belongs to the folkways of back wards, but a more sophisticated version frequently appears in judicial decisions. This theory states that schizophrenia is caused by an imbalance in brain chemicals or neurotransmitters, which antipsychotic drugs rectify.326 Drugs' effects are clearly related to these neurotransmitters, but the idea of schizophrenia as a "chemical imbalance" is far too simple.327 It appears, for example, that tilting the neurotransmitter "balance" in either direction produces "antipsychotic" effects; neither, therefore, is the direction of "normalcy."328

322. See, e.g., Michels & Marzuk, supra note 273, at 554, 557 (noting that drugs affecting more than one brain neurotransmitter generally carry higher risks of side effects and also noting that antipsychotic drugs affect more than one brain system).

323. During the mid-1950s, tardive dyskinesia was not yet recognized, yet psychiatrists still theorized that drug effectiveness resulted from drug-induced neurological impairments—impairments made evident by drug side effects. See Gelman, supra note 19, at 1748 n.118 (describing the theory). Whatever its merits, the theory demonstrates that drug actions and side effects appear substantial even to experts.

324. See, e.g., Riggins v. Nevada, 112 S. Ct. 1810, 1818 (1992) (Kennedy, J., concurring) (concluding that antipsychotics "restore normal thought processes by clearing hallucinations and delusions" and quoting with apparent approval the American Psychiatric Association's contention that the "mental health produced by antipsychotic medication is no different from, no more inauthentic or alien to the patient than, the physical health produced by other medications, such as penicillin for pneumonia"). But see id. at 1820 (describing antipsychotics as drugs that "dull cognition" and quoting, with apparent approval, the claim that drugs produce a "chemical flattening of a person's will" that "can . . . lead to . . . loss of self-determination undermining the desire for self-preservation").

325. See supra text accompanying note 68.

326. E.g., Harper, 494 U.S. at 229 (observing that antipsychotic drugs "alter the chemical balance in a patient's brain"); Cichon, supra note 20, at 291 (describing "balance" theory).

327. See Cichon, supra note 20, at 291-92 (reviewing studies and concluding that "[t]here appears to be no widely accepted theory on the biochemical manner in which antipsychotic drugs work").

328. See Kenneth L. Davis et al., Dopamine in Schizophrenia: A Review and
Thus, antipsychotic drugs are not “normalizing” agents in the brain. More recent research has found that schizophrenia is marked by a neurotransmitter excess in one brain region and a deficiency of the same neurotransmitter in a different region.\footnote{329} Once again, the idea of antipsychotic drugs supplying a chemical deficit, or remedying a chemical imbalance, is questionable.\footnote{330}

Entirely apart from neurochemistry, there is evidence that drugs do not work by supplying something a mentally ill human being needs. A widespread drug side effect, akinesia, produces motor and mental lethargy; “antipsychotic” actions may represent more subtle forms of that lethargy.\footnote{331} Then again, the widespread application of the drugs suggests that they do not simply supply some special need of schizophrenic or other mentally ill persons. Institutions for the mentally retarded, nursing homes, and even schools use antipsychotic drugs on a broad scale, but it would be incredible if some single “disease” or “deficit” was the target of drugs in those diverse settings.\footnote{332} Simi-

\begin{itemize}
\item Reconceptualization, 148 AM. J. PSYCHIATRY 1474 (1991) (noting that over the past decade “data have accumulated that are inconsistent” with the dopamine hypothesis as the single explanation of schizophrenia). For example, drugs with effects on dopamine are often ineffective and antipsychotics are only “partially effective” for negative symptoms such as social deterioration and withdrawal. Id. at 1480. In addition, nonschizophrenic individuals rarely develop “schizophrenic-like symptoms,” as the imbalance theory predicts they should. Id.; see also Gelman, supra note 19, at 1748 n.116 (citing earlier research findings and noting the American Psychiatric Association’s statement that antipsychotics are “rarely, if ever, curative”).
\item Davis et al., supra note 328 (concluding that reduction of dopamine activity in the brain minimizes some symptoms of schizophrenia, and therefore drugs reduce those symptoms, but other aspects of the disease—the so called “negative” symptoms of social withdrawal and personal deterioration—apparently are caused by low dopamine levels). The authors do not spell out the implications, but it seems that drugs should worsen these “negative” symptoms because they reduce dopamine activity throughout the brain.
\item See, e.g., Michels & Marzuk, supra note 273, at 557 (noting that, although the effects of antipsychotic drugs “in dopaminergic mesolimbic pathways . . . probably accounts for their antipsychotic effects,” it remains true that we do not understand the drugs’ “therapeutic mechanism” because “dopamine receptors are blocked immediately after the administration of these drugs but clinical improvement is gradual”); Davis, supra note 328, at 1481 (concluding that “there is compelling evidence that . . . [dopamine levels or activity] is unlikely to be the primary or sole event in either the etiology or pathogenesis of schizophrenia” and that antipsychotics only “modulat[e] . . . symptoms” of the disease).
\item See Gelman, supra note 19, at 1749 & n.121 (making a similar suggestion and citing early theorists who reached the same conclusion).
\item See Cichon, supra note 20, at 310-11 n.170. Surveying the data on antipsy-
\end{itemize}
larly, the broad range of neurological side effects militates against any conclusion that the drugs operate merely by supplying some chemical or balance missing in the disease of schizophrenia. Most importantly, perhaps, psychiatrists used these drugs for almost a decade before the theory of specific "antipsychotic" effects gained currency. Up to that point, thousands of psychiatrists thought that millions of patients had improved because drugs introduced a new disease to the brain, a disease whose effects counteracted the effects of schizophrenia.333 If drugs really gave the appearance of sustaining a person, that view would be almost inexplicable.

The statements above notwithstanding, drugs have bona fide medical applications. In the sense described earlier, however, drugs neither "sustain," nor "almost sustain" individuals. Hence, they fail to satisfy this part of the strict scrutiny test.

The fourth test is the alterationist measure's scientific basis. It is true that overwhelming numbers of psychiatrists favor liberal use of these drugs in the treatment of psychosis.334 At the same time, however, the understanding of how these drugs work remains cloudy.335

The fifth test, side effects, is where the drugs fare worst. Their side effects are unprecedentedly severe for an alterationist, indeed, for any, government measure.336 The side effects occur far more frequently than the unintended complications of vaccination or sterilization.337 Nor is there a commit-
ment to exempt those who suffer such side effects from drugging.

Until Harper, the Court appeared unlikely to sustain an alterationist measure that caused serious, widespread side effects. The decision in Jacobson strongly implied that the Court would not uphold vaccination of anyone whose health would suffer a serious impairment as a result.338 In Buck, the sterilization statute recited that sterilization caused no "serious pain or substantial danger to life."339 The state court judgment specifically found that Ms. Buck could be sterilized "without detriment to her general health,"340 and, after quoting both the statute and the judgment, Justice Holmes sustained the procedure "[i]n view of the general declarations of the Legislature and the specific findings of the Court."341 Buck, supposedly a harsh decision, does not approach a suggestion that states may sterilize individuals despite a one in four, or higher, risk of permanent neurological damage, or a likelihood of distressing motor and mental disorders. Nothing in the earlier opinions anticipates Harper's cold listing of severe and frequent drug side effects.342

Harper allows harms from biological alteration that the Court would not tolerate from any other cause.343 Yet biological alteration, an unprecedented constitutional affront in itself, is hardly the occasion to relax the usual constitutional tolerance for state inflicted harms. This consideration alone is decisive against forced drugging.

The sixth strict scrutiny test is whether an alterationist measure applies universally. Obviously, forced drugging does not. In fact, its selective use has particularly serious implications for biological equality. The mentally ill constitute a group apart, even if they do not quite qualify as a distinct and insular minority.344 Many think of them as biologically different, a view that

338. Jacobson, 197 U.S. at 39; see discussion supra part V.C.1.
340. Id. at 207 (quoting the state court judgment).
341. Id.
343. See discussion supra part I.
344. See City of Cleburne v. Cleburne Living Ctr., Inc., 473 U.S. 432, 445-46 (1985) (refusing to extend strict scrutiny to mental retardation because, among other things,
has wide support in modern psychiatry. The fact that some mental illnesses may well have biological explanations does not change the dangers of biological classification. Mental illness is not merely biologically different but is considered worse in a significant way. This judgment, in turn, is likely to have the familiar consequences that attach to supposed biological inferiority.

The seventh test is whether the alteration implicates health as opposed to the state's police concerns. Drugs and mental illness straddle such distinctions. Mental illness is a police concern because it may produce dangerous behavior. By definition, mental illness is also a matter of health. Thus, this test produces equivocal results—which is not enough to satisfy strict scrutiny. Harper fares particularly poorly because it treats prison security as an interest that justifies drugging, thereby subordinating biological integrity to police concerns.

Accordingly, drugging yields uncertain or mixed results on tests two through four, and negative results on five through seven. Without more, the severity of drug side effects are decisive against the practice. Thus, even assuming benefits to health (test one), forced drugging fails to satisfy strict scrutiny—a conclusion that courts widely endorse.

VI. WHY THE COURT IGNORES BIOLOGICAL ALTERATION'S EXTRAORDINARY NATURE

If biological alteration represents a constitutional threat as grave as racism, why has the Supreme Court neglected to recognize it? One might conclude that the problem could not be enor-

"it would be difficult . . . to distinguish" mental illness).
345. This view is commonplace. See, e.g., Michels & Marzuk, supra note 273, at 552 (noting psychiatry's focus on "genetic, neurodevelopmental, chemical, immunologic, endocrinologic, and electrophysiologic aspects of specific disorders").
346. For example, some psychiatrists suggest that the mentally ill do not suffer from drug actions in the way that "normal" people do. See supra note 107.
347. See Harper, 494 U.S. at 258 & n.31 (Stevens, J., dissenting) (noting that state courts had "uniformly concluded" that Harper-type protections were inadequate and citing cases that barred forced drugging absent "a judicial determination of incompetence, other findings, or a substituted judgment"); see also cases cited supra note 317.
ous precisely because it has gone unnoticed. This Section suggests some answers to that question.

Part of the explanation has to do with how rarely states use the technique and how few cases have reached the Court. It is not as if the Justices declined to formulate a rule for a frequently recurring issue. Then again, state intrusions of any kind into the body are rare, even in the absence of alteration. Biological alteration might have appeared as a tiny subset of a group of cases small enough to begin with—too small and difficult an area to justify a general rule. Moreover, with the sole exception of *Jacobson*, where the arguments for state compulsion were overwhelming, the cases involve prisoners and mental patients, people whose lives and situations often seem distinctly different from everyone else's. If these decisions are flawed, perhaps it is only because they undervalue the rights of inmates. Finally, there has always been a medical warrant of some kind for the alteration.

Such explanations are not completely convincing. Had a court of the former Soviet Union handed down a ruling like *Harper*, authorizing chemical alteration of prisoners' brains, or had a court of another country with racial divisions handed down a decision like *Buck*, endorsing eugenic sterilization, the grave nature of those decisions would be clear to all; nor would one discount their impact because the immediate implications extended only to inmates or members of disfavored groups. In fact, the decisions might strike us as more ominous on that account. Moreover, the considerations cited earlier fail to explain why *Jacobson* avoided obvious arguments from the effectiveness of vaccination, or why *Skinner* went to great lengths obscuring the right of freedom from biological alteration.

A large part of the explanation lies with our long-standing overemphasis on constitutional "liberty," understood as meaning freedom of choice. Elsewhere, I have tried to show that this interpretation of "liberty" obscures the parallel constitutional right of "life" in the Due Process Clauses, and that "life's" original meaning—established in the writings of influential political theorists in early state constitutions, and in judicial decisions through the 1880s—included a right of health and freedom from
bodily "destruction." Thus, the correct textual source for the right to remain free of biological alteration was lost. In the meantime, the concept of liberty grew to include virtually every protected interest, including those formerly recognized as aspects of life.\textsuperscript{349} Much was lost in the transition. The idea of "freedom of choice," liberty's supposed core meaning, puts no particular value on the integrity of the body. At most, the choice of what to make of one's biological "self" represents a choice like any other, not a matter entitled to any special constitutional protection.

There were even strands of "liberty" that ran against the grain of protecting people against biological alteration. First, in an era when individual liberty and choice were preeminent, natural limits existed on choices one could make about one's body; there is just so much that one can do. Obviously, to a large extent, people's biological makeup is not the product of choice; and to that extent, it does not benefit from the core meaning of liberty. Economic and market choices, on the other hand, seem to present limitless possibilities. The Court's attention focused on the latter, producing the conservative, \textit{Lochner}-era in constitutional law. Second, "freedom of choice" philosophies often stand in tension with the idea that there is a \textit{right} choice, or a single right answer, or limits in human nature on what should be chosen. The premise of biological equality and integrity asserts that the human constitution is a given, something not subject to choice—in effect, the single right answer. That premise, in turn, is potentially at odds with the basic thrust of choice theory.

From this point, adherents of "liberty" can go in one of two directions. Libertarians would assert that one also can choose what to make of one's body and should do so free of government interference. Such thinkers, for example, would legalize narcotic use. Other adherents of "liberty" draw the opposite conclusion. They acknowledge that some government restraints on liberty are appropriate so long as the restraints are kept to a minimum. In biological alteration cases, somebody's biological functioning

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\textsuperscript{348} Gelman, \textit{supra} note 126, at 612-36, 643-70.
\textsuperscript{349} \textit{Id.} at 664-74.
comes to be regarded as a serious threat to someone else, or to the public. These adherents of liberty are relatively willing to allow government biological intervention because choice theory affords no reason to give biological functions a privileged status. The result is that the state enjoys a relatively strong writ to intervene biologically, in order to preserve order or to perform other "police" functions, while the individual's own biological choices are relatively restricted.

This summary oversimplifies, but I think it points out important consequences of the adherence to "liberty" and the lack of attention paid to constitutional "life." It also comports with certain non-legal developments in the *Lochner* era, during the first third of this century. In this period the idea that human beings have certain wants—just because they are human—came to be replaced, or at least supplemented, with the idea that wants could be manufactured by merchants and advertising agencies. A legitimate form of economic activity became engineering a structure of wants, or desires, in consumers, and what had been regarded once as an unalterable aspect of the individual became a matter for outside manipulation. Similarly, the theory developed that democratic consent could be manufactured by manipulating the stream of information—again, an idea at odds with more traditional conceptions. Meanwhile, in the social sciences and philosophy, empiricist and behaviorist theories became more powerful, their basic idea being that human actions, thoughts, and knowledge were not dependent on any pre-existing, fixed "human nature." In its more extreme form, these theories regarded humans as fundamentally no different from animals, precisely the complaint that many people subject to biological alteration make.

351. *E.g.,* WALTER LIPPMANN, PUBLIC OPINION (1921).
353. *See supra* note 104.
If these speculations are correct, Jacobson marks a crucial turning point. Upholding a compulsory vaccination statute that could have withstood the strictest scrutiny, the Court employed an extraordinarily lenient standard of constitutional review.\textsuperscript{354} On the crucial question of biological effectiveness, the Justices regarded the legislature’s enactment and judgment as definitive.\textsuperscript{355} The Court’s next Fourteenth Amendment, police power decision, however, was \textit{Lochner v. New York};\textsuperscript{356} and, in \textit{Lochner}, the Court effectively applied strict scrutiny.\textsuperscript{357}

At issue in \textit{Lochner} was a law that limited the hours of bakery work, among other things, in order to secure the bakers’ health.\textsuperscript{358} Striking down the statute, the Court rejected the legislature’s characterization of it as a health measure—\textsuperscript{359} the same Court that had just deferred to a legislature’s biological theories. The Court in \textit{Lochner} confidently assessed background facts, where the Court in \textit{Jacobson} affected a complete unwillingness to do the same.\textsuperscript{360} The Justices determined that bakery labor was not significantly more dangerous than other lines of work.\textsuperscript{361} On that basis, \textit{Lochner} voided the statute.\textsuperscript{362} If the legislature could regulate economic choices relating to hours of work in bakeries, the Justices reasoned, it would follow that similar regulations could limit the labor choices of all employees and employers.\textsuperscript{363} That would unduly restrict free choice. Having to decide between free economic choice or “liberty” and health, the Court in \textit{Lochner} opted for the former; it simply cannot be the case, \textit{Lochner} implies, that human beings are so constituted that a regime of private choice and private economic

\textsuperscript{354} Jacobson v. Massachusetts, 197 U.S. 11 (1905).
\textsuperscript{355} Id. at 27.
\textsuperscript{356} 198 U.S. 45, 55 (1905) (“The latest case decided by this court, involving the police power, is that of Jacobson v. Massachusetts . . . .”); \textit{see also} id. at 75 (Holmes, J., dissenting) (observing that, “the other day,” the Court upheld vaccination in \textit{Jacobson}).
\textsuperscript{357} \textit{See generally} GUNTHER, supra note 21, at 448 (suggesting that one of \textit{Lochner}’s real “evils” was applying “stricter scrutiny”).
\textsuperscript{358} \textit{Lochner}, 198 U.S. at 46-52.
\textsuperscript{359} Id. at 64.
\textsuperscript{360} Id. at 54-64.
\textsuperscript{361} Id. at 59.
\textsuperscript{362} Id. at 64.
\textsuperscript{363} Id. at 59.
arrangements might generally endanger human health.364 Jacobson, on the other hand, stands for the proposition that a legislature is free to conclude that X's biological functioning threatens Y, and that X should therefore undergo biological alteration—all without serious scrutiny from the Court. If the question was whether economic choices can menace health, the Court's general answer was that health is an infinitely malleable thing; but if the question was whether one person's biology can menace another person, the Court's too-ready answer was yes.

My argument, in brief, has been that the Court should have applied Lochner's general premises and level of scrutiny in Jacobson, just as it should have applied Jacobson's general premise and type of scrutiny in Lochner.365

VII. CONCLUSION

The Supreme Court's approach to biological alteration has two interesting aspects. The first, my principal focus, relates to the correctness of the Court's decisions, as a constitutional matter. I conclude that strict scrutiny should govern all state biological alteration, and that the Court errs when it applies a lesser standard.

The second question is why the Court took the approaches that it did. I suggest that the Court followed a flawed, turn-of-the-century logic of liberty, and that its tolerance of state alteration at that time is related to its intolerance of social and economic reform, which threatened the regime of economic free choice. Regarding later developments, I remain puzzled about Skinner's avoidance of the issues and Harper's harshness. Obviously, the earlier tendencies persist, although Skinner also hinted at a break with cases like Buck.

Biological alteration cases exhibit a wide divergence in approach and rhetoric. Some judges find state biological alteration—in the form of drugs, other psychiatric interventions, or sterilization—a profoundly-threatening, political and social phe-

364. Id. at 64.
365. I make the same argument about Jacobson in Gelman, supra note 19.
nomenon. These judges may invoke Nuremberg principles, or recall Nazi abuses, in their opinions. Other judges see no such dimension in the cases, and their opinions are more technical, as well as less impassioned. In the Supreme Court, the Harper majority opinion and dissent follow these fault lines. Justice Kennedy's majority opinion is a legal technician's work. Justice Stevens' impassioned language invoked Nuremberg, the Helsinki human rights accord, and congressional hearings on psychiatric abuses in the former Soviet Union.

Thus, some see a unique threat to human values and a benchmark for judging entire societies. Others see a marginal set of problems having few implications for larger concerns of justice or politics. I believe the first position is correct because alteration undermines premises of biological equality and human dignity that provide the foundation for our rights. It destroys our Constitution. If I am right, biological alteration will not easily be contained in prisons or mental hospitals; and it cannot but reflect a larger social outlook on political and economic life.

366. See, e.g., Kaimowitz v. Michigan Dep't of Mental Health, No. 73-19434-AW (Cir. Ct. Wayne County, Mich. July 10, 1973), reprinted in ALEXANDER D. BROOKS, LAW, PSYCHIATRY AND THE MENTAL HEALTH SYSTEM 902, 912 & n.21 (1974) (invalidating state experimentation with lobotomy and citing the Nuremberg War Crimes Trials); see also In re Large v. Superior Court, 714 P.2d 399, 411 (Ariz. 1986) (Cameron, J., dissenting) (declaring it "frightening to even think that the state may be able to forcibly administer dangerous, mind-altering drugs to a mentally competent person" and seeing a possible "scenario . . . shockingly repugnant to a free society"); In re Grady, 426 A.2d 467, 472 (N.J. 1981) (in developing standards for approving sterilization of incompetent women, recalling "the atrocities that people of our own century and culture have committed upon their fellow humans" and expressing "abhorrence for the kind of ideology that assigns vastly differing value to the lives of human beings because of their innate group characteristics").


368. For example, Justice Stevens declaimed against prison "mock trial[s] before institutionally biased tribunal[s]," id. at 237 (Stevens, J., dissenting), and closed with a ringing reaffirmation of human "dignity" and the "unalienable interest in liberty," id. at 258.

369. Id. at 238 n.2.

370. Id. at 238 n.3.

371. Id.