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Laura A. Zaccone

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Policing the Policing of Intersex Bodies

SOFTENING THE LINES IN TITLE IX ATHLETIC PROGRAMS

“When lines are drawn sharply, they often cut. And sometimes people bleed.”¹

“People don’t fail to meet the definition of normal gender, but the confines of the definitions fail to meet the people.”²

INTRODUCTION

Great athletes are both born and made.³ Perhaps it is unsurprising, then, that organized sports have historically aspired to regulate both the nature and nurture of its participants. The underlying principle of athletic competition is fair play—consistent with the sporting world’s widespread condemnation of performance-enhancing drugs.⁴ But fair play is not synonymous with egalitarianism; nor could it be, given that inborn physical advantages are simply not doled out impartially.

After eighteen-year-old runner Caster Semenya broke a South African record at the African Junior Championships in July 2009, a firestorm erupted over the fairness of her innate athletic talent.⁵ At that event, the South African teen also clocked

¹ Emily Q. Shults, *Sharply Drawn Lines: An Examination of Title IX, Intersex, and Transgender*, 12 *CARDOZO J.L. & GENDER* 337, 337 (2005) (quoting Elise Mattheson, Keynote Speech at the International Conference Celebrating Bisexuality: What’s So Funny About Bisexual Separatism? (June 25, 1994), available at <http://www.lioness.net/speech.html> (last visited Aug. 7, 2010)).

² Esther Morris, *The Missing Vagina Monologue*, OUR BODIES OURSELVES, <http://www.ourbodiesourselves.org/book/companion.asp?id=13&compID=98&page=2> (last visited Nov. 14, 2010).

³ Cf. Barbara S. Andrew, *Beauvoir’s Place in Philosophical Thought*, in *THE CAMBRIDGE COMPANION TO SIMONE DE BEAUVOIR* 24, 31 (Claudia Card ed., 2003) (“One is not born, but rather becomes, a woman.” (quoting Simone de Beauvoir)).

⁴ See, e.g., Laura Fitzpatrick, *A Brief History of Steroids*, *TIME* (Jan. 13, 2010), <http://www.time.com/time/health/article/0,8599,1953229,00.html>.

⁵ See Ariel Levy, *Either/or: Sports, Sex, and the Case of Caster Semenya*, *NEW YORKER* (Nov. 30, 2009), http://www.newyorker.com/reporting/2009/11/30/091130fa_fact_levy?currentPage=all.

the fastest female time of the year for the 800-meter race,⁶ improving her personal record by seven and a half seconds.⁷ This impressive victory, which qualified Semenya for the Berlin World Championships, coupled with her “masculine” appearance, fueled speculation that she was actually a man.⁸ In essence, her natural body was unnatural.

As the Berlin World Championships drew closer, the whispers only got louder.⁹ On the day of the 800-meter final, just hours before the race, news broke in Berlin that the International Association of Athletics Federation (IAAF)—the world governing body for athletics¹⁰—had asked Semenya to undergo a sex test¹¹ to prove that she did not have an unfair advantage.¹² Despite this humiliating prelude, Semenya won the gold medal, capturing the 800-meter world title.¹³

⁶ *African Junior Champs, Day 2*, INT’L ASS’N OF ATHLETICS FED’NS (July 31, 2009), <http://www.iaaf.org/news/kind=100/newsid=52412.html>.

⁷ See Levy, *supra* note 5.

⁸ See *id.*

⁹ Owen Slot, *Caster Semenya Faces Sex Test Before She Can Claim Victory*, TIMES (U.K.) (Aug. 20, 2009), http://www.timesonline.co.uk/tol/sport/more_sport/athletics/article6802314.ece.

¹⁰ INT’L ASS’N OF ATHLETICS FED’NS, INTERNATIONAL ASSOCIATION OF ATHLETICS FEDERATIONS CONSTITUTION 7 (2009), available at http://www.iaaf.org/mm/Document/AboutIAAF/Publications/05/47/96/20100113075829_httppostedfile_IAAFConstitution-01.11.09-Eng-Website_17812.pdf.

¹¹ While the procedure has been referred to as a *gender verification test*, the term *sex test* is a more accurate description because its objective is to ascertain whether sex-linked anatomical attributes provide an unfair advantage. See Alice Dreger, *Olympic Problems with Sex Testing*, BIOETHICS F. (July 31, 2008), <http://www.thehastingscenter.org/Bioethicsforum/Post.aspx?id=2008>. This note, therefore, will use the terms *sex test* or *sex verification*.

¹² Tom Fordyce, *Semenya Left Stranded by Storm*, BBC SPORT (Aug. 19, 2009), http://www.bbc.co.uk/blogs/tomfordyce/2009/08/semenya_left_stranded_by_storm.html.

In an e-mail to journalist Ariel Levy, Nick Davies—the IAAF’s director of communications—stated that Semenya’s seven-and-a-half-second improvement at the Junior Championships roused suspicion that Semenya was either doping or had a gender condition that gave her an athletic edge. Levy, *supra* note 5 (citation omitted). The IAAF subsequently asked Athletics South Africa (ASA) to initiate the sex-verification procedure. *Id.* (The ASA is the national IAAF-affiliated federation in charge of track and field. See ATHLETICS S. AFRICA, THE CONSTITUTION OF ATHLETICS SOUTH AFRICA 7 (2008), available at <http://www.athletics.org.za/pdf/Constitution/ASA%20Constitution%202008%20version.pdf>.) Semenya subsequently underwent testing, overseen by ASA officials, in both South Africa and Berlin. Levy, *supra* note 5. The procedure involved a panel of specialists: a gynecologist, an endocrinologist, a psychologist, an internist, and an “expert on gender/transgender issues.” See INT’L ASS’N OF ATHLETICS FED’NS, IAAF POLICY ON GENDER VERIFICATION 2 (2006), available at www.iaaf.org/mm/document/imported/36983.pdf.

¹³ See Fordyce, *supra* note 12; see also Bob Ramsak, *Event Report—Women’s 800m Final*, 12TH IAAF WORLD CHAMPIONSHIPS BERLIN (Aug. 19, 2009), <http://berlin.iaaf.org/news/kind=108/newsid=53494.html>.

The gender controversy reached a fever pitch after Semenya's Berlin victory. Semenya was never formally suspended, but she agreed to wait for the IAAF's decision on her eligibility before returning to competition.¹⁴ In the meantime, the public divided over her right to compete as a female and her entitlement to the world title.¹⁵ In early September 2009, Australia's *Daily Telegraph*, citing an unnamed source, reported that Semenya was a "hermaphrodite."¹⁶ According to the report, Semenya had "male sexual organs" and "no womb or ovaries."¹⁷

The IAAF never confirmed this report. In fact, the governing body has been adamant about keeping Semenya's test results confidential.¹⁸ In July 2010, after eleven months of deliberation, the IAAF finally cleared Semenya to compete.¹⁹

¹⁴ Gerald Imray, *Caster Semenya Should Not Run Until Gender Tests Complete, IAAF Says*, HUFFINGTON POST (Mar. 30, 2010), http://www.huffingtonpost.com/2010/03/30/caster-semenya-should-not_n_518413.html.

¹⁵ See William Biebuyck, *The Case of Caster Semenya*, MAISONNEUVE (Sept. 18, 2009), <http://maisonneuve.org/pressroom/article/2009/sep/18/case-caster-semenya/#>.

Months before Semenya was officially cleared, the South African Department of Sport and Recreation (SRSA) announced that the IAAF would allow Semenya to retain her gold medal and prize money. See *Caster Semenya Will Keep Her 800m Gold Medal, Says IAAF*, TELEGRAPH (U.K.) (Nov. 19, 2009), <http://www.telegraph.co.uk/sport/others/sports/athletics/6605163/Caster-Semenya-will-keep-her-800m-gold-medal-says-IAAF.html>. (The SRSA is the public bureau responsible for developing and promoting sport in South Africa. SPORT & RECREATION S. AFR., <http://www.srsa.gov.za> (last visited Aug. 21, 2010)). But the IAAF declined to confirm the SRSA's announcement. Levy, *supra* note 5.

¹⁶ Mike Hurst, *Caster Semenya Has Male Sex Organs and No Womb or Ovaries*, DAILY TELEGRAPH (Austl.) (Sept. 11, 2009), <http://www.dailytelegraph.com.au/sport/semenya-has-no-womb-or-ovaries/story-e6fexni-1225771672245>.

The preferred term for indeterminate sex is *intersex*, encompassing "a variety of conditions in which a person is born with a reproductive or sexual anatomy that doesn't seem to fit the typical definitions of female or male." *What Is Intersex?*, INTERSEX SOC'Y N. AM., http://www.isna.org/faq/what_is_intersex (last visited July 11, 2010). The word *hermaphrodite* is pejorative and archaic. *Is a Person Who Is Intersex a Hermaphrodite?*, INTERSEX SOC'Y N. AM., <http://www.isna.org/faq/hermaphrodite> (last visited July 11, 2010). It has been widely rejected by both intersex advocates and the medical community. See Joseph Huff-Hannon, *Don't Call Them Hermaphrodites*, DAILY BEAST (Sept. 16, 2009), <http://www.thedailybeast.com/blogs-and-stories/2009-09-16/dont-call-them-hermaphrodites/full> (citation omitted). Some clinicians and intersex advocates have adopted the term *disorders of sex development* (or *DSDs*). See Alice D. Dreger & April M. Herndon, *Progress and Politics in the Intersex Rights Movement*, 15 GLQ: J. GAY & LESBIAN STUD. 199, 206 (2009). Other advocacy groups, however, have repudiated this label. See, e.g., Curtis E. Hinkle, *Why Is OII Not Using the Term DSD or "Disorders of Sex Development"?*, ORG. INTERSEX INT'L, http://www.intersexualite.org/Response_to_Intersex_Initiative.html (last visited Nov. 1, 2010) (listing its objections to use of the term *DSDs*). For these reasons, this note uses the term *intersex* unless historical context calls for the term *hermaphrodite*.

¹⁷ Hurst, *supra* note 16.

¹⁸ See *Caster Semenya May Compete*, INT'L ASS'N ATHLETICS FED'NS (July 6, 2010), <http://www.iaaf.org/aboutiaaf/news/newsid=57301.html> [hereinafter *Semenya May Compete*]; *Caster Semenya—Statement*, INT'L ASS'N ATHLETICS FED'NS (Nov. 18, 2009),

The maelstrom over Caster Semenya reveals our oversimplified understanding of sex²⁰ but leaves complex questions unanswered. On one hand, Semenya's story debunks the notion that sex is clear-cut; it is culture—not nature—that insists that human beings fit into one of two discrete sex categories.²¹ Still unresolved, however, is how and where to place intersex bodies within this male-female binary—and, more narrowly, in sports. Like other social institutions, sports are constructed on a dimorphic understanding of sex. But athletes like Caster Semenya force us to acknowledge that physical bodies can—and do—defy such neat classification. Indeed, approximately 1.7% of the world population is born intersex,²² neither fully male nor female.

In the wake of Semenya's ordeal, it is unclear how the American legal system will grapple with intersex²³ in school

<http://www.iaaf.org/aboutiaaf/news/newsid=54923.html> [hereinafter *Caster Semenya—Statement*]; see also Jeré Longman, *South African Runner's Sex-Verification Result Won't Be Public*, N.Y. TIMES (Nov. 19, 2009), http://www.nytimes.com/2009/11/20/sports/20runner.html?_r=2; Imray, *supra* note 14.

¹⁹ *Semenya May Compete*, *supra* note 18. The IAAF “accept[ed] the conclusion of a panel of medical experts that [Semenya] can compete with immediate effect” and stated that it “will make no further comment on the matter.” *Id.* Holding to the announcement it made in November 2009, see *Caster Semenya—Statement*, *supra* note 18, the athletics body added that the details of Semenya's medical tests will remain confidential, see *Semenya May Compete*, *supra* note 18.

²⁰ As discussed later in this note, the line between *sex* and *gender* is not clear-cut; there is a cultural dimension to the sex categories often viewed as purely biological. See *infra* Part II.A. Due to linguistic constraints, however, this note uses the term *sex* to refer to biological classifications. It uses the term *gender* to describe the social constructs of maleness and femaleness.

²¹ See Alice Dreger, *Sex Typing for Sport*, HASTINGS CENTER REP., Mar.-Apr. 2010, at 22, 23 [hereinafter Dreger, *Sex Typing for Sport*].

²² Melanie Blackless et al., *How Sexually Dimorphic Are We? Review and Synthesis*, 12 AM. J. HUM. BIOLOGY 151, 159 (2000); see also ANNE FAUSTO-STERLING, *SEXING THE BODY: GENDER POLITICS AND THE CONSTRUCTION OF SEXUALITY* 51, 53 (2000) [hereinafter FAUSTO-STERLING, *SEXING THE BODY*] (“At the rate of 1.7 percent, . . . a city of 300,000 would have 5,100 people with varying degrees of intersexual development. Compare this with albinism, another relatively uncommon human trait but one that most readers can probably recall having seen. Albino births occur much less frequently than intersexual births—in only about 1 in 20,000 babies.”). This estimate, calculated by biologist Anne Fausto-Sterling, includes all chromosomal, anatomical, and hormonal variations from the male-female binary. Anne Fausto-Sterling, *The Five Sexes, Revisited*, SCIENCES, July-Aug. 2000, at 19, 20 [hereinafter Fausto-Sterling, *The Five Sexes*]. Moreover, the intersex birthrate is not identical throughout the world; intersex-linked genes occur more frequently in some populations than in others. *Id.*

Leonard Sax challenges Fausto-Sterling's estimate on the grounds that she “includes conditions [that] most clinicians do not recognize as intersex.” See Leonard Sax, *How Common Is Intersex? A Response to Anne Fausto-Sterling*, 39 J. SEX RESEARCH 174, 174 (2002). Sax's contention, however, misses the point. Fausto-Sterling's very goal is to question mainstream medicine's approach to intersex conditions.

²³ *Intersex* may be used as a noun or an adjective. Dreger & Herndon, *supra* note 16, at 222 n.48.

athletic programs covered by Title IX, the landmark legislation that prohibits sex discrimination in school sports.²⁴ Should an intersex student athlete be allowed to compete as a male or a female? What criteria should be used to decide where an intersex athlete falls in the binary scheme?

This note explores these difficult issues. Its goals are modest. It does not attempt to resolve the inherent shortcomings of binary sex. Nor does it offer a method to ensure that student athletes are accurately grouped into discrete sex categories. To the contrary, this note challenges the legitimacy and fairness of binary categorization in the first place. It illustrates the cultural overlay to both the sex-based differences often regarded as biologically predetermined and the social understanding of sex as dyadic. Against this backdrop, this note argues that Title IX should be interpreted to cover discrimination based on binary-sex nonconformity. It advocates a self-identification policy on eligibility to compete as a male or female in Title IX athletics.

Following its introduction, this note begins in Part I with a discussion of Title IX's history and application to school athletics. Part II probes the relationship between sex and gender, and the interplay of biological and cultural circumstances in the sports context. This part reveals the extent to which social factors not only influence our understanding of sex as a category but also shape physical bodies themselves. Part III examines the nature of organized sports and the politics of sex testing, questioning the notion that intersex-based athletic advantages compromise the integrity of competition any more than other inborn advantages. Finally, Part IV addresses intersex conditions in Title IX athletic programs. It argues that self-identification should govern an athlete's eligibility to participate as a male or female in school sports. To that end, it encourages the administrative agency charged with enforcing Title IX to issue regulations requiring schools to adopt a self-identification policy.

I. TITLE IX AND GENDER EQUITY IN SCHOOL ATHLETICS

A. *Overview of Title IX*

Title IX of the Education Amendments of 1972 prohibits federally funded educational institutions from engaging in sex

²⁴ Title IX of the Education Amendments of 1972, 20 U.S.C. §§ 1681-1688 (2006).

discrimination.²⁵ The statute's basic antidiscrimination provision states that "[n]o person in the United States shall, on the basis of sex, be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any education program or activity receiving Federal financial assistance."²⁶ Title IX is best known for its impact on athletics, but it applies to all activities in the educational context²⁷ unless specifically exempted in the statutory text.²⁸

The law conditions federal financial assistance on the recipient's promise not to discriminate based on sex.²⁹ The receipt of either direct or indirect "[f]ederal financial assistance"³⁰ subjects an educational institution to Title IX coverage.³¹ Since the majority of educational institutions receive some form of federal funding, Title IX covers most schools in the United States—from elementary schools to institutions of higher learning.³² Nearly all private colleges and universities,

²⁵ *Id.*

²⁶ *Id.* § 1681(a).

²⁷ See KATHRYN M. REITH, WOMEN'S SPORTS FOUND., PLAYING FAIR: A WOMEN'S SPORTS FOUNDATION GUIDE TO TITLE IX IN HIGH SCHOOL & COLLEGE SPORTS 5 (5th ed. 2006), available at http://www.womenssportsfoundation.org/binary-data/wsf_article/pdf_file/195.pdf ("Title IX is not just a 'sports' law. It also covers sexual harassment and workplace discrimination against students, employees and faculty at educational institutions."); Suzanne E. Eckes, *Title IX and High School Opportunities: Issues of Equity on and in the Court*, 21 WIS. WOMEN'S L.J. 175, 177 (2006) ("Although often the focus is on athletics, Title IX prevents discrimination in all aspects of education including admissions, housing, course offerings, recruitment, financial assistance, counseling, student health, marital and parental status of students, insurance benefits, and harassment.");

²⁸ See 20 U.S.C. § 1681(a)(1)-(9) (providing exemptions for (1) religious schools, if compliance with the statute would run counter to religious tenets; (2) military schools; (3) public higher-education institutions with a continuous tradition of single-sex admissions; (4) fraternities and sororities; (5) voluntary youth organizations; (6) Boy and Girl Scout programs; (7) mother-daughter and father-son activities at educational institutions; (8) beauty pageants; and (9) schools transitioning from single-sex to mixed-sex admissions, which are given a seven-year transition period).

²⁹ CIVIL RIGHTS DIV., U.S. DEP'T OF JUSTICE, TITLE IX LEGAL MANUAL 8 (2001) [hereinafter TITLE IX LEGAL MANUAL], available at <http://www.justice.gov/crt/cor/coord/ixlegal.pdf>.

³⁰ 20 U.S.C. § 1681(a).

³¹ TITLE IX LEGAL MANUAL, *supra* note 29, at 39; see also 34 C.F.R. § 106.2(h)(4)(i) (2009) ("Recipient means any State or political subdivision thereof, or any instrumentality of a State or political subdivision thereof, any public or private agency, institution, or organization, or other entity, or any person, to whom Federal financial assistance is extended directly or through another recipient and [that] operates an education program or activity [that] receives such assistance, including any subunit, successor, assignee, or transferee thereof.")

³² See REITH, *supra* note 27, at 5. Athletic associations may also be covered by Title IX if they receive federal aid. *Id.* (citing *Horner v. Ky. High Sch. Athletic Ass'n*, 43 F.3d 265 (6th Cir. 1994)).

for example, fall within the ambit of Title IX because they receive federal funding through the financial aid programs used by their students.³³

Title IX's antidiscrimination mandate is stated in broad strokes,³⁴ leaving its contours to the regulatory agencies³⁵ charged with administering the statute.³⁶ To that end, each federal agency distributing educational funds is "authorized and directed" to establish policies ensuring compliance with the statute's mandate and to enforce those policies by any lawful means,³⁷ including the termination of funding.³⁸ In addition to administrative enforcement, individual plaintiffs may bring suit under Title IX for monetary damages.³⁹

³³ See *Grove City Coll. v. Bell*, 465 U.S. 555, 569-70 (1984) ("Title IX coverage is not foreclosed because federal funds are granted to Grove City's students rather than directly to one of the College's educational programs."), *superseded by statute on other grounds*, Civil Rights Restoration Act of 1987, Pub. L. No. 100-259, § 3(a), 102 Stat. 28, 28-29 (codified as amended at 20 U.S.C. § 1687 (2006)); see also 117 CONG. REC. 30,408 (1971) (statement of Senator Birch Bayh) ("I doubt very much whether even one institution of higher education today, private or public, is not receiving some Federal assistance."). All references in this note to Senator Bayh are to Birch Evans Bayh II.

In addition to monetary awards and grants, federal assistance may also take the form of "use or rent of federal land or property at below market value, federal training, a loan of federal personnel, subsidies, and other arrangements with the intention of providing assistance." TITLE IX LEGAL MANUAL, *supra* note 29, at 25; see also 34 C.F.R. § 106.2(g) (2009) (defining federal financial assistance in detail).

³⁴ 20 U.S.C. §§ 1681-1688.

³⁵ Under the *Chevron* doctrine, an agency's interpretation of a statute that it administers is accorded a certain degree of judicial deference. See *Chevron, U.S.A., Inc. v. Natural Res. Def. Council, Inc.*, 467 U.S. 837, 843-44 (1984) ("If Congress has explicitly left a gap for the agency to fill, there is an express delegation of authority to the agency to elucidate a specific provision of the statute by regulation. Such legislative regulations are given controlling weight unless they are arbitrary, capricious, or manifestly contrary to the statute.>").

³⁶ The statute expressly authorizes any federal department or agency that is "empowered to extend Federal financial assistance to any education program or activity . . . to effectuate [Title IX's antidiscrimination mandate] . . . by issuing rules, regulations, or orders of general applicability." 20 U.S.C. § 1682.

³⁷ *Id.*

³⁸ *Id.*; see also 28 C.F.R. § 42.108(b) (2009) ("If an applicant or recipient fails or refuses to furnish an assurance [of nondiscrimination] required under § 42.105, or fails or refuses to comply with the provisions of the assurance it has furnished, or otherwise fails or refuses to comply with any requirement imposed by or pursuant to title VI or this subpart, Federal financial assistance may be suspended, terminated, or refused . . ."). Title IX regulations incorporate the administrative enforcement procedures of Title VI of the Civil Rights Act of 1964. See 34 C.F.R. § 106.71 (2009) (cross-referencing 34 C.F.R. § 100.6-100.11).

³⁹ *Franklin v. Gwinnett Cnty. Pub. Sch.*, 503 U.S. 60, 76 (1992) (holding that a private party can recover damages in a Title IX suit); *Cannon v. Univ. of Chi.*, 441 U.S. 677, 689 (1979) (holding that an individual plaintiff has an implied private right of action under Title IX).

B. *Background and Scope of Title IX*

Title IX was enacted in 1972 as one of many congressional measures⁴⁰ designed to combat gender inequality.⁴¹ As the civil rights movement gained currency in the 1960s, gender discrimination in education became a prominent political issue.⁴² In 1970, hearings before a Special House Subcommittee documented pervasive gender discrimination in educational institutions.⁴³ Two years later, during the Senate debate on the Education Amendments of 1972, Senator Birch Bayh⁴⁴ introduced the amendment that was ultimately passed as Title IX.⁴⁵

As originally enacted, Title IX said nothing about athletics.⁴⁶ In fact, sports are virtually absent in the statute's

⁴⁰ See, e.g., Equal Credit Opportunity Act, Pub. L. No. 93-495, § 502, 88 Stat. 1500, 1521 (1974) (codified as amended at 15 U.S.C. § 1691 (2006)) (prohibiting discrimination in consumer credit practices on the basis of sex or marital status); Women's Educational Equity Act of 1974, Pub. L. No. 93-380, § 408, 88 Stat. 554, 554-55 (codified as amended at 20 U.S.C. § 1866 (2006)) (authorizing federal funding to programs designed to promote gender equity in education); Equal Rights Amendment, H.R.J. Res. 208, 92d Cong., 2d Sess., 86 Stat. 1523, 1523-24 (1972) (proposed constitutional amendment guaranteeing equal rights to both sexes under state and federal law).

⁴¹ As former Senator Birch Bayh—the principal sponsor of the original legislation—stated, “What we were really looking for was equal opportunity . . . for young women and for girls in the educational system of the United States of America. . . . [T]hat's what Title IX was intended to do.” Senator Birch Bayh, Address at the Secretary's Commission on Opportunity in Athletics 24 (Aug. 27, 2002), available at <http://www.ed.gov/about/bdscomm/list/athletics/transcript-082702.pdf>.

⁴² TITLE IX LEGAL MANUAL, *supra* note 29, at 16; WELCH SUGGS, A PLACE ON THE TEAM: THE TRIUMPH AND TRAGEDY OF TITLE IX 32 (2005).

Sex discrimination in employment was prohibited by Title VII of the Civil Rights Act of 1964, but Title VII specifically exempted academic institutions. Nancy Hogshead-Makar & Andrew Zimbalist, *Staking a Claim: The First Decade*, in EQUAL PLAY: TITLE IX AND SOCIAL CHANGE 49, 49 (Nancy Hogshead-Makar & Andrew Zimbalist eds., 2007). And while Title VI of the Civil Rights Act of 1964 proscribed racial discrimination in the educational context, it did not apply to women as a class. *Id.*

⁴³ See *Discrimination Against Women: Hearings Before the Spec. Subcomm. on Educ. of the H. Comm. on Educ. & Labor on § 805 of H.R. 16098*, 91st Cong., 2d Sess. (1970).

⁴⁴ All references in this note to Senator Bayh are to Birch Evans Bayh II.

⁴⁵ See Education Amendments of 1972, Pub. L. No. 92-318, §§ 901-03, 86 Stat. 235, 373-75 (codified as amended at 20 U.S.C. §§ 1681-1688 (2006)); see also Hogshead-Makar & Zimbalist, *supra* note 42, at 50. Senator Bayh first introduced his proposal as an amendment to the Education Amendments of 1971, S. 659, 92d Cong., 1st Sess. (1971). See 117 CONG. REC. 30,403 (1971) (statement of Senator Bayh) (introducing an amendment to S. 659, 92d Cong., 1st Sess. (1971)). But Senator Bayh's 1971 proposal never came to a vote on the Senate floor because it was deemed not germane to the bill. See 117 CONG. REC. 30,415 (1971).

⁴⁶ See EILEEN MCDONAGH & LAURA PAPPANO, PLAYING WITH THE BOYS: WHY SEPARATE IS NOT EQUAL IN SPORTS 103 (2008).

pre-enactment history.⁴⁷ Soon after the law's passage, however, it became clear that athletic programs could fall within Title IX's broad antidiscrimination provision.⁴⁸ The National Collegiate Athletic Association (NCAA)—male-only at the time—mounted a fierce lobbying campaign to limit the legislation's coverage of athletics.⁴⁹ These attempts were ultimately unsuccessful,⁵⁰ and in 1974, Congress made it clear that Title IX reached school athletic programs when it directed the Department of Health, Education, and Welfare (HEW)—the predecessor of the Department of Education (DOE)⁵¹—to issue regulations for intercollegiate athletics.⁵²

The athletic regulations were signed into law in 1975,⁵³ but it would take nearly thirteen more years to resolve which

⁴⁷ See 118 CONG. REC. 5807 (1972) (statement of Senator Bayh) (noting that differential treatment based solely on sex would be permitted only in exceptional cases “such as . . . in sports facilities or other instances where personal privacy must be preserved”); 117 CONG. REC. 30,407 (1971) (statement of Senator Bayh) (explaining that Title IX, as proposed, would not mandate sex-integrated intercollegiate football or locker rooms); see also Courtney W. Howland, Note, *Sex Discrimination and Intercollegiate Athletics: Putting Some Muscle on Title IX*, 88 YALE L.J. 1254, 1255 n.11 (1979) (“[S]ports were only mentioned twice in the congressional debate.”).

Moreover, because Title IX was passed as a floor amendment—without formal hearings or a committee report—there is little pre-enactment legislative history surrounding the statute's scope. See *N. Haven Bd. of Educ. v. Bell*, 456 U.S. 512, 527 (1982) (noting that, due to Title IX's genesis as a floor amendment, there is little legislative history surrounding its scope); Diane Heckman, *Women & Athletics: A Twenty Year Retrospective on Title IX*, 9 U. MIAMI ENT. & SPORTS L. REV. 1, 9 (1992) (same); Brian L. Porto, *Completing the Revolution: Title IX as Catalyst for an Alternative Model of College Sports*, 8 SETON HALL J. SPORT L. 351, 359 (1998) (same).

⁴⁸ See *Cohen v. Brown Univ.*, 991 F.2d 888, 893 (1st Cir. 1993).

⁴⁹ See MCDONAGH & PAPPANO, *supra* note 46, at 103-04. The NCAA initially pushed for an amendment that would have excluded intercollegiate athletics altogether from Title IX. *Id.* at 138-39. When these efforts failed, the association instead sought an exemption for revenue-producing sports. See Porto, *supra* note 47, at 361.

⁵⁰ In 1974, Senator John Tower offered an NCAA-supported bill that would have exempted from Title IX any sport that produced revenue or donations for a school. Hogshead-Makar & Zimbalist, *supra* note 42, at 50; Porto, *supra* note 47, at 361. Although the Tower Amendment passed in the Senate, it was rejected during a House-Senate conference committee. Porto, *supra* note 47, at 361.

⁵¹ Title IX enforcement responsibility was transferred from HEW to the DOE when Congress split HEW into two separate administrative agencies, (1) the Department of Health and Human Services and (2) the DOE. See Department of Education Organization Act, Pub. L. No. 96-88, § 102, 93 Stat. 668, 670 (1979) (codified at 20 U.S.C. § 3441 (2006)). The DOE adopted the Title IX regulations promulgated by HEW virtually unchanged. *Cohen*, 991 F.2d at 895.

⁵² Education Amendments of 1974, Pub. L. No. 93-380, § 844, 88 Stat. 484, 612 (directing the Secretary of HEW to “prepare and publish . . . regulations implementing the provisions of title IX,” including rules for intercollegiate athletics, “considering the nature of particular sports”); see also 20 U.S.C. § 1681 (referencing the Education Amendments of 1974); Hogshead-Makar & Zimbalist, *supra* note 42, at 50.

⁵³ See 40 Fed. Reg. 24,128 (1975) (codified at 34 C.F.R. § 106). The regulations also provided a grace period for schools to come into compliance with Title

athletic programs and activities came within Title IX's jurisdictional scope.⁵⁴ In the interim, courts struggled to determine whether the federal assistance necessary to trigger Title IX coverage was institution-wide or program-specific.⁵⁵ Under the institution-wide approach, if any part of an educational institution received federal assistance, the entire institution fell within the purview of Title IX.⁵⁶ Proponents of the program-specific approach, by contrast, maintained that Title IX reached only the educational programs and departments that received federal funds directly.⁵⁷ The implications of this debate were far-reaching. Because school athletic departments rarely received direct federal aid, the program-specific interpretation effectively insulated school athletics from Title IX's grasp.⁵⁸

In 1984, the Supreme Court resolved this judicial split. In *Grove City College v. Bell*, the Court held that Title IX was program-specific.⁵⁹ This ruling effectively "cabined Title IX"⁶⁰ until 1988 when Congress enacted the Civil Rights Restoration Act⁶¹ (Restoration Act), which ratified the institution-wide approach.⁶² Adopting a broad definition of *program or activity*,⁶³

IX. Elementary schools were given until July 1976; high schools and colleges had until July 1978. *Id.* at 24,143.

⁵⁴ See Civil Rights Restoration Act of 1987, Pub. L. No. 100-259, § 2, 102 Stat. 28, 28-29 (1988) (codified as amended at 20 U.S.C. § 1687 (2006)) (defining *program or activity* broadly, effectively bringing all federally funded educational institutions and their component programs within the purview of Title IX).

⁵⁵ Jill K. Johnson, *Title IX and Intercollegiate Athletics: Current Judicial Interpretation of the Standards for Compliance*, 74 B.U. L. REV. 553, 560 (1994).

⁵⁶ Porto, *supra* note 47, at 360.

⁵⁷ See Johnson, *supra* note 55, at 560-61; Porto, *supra* note 47, at 360. For a compilation of early-1980s decisions reaching opposite conclusions on the meaning of *program or activity*, see Johnson, *supra* note 55, at 560 nn.48-49 (1994) and the cases cited there.

⁵⁸ See Porto, *supra* note 47, at 360.

⁵⁹ *Grove City Coll. v. Bell*, 465 U.S. 555, 571-74 (1984).

⁶⁰ See *Cohen v. Brown Univ.*, 991 F.2d 888, 894 (1st Cir. 1993).

⁶¹ Civil Rights Restoration Act of 1987, Pub. L. No. 100-259, § 2, 102 Stat. 28, 28-29 (1988) (codified as amended at 20 U.S.C. § 1687 (2006)). Although this legislation was not passed until several years after *Grove City*, Congress responded to the decision rather quickly. Just weeks after the *Grove City* decision, Senator Edward Kennedy introduced a bill that would have replaced Title IX's phrase *program or activity* with the word *recipient*. See S. 2598, 98th Cong. (1984). Representative Paul Simon introduced an identical bill in the House. See H.R. 5490, 98th Cong. (1984).

⁶² The Act specifically stated,

Congress finds that (1) certain aspects of recent decisions and opinions of the Supreme Court have unduly narrowed or cast doubt upon the broad application of title IX of the Education Amendments of 1972 . . . and; (2) legislative action is necessary to restore the prior consistent and long-standing executive branch interpretation and broad, institution-wide application of those laws as previously administered.

the Restoration Act effectively brought all federally funded educational institutions—and their component athletic programs—within the ambit of Title IX.⁶⁴

C. *Title IX's Regulatory Enforcement Scheme*

The mechanics of Title IX compliance are predominantly a matter of regulatory law. The Office for Civil Rights (OCR), a division within the DOE, has primary enforcement responsibility for Title IX.⁶⁵ OCR enforces the statute by investigating complaints alleging Title IX violations and by conducting periodic compliance reviews on its own initiative.⁶⁶ If OCR determines that an institution has violated the law, it will attempt to resolve the discrimination by informal means.⁶⁷ If these efforts fail, however, OCR will initiate formal procedures, culminating in termination of federal assistance.⁶⁸

Title IX compliance is assessed in accordance with the DOE's⁶⁹ administrative regulations, originally issued in 1975.⁷⁰ Tracking the statute's language, the regulations broadly prohibit sex discrimination in school athletics.⁷¹ Under the regulations, qualifying institutions must provide equal athletic opportunities for both sexes.⁷² The athletic opportunities available to male and female students, however, need not be exactly the same.⁷³ For example, in competitive sports, sex-segregated teams are permissible as long as comparable teams are offered to both

Civil Rights Restoration Act of 1987 § 2, 102 Stat. at 28.

⁶³ *See id.* at 28-29.

⁶⁴ *See* Porto, *supra* note 47, at 364.

⁶⁵ Office for Civil Rights, *OCR Complaint Processing Procedures*, U.S. DEP'T OF EDUC., <http://www2.ed.gov/about/offices/list/ocr/complaints-how.html> (last modified Jan. 8, 2010).

⁶⁶ Title IX: A Policy Interpretation, 44 Fed. Reg. 71,413, 71,418 (1979) [hereinafter *Policy Interpretation*].

⁶⁷ *Id.* at 71,418-71,419.

⁶⁸ *Id.* at 71,419.

⁶⁹ Title IX's implementing regulations were originally promulgated by HEW, *see supra* notes 51-52 and accompanying text, as was a subsequent policy interpretation of the regulations, *see Policy Interpretation, supra* note 66, at 71,413. For the sake of clarity, however, this note will treat HEW's successor, the DOE, as the promulgating agency.

⁷⁰ *See* 40 Fed. Reg. 24,128 (1975) (codified at 34 C.F.R. § 106).

⁷¹ 34 C.F.R. § 106.41(a) (2009).

⁷² *Id.* § 106.41(c).

⁷³ *See Policy Interpretation, supra* note 66, at 71,417-71,418 ("In the selection of sports, the regulation[s] do[] not require institutions to . . . provide exactly the same choice of sports to men and women.").

sexes or the activity involved is a contact sport.⁷⁴ Moreover, a school may sponsor contact-sport teams exclusively for males; all-female equivalent teams are required only if there is sufficient interest and ability within the female student body.⁷⁵

Compliance with the equal-opportunity mandate is evaluated based on a nonexclusive list of factors delineated in the regulations.⁷⁶ These factors include the provision of facilities and equipment, access to coaching and academic tutoring, travel allowances, compensation of coaches, and publicity.⁷⁷ Also listed is the broader consideration of whether a school “effectively accommodate[s] the interests and abilities . . . of both sexes.”⁷⁸

The effective-accommodation standard is clarified in OCR’s 1979 Policy Interpretation, which also addresses athletic scholarships and other benefits (such as equipment and facilities).⁷⁹ Compliance with the effective-accommodation mandate is assessed by a disjunctive three-part test: (1) whether athletic opportunities “are provided in numbers substantially proportionate to their respective enrollment[,],” (2) “whether the institution can show a history and continuing practice of program expansion” for the underrepresented sex, or (3) whether “the interests and abilities of the [underrepresented sex] have been fully and effectively accommodated.”⁸⁰ An institution may demonstrate compliance with the law in any of these three ways.⁸¹

⁷⁴ 34 C.F.R. § 106.41(b). Contact sports are defined as “boxing, wrestling, rugby, ice hockey, football, basketball and other sports[,] the purpose or major activity of which involves bodily contact.” *Id.* Integrated competitive teams are required only when (1) an institution sponsors a team for members of one sex but not the other, and (2) the excluded sex’s athletic opportunities have previously been limited. *Id.*

⁷⁵ *See id.*; Policy Interpretation, *supra* note 66, at 71,418.

⁷⁶ 34 C.F.R. § 106.41(c).

⁷⁷ *Id.*

⁷⁸ *Id.*

⁷⁹ Policy Interpretation, *supra* note 66, at 71,415-71,418. The purpose of the Policy Interpretation was to “provide further guidance on what constitutes compliance with the law” in response to “nearly 100 complaints alleging discrimination in athletics against more than 50 institutions of higher education” and “to answer questions from the university community.” *Id.* at 71,413. Although the Policy Interpretation was “designed specifically for intercollegiate athletics,” it specified that “its general principles will often apply to club, intramural, and interscholastic athletic programs.” *Id.*

⁸⁰ *Id.* at 71,418.

⁸¹ Letter from the U.S. Dep’t of Educ., Office for Civil Rights, *Clarification of Intercollegiate Athletics Policy Guidance: The Three-Part Test* (Jan. 16, 1996), available at <http://www2.ed.gov/print/about/offices/list/ocr/docs/clarific.html> (“[T]he three-part test furnishes an institution with three individual avenues to choose from when determining how it will provide individuals of each sex with nondiscriminatory opportunities to participate in intercollegiate athletics. If an institution has met any part of the three-part test, OCR will determine that the institution is meeting this requirement.”).

II. SEX (OR IS IT GENDER?): CREATING CATEGORIES, SHAPING BODIES, AND ASCRIBING MEANING

Before examining Title IX's implications for intersex student athletes, it is important to define the statute's key term: sex. Sex is often distinguished from gender—the former, a biological identity and the latter, a social one.⁸² But sex and gender—biology and culture—are not wholly distinct. Scientific knowledge is not produced in a cultural vacuum. Cultural perceptions inform biological classification.⁸³ On a fundamental level, what counts as one sex or the other is driven by social decision.⁸⁴ Intersex bodies—neither fully male nor fully female—demonstrate that the male-female binary is not preordained. The characteristics used to “sex” bodies⁸⁵ may derive from biology, but it is society, not nature, that ascribes meaning to them.⁸⁶ Moreover, sociocultural factors have physical consequences on human bodies themselves.⁸⁷ Athletic prowess, for example, is not simply a matter of genetics; nor is it solely a matter of biological sex. Social norms and opportunities are important variables.⁸⁸ Like sex categories, the bodily traits viewed as sex-specific contain a cultural dimension.

A. *Sex and Gender: Terminology*

In popular discourse, the term *sex* stands for a “biological categorization based primarily on reproductive potential” while *gender* refers to the social condition of being a man or woman.⁸⁹ In recent years, this distinction between sex

⁸² See *infra* notes 89-94 and accompanying text.

⁸³ See *infra* Part II.B.2.

⁸⁴ See *infra* Part II.B.2.

⁸⁵ This phrase comes from Anne Fausto-Sterling's book, *Sexing the Body*. FAUSTO-STERLING, *SEXING THE BODY*, *supra* note 22.

⁸⁶ Just as sex is not purely biological, gender is not purely social. There is substantial evidence, for example, that human beings are not gender-neutral at birth. To a certain degree, humans are “predisposed and biased to interact with environmental, familial, and social forces in either a male or female mode.” Alice Domurat Dreger, *Ambiguous Sex or Ambivalent Medicine? Ethical Issues in the Treatment of Intersexuality*, HASTINGS CENTER REP., May-June 1998, at 24, 25 [hereinafter Dreger, *Ambiguous Sex*] (quoting Milton Diamond & H. Keith Sigmundson, *Sex Reassignment at Birth: Long-Term Review and Clinical Implications*, 15 ARCHIVES PEDIATRICS & ADOLESCENT MED. 298, 303 (1997)).

⁸⁷ See *infra* Part II.C.2.

⁸⁸ See *infra* notes 99-103, 242-64 and accompanying text.

⁸⁹ See PENELOPE ECKERT & SALLY MCCONNELL-GINET, LANGUAGE AND GENDER 10 (2003).

and gender—body and culture—has been widely debated in scientific and feminist forums.⁹⁰ Sex-linked biological differences have historically been invoked to justify social inequalities between males and females.⁹¹ During the 1970s, in an effort to counter the view of biology as destiny, feminists called for a categorical distinction between sex and gender.⁹² Sex was “the supposed biological essence that underlay gender”; gender referred to “the social overlay that produced two different categories of being—men and women, through an ill-defined process of socialization.”⁹³ While certain anatomical distinctions were obvious, they argued, most differences between men and women were the product of social institutions, not biological determinism.⁹⁴

Initially, this theory was seen as a triumph for feminism.⁹⁵ It “showed why biology could not be used to justify women’s subordination” and provided conceptual backing to challenge gender stereotypes.⁹⁶ Ultimately, however, “[l]eaving ‘sex’ in the realm of scientifically verifiable fact left feminism vulnerable to a new tide of biological difference” used to justify the differential treatment of men and women.⁹⁷

The sex/gender dichotomy has steadily eroded over the past few decades as scholars have demonstrated that culture and body converge significantly.⁹⁸ In actuality, bodies are

⁹⁰ Anne Fausto-Sterling, *Essay Review: The Sex/Gender Perplex*, 31 *STUD. HIST. PHIL. BIOLOGY & BIOMEDICAL SCI.* 637, 637 (2000) [hereinafter Fausto-Sterling, *Sex/Gender Perplex*].

⁹¹ Anne Fausto-Sterling, *The Problem with Sex/Gender and Nature/Nurture*, in *DEBATING BIOLOGY: SOCIOLOGICAL REFLECTIONS ON HEALTH, MEDICINE AND SOCIETY* 123, 123 (Simon J. Williams, Lynda Birke & Gillian A. Bendelow eds., 2003) [hereinafter Fausto-Sterling, *The Problem with Sex/Gender*].

⁹² R.W. Connell, *Making Gendered People: Bodies, Identities, Sexualities*, in *REVISIONING GENDER* 449, 451 (Myra Marx Ferree, Judith Lorber & Beth B. Hess eds., 2000); Fausto-Sterling, *The Problem with Sex/Gender*, *supra* note 91, at 123. For a concise summary of the argument used to advance the sex/gender distinction, see John Hood-Williams, *Sexing the Athletes*, 12 *SOC. SPORT J.* 290, 295-96 (1995).

⁹³ Fausto-Sterling, *The Problem with Sex/Gender*, *supra* note 91, at 123.

⁹⁴ Fausto-Sterling, *Sex/Gender Perplex*, *supra* note 90, at 638.

⁹⁵ Connell, *supra* note 92, at 451-52.

⁹⁶ *Id.*

⁹⁷ Fausto-Sterling, *The Problem with Sex/Gender*, *supra* note 91, at 123-24.

⁹⁸ See ECKERT & MCCONNELL-GINET, *supra* note 89, at 10. Still, the bifurcated perception of sex and gender has not been wholly eradicated from contemporary discourse. See, e.g., *J.E.B. v. Alabama ex rel. T.B.*, 511 U.S. 127, 157 n.1 (1994) (Scalia, J., dissenting) (“The word ‘gender’ has acquired the new and useful connotation of cultural or attitudinal characteristics (as opposed to physical characteristics) distinctive to the sexes. That is to say, gender is to sex as feminine is to female and masculine to male.”); Jill Pilgrim, David Martin & Will Binder, *Far from the Finish Line: Transsexualism and Athletic Competition*, 13 *FORDHAM INTELL. PROP.*

neither static nor immutable; rather, they change over time, and are shaped by social norms, cultural practices, and economic conditions. Life expectancies, for example, are higher in more developed countries than in less developed ones.⁹⁹ Similarly, bone development is not “a passive unfolding of biology” but can be shaped by culture.¹⁰⁰ Urban ultra-Orthodox Jewish adolescents—who perform less physical activity, consume fewer dairy products overall, and are exposed to less sunlight than more secular adolescents—have reduced spinal bone mineral density.¹⁰¹ By contrast, Chinese women that perform daily agricultural labor have increased bone mineral density.¹⁰² Moreover, social norms can influence deliberate bodily processes and changes, such as plastic surgery, diet, and the use of enhancement drugs (i.e., diet pills or steroids).¹⁰³ As these examples elucidate, “there is no obvious point at which sex leaves off and gender begins.”¹⁰⁴ The conceptual bifurcation of sex (as biological) and gender (as culturally constructed), then, is deeply problematic, if not untenable altogether. To analyze sex-linked differences and gendered behaviors, both body and culture must be considered.¹⁰⁵

B. *Intersex Conditions and the Binary Myth*

In the context of intersex conditions, the sex/gender distinction is more than an argument over semantics.

MEDIA & ENT. L.J. 495, 498 (2003) (“[W]hereas ‘sex’ considers what is male and what is female, ‘gender’ considers what is masculine and what is feminine. The two terms are often (incorrectly) used interchangeably.”).

⁹⁹ See, e.g., DEP’T OF ECON. & SOC. AFFAIRS, RETHINKING POVERTY: REPORT ON THE WORLD SOCIAL SITUATION 69 (2010), available at <http://www.un.org/esa/socdev/rwss/docs/2010/fullreport.pdf> (reporting that the average life expectancy for babies born in 2005 was seventy-five years in more developed regions, sixty-four years in less developed regions, and fifty-four years in the least developed regions (citation omitted)); cf. Nancy Krieger & George Davey Smith, “Bodies Count,” and *Body Counts: Social Epidemiology and Embodying Inequality*, 26 EPIDEMIOLOGIC REV. 92, 96 (2004) (“For decades it was suggested that the lower height of the Japanese as compared with Europeans was genetic; however, second- and third-generation Japanese migrants to the United States, and now Japanese people living in Japan, have come to attain heights akin to those of their European counterparts.” (citations omitted)).

¹⁰⁰ Anne Fausto-Sterling, *The Bare Bones of Sex: Part 1—Sex and Gender*, 30 SIGNS: J. WOMEN CULTURE & SOC’Y 1491, 1491, 1498 (2005) [hereinafter Fausto-Sterling, *Bare Bones*].

¹⁰¹ *Id.* at 1491.

¹⁰² *Id.*

¹⁰³ Connell, *supra* note 92, at 454.

¹⁰⁴ See ECKERT & MCCONNELL-GINET, *supra* note 89, at 10.

¹⁰⁵ See Anne Fausto-Sterling, *Is Gender Essential?*, in *SISSIES AND TOMBOYS: GENDER NONCONFORMITY AND HOMOSEXUAL CHILDHOOD* 56 (Matthew Rottnek ed., 1999).

Conventional wisdom posits that binary sex is a biological given, but intersex bodies “mix together anatomical components conventionally attributed to both males and females.”¹⁰⁶ From a purely biological standpoint, then, the two-sex model does not account for the diversity of human beings. The male-female binary is as much the product of social decision as it is a “scientifically verifiable fact.”¹⁰⁷

1. Intersex Conditions

Intersex encompasses a wide range of conditions that cause physical sex traits to develop atypically.¹⁰⁸ Intersex conditions may arise from genital, chromosomal, or gonadal “anomalies.”¹⁰⁹ Hypospadias is a condition affecting the male genitalia where the urethra does not open at the tip of the penis.¹¹⁰ In minor hypospadias, the opening may be located on the underside of the penis; in moderate cases, the urethra may open along the shaft; and in severe forms, it may be as far down as the scrotum.¹¹¹ Chromosomal conditions include Klinefelter syndrome and Turner syndrome. Klinefelter syndrome results in an XXY chromosomal combination in males and, in most cases,

¹⁰⁶ ANNE FAUSTO-STERLING, *SEXING THE BODY*, *supra* note 22, at 31.

¹⁰⁷ Fausto-Sterling, *The Problem with Sex/Gender*, *supra* note 91, at 123; Lisa Pearlman, *Transsexualism as Metaphor: The Collision of Sex and Gender*, 43 *BUFF. L. REV.* 835, 842-43 (1995).

¹⁰⁸ The intersex conditions discussed here are the most common. For further discussion of intersex conditions, see *Intersex Conditions*, INTERSEX SOC’Y N. AM., <http://www.isna.org/faq/conditions> (last visited July 11, 2010). Contrary to popular belief, it is physically impossible to possess both male and female genitals. Alice Domurat Dreger, “Both Sets of Genitals”...*Not.*, ALICEDREGER.COM, http://alicedreger.com/both_sets_of_genitals.html (Mar. 31, 2009).

¹⁰⁹ See generally FAUSTO-STERLING, *SEXING THE BODY*, *supra* note 22, at 51-54; Julie A. Greenberg, *Defining Male and Female: Intersexuality and the Collision Between Law and Biology*, 41 *ARIZ. L. REV.* 265, 281-89 (1999). What constitutes an anomaly is, of course, relative. Intersex bodies are anomalous only if binary sex is the benchmark for normality. But there is good reason to question this understanding of sex. As pathologist and immunologist Gerald Callahan notes,

Even if we wished to explain all [intersex conditions] away as some simple sort of genetic mutation, we have to ask ourselves, why does that mutation keep popping up? Why does it appear in so many societies? Generally, these people aren’t reproductive. Biologically, that should be a death knell for their genes. But the people and their genes don’t go away. Perhaps all of us are essential in ways we have not yet imagined.

GERALD N. CALLAHAN, *BETWEEN XX AND XY: INTERSEXUALITY AND THE MYTH OF TWO SEXES* 149 (2009).

¹¹⁰ FAUSTO-STERLING, *SEXING THE BODY*, *supra* note 22, at 52.

¹¹¹ *Id.*

infertility.¹¹² In Turner syndrome, the absence of one of the sex chromosomes¹¹³ (either X or Y) causes an XO chromosome pattern and unformed, nonfunctioning gonads.¹¹⁴

Swyer syndrome, or pure gonadal dysgenesis, is a gonadal condition occurring in XY individuals.¹¹⁵ Despite having an XY chromosomal makeup, people with Swyer syndrome are phenotypically¹¹⁶ female due to a genetic mutation that prevents testes from forming in utero.¹¹⁷ Some cases of Swyer syndrome are caused by a mutation to the SRY (the sex-determining region Y) gene—the gene on the Y chromosome that induces testes development in an XY fetus.¹¹⁸ Without a functional SRY gene, female genitalia develop by default,¹¹⁹ and an affected child will appear female at birth.¹²⁰ Swyer syndrome is usually undetected until puberty when female secondary sex characteristics, such as breast development, fail to appear and menstruation does not begin.¹²¹

Androgen insensitivity syndrome (AIS) is a hormonal condition affecting XY individuals.¹²² Children with AIS are born with functioning testes but are unable—either completely or partially—to process androgens.¹²³ Because people with complete AIS lack the receptors necessary to metabolize androgens, they

¹¹² See *id.*; Greenberg, *supra* note 109, at 283.

¹¹³ Human cells have twenty-three pairs of chromosomes (forty-six in total). LAURALEE SHERWOOD, HUMAN PHYSIOLOGY: FROM CELLS TO SYSTEMS 745 (7th ed. 2010). Twenty-two of these pairs are autosomal chromosomes, which code for most general human characteristics; sex chromosomes are the twenty-third pair. *Id.* Genetic females have two X chromosomes (XX), while genetic males have one X chromosome and one Y chromosome (XY). *Id.*

¹¹⁴ Greenberg, *supra* note 109, at 284.

¹¹⁵ *Id.*

¹¹⁶ The word *phenotype* refers to the observable characteristics of an organism. *Genotype* describes the set of genes an organism carries. Richard Lewontin, *The Genotype/Phenotype Distinction*, STANFORD ENCYCLOPEDIA PHIL. (Jan. 23, 2004), <http://plato.stanford.edu/entries/genotype-phenotype/>.

¹¹⁷ NAT'L ORG. FOR RARE DISORDERS, SWYER SYNDROME 2-3 (2008), available at <http://orphancommunications.com/Documents/Swyer%20syndrome%20WS.pdf>.

¹¹⁸ *Id.* at 3; Surg Cdr R Panicker et al., *Swyer's Syndrome: An Uncommon Cause of Primary Amenorrhoea*, 65 MED. J. ARMED FORCES INDIA 186, 186 (2009).

¹¹⁹ Ovaries, on the other hand, will not develop in individuals with Swyer syndrome. Greenberg, *supra* note 109, at 284. Affected individuals will have only streak gonads (i.e., unformed and nonfunctional gonads). *Id.*

¹²⁰ *Id.* During gestation, primordial gonad cells develop as female in the absence of a virilizing factor. COMM. ON UNDERSTANDING THE BIOLOGY OF SEX & GENDER DIFFERENCES, INST. OF MED., EXPLORING THE BIOLOGICAL CONTRIBUTIONS TO HUMAN HEALTH: DOES SEX MATTER? 41 (Theresa M. Wizemann & Mary-Lou Pardue eds., 2001).

¹²¹ Greenberg, *supra* note 109, at 284.

¹²² See *id.* at 286.

¹²³ See *id.*

develop as phenotypic females.¹²⁴ Individuals with partial AIS develop phenotypic male features in varying degrees, depending on the extent that their bodies can process androgens.¹²⁵ Similar to AIS, 5-alpha reductase deficiency (5-ARD) is characterized by XY chromosomes, male gonads, and a female appearance at birth.¹²⁶ Unlike AIS, however, the testes of an individual with 5-ARD descend at puberty.¹²⁷ Still another hormonal condition is congenital adrenal hyperplasia (CAH). In CAH, an enzyme deficiency prevents the synthesis of cortisol, in turn, causing an increased production of androgen.¹²⁸ While this abundance of androgen has no gonadal or chromosomal effect, it causes the genitals to appear masculine, either at birth or later.¹²⁹

2. Constructing Categories and Containing Bodies

With intersex conditions occurring so frequently and in such varied form,¹³⁰ one might wonder how binary sex became so culturally ingrained in the first place. As Brown University biologist Anne Fausto-Sterling explains, prevailing gender norms frame scientists' approach, study, and interpretation of science itself—shaping “what kinds of knowledge scientists produce about sex.”¹³¹ For example, the labeling of estrogens

¹²⁴ See *id.* Complete AIS results in undescended (or internal) testes. See *id.*

¹²⁵ See *id.* at 287.

¹²⁶ CALLAHAN, *supra* note 109, at 109. Individuals with 5-ARD have a deficiency of 5-alpha reductase type 2, the enzyme needed to convert testosterone to dihydrotestosterone. *Id.* Without the dihydrotestosterone conversion, testes develop but do not descend, causing the genitals to appear female. *Id.* In the best-selling novel *Middlesex*, the narrator and protagonist has 5-ARD. See JEFFREY EUGENIDES, *MIDDLESEX* (2002).

¹²⁷ CALLAHAN, *supra* note 109, at 108-09.

¹²⁸ Greenberg, *supra* note 109, at 288; Perrin C. White & Phyllis W. Speiser, *Congenital Adrenal Hyperplasia due to 21-Hydroxylase Deficiency*, 21 *ENDOCRINE REV.* 245, 245-46 (2000).

¹²⁹ See FAUSTO-STERLING, *SEXING THE BODY*, *supra* note 22, at 52; Greenberg, *supra* note 109, at 288.

A very rare gonadal condition is ovotesticular disorder of sexual development (ovotesticular DSD), formerly called *true hermaphroditism*. Affected individuals have both ovarian and testicular tissue either in the same or different gonads. CALLAHAN, *supra* note 109, at 76-77; Greenberg, *supra* note 109, at 285.

¹³⁰ Intersex conditions also exist among animals. For example, hamlet fish have both male and female reproductive organs, and while mating, they take turns in the roles of male and female. CALLAHAN, *supra* note 109, at 110. Similarly, all female spotted hyenas have genitals that closely resemble those of their male counterparts. *Id.* at 100-01. Female spotted hyenas have had this anatomical trait for as long as the species has existed—about seven million years; “[a]nd all that time [they] have had an anatomical ‘problem’ that, if they were humans, we would insist on fixing.” *Id.* at 103.

¹³¹ FAUSTO-STERLING, *SEXING THE BODY*, *supra* note 22, at 3; see also ANNE FAUSTO-STERLING, *MYTHS OF GENDER: BIOLOGICAL THEORIES ABOUT MEN AND WOMEN* 220 (2d ed. 1992) [hereinafter FAUSTO-STERLING, *MYTHS OF GENDER*] (“[O]ur cultural

and androgens as *sex hormones*—estrogen as female and androgen as male—was largely a consequence of preconceived notions among early-twentieth-century researchers that hormones were “chemical messengers of masculinity and femininity.”¹³² As research progressed, scientists discovered that sex hormones have many functions unrelated to sex and that neither “male” nor “female” hormones are unique to the bodies of either sex.¹³³ By that point, however, “the assumption[] that hormones were gendered [was] already deeply ingrained”¹³⁴—an idea that was preserved when the terms *androgens* (i.e., to build a man) and *estrogens* (i.e., to cause estrus, the reproductive cycle) were adopted in lieu of *male hormones* and *female hormones*, respectively.¹³⁵

Similarly, as feminist and gay rights activists vigorously challenged prevailing gender roles during the late nineteenth century, scientists and physicians contained intersex by conceptually narrowing the number of people whose bodies did not conform to the binary paradigm.¹³⁶ Alice Dreger, Northwestern University professor of clinical medical humanities and bioethics, dubs this period the “Age of Gonads.”¹³⁷ During this time, biomedical experts designated gonads as the sole signifiers of true sex.¹³⁸ Thus, under this approach, the conditions identified as intersex were limited to the rare case of true hermaphroditism,¹³⁹ a condition characterized by the presence of both ovarian and testicular tissue in the gonads.¹⁴⁰ And given the unsophisticated

conceptions will change the way our bodies grow, and how our bodies grow will change the way our culture views them.”); THOMAS LAQUEUR, MAKING SEX: BODY AND GENDER FROM THE GREEKS TO FREUD 10 (1992); Anne Fausto-Sterling, *Society Writes Biology/Biology Constructs Gender*, 116 DAEDALUS 61, 69 (1987) [hereinafter Fausto-Sterling, *Society Writes Biology*] (“The language used [in biological literature] to describe ‘the facts’ has channeled experimental thought along certain lanes, leaving others not only unexplored but unnoticed.”); Emily Martin, *The Egg and the Sperm: How Science Has Constructed a Romance Based on Stereotypical Male-Female Roles*, 16 SIGNS 485, 486 (1991) (“[G]ender stereotypes [lie] hidden within the scientific language of biology.”).

¹³² NELLY OUDSHOORN, BEYOND THE NATURAL BODY: AN ARCHEOLOGY OF SEX HORMONES 16-17 (1994); see FAUSTO-STERLING, SEXING THE BODY, *supra* note 22, at 170-94.

¹³³ FAUSTO-STERLING, SEXING THE BODY, *supra* note 22, at 177.

¹³⁴ *Id.*

¹³⁵ *Id.* at 188.

¹³⁶ ALICE DREGER, HERMAPHRODITES AND THE MEDICAL INVENTION OF SEX 146 (1998) [hereinafter DREGER, HERMAPHRODITES].

¹³⁷ *Id.* at 139-66.

¹³⁸ *Id.*

¹³⁹ The contemporary term for *true hermaphroditism* is *ovotesticular DSD*. See CALLAHAN, *supra* note 109, at 76-77.

¹⁴⁰ Under the gonadal definition of sex, individuals with mixed anatomies were forced into the binary mold: “People with testicular tissue but with some

nature of nineteenth-century surgical procedures, “the only ‘true hermaphrodites’ tended to be dead and autopsied hermaphrodites.”¹⁴¹

The gonad-driven approach ultimately became untenable in the early twentieth century after new diagnostic procedures—namely, laparotomies and biopsies¹⁴²—allowed physicians to classify people as *true hermaphrodites*.¹⁴³ Faced with this conundrum, biomedicine retreated from a “strict notion of gonadal ‘true sex’ toward a pragmatic concept of gender,” advocating “gender reconstruction” in intersex cases.¹⁴⁴ Under this approach, physicians “increasingly decided to assign a *gender* identity to each patient—strictly boy/man or girl/woman—according to what a person’s social role already was or was likely to be given that person’s appearance.”¹⁴⁵

In the 1950s, surgical intervention became the norm based on the optimum gender of rearing (OGR) theory, developed by Johns Hopkins University psychologist John Money and his colleagues.¹⁴⁶ The Johns Hopkins team believed that gender identity was completely malleable at birth and that “children could be steered one way or the other so long as the steering began [approximately] before the age of two.”¹⁴⁷ Based on this assumption, all children born with ambiguous genitals underwent surgery so that they could be characterized as conventional males or females.¹⁴⁸

Under the OGR model, physicians played a dominant role in deciding whether an intersex infant should be raised as a boy or a girl.¹⁴⁹ Because the OGR theory assumed that gender

otherwise ‘ambiguous’ anatomy were now labeled ‘male pseudo-hermaphrodites’—that is, ‘true’ males; people with ovarian tissue but with some otherwise ambiguous anatomy were labeled ‘female pseudo-hermaphrodites’—‘true’ females.” Dreger, *Ambiguous Sex*, *supra* note 86, at 26.

¹⁴¹ *Id.*

¹⁴² A laparotomy is an exploratory procedure, while a biopsy is a sampling of cells or tissue for examination. See Alice Dreger, *Doctors Containing Hermaphrodites: The Victorian Legacy*, *CHRYSALIS*, Fall 1997-Winter 1998, at 15, 20 [hereinafter Dreger, *Victorian Legacy*].

¹⁴³ Dreger, *Ambiguous Sex*, *supra* note 86, at 26.

¹⁴⁴ *Id.* at 27 (second internal quotation marks omitted).

¹⁴⁵ Dreger, *Victorian Legacy*, *supra* note 142, at 21; see also Dreger, *Ambiguous Sex*, *supra* note 86, at 27.

¹⁴⁶ See Dreger & Herndon, *supra* note 16, at 202; *What’s Wrong with the Way Intersex Has Traditionally Been Treated?*, INTERSEX SOC’Y N. AM., <http://www.isna.org/faq/concealment> (last visited Jan. 3, 2010) [hereinafter ISNA, *What’s Wrong?*].

¹⁴⁷ Dreger & Herndon, *supra* note 16, at 202; see also ISNA, *What’s Wrong?*, *supra* note 146.

¹⁴⁸ FAUSTO-STERLING, *SEXING THE BODY*, *supra* note 22, at 56.

¹⁴⁹ CALLAHAN, *supra* note 109, at 7.

identity was malleable at birth,¹⁵⁰ surgical—and cultural—practicality dictated gender assignment.¹⁵¹ To determine whether an infant born with an “undersized” phallus should be assigned male or female, the standard considerations were the potential for vaginal penetration and urination while standing up.¹⁵² This phallogocentric approach was based on a cultural measurement of male adequacy—and an elusive one at that, since reasonable minds can (and do) disagree on where to set the threshold of normality.¹⁵³ Indeed, some researchers have concluded that “a small penis does not preclude [a] normal male role.”¹⁵⁴ And at any rate, a penis deemed inadequate at birth may grow significantly at puberty.¹⁵⁵

Few criteria, on the other hand, were required for a surgically constructed vagina to be deemed functional; suitability for sexual intercourse sufficed.¹⁵⁶ Thus, intersex infants born with undersized penises were assigned female largely because it was surgically expedient.¹⁵⁷ Similarly, infants that had “enlarged” clitorises—an attribute regarded as cosmetically offensive—were subjected to clitoral reduction surgeries.¹⁵⁸

While surgical intervention became the standard of care after the 1950s,¹⁵⁹ rarely were these procedures *medically*

¹⁵⁰ Dreger & Herndon, *supra* note 16, at 202; *see also* ISNA, *What's Wrong?*, *supra* note 146. Though Money's writings advised clinicians to inform intersex children of their medical histories at an appropriate age, it became standard practice by the early 1990s to withhold information and engage in outright deception. Dreger & Herndon, *supra* note 16, at 203.

¹⁵¹ *See* FAUSTO-STERLING, *SEXING THE BODY*, *supra* note 22, at 77; Dreger, *Ambiguous Sex*, *supra* note 86, at 28-29; Fausto-Sterling, *Sex/Gender Perplex*, *supra* note 90, at 641-44; Suzanne Kessler, *The Medical Construction of Gender*, 16 *SIGNS* 3, 25 (1990). For a brief history of the social understanding of sexual anatomy and how it has changed over time, *see* CALLAHAN, *supra* note 109, at 9-25. Our understanding of sexual anatomy continues to evolve even today. *See, e.g.,* *The G-Spot “Doesn't Appear to Exist.” Say Researchers*, BBC NEWS (U.K.) (Jan. 4, 2010), <http://news.bbc.co.uk/2/hi/health/8439000.stm> (discussing a recent study that challenges the existence of a G-spot in women).

¹⁵² Fausto-Sterling, *Sex/Gender Perplex*, *supra* note 90, at 641.

¹⁵³ Dreger, *Ambiguous Sex*, *supra* note 86, at 29.

¹⁵⁴ *Id.*

¹⁵⁵ *See id.*; *see also* Fausto-Sterling, *Sex/Gender Perplex*, *supra* note 90, at 642-43. In Saudi Arabia, for example, XX children with late-diagnosed congenital adrenal hyperplasia (CAH)—typically raised as girls in the United States and in Europe—are often brought up as boys due to the cultural preference for male children. Fausto-Sterling, *Sex/Gender Perplex*, *supra* note 90, at 643. For a discussion of CAH, *see supra* discussion accompanying notes 128-29.

¹⁵⁶ Dreger, *Ambiguous Sex*, *supra* note 86, at 29.

¹⁵⁷ *Id.* at 28.

¹⁵⁸ *Id.*

¹⁵⁹ Dreger & Herndon, *supra* note 16, at 202.

necessary.¹⁶⁰ An infant's "genital ambiguity [would be] 'corrected' not because it [wa]s threatening to the infant's life but because it [wa]s threatening to the infant's culture."¹⁶¹ Today, however, the OGR approach has declined significantly.¹⁶² Contemporary physicians are much more receptive to a patient-centered approach to intersex births—a model based on psychosocial support, full disclosure, informed consent, and caution in surgical intervention.¹⁶³

Despite this progress, genital surgery remains a common practice.¹⁶⁴ The decision to surgically assign an intersex infant one gender or the other is influenced by normative views about how bodies ought to look and what bodies ought to do.¹⁶⁵ Even when surgery is delayed, parents of intersex infants still must choose to raise their children as one gender or the other. While physicians are no longer the primary decision-makers, the decision is made nonetheless because "[t]o participate in society, we must be sexed."¹⁶⁶ And sex/gender identification outside the

¹⁶⁰ See Fausto-Sterling, *Sex/Gender Perplex*, *supra* note 90, at 642 ("The decision to assign an intersex infant to the male gender is more social than medical It is not what the sex organ does for the body to which it is attached It is what the organ does vis-à-vis other bodies.").

¹⁶¹ Kessler, *supra* note 151, at 25; see also Fausto-Sterling, *Sex/Gender Perplex*, *supra* note 90, at 642.

¹⁶² See Dreger & Herndon, *supra* note 16, at 205-07. Money's OGR model was severely undermined when Milton Diamond and H. Keith Sigmundson revealed that David Reimer, who Money had reassigned as female after a botched circumcision, had never actually identified as female and underwent a phalloplasty as a teenager after learning of his medical history. See Milton Diamond & H. Keith Sigmundson, *Sex Reassignment at Birth: Long-Term Review and Clinical Implications*, 15 ARCHIVES PEDIATRICS & ADOLESCENT MED. 298, 300 (1997).

¹⁶³ See Dreger & Herndon, *supra* note 16, at 205-07.

¹⁶⁴ See *id.*

¹⁶⁵ See FAUSTO-STERLING, SEXING THE BODY, *supra* note 22, at 77; Fausto-Sterling, *Sex/Gender Perplex*, *supra* note 90, at 642. Similarly, the increasing prevalence of cosmetic genital surgery demonstrates the pursuit of an aesthetically ideal genital appearance. See, e.g., Virginia Braun, *In Search of (Better) Sexual Pleasure: Female Genital 'Cosmetic' Surgery*, 8 SEXUALITIES 407, 418-20 (2005).

Although physicians today approach gender assignment surgery with more caution, the view of intersex as a medical emergency remains prevalent. Earlier this year, for example, controversy emerged over the use of prenatal dexamethasone (popularly known as *dex*) to prevent children from being born with atypical genitalia. See Catherine Elton, *A Prenatal Treatment Raises Questions of Medical Ethics*, TIME (June 18, 2010), <http://www.time.com/time/health/article/0,8599,1996453,00.html>. This prenatal treatment was prescribed not to prevent the underlying intersex condition; instead, it targeted the condition's physical manifestations, *id.*, reflecting the social judgment that sex ambiguity itself is pathological.

¹⁶⁶ RIKI ANNE WILCHINS, READ MY LIPS: SEXUAL SUBVERSION AND THE END OF GENDER 56 (1997).

binary model is simply not a socially viable option.¹⁶⁷ As sports historian Kevin Wamsley writes,

Our inability to deal with, at times even to conceive, that gender variance is not abnormal but, instead, unique and more prevalent than commonly acknowledged, is based upon deep cultural assumptions that sex and gender are and should be binary constructs and that congruency is the order of the day.¹⁶⁸

The existence of alternative sex/gender systems illustrates this point. For example, Indian culture recognizes a third sex, the *hijras*, who are neither male nor female.¹⁶⁹ Similarly, some Native American cultures acknowledge a third sex/gender category, which broadly encompasses individuals whose behavior is traditionally associated with the opposite sex/gender.¹⁷⁰ In Brazil, the sex/gender system is grounded in a dichotomy between “men and not-men.”¹⁷¹ *Travesti*, characterized as the latter group, is the term for a homosexual male who dresses as a woman and takes hormones to achieve feminine features, but does not seek genital-altering surgery.¹⁷² Intersex bodies appear in mythology as well. According to Greek myth, Hermaphroditus acquired both male and female characteristics after the gods fused his body with the female body of the nymph

¹⁶⁷ Alice Dreger emphasizes that most intersex groups do not advocate the eradication of gender categories. Rather, intersex activists are primarily concerned with the medical mismanagement of intersex conditions—namely, genital surgeries performed on children too young to consent. See Dreger & Herndon, *supra* note 16, at 216-17. Dreger shares the view of most intersex groups that gender assignment is possible without corresponding genital surgery and that an intersex child *should* be raised as a boy or a girl because doing otherwise would be socially traumatic for a child. See *id.* at 217. Some physicians, however, are hesitant to endorse an approach that postpones genital surgery. See, e.g., Garry L. Warne & Jacqueline K. Hewitt, *Disorders of Sex Development: Current Understanding and Continuing Controversy*, 190 *MED. J. AUSTRAL.* 612, 612 (2009) (cautioning that delaying genital surgery increases the risk of gonadal malignancy).

¹⁶⁸ KEVIN B. WAMSLEY, SOCIAL SCIENCE LITERATURE ON SPORT AND TRANSITIONING/TRANSITIONED ATHLETES 6 (2008), available at <http://www.athletescan.com/Content/Publications.asp> (follow the “Promising Practices: Working with Transitioning/Transitioned Athletes in Sport” hyperlink; then follow the “Social Science Literature on Sport and Transitioning/Transitioned Athletes—LITERATURE REVIEW” hyperlink).

¹⁶⁹ See Serena Nanda, *Cross-Cultural Issues*, in *HANDBOOK OF SEXUAL AND GENDER IDENTITY DISORDERS* 457, 461-66 (David L. Rowland & Luca Inrocci eds., 2008).

¹⁷⁰ See Carolyn Epple, *Coming to Terms with Navajo “Nádleehi”: A Critique of “Berdache,” “Gay,” “Alternate Gender,” and “Two-Spirit,”* 25 *AM. ETHNOLOGIST* 267, 267 (1998); see also FAUSTO-STERLING, *SEXING THE BODY*, *supra* note 22, at 108-09.

¹⁷¹ Nanda, *supra* note 169, at 464.

¹⁷² *Id.*

Salmacis.¹⁷³ Moreover, Thai Buddhist myths describe three sexes—male, female, and *kathoey* or hermaphrodite.¹⁷⁴

Photographer Dayanita Singh's account of her friendship with a *hijra*, Mona Ahmed, is particularly illuminating:

When I once asked her if she would like to go to Singapore for a sex change operation, she told me, "You really do not understand. I am the third sex, not a man trying to be a woman. It is your society's problem that you only recognize two sexes."¹⁷⁵

To be sure, the mere recognition of a third sex/gender category provides no safeguards against social inequality.¹⁷⁶ But the existence of cross-cultural alternatives to a two-sex system "suggests that ours is not inevitable."¹⁷⁷

Fashioned as a biological truth, the male-female binary has been integrated into sociocultural perceptions. For years, for example, American physicians prescribed hormone treatment to stunt the growth of girls who were likely to grow "too tall for a woman."¹⁷⁸ The notion that a certain height was inappropriate for a woman was a social judgment based, in turn, on "prior biological observation[s]" of female height.¹⁷⁹ Overlooked was the overall height increase in healthy Western European and North American women.¹⁸⁰

In essence, the disconnect between intersex bodies and the two-sex system is the product of social decisions and cultural attitudes. Intersex conditions expose the sex/gender

¹⁷³ See George Androustos, *Hermaphroditism in Greek and Roman Antiquity*, 5 HORMONES 214, 215 (2006).

¹⁷⁴ Nanda, *supra* note 169, at 466-67. This three-sex system began to decline in the mid-twentieth century when exposure to Western culture brought a shift in sex/gender ideologies. *Id.* at 467. In contemporary Thailand, the term *kathoey* generally refers to "a 'deficient male,' or a *male* transgender category, that is, a male who breaches biological and/or cultural norms of masculinity." *Id.*

¹⁷⁵ DAYANITA SINGH, MYSELF MONA AHMED 15 (2001).

¹⁷⁶ FAUSTO-STERLING, SEXING THE BODY, *supra* note 22, at 109. Mona Ahmed's conversation with Dayanita Singh, *supra* text accompanying note 175, suggests that Ahmed actually identified with the *hijra* category. Other intersex people, however, might find third-sex categorization more oppressive than liberating. See, e.g., Nanda, *supra* note 169, at 463 ("*Hijras* are viewed with ambivalence in Indian society and are treated with a combination of mockery, fear, and respect.").

¹⁷⁷ FAUSTO-STERLING, SEXING THE BODY, *supra* note 22, at 109.

¹⁷⁸ Fausto-Sterling, *Society Writes Biology*, *supra* note 131, at 71; see also Christine Cosgrove, A 'Too Tall' Tale: Girls and the Drug DES, L.A. TIMES (Apr. 5, 2009), <http://www.latimes.com/news/opinion/la-oe-cosgrove5-2009apr05,0,4024242.story>.

¹⁷⁹ Fausto-Sterling, *Society Writes Biology*, *supra* note 131, at 71.

¹⁸⁰ *Id.* ("The biological norm that . . . influenced the social norm . . . chang[ed], while the social norm—at least for women—play[ed] a role in an attempt to prevent further biological change.").

order—and, indeed, the social institutions structured upon that sex/gender order—as a fallacy.

C. *Shaping Athletic Performance: The Interplay of Biological and Sociocultural Factors*

Just as culture constructs bodily categories, it also influences bodily attributes. Although certain sex-linked biological differences exist, the matter is far more complicated than conventional wisdom suggests. For one thing, the impact of biological distinctions on athleticism depends on the particular sport at issue.¹⁸¹ Moreover, there is a vast range of anatomical variation within each sex category, and the biological differences *within* those categories are greater than the differences *between* them.¹⁸² Most importantly, sex-based differences—even biological ones—are influenced by sociocultural factors. Biological distinctions are difficult to measure because “[m]ind, body, and culture interact in ways that scientific research cannot wholly disentangle.”¹⁸³ Whatever criteria are used to differentiate males and females in the sports context, the dividing line will be guided, to a certain extent, by social judgments.

1. The Role of Biology

On average, men are taller and heavier than women, and have longer limbs and wider upper bodies.¹⁸⁴ Men also

¹⁸¹ For example, spectator sports (basketball, football, and baseball), which emphasize upper-body strength, tend to offer men some advantage. Syda Kosofsky, *Toward Gender Equality in Professional Sports*, 4 HASTINGS WOMEN'S L.J. 209, 215 (1993). On the other hand, in endurance sports, such as marathon swimming, women's body fat distribution increases buoyancy, *see infra* text accompanying notes 235-41, and their evenly distributed sweat glands provide them with more endurance than men, *see infra* text accompanying notes 220-21.

¹⁸² *See* FAUSTO-STERLING, MYTHS OF GENDER, *supra* note 131, at 218; Mary Jo Kane, *Resistance/Transformation of the Oppositional Binary: Exposing Sport as a Continuum*, 19 J. SPORT & SOC. ISSUES 191, 201 (1995); Carol M. Worthman, *Hormones, Sex, and Gender*, 24 ANN. REV. ANTHROPOLOGY 593, 607 (1995).

¹⁸³ DEBORAH L. RHODE, SPEAKING OF SEX: THE DENIAL OF GENDER EQUALITY 35 (1997).

¹⁸⁴ FAUSTO-STERLING, MYTHS OF GENDER, *supra* note 131, at 214-17; MCDONAGH & PAPPANO, *supra* note 46, at 52 (“American males as a group are 5.4 inches taller and 28 pounds heavier than American females as a group.”); Kosofsky, *supra* note 181, at 214-15; MICHAELA C. DEVRIES, DO TRANSITIONED ATHLETES COMPETE AT AN ADVANTAGE OR DISADVANTAGE AS COMPARED WITH PHYSICALLY BORN MEN AND WOMEN?: A REVIEW OF THE SCIENTIFIC LITERATURE 4 (2008), *available at* <http://www.athletescan.com/Content/Publications.asp> (follow the “Promising Practices: Working with Transitioning/Transitioned Athletes in Sport” hyperlink; then follow the

generally have larger hearts, greater lung capacity, and higher hemoglobin¹⁸⁵ levels, all of which tend to give males greater VO₂max¹⁸⁶ or aerobic capacity.¹⁸⁷ Still, there is no sex-based difference in cardiac output¹⁸⁸ (i.e., the amount of blood that the heart can pump in a one-minute interval).¹⁸⁹ And because women typically weigh less than men, they require less oxygen to exercise, a result that may offset the advantages of men's greater lung function.¹⁹⁰

While male and female muscles do not vary qualitatively, men generally have greater muscle mass.¹⁹¹ The average man has forty to sixty percent more upper-body strength and twenty-five to thirty percent more lower-body strength than the average woman.¹⁹² These differences, however, vary widely between trained and untrained individuals.¹⁹³

"Do Transitioned Athletes Compete at an Advantage or Disadvantage—LITERATURE REVIEW" hyperlink) (noting that men are taller than women by approximately twelve to fifteen centimeters—or 4.7 to 5.9 inches).

¹⁸⁵ Hemoglobin, also spelled "haemoglobin," is the protein that carries oxygen in red blood cells, allowing oxygen delivery from the lungs to active muscles and other tissue. DEVRIES, *supra* note 184, at 6. Because hemoglobin delivers oxygen to exercising muscles, higher hemoglobin content means higher aerobic capacity. *Id.*

¹⁸⁶ VO₂max refers to the maximum amount of oxygen an individual can consume during exercise. Alan Ivkovic et al., *Overuse Injuries in Female Athletes*, 48 CROAT. MED. J. 767, 769 (2007). Muscle cells use oxygen to convert food energy to adenosine triphosphate (ATP), the fuel for the body's activities. Elizabeth Quinn, *Endurance Training for Sports—What Is Cardiovascular and Aerobic Fitness?*, ABOUT.COM (July 29, 2009), <http://sportsmedicine.about.com/od/anatomyandphysiology/a/Endurance.htm>. Contracting muscle cells require larger amounts of ATP and consume more oxygen during exercise than at rest. *Id.* VO₂max depends on (1) the heart's blood-pumping capacity, (2) the ability of the lungs to get oxygen from the air into the blood returning from contracting muscles, (3) the blood's oxygen-carrying capability, and (4) the ability of the muscle cells to extract oxygen from the blood and use it to produce energy or ATP. MCDONAGH & PAPPANO, *supra* note 46, at 55; Tony Leyland, *VO2 Max: Not the Gold Standard?*, CROSSFIT J., Dec. 2006, at 2, available at http://library.crossfit.com/free/pdf/52_06_VO2_Not_Gold_Standard.pdf.

¹⁸⁷ MCDONAGH & PAPPANO, *supra* note 46, at 55.

¹⁸⁸ DEVRIES, *supra* note 184, at 6.

¹⁸⁹ Cardiac output is calculated by multiplying heart rate by stroke volume. Craig Coghlin, *Gender Differences and Exercise*, EMPOWERMENT HEALTH & FITNESS, http://www.empowerment-health.com/Empowerment/Gender_Differences.html (last visited Aug. 16, 2010). Women generally have reduced blood volume due to their smaller hearts, but their higher heart rates allow them to match the cardiac output of men. *Id.*

¹⁹⁰ DEVRIES, *supra* note 184, at 6.

¹⁹¹ Ivkovic et al., *supra* note 186, at 769; see also MCDONAGH & PAPPANO, *supra* note 46, at 54. Thus, based on a ratio of lean body mass to strength, the strength differential is virtually absent. MCDONAGH & PAPPANO, *supra* note 46, at 54.

¹⁹² MCDONAGH & PAPPANO, *supra* note 46, at 54.

¹⁹³ *Id.* Strength and muscle mass are also influenced by extrinsic factors, such as coaching, access to training facilities, and the social stigma attached to female muscularity. See *id.* (citing a study that found a zero to eight percent sex-based performance differential among trained power lifters); Shari L. Dworkin, "Holding

Generally, lean body mass—the weight of all body tissue other than body fat¹⁹⁴—also tends to be greater in males.¹⁹⁵ Lean body weight is correlated with athletic speed, strength,¹⁹⁶ and higher anaerobic¹⁹⁷ capacity.¹⁹⁸ In trained men and women, however, research shows no sex-based disparity in anaerobic capability relative to lean body mass.¹⁹⁹ Moreover, body fat varies significantly among members of each sex and among athletes in different sports.²⁰⁰

Body fat distribution also differs between males and females. Men typically accumulate fat in the middle section and abdomen, while women tend to store fat in the lower body.²⁰¹ This distinction means that men generally have a higher center of gravity, an attribute that may impact balance and stability.²⁰² Still, center of gravity is more accurately tied to height and body type than to sex.²⁰³

Additionally, men and women have different hormone systems. The average woman has higher levels of estrogen²⁰⁴ while the average man produces more testosterone,²⁰⁵ although there is more variation in testosterone levels among women than among men.²⁰⁶ Greater estrogen concentration is

Back”: *Negotiating a Glass Ceiling on Women’s Muscular Strength*, 44 SOC. PERSP. 333, 346 (2001) (“[I]deals of emphasized femininity lead many women in the weight room to ‘just hold back.’”); *see also infra* Part II.C.2.

¹⁹⁴ MCDONAGH & PAPPANO, *supra* note 46, at 53.

¹⁹⁵ *Id.* at 53-54; DEVRIES, *supra* note 184, at 5.

¹⁹⁶ *See* sources cited *supra* note 195.

¹⁹⁷ While aerobic exercise is characterized by “low levels of exertion over a long period of time” (e.g., marathon running), anaerobic activity “involves short bursts of higher intensity contractions at a much greater percentage of their maximum contraction strength” (e.g., sprinting or weightlifting). *Marathon Versus Sprinting*, SCI. LEARNING HUB (July 23, 2007), <http://www.sciencelearn.org.nz/Contexts/Sporting-Edge/NZ-Research/Marathon-versus-sprint>.

¹⁹⁸ DEVRIES, *supra* note 184, at 5.

¹⁹⁹ *Id.*

²⁰⁰ MCDONAGH & PAPPANO, *supra* note 46, at 53-54 (“A trained male athlete’s body fat may range from 7 percent of body mass for decathlon athletes to 20 percent among shot put throwers. Elite female runners may have body fat as low as 9 percent.”).

²⁰¹ DEVRIES, *supra* note 184, at 5.

²⁰² *Id.*

²⁰³ Heidi Prather & Deyvani Hunt, *Issues Unique to the Female Runner*, 16 PHYSICAL MED. & REHABILITATION CLINICS N. AM. 691, 692 (2005).

²⁰⁴ MCDONAGH & PAPPANO, *supra* note 46, at 52; DEVRIES, *supra* note 184, at 10.

²⁰⁵ MCDONAGH & PAPPANO, *supra* note 46, at 52; Alice Dreger, *Where’s the Rulebook for Sex Verification?*, N.Y. TIMES (Aug. 22, 2009), http://www.nytimes.com/2009/08/22/sports/22runner.html?_r=1 [hereinafter Dreger, *Where’s the Rulebook?*].

²⁰⁶ MCDONAGH & PAPPANO, *supra* note 46, at 52. Moreover, “[g]iven cultural bias against women developing muscles, we may not yet know the physiological limits of female strength.” *Id.* at 52-53.

associated with female lower-body fat distribution.²⁰⁷ Testosterone, on the other hand, regulates muscle development, generally allowing men to achieve greater muscle mass²⁰⁸ than women.²⁰⁹ But the relationship between testosterone and athletic performance is complex,²¹⁰ and some aspects are poorly understood. For instance, the androgenic response to competition—and its impact on performance—is unclear, particularly in women.²¹¹ Testosterone appears to boost competitive performance in animals, but human studies have yielded contradictory results.²¹² Some research shows a positive correlation between pre-event testosterone and performance; other studies demonstrate no relationship; and in some, elevated testosterone is associated with diminished performance.²¹³ Little can be extrapolated from these results,

²⁰⁷ See, e.g., Jardena J. Puder et al., *Estrogen and Exercise May Be Related to Body Fat Distribution and Leptin in Young Women*, 86 FERTILITY & STERILITY 694, 698 (2006) (finding—independent of total body fat—a positive correlation between estrogen levels and peripheral fat, and an inverse relationship between estrogen concentrations and midsection body fat).

²⁰⁸ Importantly, this correlation presupposes that the testosterone is *functional* (i.e., that the body is capable of processing it). For example, elevated testosterone levels would be of no benefit to a woman with complete androgen insensitivity syndrome (AIS) because her body lacks the androgen receptors needed to respond to the hormone. See Dreger, *Sex Typing for Sport*, *supra* note 21, at 23; E A E Ferris, *Gender Verification Testing in Sport*, 48 BRIT. MED. BULL. 683, 690 (1992); *supra* text accompanying notes 123-24 (discussing complete AIS).

²⁰⁹ See Alice Dreger, *The Sex of Athletes: One Issue, Many Variables*, N.Y. TIMES, Oct. 25, 2009, at SP8, available at http://www.nytimes.com/2009/10/25/sports/25intersex.html?_r=1 [hereinafter Dreger, *The Sex of Athletes*] (citation omitted).

²¹⁰ Cf. FAUSTO-STERLING, MYTHS OF GENDER, *supra* note 131, at 130-31 (“[I]t is easy to forget that our bodies have a number of different hormone systems, all of which interact with one another Under stress, during a fight, when angry, when engaging in behavior some might label aggressive, many different hormone levels change in the body. Thus, to attribute a change in behavior to a change in a single hormone, when many different hormones rise and fall simultaneously, misrepresents the actual physiological events.”).

²¹¹ Linda Dawn Hamilton et al., *The Effect of Competition on Salivary Testosterone in Elite Female Athletes*, 4 INT’L J. SPORTS PHYSIOLOGY & PERFORMANCE 538, 538 (2009).

²¹² Pranjali H. Mehta et al., *When Are Low Testosterone Levels Advantageous? The Moderating Role of Individual Versus Intergroup Competition*, 56 HORMONES & BEHAV. 158, 158 (2009).

²¹³ *Id.* (summarizing the findings of prior studies); see, e.g., *id.* at 160 (finding, irrespective of sex, a positive correlation between testosterone and performance in individual competition, and a negative correlation in intergroup competition); Justin Carré et al., *Pre-Competition Hormonal and Psychological Levels of Elite Hockey Players: Relationship to the ‘Home Advantage’*, 89 PHYSIOLOGY & BEHAV. 392, 394, 396 (2006) (reporting worse athletic performance in elite male hockey players despite higher pre-event testosterone); Hamilton et al., *supra* note 211, at 541 (reporting that testosterone in elite female wrestlers did not vary significantly between wins and losses); Katie T. Kivlighan et al., *Gender Differences in Testosterone and Cortisol Response to Competition*, 30 PSYCHONEUROENDOCRINOLOGY 58, 66-67 (2001) (mixed-

but they do indicate that testosterone is not necessarily directly proportional to athletic prowess.

Likewise, testosterone is not the only hormone that influences muscle strength. Estrogen, too, appears to offer benefits.²¹⁴ Recent studies report a link between estrogen and muscle function in postmenopausal women.²¹⁵ In one study, researchers found that postmenopausal women who received estrogen-based hormone therapy had approximately five percent greater muscle strength than untreated postmenopausal women.²¹⁶ The study concluded that estrogen benefits the quality and function—rather than the quantity—of muscle tissue.²¹⁷ There is also evidence that estrogen minimizes exercise-induced muscle damage and inflammation, and stimulates muscle repair.²¹⁸

In addition to muscle function, there are other biological mechanisms that privilege female athletes. Relative to men, women are more resistant to fatigue and can sustain muscle contractions for longer periods of time.²¹⁹ Women also have more efficient sweat glands.²²⁰ As a result, in hot weather, they sweat less—and conserve more body water—than men, making

sex study of varsity and novice rowers finding an association between heightened pre-event testosterone and poor performance in all participants except varsity women).

²¹⁴ See Dawn A. Lowe et al., *Mechanisms Behind Estrogen's Effect on Muscle Strength in Females*, 38 EXERCISE & SPORT SCI. REV. 61, 62, 66 (2010); Paula H.A. Ronkainen et al., *Postmenopausal Hormone Replacement Therapy Modifies Skeletal Muscle Composition and Function: A Study with Monozygotic Twin Pairs*, 107 J. APPLIED PHYSIOLOGY 25, 29 (2009).

²¹⁵ Lowe et al., *supra* note 214, at 61-62. Studies on estrogen-deficient rodents have yielded similar results. *See id.* at 62-63.

²¹⁶ *Id.* at 62.

²¹⁷ *Id.* Additionally, some research shows a correlation between increased muscle mass and estrogen-replacement therapy in older women. *See* Ronkainen et al., *supra* note 214, at 28 (in a study of identical female twins, the sisters who received estrogen therapy had larger thigh muscles than the sisters who had no history of estrogen therapy); *see also id.* at 25 (citing two studies finding a link between estrogen therapy and muscle mass). These findings, however, remain inconclusive. *See id.* at 31 (discussing a study that found no relationship between estrogen therapy and muscle size).

²¹⁸ Deborah L. Enns & Peter M. Tiidus, *The Influence of Estrogen on Skeletal Muscle: Sex Matters*, 40 SPORTS MED. 41, 45-53 (2010).

²¹⁹ Brenda Critchfield & Len Kravitz, *Fatigue Resistance: An Intriguing Difference in Gender*, IDEA FITNESS J., June 2008, at 19. Estrogen may be responsible for this result. Some studies show that “estrogen may delay the onset of fatigue in part by spurring serotonin production, which increases energy and elevates mood.” MCDONAGH & PAPPANO, *supra* note 46, at 56.

²²⁰ MCDONAGH & PAPPANO, *supra* note 46, at 53; Kosofsky, *supra* note 181, at 214, 215.

them less prone to heat exhaustion and dehydration.²²¹ Additionally, women may have a metabolic advantage. Several studies demonstrate that females rely more on fat oxidation and less on carbohydrate oxidation during exercise than men.²²² Consequently, women exhaust their carbohydrate reserves at a slower rate than men.²²³ Since carbohydrates are the primary fuel source during moderate- to high-intensity exercise,²²⁴ this metabolic difference may give females an endurance edge.²²⁵

In fact, there is evidence that women may be better suited to endurance sports than men.²²⁶ One study, for instance, found a female performance advantage in running distances greater than sixty-six kilometers.²²⁷ Similarly, in a 1996 study of equally trained men and women, female performance times matched those of males over forty-two kilometers and surpassed them over ninety kilometers.²²⁸

This research is supported by results from several ultra-endurance events where women have outperformed men. For example, in the 2002 and 2003 Badwater Ultramarathon—a 135-mile race in temperatures up to 130 degrees Fahrenheit²²⁹—Pam Reed took first place, outpacing the fastest man by 4.5 hours in 2002 and by a half hour in 2003.²³⁰ In the Self-Transcendence Six-Day Run, Dipali Cunningham logged the fastest time for the event—male or female—twice.²³¹ Last year,

²²¹ MCDONAGH & PAPPANO, *supra* note 46, at 53; Aimee Phan & Steve Sternberg, *Sweating Is One Way to Keep Your Cool*, USA TODAY (May 20, 2005), <http://www.usatoday.com/weather/resources/basics/sweating-cools.htm>.

²²² Critchfield & Kravitz, *supra* note 219, at 21; DEVRIES, *supra* note 184, at 7.

²²³ See sources cited *supra* note 222.

²²⁴ Fat can also serve as an energy source during exercise, but “[a]s exercise intensity increases, the proportion of energy that is derived from fat decreases and the proportion from carbohydrate increases.” MARIE DUNFORD & J. ANDREW DOYLE, *NUTRITION FOR SPORT AND EXERCISE* 103 (2008).

²²⁵ DEVRIES, *supra* note 184, at 7.

²²⁶ MCDONAGH & PAPPANO, *supra* note 46, at 56; Mark A. Tarnopolsky & Wim H.B. Saris, *Evaluation of Gender Differences in Physiology: An Introduction*, 4 *CURRENT OPINION CLINICAL NUTRITION & METABOLIC CARE* 489, 489 (2001).

²²⁷ MCDONAGH & PAPPANO, *supra* note 46, at 56; Tarnopolsky & Saris, *supra* note 226, at 489.

²²⁸ See sources cited *supra* note 227.

²²⁹ BADWATER.COM, <http://www.badwater.com> (last visited Aug. 17, 2010). One hundred and thirty-five miles is approximately 217 kilometers (217,000 meters). *Id.*

²³⁰ R. Beneke et al., *Women Will Do It in the Long Run*, 39 *BR. J. SPORTS MED.* 410, 410 (2005); see also *Badwater Ultramarathon Race Results, 2000-2010*, BADWATER.COM, <http://www.badwater.com/results/index.html> (last visited Aug. 17, 2010).

²³¹ *Dipali Cunningham Wins Self-Transcendence Six-Day Race*, ULTRARUNNING (May 6, 2008), <http://www.ultrarunning.com/ultra/features/news/dipali-cunningham-wins-se.shtml>.

runner Laura McDonough won Alaska's Resurrection Pass 100 Miler, finishing over forty-five minutes before male competitor Eliseo Marquez who took second place.²³² In the 2003 Boston Marathon, while men turned in the top fifteen finish times, of the 207 runners who finished the 26.2-mile²³³ course in under two hours and fifty minutes, women's overall performance time was nearly five minutes faster than men's—a mean time of 2:36:55 compared to the male mean time of 2:41:33.²³⁴

Additionally, women have repeatedly upstaged men in distance swimming, where women's greater body fat appears to be a boon, providing buoyancy and insulation against the cold.²³⁵ A female holds the world record for the 28.5-mile Manhattan Island Marathon swim, and women have frequently surpassed men in the event,²³⁶ taking first place in fourteen of the twenty-six annual solo events from 1985 through 2010.²³⁷ Women also hold three out of four records for solo swims across the twenty-two mile Catalina Channel between Catalina Island and the California coast.²³⁸ Greater body fat also yields an advantage in cold-weather sports.²³⁹ For example, the Iditarod—an 1150-mile dogsled race across Alaska²⁴⁰—has been won by a woman several times.²⁴¹

²³² *100 Miles Is a Day's Work for McDonough*, ANCHORAGE DAILY NEWS (Aug. 6, 2009), <http://www.adn.com/2009/08/06/890576/100-miles-is-a-days-work-for-mcdonough.html>.

²³³ *Boston Athletic Association, Patriots' Day*, BOSTONMARATHON.ORG, <http://www.bostonmarathon.org/BostonMarathon/PatriotsDay.asp> (last visited Aug. 17, 2010).

²³⁴ MCDONAGH & PAPPANO, *supra* note 46, at 14-15.

²³⁵ FAUSTO-STERLING, *MYTHS OF GENDER*, *supra* note 131, at 218.

²³⁶ *Manhattan Island Match Race and Record Attempt*, NYCSWIM.ORG, http://www.nycswim.org/Event/Event.aspx?event_id=2055&from=overview (last visited Aug. 17, 2010).

²³⁷ *See Manhattan Island Marathon Swim*, NYCSWIM.ORG, http://www.nycswim.org/Event/Event.aspx?event_id=2102&from=results (use the "Select a year" and "Select a date" drop-down lists to view event results from prior years) (last visited Aug. 17, 2010).

²³⁸ *Catalina Channel Swimming Federation Individual Records*, CATALINA.ORG, <http://www.swimcatalina.org/Records.htm> (last visited Aug. 17, 2010) (reporting records for fastest solo swim from Catalina Island to mainland California, fastest solo swim from mainland to Catalina Island, fastest solo round trip swam from Catalina Island, and fastest solo round trip swam from mainland—the former three records held by women); PENNY LEE DEAN, *A HISTORY OF THE CATALINA CHANNEL SINCE 1927*, at 6 (1980), available at <http://www.swimcatalina.org/History/Chapter%201-2.pdf> (describing the Catalina Channel).

²³⁹ MCDONAGH & PAPPANO, *supra* note 46, at 58.

²⁴⁰ *Learn About the Iditarod*, IDITAROD.COM, <http://www.iditarod.com/learn> (last visited Aug. 17, 2010).

²⁴¹ *Champions & Record Holders*, IDITAROD.COM, <http://www.iditarod.com/learn/awards.html> (last visited Aug. 17, 2010). In 1985, Libby Riddles became the first woman to win the Iditarod. Susan Butcher took first place the following year and went on to win another three times. *Id.*

2. Sociocultural Factors

But biology alone cannot account for sex-based differences in athletic performance. The gender gap in athletics is due, in part, to sociocultural constraints. Historically, boys and men have been expected and encouraged to participate in sports.²⁴² Girls and women, however, were largely excluded²⁴³ until the late 1970s.²⁴⁴ Only then did “educators even consider[] the idea that boys and girls should or could receive the same athletic training.”²⁴⁵ Since then, women have bridged the gender gap substantially as they “gained greater access to coaching and training facilities.”²⁴⁶ And at the elite level, the performance gap is “remarkably slight.”²⁴⁷ In fact, in 2004, researchers at Oxford University calculated that if the gender gap continues to narrow at the current rate, by 2156, female sprinters will outpace their male counterparts in the 100-meter Olympic race.²⁴⁸ While the upper limit of female athletic ability remains to be seen,²⁴⁹ female

²⁴² Yael Lee Aura Shy, Note, “*Like Any Other Girl*”: *Male-to-Female Transsexuals and Professional Sports*, 14 SPORTS LAW. J. 95, 101-02 (2007).

²⁴³ *Id.*

²⁴⁴ Although Title IX was enacted in 1972, its implementing regulations were not issued until July 1975, and even then, the regulations gave elementary schools until July 1976—and high schools and colleges until July 1978—to comply with the law. See 40 Fed. Reg. 24,128 (1975) (codified at 34 C.F.R. § 106).

²⁴⁵ FAUSTO-STERLING, MYTHS OF GENDER, *supra* note 131, at 214-15.

²⁴⁶ Michael A. Messner, *Sports and Male Domination: The Female Athlete as Contested Ideological Terrain*, 5 SOC. SPORT J. 197, 197 (1988); see, e.g., COLETTE DOWLING, THE FRAILTY MYTH: WOMEN APPROACHING PHYSICAL EQUALITY 204 (2000) (noting that, between 1964 and 1995, the female marathon world record improved by sixty-five minutes and twenty-one seconds while the male world record improved by only five minutes); Brian J. Whipp & Susan A. Ward, *Will Women Soon Outrun Men?*, 355 NATURE 25, 25 (1992) (Based on the Olympic track world records from the 1920s through 1990, women’s rate of improvement was approximately double the male rate in the 200, 400, 800, and 1500 meters. In the Olympic marathon, the gender gap narrowed even more rapidly between 1955—the first year that women’s marathon times were recorded—and 1990.).

²⁴⁷ Laura Wackwitz, *Verifying the Myth: Olympic Sex Testing and the Category “Woman,”* 26 WOMEN’S STUD. INT’L F. 553, 555 (2003); MCDONAGH & PAPPANO, *supra* note 46, at 71-73.

²⁴⁸ See Andrew J. Tatem et al., *Momentous Sprint at the 2156 Olympics?*, 431 NATURE 525, 525 (2004); David Adam, *Why Women Could Be Faster than Men Within 150 Years*, GUARDIAN (U.K.) (Sept. 30, 2004), <http://www.guardian.co.uk/uk/2004/sep/30/science.science>.

²⁴⁹ MCDONAGH & PAPPANO, *supra* note 46, at 73. The gender performance gap has been a source of debate. Compare Beneke, *supra* note 230, at 410 (suggesting that women could eventually outpace men in long-distance races); and Tatem et al., *supra* note 248, at 525 (calculating that women may outpace men by the middle of the twenty-second century); with Constance Holden, *An Everlasting Gender Gap?*, 305 SCIENCE 639 (2004) (predicting a permanent gender gap in running); and Valerie Thibault et al., *Women and Men in Sport Performance: The Gender Gap Has Not*

athletic progress over the last few decades—in tandem with the broadening of women’s athletic opportunities—suggests that sociocultural restrictions have stifled women’s athletic potential more so than biological limitations.²⁵⁰

Moreover, these sociocultural barriers have not been wholly eliminated. Although Title IX has spurred a dramatic increase in women’s sports participation,²⁵¹ the legacy of historical exclusion endures. Sports programs continue to be male-dominated,²⁵² and lingering social attitudes and practices still inhibit female athletic development. For example, social pressures to adhere to the thin-but-not-too-muscular feminine bodily ideal may discourage women from heavy lifting, contributing to the “glass ceiling” on their muscle strength.²⁵³

Evolved Since 1983, 9 J. SPORTS & SCI. MED. 214, 219-21 (2010) (concluding that women’s records may never match those of men in elite-level events).

²⁵⁰ Wackwitz, *supra* note 247, at 555 (“It may be . . . that cultural restrictions, not genetic differences, have prevented women from exceeding the athletic achievements of men.”); *see also* FAUSTO-STERLING, MYTHS OF GENDER, *supra* note 131, at 218 (“[I]t remains possible . . . that at least some of the height and strength dimorphism between males and females would diminish in a culture in which girls from infancy on engaged in the same amount and kind of physical activity as boys.”); DEBORAH L. RHODE, JUSTICE AND GENDER: SEX DISCRIMINATION AND THE LAW 302-03 (1989) (“How much of males’ advantages in most sports results from nature and how much from nurture remains unclear. It is, however, obvious that the differences in men’s and women’s capabilities are relatively small in comparison to the differences in opportunities now open to them.”); Kane, *supra* note 182, at 201 (“What about centuries of neglect, stigmatization, and hostility that have prevented women from reaching their full potential in all sports but particularly in those sports that have been most appropriated by men?”).

²⁵¹ *See* NAT’L WOMEN’S LAW CTR., THE BATTLE FOR GENDER EQUITY IN ATHLETICS IN ELEMENTARY AND SECONDARY SCHOOLS 1 (2010), <http://www.nwlc.org/pdf/Battle%20final.pdf> [hereinafter NWLC, THE BATTLE FOR GENDER EQUITY] (citing a 2009 study) (reporting that athletic participation among high school girls increased from 295,000 girls in 1972 to 3.1 million for the 2008-09 academic year); NAT’L WOMEN’S LAW CTR., TITLE IX AND WOMEN’S ATHLETIC OPPORTUNITY: A NATION’S PROMISE YET TO BE FULFILLED 1 (2008), <http://www.nwlc.org/pdf/Nation%27s%20Promise%20July%202008.pdf> [hereinafter NWLC, A NATION’S PROMISE] (citing a 2007 study) (reporting that the number of female athletes participating in college sports is nearly five times the pre-Title IX rate).

²⁵² The number of girls competing in high school sports is still lower than the pre-Title IX number of male high school student athletes. In 1972, 3.67 million high school boys played school sports, compared to 3.1 million high school girls that did so during the 2008-09 academic year. *See* NWLC, THE BATTLE FOR GENDER EQUITY, *supra* note 251, at 1 (citing a 2009 study). Moreover, at the college level, it was not until the 2005-06 academic year that the rate of female participation in college sports equaled the 1971-72 rate of male participation. NWLC, A NATION’S PROMISE, *supra* note 251, at 1 (citing a 2007 study).

²⁵³ *See* MCDONAGH & PAPPANO, *supra* note 46, at 70-71; Dworkin, *supra* note 193, at 346 (ethnographic study concluding that “ideals of emphasized femininity lead many women in the weight room to ‘just hold back’”); *cf.* Vikki Krane et al., *Living the Paradox: Female Athletes Negotiate Femininity and Muscularity*, 50 SEX ROLES 315, 326 (2004) (study of female college athletes, the participants “considered their

These types of gender expectations are normalized in children from an early age. Sex-linked “differences in size, strength, and ability are . . . reinforced through the socialization of boys and girls.”²⁵⁴ Parental nurturing of athletic talent in their children still reflects gendered stereotypes. Boys tend to receive more encouragement to participate in sports than girls.²⁵⁵ Fathers, in particular, tend to engage in more active play with their sons than daughters,²⁵⁶ and they spend more time actively mentoring male children.²⁵⁷

This gender bias is also apparent in organized sports for children. For instance, researchers observing coed children’s tee ball²⁵⁸ found a notable gender disparity in the coaches’ treatment of the players.²⁵⁹ While the boys received the most attention and training, coaches showed little regard for the girls’ athletic development.²⁶⁰ Girls were also admonished “more frequently and more harshly than boys, often for the same behavior that was acceptable for boys.”²⁶¹ Childhood experiences like these engender a false sense of athletic incompetence in girls, resulting in their “learned weakness.”²⁶² Since athletic training and socialization during childhood impacts athletic

muscular bodies . . . the primary hindrance to being perceived as heterosexually feminine in social settings”).

²⁵⁴ HarmoniJoie Noel, *Un-doing Gendered Power Relations Through Martial Arts?*, 2 INT’L J. SOC. INQUIRY 17, 22 (2009).

²⁵⁵ *Id.*

²⁵⁶ Campbell Leaper & Carly Kay Friedman, *The Socialization of Gender*, in HANDBOOK OF SOCIALIZATION: THEORY AND RESEARCH 561, 571 (Joan E. Grusec & Paul D. Hastings eds., 2007).

²⁵⁷ WOMEN’S SPORTS FOUND., GO OUT AND PLAY: YOUTH SPORTS IN AMERICA 58-61 (2008), available at <http://www.womenssportsfoundation.org/~media/Files/Research%20Reports/Go%20Out%20and%20Play%20report%209%2018%2008.pdf>.

²⁵⁸ Tee ball, generally played by children aged four to eight, is modeled on adult baseball. *What Is Tee Ball?*, T-BALL USA ASS’N, http://www.teeballusa.org/What_is_TBball.asp (last visited Aug. 10, 2010). Unlike baseball, however, tee ball eliminates pitching; instead, children take turns hitting the ball off of a batting tee placed on home plate. *Id.*

²⁵⁹ Melissa A. Landers & Gary Alan Fine, *Learning Life’s Lessons in Tee Ball: The Reinforcement of Gender and Status in Kindergarten Sport*, 13 SOC. SPORT J. 87, 90-92 (1996); see also MCDONAGH & PAPPANO, *supra* note 46, at 21-22.

²⁶⁰ Landers & Fine, *supra* note 259, at 90-92; see also MCDONAGH & PAPPANO, *supra* note 46, at 21.

²⁶¹ Landers & Fine, *supra* note 259, at 90. Of the two coaches interviewed, both expressed the view that the girls lacked interest in tee ball—an expectation that fueled the coaches’ gendered treatment of the children. *Id.*

²⁶² See DOWLING, *supra* note 246, at 77.

interest and self-confidence later in life,²⁶³ these childhood experiences may ultimately lead girls to withdraw from sports.²⁶⁴

The interplay between social and biological circumstances, as these examples indicate, undercuts the view of the body as the site of natural difference. Thus, even if one accepts the two-sex system as valid, the harder question is how and where to draw the binary line. So far, no one has come up with an answer.²⁶⁵ As Alice Dreger has said,

This is not a solvable problem People always press me: “Isn’t there one marker we can use [to decide who is one sex or the other]?” No. We couldn’t then and we can’t now, and science is making it more difficult and not less, because it ends up showing us how much blending there is and how many nuances, and it becomes impossible to point to one thing, or even a set of things, and say that’s what it means to be male.²⁶⁶

As an imperfect compromise, some scientists have suggested measuring functional testosterone, which is correlated with muscle mass.²⁶⁷ The trouble with using testosterone—or any hormone—as the signifier of sex is that “girls’ and women’s bodies do not uniformly produce a single, identifiable sort of ‘feminine’ cocktail of hormones, nor do all boys and men produce a single identifiable sort of ‘masculine’ cocktail.”²⁶⁸ In

²⁶³ For example, one study reported that girls who experienced higher levels of parental encouragement had greater perceived athletic competence and were more interested in physical activity than girls who received less parental encouragement. Robert J. Brustad, *Attraction to Physical Activity in Urban Schoolchildren: Parental Socialization and Gender Influences*, 67 RES. Q. FOR EXERCISE & SPORT 316, 321-22 (1996); see also Sandra E Short & Martin W Short, *Role of the Coach in the Coach-Athlete Relationship*, 366 LANCET S29, S29 (2005) (“[C]oach[es] [have] tremendous influence on the physical and psychological development of their athletes.”).

²⁶⁴ Cf. MCDONAGH & PAPPANO, *supra* note 46, at 22 (“The athletic socialization that unfolds at beginning levels lays the foundation for future athletic interests.”).

²⁶⁵ See Ross Tucker & Malcolm Collins, *The Science and Management of Sex Verification in Sport*, 21 S. AFR. J. SPORTS MED. 147, 150 (2009) (“[W]hile a range of [intersex] conditions and disorders have been identified, authorities are seemingly no closer to establishing precisely how these conditions affect performance, and many athletes appear to have been unfairly excluded from competition.”); see also CALLAHAN, *supra* note 109, at 32 (“[N]o one has yet figured out the list of ingredients needed to make a boy or girl—neither chromosomes, nor hormones, nor genes, nor family or society or chance, alone or in combination, seems sufficient to explain how one’s sex comes to be.”); Dreger, *Sex Typing for Sport*, *supra* note 21, at 23 (“Humans like their sex categories neat, but nature doesn’t care. Nature doesn’t actually have a line between the sexes. If we want a line, we have to draw it *on* nature.”); *supra* Part II.B.1.

²⁶⁶ Levy, *supra* note 5 (citation omitted).

²⁶⁷ Dreger, *The Sex of Athletes*, *supra* note 209 (citation omitted).

²⁶⁸ DREGER, HERMAPHRODITES, *supra* note 136, at 7.

addition, hormonal levels are in constant flux.²⁶⁹ To some degree, then, using testosterone as the benchmark would be unavoidably arbitrary. But as long as sports—and society overall—are organized around the fiction of binary difference, the dividing line between males and females must be drawn somewhere. Wherever the binary line is placed, it will be more of a social judgment than a scientific truth.

III. SEX TESTING AND THE POLITICS OF SPORTS

The binary divide is perceived as essentially self-evident in the sports context, where sex-segregated competition is the default model. Organized sports and binary sex are mutually reinforcing. Because sports are grounded in the performance of the physical body, they convey a biological basis for the male-female binary.²⁷⁰ And just as sports naturalize binary sex categories, the binary—and the normative views founded upon it—underlies sports. Intersex athletes thus disrupt the logic of binary classification not only as a social practice but, more narrowly, as a sporting practice. The proffered goal of sex testing is a level playing field.²⁷¹ But a woman's²⁷² inborn athletic advantage is troubling only when it originates from an intersex condition;²⁷³ other natural advantages are not only tolerated but exalted.²⁷⁴ At base, the justification for sex testing operates as a metaphor for the sports world's commitment to the binary sex model.

A. *Sports and Masculinity*

At the institutional level, sports have historically been male-dominated. In fact, organized athletics were developed by and for men.²⁷⁵ The transformation from an agrarian to industrial economy in the late nineteenth century “changed the

²⁶⁹ See Helene Keane & Marsha Rosengarten, *On the Biology of Sexed Subjects*, 17 AUSTL. FEMINIST STUD. 261, 269 (2002) (“[T]he hormonal body is always in process rather than fixed . . .”).

²⁷⁰ Kane, *supra* note 182, at 192; see also Susan Birrell & Cheryl L. Cole, *Double Fault: Renee Richards and the Construction and Naturalization of Difference*, 7 SOC. SPORT J. 1, 18 (1990) (“[S]port is a central site for the naturalization of sex and gender difference . . .”); Ann Travers, *The Sport Nexus and Gender Injustice*, 2 STUD. SOC. JUST. 79, 80-83 (2008).

²⁷¹ See *infra* notes 303, 305 and accompanying text.

²⁷² Importantly, sex tests have been applied only to female athletes. See generally Wackwitz, *supra* note 247, at 554.

²⁷³ See *infra* Part III.C.2.

²⁷⁴ See *infra* notes 307-10 and accompanying text.

²⁷⁵ See generally Messner, *supra* note 246, at 199-200.

foundation for the middle class masculine identity, once the physically powerful breadwinner and head of family.²⁷⁶ At the same time, women began to challenge masculine political and social power.²⁷⁷ These economic and social forces culminated in a “crisis of masculinity.”²⁷⁸ As traditional institutional spheres of masculinity appeared to crumble, sports offered men an outlet to reaffirm their masculine superiority.²⁷⁹

Gender equality has improved substantially since the advent of competitive sports. But sporting practices and ideologies still reflect the understanding of sports as a decidedly male arena. It is telling, for example, that the names of women’s professional sports associations specifically include gender identifiers while those of their male counterparts are unspecified.²⁸⁰ Similarly, many colleges and university sports teams still use sexist nomenclature to distinguish their women’s teams, either by using the feminine suffix *-ette* (e.g., Tigerettes) or by using a feminine prefix (e.g., Lady Tigers).²⁸¹

In professional football and baseball—the sports that Americans most frequently watch on TV²⁸²—women are not even eligible to play. Only in 2000 did the first professional women’s soccer league make its debut.²⁸³ The league folded

²⁷⁶ Suzanne Sangree, *Title IX and the Contact Sports Exemption: Gender Stereotypes in a Civil Rights Statute*, 32 CONN. L. REV. 381, 402 (2000).

²⁷⁷ *Id.* at 404.

²⁷⁸ Messner, *supra* note 246, at 200.

²⁷⁹ See Sangree, *supra* note 276, at 401-04.

²⁸⁰ Travers, *supra* note 270, at 83-84 (naming as examples “Ladies Professional Golf Association vs. Professional Golf Association; Women’s National Basketball Association vs. National Basketball Association”).

²⁸¹ Cynthia Fabrizio Pelak, *The Relationship Between Sexist Naming Practices and Athletic Opportunities at Colleges and Universities in the Southern United States*, 81 SOC. EDUC. 189, 195-98 (2008) (In a study of colleges and universities in nine southern states, almost seventy percent employed a “sexist naming practice.”).

²⁸² *Compare Updated Ratings Make Super Bowl XLIII the Most-Watched Ever*, USA TODAY (Feb. 4, 2009), http://www.usatoday.com/sports/football/nfl/2009-02-04-ratings_N.htm (about 98.7 million people watched Arizona-Pittsburgh Super Bowl), and *TV Ratings for NBA Finals Down from Last Year*, NBA.COM (June 16, 2009), <http://www.nba.com/2009/news/06/16/finals.ratings.ap/index.html?rss=true> (2009 NBA Finals had approximately 8.4 million viewers), and *World Series Ratings Highest Since 2004, as Matsui Buzzes in out of Nowhere*, NIELSEN WIRE (Nov. 6, 2009), http://blog.nielsen.com/nielsenwire/media_entertainment/world-series-ratings-highest-since-2004-as-matsui-buzzes-in-out-of-nowhere (average of 19 million viewers watched the World Series in 2009), with *WNBA Postseason on ESPN2 Delivers Double-Digit Increases Across the Board*, WBNA.COM (Oct. 12, 2009), http://www.wnba.com/news/postseason_ratings_091012.html (average of 548,000 viewers of 2009 WBNA Finals).

²⁸³ Robert Lipsyte, *Who’s Got Game?*, NATION (Mar. 24, 2008), <http://www.thenation.com/article/whos-got-game>.

three years later and did not relaunch until 2009.²⁸⁴ Although female professional basketball leagues exist today, women's basketball has a shorter season than its male counterpart,²⁸⁵ and tickets to see a men's basketball game are over three times more expensive than tickets for women's games.²⁸⁶

Moreover, when female athletes do appear in the media, the focus tends to be more on their sexuality than their athletic careers, which trivializes their athletic achievements and presents them as commodities for heterosexual male consumption.²⁸⁷ In these ways, social practice fosters the notion that women are not "real" athletes and that the sports realm is decidedly male.

B. *Myth and Reality Collide: The Sporting Practice of Sex Testing*

As a gendered institution, competitive sports have long been committed to the male-female binary. Binary sex has been particularly central in the Olympics, the pinnacle of athletic competition. Consistent with this interest, the Olympic Movement developed procedures early on to police the boundaries between male and female. The first sex verification policy was introduced prior to the 1966 European Athletics Championship, in response to rumors that men had been masquerading as women in competitive events.²⁸⁸ The procedure was rather crude, consisting solely of a visual genital inspection.²⁸⁹ In 1968, the International Olympic Committee (IOC)²⁹⁰ officially adopted the Barr body²⁹¹ test.²⁹² The new

²⁸⁴ Bill King, *Confident, Yes, but Can New League Survive?*, STREET & SMITH'S SPORTS BUS. J. (Mar. 2, 2009), <http://www.sportsbusinessjournal.com/article/61681>.

²⁸⁵ Lipsyte, *supra* note 283.

²⁸⁶ See Rachel Elyachar & Lauren Moag, *The Growth of Women's Sports*, in THE BUSINESS OF SPORTS 346, 348 (Scott R. Rosner & Kenneth L. Shropshire eds., 2004) (noting that the average ticket price for an NBA game is over \$50, while the average cost of WBNA tickets is about \$15); see also MCDONAGH & PAPPANO, *supra* note 46, at 239-40 (noting a similar disparity in the cost of college basketball tickets).

²⁸⁷ See Kristin Allbritton, *(Un)covering Athletes: When Women Appear in Sports Magazines, It's All About Sex*, N.Y. REV. MAG., <http://archives.jrn.columbia.edu/nyrm/2006/Well/uncoveringathletes.htm> (last visited July 16, 2010).

²⁸⁸ Robert Ritchie et al., *Intersex and the Olympic Games*, 101 J. ROYAL SOC'Y MED. 395, 396 (2008). At the 1936 Berlin Olympics, officials conducted a "sex check" of a female sprinter after a competitor publicly accused her of being a man, but no formal sex verification policy existed at that time. *Id.* at 395-96.

²⁸⁹ *Id.* at 396-97.

²⁹⁰ The IOC is the organization with the supreme authority over the Olympic Movement. Anita DeFrantz, *Which Rules?: International Sport and Doping in the 21st Century*, 31 HOUS. J. INT'L L. 1, 4 (2008) (citation omitted). For a detailed discussion of the history and structure of the Olympic Movement, see *id.* at 2-9.

procedure evaluated cells taken from the inner lining of an athlete's cheek.²⁹³ If the test detected that the athlete had two X chromosomes,²⁹⁴ she was certified as female; if not, she would be subject to blood tests and a physical examination.²⁹⁵ After a series of false positives and false negatives using the Barr method,²⁹⁶ the IOC replaced it at the 1992 Winter Olympics with the DNA polymerase chain reaction chromosomal test.²⁹⁷

The IOC finally abolished mandatory sex testing at its 109th session in June 1999 but reserved the authority to conduct sex verifications on an individual basis.²⁹⁸ The IAAF,²⁹⁹ on the other hand, employed the Barr body test until 1991 when it abandoned compulsory sex testing but reserved the right to conduct sex tests on an ad hoc basis³⁰⁰—that is, when suspicion was raised.³⁰¹ This policy remains in place in both the IOC and IAAF today.³⁰²

²⁹¹ The Barr body test was also known as the sex chromatin or buccal smear test. WAMSLEY, *supra* note 168, at 13.

²⁹² Haley K. Olsen-Acre, Note, *The Use of Drug Testing to Police Sex and Gender in the Olympic Games*, 13 MICH. J. GENDER & L. 207, 217 (2007).

²⁹³ *Id.*

²⁹⁴ For a discussion of chromosomes, see *supra* note 113.

²⁹⁵ WAMSLEY, *supra* note 168, at 13.

²⁹⁶ Olsen-Acre, *supra* note 292, at 217. Under the Barr body test, for example, “[w]omen with complete androgen insensitivity syndrome would have been barred from competing due to the presence of XY sex chromosomes despite an entirely female phenotype. Men with Klinefelter syndrome (who have an XXY mosaic) would be eligible to compete . . .” Ritchie et al., *supra* note 288, at 397.

²⁹⁷ Pilgrim, Martin & Binder, *supra* note 98, at 510. The polymerase chain reaction test amplifies the DNA extracted from buccal smears to allow detection of SRY, a Y chromosome gene that codes for male determination. See Ritchie et al., *supra* note 288, at 397; Olsen-Acre, *supra* note 292, at 217 n.46.

²⁹⁸ See INT’L OLYMPIC COMM., FACT SHEET, THE SESSIONS 2 (2008), http://multimedia.olympic.org/pdf/en_report_942.pdf; WAMSLEY, *supra* note 168, at 13.

²⁹⁹ For a discussion of the IAAF, see *supra* text accompanying note 10.

³⁰⁰ Pilgrim, Martin & Binder, *supra* note 98, at 511; WAMSLEY, *supra* note 168, at 13. This new policy would involve examinations by a gynecologist, an endocrinologist, a psychologist, an internist, and an “expert on gender/transgender issues.” WAMSLEY, *supra* note 168, at 13.

³⁰¹ WAMSLEY, *supra* note 168, at 13.

³⁰² The IAAF allows male-to-female transsexuals to compete as women after (1) a two-year grace period, (2) legal recognition of their assigned sex, and (3) a certain degree of hormonal therapy. IAAF MED. & ANTI-DOPING COMM’N, IAAF POLICY ON GENDER VERIFICATION 6 (2006), available at <http://www.iaaf.org/mm/Document/imported/36983.pdf>.

C. *Weighing the Benefits*

1. The Elusive Level Playing Field

The justification for sex testing has long been a level playing field³⁰³—the same goal of antidoping rules.³⁰⁴ Intersex-based advantages, some have argued, jeopardize the integrity of competition.³⁰⁵ But intersex conditions are very different from performance-enhancing drugs. The volitional element is wholly absent.³⁰⁶

As a practical matter, athletic advantages are relative. Elevated testosterone levels, for example, are not uncommon among female athletes—intersex or not.³⁰⁷ The typical female athlete surpasses average standards of strength, speed, agility, and endurance.³⁰⁸ All top twenty female tennis players in February 2007, for example, exceeded the average height for a woman aged twenty to thirty.³⁰⁹ Considered in this context, the advantage derived from intersex conditions is perhaps overstated.

At any rate, whatever advantages are conferred by intersex conditions, they are fundamentally no different from any other inborn physical advantage, such as long limbs,

³⁰³ Alice Dreger, *Science Is Forcing Sports to Re-examine Their Core Principles*, N.Y. TIMES (Sept. 13, 2009), at D1, available at <http://www.nytimes.com/2009/09/13/sports/13dreger.html> [hereinafter Dreger, *Science Forcing Sports*]. But not all intersex conditions provide a competitive edge. Chris Lehourites, *Semenya's Status No Clearer Despite Media Leak*, USA TODAY (Sept. 11, 2009), http://www.usatoday.com/sports/olympics/2009-09-11-3776936744_x.htm (“Some [intersex conditions] give no advantage.” (citation omitted)).

³⁰⁴ See Jennifer Elle Lewis, *Caster Semenya: A Girl of Two Parts*, 7 GENDER & MEDIA DIVERSITY J. 112, 115 (2009); Dreger, *Science Forcing Sports*, *supra* note 303. Antidoping rules are also about safety, but the primary concern is competitive integrity. See Dreger, *Science Forcing Sports*, *supra* note 303 (“The safety argument against steroids may be a good one, but . . . [i]t isn’t the one that motivates most officials and fans to frown on steroids. Steroid use does not just seem risky or unnatural[;] it seems to disrupt the level playing field.”).

³⁰⁵ See, e.g., William Lee Adams, *Could This Women’s World Champ Be a Man?*, TIME (Aug. 21, 2009), <http://www.time.com/time/world/article/0,8599,1917767,00.html> (statement of Italian runner Elisa Piccione to journalists after finishing the 2009 World Championships in sixth place—behind first-place winner Caster Semenya) (“These kinds of people should not run with us. For me, she’s not a woman. She’s a man.”).

³⁰⁶ Lewis, *supra* note 304, at 115.

³⁰⁷ Dreger, *Where’s the Rulebook?*, *supra* note 205 (“[T]o state the obvious, the average female athlete is not the average woman. In some sports, she is likely to have naturally high levels of androgens. That is probably part of why she has succeeded athletically.”). Also, the correlation between testosterone and competitive edge is not well understood. See *supra* notes 211-14 and accompanying text.

³⁰⁸ David McArdle, *Swallows and Amazons, or the Sporting Exception to the Gender Recognition Act*, 17 SOC. & LEGAL STUD. 39, 48 (2008).

³⁰⁹ McArdle, *supra* note 308, at 49.

strong lungs, or a fast metabolism—none of which are viewed as unfairly disadvantaging less endowed athletes.³¹⁰ Cyclist Lance Armstrong, for instance, reportedly has half as much lactic acid in his muscles than the average person, enabling him to recover much faster than other athletes.³¹¹ One physiologist opined that “there are probably no more than 20 people on earth with [Lance Armstrong’s cycling] ability.”³¹² Organized sports not only tolerate athletes like Armstrong but idolize them for their superhuman athletic abilities.³¹³

Even advantages derived from bodily *abnormalities* are permitted. Under the IAAF’s policy, a female athlete with adrenal cancer may compete as a woman, even though she may have higher testosterone levels than a typical male.³¹⁴ Volleyball player Flo Hyman had Marfan’s syndrome, a condition characterized by tall stature and long limbs.³¹⁵ Similarly, several professional basketball players have had acromegaly or gigantism, diseases responsible for their unusual tallness.³¹⁶ South African sprinter

³¹⁰ See Dreger, *Where’s the Rulebook?*, *supra* note 205 (“Some men naturally have higher levels of androgens than other men. . . . Men on average are taller than women. But do we stop women from competing if a male-typical height gives them an advantage over shorter women? . . . So why would we want to tell some women, ‘You naturally have too high a level of androgens to compete as a woman?’ There seems to be nothing wrong with this kind of natural advantage.”); Levy, *supra* note 5 (“Michael Phelps, who has won fourteen Olympic gold medals, has unusually long arms and is said to have double-jointed elbows, knees, and ankles.”); Aimee Mullins, *Racing Carbon Fiber Legs: How Abled Should We Be?*, GIZMODO (Nov. 12, 2009), <http://gizmodo.com/5403322/racing-on-carbon-fiber-legs-how-abled-should-we-be> (“It’s absurd to look at a star line-up of athletes and think that they all have an equal shot. . . . It’s tough luck that 5’11” Tyson Gay has to line up against a 6’5” Usain Bolt.”).

³¹¹ Stefan Lovgren, *The Science of Lance Armstrong: Born, and Built, to Win*, NAT’L GEOGRAPHIC NEWS (July 22, 2005), <http://news.nationalgeographic.com/news/pf/73545248.html>.

³¹² Gina Kolata, *Super, Sure, but Not More than Human*, N.Y. TIMES (July 24, 2005), <http://www.nytimes.com/2005/07/24/weekinreview/24kola.html> (quoting physiologist Eric Coyle).

³¹³ See David Zirin, *The Fall of Marion Jones, Inc.*, NATION (Oct. 15, 2007), <http://www.thenation.com/article/fall-marion-jones-inc.>; see also Sheila L. Cavanaugh & Heather Sykes, *Transsexual Bodies at the Olympics: The International Olympic Committee’s Policy on Transsexual Athletes at the 2004 Athens Summer Games*, 12 BODY & SOC’Y 75, 78 (2006) (describing Olympic bodies as “display[ing] superhuman strength, endurance, balance, coordination, speed and agility”); Jennifer Warner, *Genes Separate Olympians from Average Joes*, MEDICINET.COM (Aug. 6, 2004), <http://www.medicinenet.com/script/main/art.asp?articlekey=50333> (“[Elite Olympic athletes] are an anomaly with some of them almost bordering on freaks of nature.”).

³¹⁴ Dreger, *The Sex of Athletes*, *supra* note 209.

³¹⁵ J C Reeser, *Gender Identity and Sport: Is the Playing Field Level?*, 39 BR. J. SPORTS MED. 695, 698 (2005). Though Hyman was not diagnosed until after her death, “she was clearly phenotypically different from the vast majority of her fellow athletes . . . [and] was never . . . restricted from competing because she was different.” *Id.*

³¹⁶ Levy, *supra* note 5. For example, former NBA player Gheorghe Mureșan and Chinese basketball player Sun Ming Ming, who has played in American minor

Oscar Pistorius, who has a double amputation, was declared eligible to run in the Olympic Games, despite criticism that his prosthetic legs afforded him an unfair advantage.³¹⁷

The goal of a level playing field is also undercut by socioeconomic factors. Athletic achievement is influenced by access to coaching and training, facilities, nutrition, equipment, technology, and “even sheer opportunity to participate.”³¹⁸ Golfer Tiger Woods underwent two LASIK procedures to achieve 20/15 vision.³¹⁹ Prior to the surgery, Woods was so nearsighted that he was considered legally blind without glasses or corrective lenses.³²⁰ Woods stated that contact lenses burned his eyes and negatively impacted his golf performance.³²¹ But not all athletes have access to LASIK surgery—or even corrective lenses, for that matter.³²² Likewise, at the 2008 Beijing Olympics, athletes wearing the controversial Speedo LZR Racer swimsuit won ninety-four percent of the swimming gold medals and broke seventy-four world records.³²³ And with a \$550 price tag, the suit was inaccessible to less affluent competitors, particularly those from developing regions.³²⁴ Although FINA³²⁵—the international governing body for swimming—subsequently banned the suits, it allowed the Beijing world records to stand.³²⁶

leagues, both have gigantism. See Adam Himmelsbach, *Basketball Skills Come Slowly to a 7-Foot-9 Center from China*, N.Y. TIMES (Mar. 10, 2007), <http://www.nytimes.com/2007/03/10/sports/basketball/10sun.html>.

³¹⁷ Press Release, Int’l Ass’n of Athletics Fed’n’s, Pistorius Is Eligible for IAAF Competition (May 16, 2008), available at <http://www.iaaf.org/aboutiaaf/news/newsid=44917.html>. The IAAF had initially decided that Pistorius could not compete, relying on the report of a biomechanics expert who had tested the prosthetics. *Id.* The Court of Arbitration for Sport reversed the IAAF’s decision, finding inconclusive evidence of an unfair advantage. *Id.*

³¹⁸ Kane, *supra* note 182, at 201; WAMSLEY, *supra* note 168, at 12.

³¹⁹ Mullins, *supra* note 310.

³²⁰ *Id.*

³²¹ *Id.*

³²² Cf. William Saletan, *The Beam in Your Eye: If Steroids Are Cheating, Why Isn’t LASIK?*, SLATE (Apr. 18, 2005), <http://www.slate.com/id/2116858> (questioning whether LASIK surgery is really any different from steroid usage).

³²³ Anna Kessel, *Born Slippery*, GUARDIAN (U.K.) (Nov. 23, 2008), <http://www.guardian.co.uk/sport/2008/nov/23/swimming-olympics2008>; Mullins, *supra* note 310.

³²⁴ Kessel, *supra* note 323; Candus Thomson & Kevin Van Valkenburg, *Speedo’s Strong Suit*, BALTIMORE SUN (Apr. 4, 2008), <http://www.baltimoresun.com/sports/olympics/bal-sp.swim04apr04,0,3142477.story>.

³²⁵ FINA stands for Fédération Internationale de Natation. See *Structure*, FINA, http://www.fina.org/H2O/index.php?option=com_content&view=article&id=602&Itemid=359 (last visited Aug. 24, 2010).

³²⁶ Mullins, *supra* note 310.

At bottom, athletic competition is not a democratic enterprise. The bodies of athletes are no more homogeneous than the opportunities available to them. On some level, then, competitive sports will always be intrinsically “unfair.” To the extent that fair competition is not frustrated by this baseline disparity, intersex bodies are no more subversive to a level playing field than the naturally occurring advantages permitted in competitive sports.

2. Identifying the Metaphor: *Level for Binary*

Given the plethora of systemic inequalities in organized sports, why are intersex-based advantages singled out as unfair? Unlike other advantages, intersex is understood as arising from a degree of “maleness”—in particular, testosterone. Although testosterone is endogenous to both male and female bodies,³²⁷ its connotation of maleness remains culturally entrenched.³²⁸ By default, an elevated level of testosterone (read *maleness*) is seen as a competitive edge too great to tolerate in sex-segregated sports.

A female athlete perceived as too athletically skilled, too muscular, too masculine-looking—characteristics traditionally (even if simplistically) associated with testosterone—disrupts the binary division of sports and must be reined in.³²⁹ Thus, her status as a woman is challenged, and she is depicted as a “biological freak” or a “deviant-mutant.”³³⁰ By branding this woman as the “other,” the boundaries between male and female

³²⁷ DREGER, HERMAPHRODITES, *supra* note 136, at 7.

³²⁸ See FAUSTO-STERLING, MYTHS OF GENDER, *supra* note 131, at 81. Accordingly, testosterone has been invoked to justify aggression, violence, and power. *See id.* at 123-54. In 2000, for example, columnist Andrew Sullivan wrote a controversial piece, arguing that testosterone was the reason that various “inequalities between men and women remain so frustratingly resilient in public and private life.” Andrew Sullivan, *The He Hormone*, N.Y. TIMES, Apr. 2, 2000, § 6 (Magazine), at 46, available at <http://www.nytimes.com/2000/04/02/magazine/the-he-hormone.html>. The notion that “testosterone equals male” and “absence of testosterone equals female” reflects the traditional understanding of femaleness as a “lack” of maleness. FAUSTO-STERLING, MYTHS OF GENDER, *supra* note 131, at 81.

³²⁹ For example, Caster Semenya’s deep voice, muscular build, and athletic prowess fueled rumors on South African blogs that she was “born a hermaphrodite,” prompting the IAAF to conduct tests. *See Levy, supra* note 5. Tennis pro athlete Martina Navratilova was criticized for looking “too manly” and one of her competitors claimed that she “must have a chromosome loose somewhere.” Dave Zirin & Sherry Wolf, *The Idiocy of Sex Testing*, NATION (Aug. 21, 2009), http://www.thenation.com/doc/20090831/zirin_wolf.

³³⁰ Kane, *supra* note 182, at 210-12; *see also* Olsen-Acre, *supra* note 292, at 233.

in sports are reaffirmed and normalized³³¹—the implication being that it is the woman who is flawed, not the social institution. Sex testing, then, is less about egalitarianism than it is about gender politics. At its core, the *level* playing field is a metaphor for a *binary* one.

3. Balancing the Social Costs

The intolerance for sex nonconformity is socially costly as well. For one thing, sex testing normalizes the inquisition of athletes who are too masculine—or too strong—to be women and encourages their vilification.³³² Moreover, these procedures subject women to tremendous psychological harm. After Caster Semenya's sex was publicly called into question, she went into hiding and sought trauma counseling.³³³ Semenya is one of many female athletes to suffer this emotional damage at the hands of sex testing policies. Ewa Klobukowska was the first athlete to fail a sex test.³³⁴ Stripped of her Olympic medals and barred from future competition, she fell into a severe depression and severed all ties with the sports world.³³⁵ In 1986, Maria Jose Martinez-Patiño was publicly disqualified after the Barr body test³³⁶ revealed that she had a Y chromosome.³³⁷ In the aftermath, her athletic scholarship was revoked, her

³³¹ Cf. Lena Eckert, *'Diagnosticism': Three Cases of Medical Anthropological Research into Intersexuality*, in CRITICAL INTERSEX 41, 54 (Morgan Holmes ed., 2009) (“[P]ositioning ‘normal’ bodies as dependent on ‘other’ and ‘abjected’ bodies or identities . . . constructs the normal.” (citations omitted)).

³³² For example, it is doubtful that Caster Semenya would have been subjected to sex tests if she were conventionally beautiful. Gregg Doyel, *The Ugly Side of Semenya Gender Saga*, CBSSPORTS.COM (Aug. 25, 2009), <http://www.cbssports.com/columns/story/12111248> (“[I]f [Semenya] were beautiful, there would be no outrage here, because her winning time and even her margin of victory [would be] plausible.”).

Caster Semenya's treatment has been likened to the prurient interest in the Khoikhoi woman Saartjie Bartmann during the nineteenth century. Dubbed the “Hottentot Venus,” Bartmann's naked body—in particular, her large buttocks and elongated labia—was displayed as a sideshow attraction and utilized to reinforce racial difference. See, e.g., Lewis, *supra* note 304, at 114-15 (2009); see also JENNIFER MORGAN, *LABORING WOMEN: REPRODUCTION AND GENDER IN NEW WORLD SLAVERY* 12-49 (2004) (arguing that early European travelers' descriptions of African women's bodies formed the ideological foundations of slavery in the West).

³³³ Alex Duval Smith & Stewart Maclean, *Fears for Caster Semenya over Trauma of Test Results*, GUARDIAN (U.K.) (Sept. 13, 2009), <http://www.guardian.co.uk/sport/2009/sep/13/caster-semenya-gender-test-results>.

³³⁴ See Alison Carlson, *Essay: Suspect Sex*, 366 LANCET S39, S39 (2005).

³³⁵ See *id.*

³³⁶ For a discussion of the Barr body test, see *supra* notes 291-96 and accompanying text.

³³⁷ See FAUSTO-STERLING, *SEXING THE BODY*, *supra* note 22, at 1.

records were erased, and her fiancé left her.³³⁸ She later wrote, “What happened to me was like being raped. I’m sure it’s the same sense of incredible shame and violation. The only difference is that, in my case, the whole world was watching.”³³⁹ Perhaps most tragic is Santhi Soundarajan’s story. The Indian middle-distance runner won a silver medal at the 2006 Asian Games only to be stripped of her medal over a failed sex test.³⁴⁰ Soundarajan attempted suicide in 2007.³⁴¹

At bottom, binary sex classification is inescapably exclusive because it fails to recognize the natural bodies of all human beings. Sex testing makes intersex people scapegoats for the inadequacy of a sex/gender system that, by its very nature, casts them as biological freaks. Treating intersex people as deviants may reaffirm the binary, but as intersex becomes more visible, sexual dimorphism becomes increasingly difficult to vindicate.

Ideally, the prevailing sex/gender model would be displaced entirely. But this goal is admittedly overambitious (at least currently). The present challenge, then, is to “make room for”³⁴² intersex people within the existing binary framework by recognizing sexual identity as a valid signifier of binary sex. As a remedial statute³⁴³ that has dramatically improved gender equality in sports,³⁴⁴ Title IX is a promising avenue to deconstruct the deep-rooted assumption that sex is binary.

³³⁸ Maria Jose Martinez-Patiño, *Personal Account: A Woman Tried and Tested*, 366 LANCET S38, S38 (2005).

³³⁹ See Alison Carlson, *When Is a Woman Not a Woman?*, WOMEN’S SPORTS & FITNESS, Mar. 1991, at 24, 29 (quoting Maria Jose Martinez-Patiño); see also Maria Jose Martinez-Patiño, *supra* note 338, at S38.

Patiño later discovered that she had androgen insensitivity syndrome (AIS). FAUSTO-STERLING, *SEXING THE BODY*, *supra* note 22, at 2. People with AIS have XY chromosomes, but their bodies are unresponsive to testosterone. See *supra* text accompanying notes 123-25. The IAAF reinstated Patiño in 1988. Maria Jose Martinez-Patiño, *supra* note 338, at S38. But by then, much of her momentum was lost; she failed to qualify for the 1992 Olympics, missing the mark by ten hundredths of a second. *Id.*

³⁴⁰ Harmeet Shah Singh, *Indian Athlete Makes Plea for Semenya*, CNN (Sept. 14, 2009), <http://www.cnn.com/2009/WORLD/asiapcf/09/14/Semenya.India.Athlete>.

³⁴¹ *Id.*

³⁴² The phrase *make room for* is taken from Kate Haas’s article. See Kate Haas, *Who Will Make Room for the Intersexed?*, 30 AM. J.L. & MED. 41 (2004).

³⁴³ See, e.g., 118 CONG. REC. 5803 (1972) (statement of Senator Bayh) (explaining that Title IX’s purpose was to combat “the continuation of corrosive and unjustified discrimination against women” in the American educational system).

³⁴⁴ See, e.g., NWLC, *A NATION’S PROMISE*, *supra* note 251, at 1 (“The number of college women participating in competitive athletics is now nearly five times the pre-Title IX rate. In 2005-06, a record number of 170,526 women competed, representing 42% of college athletes nationwide.”).

IV. PREVENTING DISCRIMINATION ON THE BASIS OF SEX IN SCHOOL ATHLETICS

To protect intersex student athletes from discrimination on account of their binary nonconformity, the law must first recognize that binary categories themselves are oppressive vis-à-vis intersex people. This section begins by examining Title IX's application to intersex individuals. It then considers two policies for preventing intersex-directed discrimination in school sports: (1) sex-integrated teams and (2) sex-segregated teams organized by students' self-identified gender.

A. *Discrimination Against Intersex Individuals as Discrimination on the Basis of Sex*

Title IX's application to intersex individuals depends largely on the interpretation of the word *sex*. If *sex* comprises the anatomical traits associated with males and females, the plain language of Title IX seems to protect intersex individuals. But if the term is limited to the status of being male or female, then intersex people—who fit neatly into neither category—are left unprotected.

To date, very few courts have addressed discrimination against intersex people,³⁴⁵ and none have done so under Title IX. Still, the sex-discrimination cases decided under Title VII³⁴⁶ are

³⁴⁵ Only one case, as far as I have found, directly addresses discrimination against intersex individuals. In *DiMarco v. Wyoming Department of Corrections* (“*DiMarco I*”), 300 F. Supp. 2d 1183 (D. Wyo. 2004), the plaintiff, Miki Ann DiMarco, was an intersex woman incarcerated in a Wyoming female correctional facility. *Id.* at 1186. DiMarco had initially been classified as a minimum security risk. *Id.* at 1188. But after a routine search revealed her atypical genitals, prison officials placed DiMarco in maximum-security isolation without providing her a hearing to challenge the decision. *Id.* at 1187, 1189. DiMarco subsequently brought suit in a federal district court, arguing that the conditions of her confinement violated her constitutional rights. In rejecting DiMarco's equal-protection claim, the district court held that intersex people were not a suspect class under the Equal Protection Clause and concluded that the prison's decision survived rational-basis scrutiny. *Id.* at 1197. The court did find, however, that DiMarco's procedural-due-process rights had been violated, noting that the sole reason for her solitary confinement was “a genetically created ambiguous gender and the [prison] had plenty of time to develop other more respectable, less harsh alternatives.” *Id.* at 1195. On appeal, the Tenth Circuit reversed the lower court's due-process ruling. The panel conceded that the prison officials “could have done better,” but it concluded that safety and the prison's lack of resources were legitimate reasons for segregating DiMarco. *Estate of DiMarco v. Wyo. Dep't of Corr.* (“*DiMarco II*”), 473 F.3d 1334, 1342-43, 1345 (10th Cir. 2007).

³⁴⁶ Title VII of the Civil Rights Act of 1964, 42 U.S.C. § 2000e (2006). Title VII prohibits workplace discrimination based on certain characteristics, one of which is sex. *See id.* § 2000e-2.

instructive, as courts typically interpret Title IX by analogy to Title VII.³⁴⁷ While no Title VII case squarely addresses intersex discrimination, several cases have considered Title VII's application to other gender-nonconforming plaintiffs—namely, transgender³⁴⁸ individuals. The evolving judicial approach to Title VII claims for transgender discrimination suggests that Title VII (and thus, Title IX) protects intersex people.

Like Title IX, Title VII prohibits discrimination based on *sex*. Embracing a traditional view of sex categorization, courts have consistently ruled that transgendered individuals are not protected under Title VII solely due to their status as transgendered.³⁴⁹ Nevertheless, most modern courts extend Title VII protection to transgendered individuals who can demonstrate that they were subjected to discrimination because they do not conform to male or female stereotypes.³⁵⁰ In *Kastl v. Maricopa Community College*, for example, a federal district court held that Title VII prohibits discrimination against a transgender employee for failure to conform to the employer's gender expectations, "whether th[ose] stereotype[s] relate[] to an individual's behavior, appearance, or anatomical features."³⁵¹ The court reasoned,

³⁴⁷ See, e.g., *Franklin v. Gwinnett Cnty. Pub. Sch.*, 503 U.S. 60, 75 (1992) (relying on a Title VII case, *Meritor Savings Bank v. Vinson*, 477 U.S. 57 (1986), to hold that Title IX applied to the sexual harassment of a student); *Murray v. N.Y. Univ. Coll.*, 57 F.3d 243, 249 (2d Cir. 1995) ("[I]n a Title IX suit for gender discrimination based on sexual harassment of a student, an educational institution may be held liable under standards similar to those applied in cases under Title VII.").

³⁴⁸ The terms *transsexual* and *transgender* are often used interchangeably. This note uses *transgender* as "[a]n umbrella term . . . for people whose gender identity and/or gender expression differs from the sex they were assigned at birth." GAY & LESBIAN ALLIANCE AGAINST DEFAMATION, MEDIA REFERENCE GUIDE 8 (8th ed. 2010), available at <http://www.glaad.org/document.doc?id=99>. "Transgender people may or may not decide to alter their bodies hormonally and/or surgically." *Id.*

³⁴⁹ See *Schroer v. Billington (Schroer II)*, 577 F. Supp. 2d 293, 305 (D.D.C. 2008) (collecting cases).

³⁵⁰ See, e.g., *Barnes v. City of Cincinnati*, 401 F.3d 729, 737 (6th Cir. 2005); *Smith v. City of Salem*, 378 F.3d 566, 571-75 (6th Cir. 2004); *Schroer II*, 577 F. Supp. 2d at 305; *Lopez v. River Oaks Imaging & Diagnostic Grp., Inc.*, 542 F. Supp. 2d 653, 660-61 (S.D. Tex. 2008); *Creed v. Family Express Corp.*, No. 3:06-CV-465RM, 2007 WL 2265630, at *2-4 (N.D. Ind. Aug. 3, 2007); *Mitchell v. Axcan Scandipharm, Inc.*, No. 05-243, 2006 WL 456173, (W.D. Pa. Feb. 17, 2006); *Kastl v. Maricopa Cnty. Cmty. Coll. Dist.*, No. Civ. 02-1531-PHX-SRB, 2004 WL 2008954, at *2 (D. Az. June 3, 2004); *Tronetti v. TLC Healthnet Lakeshore Hosp.*, No. 03-CV-0375E, 2003 WL 22757935, at *4 (W.D.N.Y. Sept. 26, 2003).

Sex-stereotyping Title VII claims were first recognized as actionable claim under Title VII in *Price Waterhouse v. Hopkins*, 490 U.S. 228 (1989). See *id.* at 251 (plurality opinion) (holding that adverse treatment based on the failure to conform gender stereotypes was an impermissible form of sex discrimination under Title VII).

³⁵¹ *Kastl*, 2004 WL 2008954, at *2.

The presence or absence of anatomy typically associated with a particular sex cannot itself form the basis of a legitimate employment decision unless the possession of that anatomy (as distinct from the person's sex) is a bona fide occupational qualification. . . . Therefore, neither a woman with male genitalia nor a man with stereotypically female anatomy, such as breasts, may be deprived of a benefit or privilege of employment by reason of that nonconforming trait.³⁵²

Kastl's reasoning seems to apply to intersex people as well. When intersex persons are subject to adverse treatment for failing to conform to a binary sex, they, too, are discriminated against because their anatomical characteristics do not align with their gender identity. And this mistreatment, like that directed at transgendered people, stems from the stereotypical expectation that certain anatomical traits appropriately dictate gender identity. To be sure, unlike intersex people, transgendered individuals are born with a socially recognized sex, and discrimination directed at them is based on their failure to conform to the social expectations for someone of their natal sex. But just because intersex people fall outside of the binary does not mean that they are without a sex.³⁵³ Indeed, most identify as male or female.³⁵⁴ As Judge James Robertson of the D.C. District Court recognized in *Schroer v. Billington*, sex is not simply a matter of anatomical characteristics; it necessarily encompasses gender identity.³⁵⁵ To treat anatomical traits as conclusive of sex not only grossly oversimplifies the issue, but “superimpose[s] classifications” on individuals and “then legitimize[s] discrimination based on [their] gender non-conformity by formalizing the non-conformity into an ostensibly unprotected

³⁵² *Id.* (footnote omitted).

³⁵³ *Cf. Tronetti*, 2003 WL 22757935, at *4 (“Transsexuals are not gender-less[;] they are either male or female and are thus protected under Title VII to the extent that they are discriminated against on the basis of sex.”).

³⁵⁴ See April Herndon, *Why Doesn't ISNA Want to Eradicate Gender?*, INTERSEX SOC'Y N. AM. (Feb. 17, 2006, 1:28 PM), http://www.isna.org/faq/not_eradicating_gender (“[M]any intersex people are perfectly comfortable adopting either a male or female gender identity and are not seeking a genderless society or to label themselves as a member of a third gender class.”).

³⁵⁵ *Schroer II*, 577 F. Supp. 2d 295, 306 (D.D.C. 2008); see also *Schroer v. Billington (Schroer I)*, 424 F. Supp. 2d 203, 212-13 (D.D.C. 2006) (“[F]actual complexities that underlie human sexual identity . . . stem from real variations in how the different components of biological sexuality—chromosomal, gonadal, hormonal, and neurological—interact with each other, and in turn, with social, psychological, and legal conceptions of gender.”).

classification.”³⁵⁶ Under this approach, discrimination against intersex people constitutes discrimination “on the basis of sex” within the plain meaning of Title IX.³⁵⁷

Although Title IX may not have been explicitly intended to remedy discrimination against intersex people, when it was enacted in 1972, legislators perceived sex discrimination only in terms of the inequalities between men and women; they had little knowledge of intersex.³⁵⁸ As the Supreme Court has noted, “statutory prohibitions often go beyond the principal evil to cover reasonably comparable evils. . . .”³⁵⁹ Because the male-female binary is itself socially prescribed, discrimination based on status as male or female is comparable to discrimination based on failure to conform to either binary sex group. In both cases, binary sex categories are used to elevate some individuals over others—males over females (or vice versa) or individuals that conform to binary expectations over those that cannot.

B. *Policies of Protection for Intersex Athletes*

If intersex individuals are covered by Title IX, preventive measures should be taken to ensure that they are not subjected to sex discrimination without consequence. Two potential policies are considered below.

1. The Case for Sex-Integrated Sports in Title IX Programs

Since the sex-segregated sports model perpetuates problematic cultural fictions, should it be dismantled altogether in school athletics? Some commentators say yes, advocating gender-neutral criteria to decide eligibility in sex-integrated sports teams.³⁶⁰ After all, if more physical variation

³⁵⁶ Cf. *Smith v. City of Salem*, 378 F.3d 566, 574 (6th Cir. 2004) (criticizing the view that discrimination based on sex stereotyping is removed from Title VII’s coverage simply because it is directed at transgendered individuals).

³⁵⁷ Cf. *Schroer II*, 577 F. Supp. at 308 (“[T]he . . . refusal to hire [the plaintiff] after being advised that she planned to change her anatomical sex by undergoing surgery was literally discrimination ‘because of . . . sex’” under Title VII.).

³⁵⁸ See *supra* notes 138-42.

³⁵⁹ *Oncale v. Sundowner Offshore Servs., Inc.*, 523 U.S. 75, 79 (1998).

³⁶⁰ Some commentators have decried organized sport as a bastion of “sexual apartheid,” see, e.g., Travers, *supra* note 270, at 92 (summarizing this view); Dominic Lawson, *No Sexing, Please—Let’s All Race Together*, SUNDAY TIMES (U.K.) (Aug. 23, 2009), http://www.timesonline.co.uk/tol/comment/columnists/dominic_lawson/article6806508.ece, and have likened sex-segregated athletics to the de jure racial segregation ruled unconstitutional in *Brown v. Board of Education*, 347 U.S. 483 (1954), see Travers, *supra*

is found within sex categories than between them,³⁶¹ then sex is not the most meaningful variable in structuring sports. Indeed, if sex ceases to be an organizing principle in team sports, intersex athletes would no longer be excluded; bodies would no longer be sex-verified and forced into binary conformity.³⁶²

But if integration solves one problem, it precipitates another—namely, the marginalization of women. In theory, integration shifts the focus away from sex as the yardstick for athletic performance: if organized sports actively reinforce the binary fiction—and its concomitant gender stereotypes—dispensing with sex as an organizational category helps deconstruct the view that women are, by default, inferior athletes.³⁶³ Nevertheless, while sex is by no means a proxy for athletic talent, the performance gap does tip in favor of males.³⁶⁴ In effect, then, integrated team sports would shut out girls and women³⁶⁵—a result that, ironically, flies in the face of Title IX.³⁶⁶

note 270, at 92. Under this view, “just as racial segregation in sport has been abolished [based on] the revelation that race is not meaningful as a biological category, so too should sex segregation.” Travers, *supra* note 270, at 92 (citing MARTINE ROTHBLATT, *THE APARTHEID OF SEX: A MANIFESTO ON THE FREEDOM OF GENDER* (1995)).

³⁶¹ See sources cited *supra* note 182.

³⁶² Cf. Travers, *supra* note 270, at 92 (noting that integrated sports would eliminate the need for the IOC’s policy on transsexual participation).

³⁶³ See, e.g., Eric Anderson, “I Used to Think Women Were Weak”: *Orthodox Masculinity, Gender Segregation, and Sport*, 23 *SOC. F.* 257, 274-75 (2008) (finding that male members of integrated team sports “were influenced to undo much of their . . . sexist thinking” and came to view their female teammates as “worthy and competent athletes”).

³⁶⁴ See *supra* Part II.C.1.

³⁶⁵ Integration at the elite level, however, would advantage the most talented female athletes by opening the door for them to compete in the prestigious male-only events. See Travers, *supra* note 270, at 91.

Different variations of the sex-integration model have been proposed. See, e.g., MCDONAGH & PAPPANO, *supra* note 46, at 224 (arguing that female-only teams should be retained and that females should be given the option to play on currently male-only teams); B. Glenn George, *Fifty/Fifty: Ending Sex Segregation in School Sports*, 63 *OHIO ST. L.J.* 1107, 1145 (2002) (advocating mixed-sex sports teams where half the players are male and half are female).

³⁶⁶ The case law addressing sex-integrated sports is in accord. See, e.g., *O’Connor ex rel. O’Connor v. Bd. of Educ.*, 449 U.S. 1301, 1307 (Stevens, Circuit Justice 1980) (“Without a gender-based classification in competitive contact sports, there would be a substantial risk that boys would dominate the girls’ programs and deny them an equal opportunity to compete in interscholastic events.”); *Clark ex rel. Clark v. Ariz. Interscholastic Ass’n*, 695 F.2d 1126, 1131 (10th Cir. 1982) (“[D]ue to average physiological differences, males would displace females to a substantial extent if they were allowed to compete for positions on the volleyball team. Thus, athletic opportunities for women would be diminished.”); *Kleczek v. R.I. Interscholastic League, Inc.*, 612 A.2d 734, 738-39 (R.I. 1992) (“Because of innate physiological differences, boys and girls are not similarly situated as they enter athletic competition. . . . The tradition of having separate teams is based on a realization that . . . distinguishing between boys and girls in interscholastic sports will . . . provide more athletic opportunities for both boys and girls.”); *B.C. ex rel. CC. v. Bd. of Educ.*, 531 A.2d 1059, 1065 (N.J. Super.

For the purposes of the statute, the root of this sex-linked differential—whether biological limitation or social influence—is of little consequence. “Just because something is socially constructed . . . does not mean it is not ‘real’; social forces have material consequences.”³⁶⁷ The performance differential may not be inevitable, but—for now at least—it exists nonetheless.

2. Constructing Categories of Inclusion in School Sports

a. *Self-Identified Gender as Determinative*

If sex-integrated competition is not a viable option, the binary organization of sports must bend to recognize the reality of intersex bodies. Sex itself is a social judgment about how to classify material bodies, where to draw the line between nature and pathology.³⁶⁸ The boundary where femaleness ends and maleness begins is simply too complex—and too subjective—to be verifiable.³⁶⁹ But as long as sports—and society at large—are structured on a binary understanding of sex, intersex athletes “must be sexed.”³⁷⁰ The only way to avoid alienating individuals who cannot conform to our sex classification system is to respect their gender identity.

To prevent the gender inquisition that befell Caster Semenya from occurring in the educational context, the DOE should issue Title IX regulations—or, failing that, a policy interpretation³⁷¹—making a student’s self-identified gender determinative of eligibility to compete in school athletics. If a

Ct. App. Div. 1987) (“[E]xcluding males from participation on female high school athletic teams . . . prevents males from dominating and displacing females from meaningful participation in available athletic opportunities.”); *Petrie ex rel. Petrie v. Ill. High Sch. Ass’n*, 394 N.E.2d 855, 864 (Ill. App. Ct. 1979) (“Because of the innate advantage in volleyball [that] many boys possess over many girls, permitting boys to play [on girls’ teams] would place a substantial competitive premium upon schools placing themselves in that position.”); *cf. Williams ex rel. Williams v. Sch. Dist.*, 998 F.2d 168, 178-79 (3d Cir. 1993) (finding a genuine issue of material fact over whether allowing boys to play on a school’s female field-hockey team would inhibit girls’ athletic opportunities at the school). *But see Attorney Gen. v. Mass. Interscholastic Athletic Ass’n, Inc.*, 393 N.E.2d 284, 293 (Mass. 1979) (“[B]iological circumstance does contribute to some overall male advantages. But we think the differences are not so clear or uniform as to justify a rule in which sex is sought to be used as a kind of ‘proxy’ for a functional classification.”).

³⁶⁷ Travers, *supra* note 270, at 92.

³⁶⁸ *See supra* Part II.B.2.

³⁶⁹ *See supra* Part II.B.1.

³⁷⁰ *See WILCHINS, supra* note 166, at 56 (“To participate in society, we must be sexed.”).

³⁷¹ As discussed earlier in this note, the DOE has oversight responsibility for Title IX. *See supra* notes 51-52, 69 and accompanying text.

student lives and identifies as a female, there should be no other eligibility criterion for participation on a female team.³⁷²

Under this policy, the perspective of the individual student is the deciding factor. But an individual's self-identified gender is not always readily discernable to others. Some basic guidelines, then, are needed to ensure that this policy is administered fairly. Above all, students should not be subjected to gender-identity tests. Procedures seeking to establish gender identity are just as pernicious as those purporting to verify biological sex. The DOE should make clear that testing of this nature is likely to violate Title IX.

To determine a student's gender identity, there are a numbers of factors that school administrators can consider. Substantial weight should be accorded to the gender self-identified by the student at enrollment.³⁷³ Administrators might also consider the gender marker on identification documents, such as passports, driver's licenses, or birth certificates. These records should not be regarded as conclusive, however, given the adverse implications for transgender students, who often face obstacles in modifying the gender designation on personal documents even after sex reassignment surgery.³⁷⁴ Whatever factors are used to show self-identified gender, the DOE should require that school officials apply them consistently across the board. A case-by-case approach risks that athletes appearing more "masculine" than others will be subjected to more vigorous scrutiny.

b. The Gender-Fraud Concern

A self-identification policy could arguably create incentives for men to hold themselves out as women in school athletics. In practice, though, this result seems highly improbable. Sex tests in the Olympics originated from the

³⁷² Importantly, these regulations should be framed as recognition of human anatomical diversity. This approach has the potential to shift normative ideas toward the recognition that intersex is no less biological than the categories male and female.

³⁷³ That being said, school administrators must also be mindful of transgendered individuals that undergo sex-reassignment surgery after their initial enrollment.

³⁷⁴ In some states, for example, transgender individuals are not permitted to amend the gender marker on their birth certificates even after sex-reassignment surgery. See Dean Spade, *Documenting Gender*, 59 HASTINGS L.J. 731 app. at 832-41 (2008) (compiling the state-specific requirements for gender amendments on birth certificates). Moreover, gender amendments to driver's licenses are more difficult in some states than in others. Some states require an amended birth certificate; in others, a court order is necessary; and other states require a doctor's letter. See *id.* app. at 822-29 (compiling state-by-state requirements for changing the gender marker on a driver's license).

concern that men had been infiltrating women's events.³⁷⁵ Notably, however, only one instance of deliberate gender misrepresentation has been recorded—in 1936, when German athlete Hermann Ratjen bound his genitals and competed in the women's high-jump event.³⁷⁶

In the educational context, the risk of males masquerading as females is even slighter. Even if athletic scholarships furnish sufficient incentive, practical difficulties make it unlikely for any male student to successfully pass himself off as a female. To do so, he would have to pose as a woman for the full span of his enrollment at a school—a drastic measure even for the most ambitious athlete. A self-identification policy, therefore, provides a built-in safeguard against gender fraud.

c. The Fair-Play Concern

The self-identification approach also treats intersex-based advantages like any other natural competitive advantage.³⁷⁷ There is no good reason to treat an athletic advantage differently when it arises from an intersex condition.³⁷⁸ To the extent that a level playing field is feasible in athletics, it is not the type of equal opportunity that Title IX—or, for that matter, organized sports—has in mind. Title IX was intended to remedy gender inequities in education,³⁷⁹ but intersex advantages do not change the elitist nature of sports.³⁸⁰ By respecting the gender identity of their students, schools discourage athletes from seeking other types of fairness-based accommodations that, if implemented, would undermine the very point of athletic competition.

CONCLUSION

The way things have always been is not an argument for the way things should be; some of our nation's most shameful moments have been justified on the basis of entrenched ideologies

³⁷⁵ Ritchie et al., *supra* note 288, at 396.

³⁷⁶ Olsen-Acre, *supra* note 292, at 212. Rajten finished fourth—behind three women. *Id.*

³⁷⁷ See *supra* Part III.C.1-2.

³⁷⁸ See *supra* Part III.C.1-2.

³⁷⁹ See *supra* text accompanying notes 41-45.

³⁸⁰ See *supra* Part III.C.1-2.

perceived as self-identifying truths.³⁸¹ Only by recognizing the error of oversimplification that pervades binary sex/gender categories can we gradually move beyond drawing unneeded lines between male and female, natural and unnatural. Like other dark chapters in history that have been illuminated by the benefits of hindsight, this undertaking will demonstrate that our intolerance, rather than our gender binary, needs policing.

Laura A. Zaccone[†]

³⁸¹ See, e.g., *Plessy v. Ferguson*, 163 U.S. 537 (1896); *Dred Scott v. Sandford*, 60 U.S. 393 (1857).

[†] J.D. Candidate, Brooklyn Law School, 2011; B.A., New York University, 2006. I would like to thank Professor Anita Bernstein for her invaluable guidance in honing this topic and the members of the *Brooklyn Law Review* for their assistance in preparing this note. I also thank my wonderful family and friends for their support throughout my law school studies. A special note of thanks to Ben Fontana and Doris Suarez for their endless encouragement, to Jerry Coffin for never letting me down, and to Nina Shulepina for always believing in me. Finally, I thank my mother, Fenisia Zaccone, for her unconditional love and selflessness, and for inspiring me every day.