Conflicting Heterosexualities: Hermaphroditism and the Emergence of Surgery around 1900

GEERTJE A. MAK
Radboud University Nijmegen

HISTORIANS WHO HAVE STUDIED hermaphroditism generally agree that heteronormativity was directive in how medicine dealt with people whose sex was doubted around 1900.[1] But what *was* the heterosexuality that was normative? This article describes the fierce national and international debates about precisely this issue that emerged between physicians around the turn of the twentieth century. The sudden urgency of the issue was directly related to a rapid and fundamental shift in surgical clinical practice in Europe and the United States. In 1890 two simultaneous medical innovations, effective antiseptic measures and the introduction of anesthesia, quickly changed surgery from a life-threatening experience to a commonly applied technique.[2] The rise of surgery produced an exponential increase in its use in cases of hermaphroditism, both for diagnosis and for treatment. This led to all kinds of new problems concerning the clinical treatment of people of doubtful sex.[3]

I would like to thank Stefan Dudink, Agnes Andeweg, Veronica Vasterling, and Rebecca Jordan-Young, as well as the three anonymous reviewers of the *Journal of the History of Sexuality*, for their comments on earlier versions of this article, Titus Verheijen for his fast and meticulous work of correcting my English, and Annette F. Timm for her careful editing. The French, Dutch, and German quotations were translated by Paula Yoni and Jennifer Gay, Wendy Schaffer, and Steph Morris, respectively.

[1] In this article I will use "(pseudo)hermaphroditism" as the contemporary term to refer to people whose physical sex had raised serious doubts. The medical, juridical, and social context leading to such doubts and a diagnosis of (pseudo)hermaphroditism differs dramatically from the current medical and psychosocial context in which "intersex" or "disorders of sexual development" (DSD) is diagnosed. How, when, where, about what, and by whom doubt is raised is completely different in most cases. Therefore, "(pseudo)hermaphroditism" is not the same as "intersex" or "DSD."

[2] Martin S. Pernick, *A Calculus of Suffering: Pain, Professionalism, and Anesthesia in Nineteenth-Century America* (New York: Columbia University Press, 1985); and W. F. Bynum, *Science and the Practice of Medicine in the Nineteenth Century* (Cambridge: Cambridge University Press, 1994).

[3] For my study of the long-term development of clinical treatment of hermaphrodites in Western Europe, see Geertje Mak, *Doubting Sex: Inscriptions, Bodies and Selves in Nineteenth*

Journal of the History of Sexuality, Vol. 24, No. 3, September 2015

DOI: 10.7560/JHS24303

In this article, I will use clinical case histories of hermaphroditism from around 1900 to unravel the many different ways in which heterosexuality (or fear of homosexuality) was enacted in this debate. For instance, a couple that had been deemed heterosexual because one of them looked like a man and the other like a woman in their quotidian appearance might in another context be deemed homosexual because doctors proved that the woman had testicles in her abdomen. Such differences show that heterosexuality is not a single, clearly defined thing or norm but is rather very much *divided in and of itself*. I will end this essay on a more theoretical note, arguing that skepticism about heteronormativity's unity and stability is more useful than criticizing it as a grid of "intelligibility" that makes certain lives "unlivable."[4]

A Surgical Turn

In 1908 the internationally acknowledged expert on hermaphroditism, Franz Ludwig von Neugebauer, published a collection of more than eleven hundred case histories from around the world concerning people with a doubtful sex—people who at the time were referred to as (pseudo)hermaphrodites.[5] This volume summarized cases from an enormous range of countries from antiquity to his own time. Neugebauer, who was Polish and maintained contact with gynecologists worldwide, published this volume in German, but he had already published large overviews in both English and French. Using this collection as a starting point for my research, I retraced as much as possible the original sources for the cases in the languages that I read (German, English, French, and Dutch) concerning living hermaphrodites from the late eighteenth century on. This led to the creation of my own database of just over three hundred cases. German and French cases are probably overrepresented in my database, but it nonetheless provides a good international overview, especially around 1900, when Neugebauer was actively collecting international material.[6]

Neugebauer's work of collecting, comparing, and counting cases of doubtful sex was an important technique at a time when there were no specialized clinics for the treatment of what we today call "intersex." The case histories of his time create the impression that most of the gynecologists involved encountered only one or maybe two cases of doubtful sex in their entire careers. Although they might have heard of other cases, for most

---

Century Hermaphrodite Case Histories (Manchester: Manchester University Press, 2012), 90–156.

[4] Judith Butler, *Bodies That Matter: On the Discursive Limits of "Sex"* (New York: Routledge, 1993), 1–23.

[5] Franz Ludwig von Neugebauer, *Hermaphroditismus beim Menschen* (Leipzig: Werner Klinkhardt, 1908).

[6] For detailed information about the original sources for this database, see Mak, *Doubting Sex*.

of them the situation must have been surprising and new. Neugebauer's collection of cases helped gynecologists compare their own findings and decisions to those of their colleagues. As other historians before me have noticed, the scattered nature of cases lends a strongly idiosyncratic character to how cases of doubtful sex were dealt with. Every case was very different. It is virtually impossible to discern different schools of thought in the material or to relate the individual characteristics of a certain doctor to his way of treating hermaphrodites. After all, most doctors only treated one. Nevertheless, certain implicit structures behind the clinical treatment of hermaphrodites can be discerned, and despite the idiosyncrasies, remarkable international similarities emerged around 1900 as clinicians incorporated surgery into their diagnosis and treatment.

The statistical overviews of the large collection of cases that Neugebauer investigated in his various publications, summarized in table 1, demonstrate the influence of the rise of surgery in clinical medicine.

TABLE 1. NUMBER OF OPERATIONS ON HERMAPHRODITES AND DISCOVERIES OF ERRONEOUS SEX

	Laparotomy	Herniotomy	"Diverse operations"	Total	*Total cumulative (percent)*	"Erreur de sexe"
1898[a]				38	*100*	
1900[b]	13	41	18	72	*189*	44
1903[c]	45	55	23	134	*353*	54
1908[d]	45	69	68	182	*479*	68

[a] A. Solowij, "Ein Beitrag zum Hermaphroditismus," *Monatsschrift für Geburtshülfe und Gynäkologie* 9 (1899): 210–11.

[b] Franz-Ludwig von Neugebauer, "Quarante-quatre erreurs de sexe révelées par l'opération: Soixante-douze opérations chirurgicales d'urgence, de complaisance ou de complicité pratiquées chez des pseudo-hermaphrodites et personnes . . . ," *Revue de gynécologie et de chirurgie abdominale* 4, no. 4 (1900): 457–518, esp. 459, 478, 483, 485.

[c] Franz-Ludwig von Neugebauer, "Chirurgische Überraschungen auf dem Gebiete des Scheinzwittertums," *Jahrbuch für sexuelle Zwischenstufen* 1 (1903): 205–424.

[d] Neugebauer, *Hermaphroditismus*, 712–24.

The first two columns, laparotomy and herniotomy, indicate diagnostic surgery or surgery to remove painful glands from the abdomen or the groin, respectively. By "diverse operations" von Neugebauer in particular meant plastic surgery on the external genitals to improve their appearance or function, for example, operations to straighten a curved and/or hypospadiac penis (where the urethra opening was situated on the underside of the penis); operations to enable men to urinate standing up; and opera-

Typesetter: Right align the digits in the "Total" column of the table.

tions to widen the vagina or to remove a large clitoris. Before 1890 these were the most frequently performed operations. The last column, "Erreur de sexe," or sexual errors, represents cases in which surgery revealed that the gonads (cut out and often also microscopically examined) were of a different sex from the one the patient had been assigned. Whether there was previous doubt regarding this person's sex is often not entirely clear, but the term suggests that these results were surprising: they were either accidental revelations from operations with other goals or the results of deliberate diagnostic surgery (columns 1 and 2).

Surgery had four distinct effects on the diagnosis and treatment of hermaphroditism. First, new ways of doubting sex emerged. People who did not doubt their sex and who underwent surgery related to problems with sexual functions (for example, menstruation) or for entirely other reasons could suddenly be discovered to have internal sexual organs that did not correspond to their outer sex. In my database, these are cases of men with uteruses and women with testicles inside their abdomens. Previously, such discoveries had been made postmortem and had therefore not prompted debate about clinical treatment. Second, in cases where a person's sex was already doubted, new diagnostic surgical techniques were developed to remove tissue in order to establish the character of the sexual glands microscopically. There was considerable debate about the advisability of this risky procedure. Third, microscopic diagnosis also often followed the surgical removal of testicles or ovaries for other diagnostic reasons, such as pain or the growth of a tumor.[7] Finally, plastic surgery offered the opportunity of rendering sex less ambiguous and making bodies function better in the role of one or the other sex. Table 1, column 3 reveals the exponential growth of the number of these procedures conducted from 1900 onward. These plastic surgery cases mostly report that the surgery was performed at the patient's request, though we cannot be sure whether this was indeed the case, given that at least some professional pride in the development of new surgical techniques was involved. Such surgeries caused heated discussions about whether patients (or their parents) could decide which sex would be enabled by an operation, as their wish did not always correspond to the diagnosis of the gonadal sex (ovaries or testicles).

I will focus here only on the most common type of case found around 1900: individuals baptized and raised as girls who identified as women and who were sexually interested in men but who began to encounter doubt

[7] Sometimes this removal was combined with diagnostic motives or a deliberate desexing of the patient. I have not found examples of deliberate removal of the sexual glands exclusively with the aim to desex a patient, which Dreger claims to have been common practice in England. It is my impression that desexing was sometimes seen as a favorable side effect because such a sexually "neutral" situation offered physicians more freedom to define the patient's sex according to her wish without being criticized for not acting upon scientific evidence. Alice Domurat Dreger, *Hermaphrodites and the Medical Invention of Sex* (Cambridge, MA: Harvard University Press, 1998), 122–23, 157.

about their sex. This allows me to ask in what form, precisely, heteronormativity was involved in clinical decisions and sex (re)assignment. I begin with a summary of the historiography on hermaphroditism in which similar cases figure.

HIDDEN CONTROVERSIES

Alice Dreger was the first to publish a thorough study of French and English medical concepts of hermaphroditism and physical sex in her well-known *Hermaphroditism and the Medical Invention of Sex* (1998). During the nineteenth century, she argues, the medical criteria for defining a person as a "true hermaphrodite" narrowed to the point where the category was hardly ever applied at all. Doctors used the sexual glands (gonads)—or even just cell tissue of either ovaries or testicles—to define each and every person as either a man or a woman. Only when both were found in a single person would medical scientists call it "true hermaphroditism." According to Dreger, this understanding of sexual difference dominated medical science from the 1870s until 1915, a period she labels the "age of gonads." In her chapter "Hermaphrodites in Love," she argues that "one major assumption . . . framed and governed the biomedical treatment of hermaphrodites, namely, the assumption that true males would naturally desire only females and that true females would naturally desire only males." Henceforth, anyone who had the sexual gonads of a particular sex and fell in love with or had sex with a person of the same sex was considered homosexual regardless of how their bodies looked or to what gender they felt they belonged. Thus, in cases of doubtful sex, the gonadal criterion of sex defined what was homo- or heterosexual and who was allowed to marry whom.[8] The case history Dreger uses to illustrate the fear of homosexuality strongly suggests that this gonadal criterion was not just an abstract scientific definition but also directed clinical decisions: "Louise-Julia-Anna . . . wandered northern France in search of a doctor who would allow her—help her—to go on loving men. Yet the doctors believed the ultimate truth and so her fate lay in her body, not in her desires, not in her acts. Louise-Julia-Anna was a man because she had testicles, and as a man she was a homosexual, and as a homosexual she had to be stopped."[9]

On the surface, Elizabeth Reis's history of intersex in America documents similar concerns about the fear of homosexuality during this period:

> Though the possibility of hermaphrodites being physically intimate with persons of either sex had long concerned physicians, American doctors in the late nineteenth and early twentieth century began to

[8] Ibid., 110–30, quote at 113.

[9] Ibid., 138. Here Dreger's analysis is focused on scientific criteria. She briefly discusses how this worked out in the daily lives of hermaphrodites (see 157–58), but her use of this example strongly suggests that these criteria also directed clinical decisions.

> evaluate their patients' sexual inclinations and to intervene to surgically ensure that sexual intercourse, when it occurred, would take place between two differently sexed bodies. Doctors wanted genitalia to match heterosexual desire. If a patient with ambiguous genitals expressed a sexual interest in women, surgeons would try to ensure that their surgically "repaired" male genitals could penetrate. Similarly, if the patient showed sexual interest in men (or expressed no sexual desire, for doctors often considered the sexual urge to be a male, not a female impulse), fashioning female genitalia became the project. Such privileging of heterosexuality persisted throughout the twentieth century among physicians and laypeople alike, and current intersex activists have critiqued its impact on intersex people.[10]

As an example, Reis describes the case of a woman, E.C., who in 1903 demanded that the New York gynecologist J. Riddle Goffe amputate "the growth" on her genitals. Goffe decided to comply with her wish. He removed the large clitoris and proudly presented his invented technique of using the skin of the clitoris to create the inside of a vagina in an illustrated medical article.[11] Reis describes Goffe's motives with reference to the overwhelming influence of heteronormative values: "E.C. needed to be a woman, in Goffe's eyes, because she had been romantically inclined toward boys. If Goffe had considered her clitoris to be a penis, then by classifying E.C. as male, the doctor would perhaps have encouraged same sex relationships."[12] Unlike the case of Louise-Julia-Anna, it was clearly desire and "romantic inclination" rather than gonads that defined what was homosexual or heterosexual in this American case.

Interestingly, Reis—who at several other points affirmatively refers to Dreger—does not seem to notice that in this case, contrary to Dreger's proposition, gonads clearly did *not* determine the doctor's definition of "homosexuality" or "heterosexuality." The issue is sharpened if one considers the vigorous discussion Goffe's operation provoked at the time. Goffe's contemporaries, Fred Taussig, Franz Ludwig von Neugebauer, and others, harshly criticized him for his operation to create E.C.'s vagina. They argued that Goffe had not paid enough attention to the question of her gonads

[10] Elizabeth Reis, *Bodies in Doubt: An American History of Intersex* (Baltimore, MD: Johns Hopkins University Press, 2009), xii.

[11] J. Riddle Goffe, "A Pseudohermaphrodite, in Which the Female Characteristics Predominated: Operation for Removal of the Penis and the Utilization of the Skin Covering It for Formation of a Vaginal Canal," *American Journal of Obstetrics and Diseases of Women and Children* 48, no. 6 (1903): 755–63. See also Christina Matta, "Ambiguous Bodies and Deviant Sexualities: Hermaphrodites, Homosexuality, and Surgery in the United States, 1850–1904," *Perspectives in Biology and Medicine* 48, no. 1 (2005): 74–83, esp. 80–82; Geertje Mak, "'So We Must Go behind Even What the Microscope Can Reveal': The Hermaphrodite's 'Self' in Medical Discourse at the Beginning of the Twentieth Century," *GLQ* 11, no. 1 (2005): 65–94; and Reis, *Bodies in Doubt,* 78–81.

[12] Reis, *Bodies in Doubt*, 79.

and that he had given far too much decision-making power to the patient.[13] Arguing that sex is strongly connected to reproduction, which is in turn connected to ova and sperm and to the gonads producing them, Taussig claimed that these elements had to be the determining factor, "not such a purely subjective element as sexual feeling or the psychic sexuality."[14] One might argue that both Goffe and Taussig were privileging heterosexuality, but it is also clear that they were offering diametrically opposed interpretations of the correct way to read the bodies and people in question.[15]

Was the contrasting approach a matter of national differences? Christina Matta has suggested that promoting surgery in order to "normalize" a hermaphrodite's sexual behavior was more prominent in America than in Europe. She bases her argument in part on Goffe's operation on E.C. She downplays the disagreement between Taussig and Goffe, concluding that "discomfort with homosexuality . . . was among the most pronounced influences that contributed to the establishment of surgery as a necessary medical treatment for hermaphroditism in the early 20th century."[16] But if there was a fundamental disagreement between doctors about what, precisely, constituted homosexuality, how could "discomfort with homosexuality" unequivocally lead to surgery as a necessary treatment for hermaphrodites?

Reis's description of American clinical decisions in the 1920s and 1930s concentrates on the debate between those who clung to the sexual glands as the criterion for sex and those who paid attention to their patients' desires or libido. She adopts Alison Redick's label "the age of idiosyncrasy" for this period in order to describe the lack of medical consensus. Redick has shown that the difference between a gonadal and libidinal criterion for "true sex" in decisions about surgery and clinical sex assignment continued to provoke dispute among American doctors into the first half of the twentieth century, and, like Dreger and Reis, she insists that avoidance of homosexuality guided medical decisions: "Because psychology and libido often conflicted with gonadal sex, practitioners began to increasingly defer to psychological sex

[13] Fred J. Taussig, "Shall a Pseudo-Hermaphrodite Be Allowed to Decide to Which Sex He or She Shall Belong?," *American Journal of Obstetrics and Diseases of Women and Children* 49, no. 2 (1904): 162–65; Taussig, "Editorial Comment," *Interstate Medical Journal St. Louis* 11 (February 1904): 134; Taussig,, "Rejoinder to Dr. Goffe's Letter," *Interstate Medical Journal St. Louis* 11 (May 1904): 316–17; J. Riddle Goffe, "Hermaphroditism and the True Determination of Sex," *Interstate Medical Journal St. Louis* 11 (May 1904): 314–15; Franz Ludwig von Neugebauer, "Letter to the Editor," *Interstate Medical Journal St. Louis* 11 (May 1904): 317–18; Franz Ludwig von Neugebauer, "What Value Has the Knowledge of Pseudo-Hermaphroditism for the Practitioner?," *Interstate Medical Journal* 11 (February 1904): 103–24. See also Mak, "'So We Must.'"

[14] Taussig, "Rejoinder," 317.

[15] Reis, *Bodies in Doubt*, 79. Reis only very briefly mentions this criticism in relation to debates about who should have the power to determine sex, a topic that she spends much more time on in her discussion of the 1920s and 1930s.

[16] Matta, "Ambiguous Bodies," 78, 82.

in order to avoid a sex reassignment that would produce homosexuality."[17] This meant that a person who felt herself to be a woman and sexually desired men should not, on the basis of her testicles, be declared male, because in that case she would be a man having relationships with men. But Redick fails to mention that basing decisions on "psychological sex" could also mean that a person with testicles was allowed to have sexual relations with another person with testicles. Did the fear of "gonadal homosexuality" described by Dreger no longer bother physicians?

Dreger, Reis, Matta, and Redick all point out how anxieties about homosexuality increasingly informed clinical decisions about hermaphrodite patients from the last part of the nineteenth century onward. Their critical analyses are based on a shared theoretical concept: the normative heterosexual definition of sex and gender or its counterpart, the fear and avoidance of homosexuality in decisions about someone's sex. Each of these authors attributes the same underlying logic to this nascent and highly idiosyncratic field: that the fear of homosexuality and the insistence upon privileging heterosexuality were the driving forces behind the treatments and sex assignments of hermaphrodites. Rather than disagreeing with this emphasis upon heteronormativity, my goal here is to pay attention to and draw lessons from the remarkable differences, discrepancies, and conflicts *within* that very same logic.

These differences were not unimportant. They were critical not only because they provoked heated disputes between the physicians involved but also because they determined how decisions were made and the degree to which physicians were willing to listen to the voices of the hermaphrodite patients and other parties involved. The arguments and their implicit logics allowing for medical alterations that enabled intersex patients to appear more convincingly as one or the other sex, irrespective of the character of their gonads, later also provided transsexuals with the legitimations and technical means to surgical and endocrinological sex reassignment. Rainer Herrn has described this relation between surgeries of hermaphrodites and those of trans people for Germany and for Magnus Hirschfeld's Sexological Institute in the 1920s and 1930s; Joanne Meyerowitz and Bernice Hausman have analyzed how in the United States these developments led to a diagnostic recognition of transsexuals.[18] The logics used in hermaphrodite cases may apply to other situations and vice versa.

[17] Alison Redick, "American History XY: The Medical Treatment of Intersex, 1916–1955" (PhD diss., New York University, 2004), 2.

[18] Rainer Herrn, *Schnittmuster des Geschlechts: Transvestitismus und Transsexualität in der frühen Sexualwissenschaft* (Giessen: Psychosozial Verlag, 2005), 167–218; Joanne Meyerowitz, *How Sex Changed: A History of Transsexuality in the United States* (Cambridge, MA: Harvard University Press, 2002), 14–50; Bernice Hausman, *Changing Sex: Transsexualism, Technology and the Idea of Gender* (Durham, NC: Duke University Press, 1995), 72–109.

BEYOND A SINGLE HETEROSEXUAL MATRIX

That the modern Western sex/gender binary with its restriction to two mutually exclusive categories has been built upon a fundamental but often implicit norm of heterosexuality is an assumption shared not only by historians of hermaphroditism but also by most feminist, (trans)gender, and queer studies scholars. To foreground this basic heterosexual structure or "grid," to use Judith Butler's term, is to recognize the same principle or rule in many different situations. As instructive and insightful as these theories and studies may have been, they also allowed this heterosexual grid or principle to appear as a consistent, almost invincible unity. In recognizing and pinpointing the same heterosexual structure always and everywhere, differences and inconsistencies within that heterosexual structure disappear from sight.

Butler's work drew upon feminist thinkers such as Monique Wittig and Gayle Rubin to demonstrate that gender is essentially a function of the heterosexual system. In that sense, her book *Gender Trouble* was a welcome and sharp criticism of feminism's lack of awareness of its own implicit heterosexual definition of female subjectivity. Butler also invoked Michel Foucault's understanding of subjectivity to argue that the existing discourse, based on a heterosexual system of a binary gender opposition, determined the (im)possibilities of being a human subject. According to Butler, only imperfect reiterations of discourse through performativity could engender transformation and change. In *Bodies That Matter*, Butler argues that physical sex is not something that already materially exists before it enters discourse but that bodies materialize as sex through heteronormative discourse. She insists that to live outside the heterosexual matrix, to transgress the norm, is to occupy a domain of "unlivability" and "unintelligibility" in society.[19]

In much of Butler's work, the central problem is a transgressive subject's relation to this dominant discourse, which is mostly discussed in theoretical terms.[20] Like many feminist, gay, lesbian, and queer scholars, I have sought evidence of this problem in more concrete historical, social, and cultural examples of gender transgression. Transvestism, masculine women, hermaphrodites, third sex, genderbending, passing, and cross-dressing have been the subjects of hundreds if not thousands of books and articles, most of which have placed the question of how social and cultural systems dealt with gender and sexual transgressions and how "unruly subjects" dealt with these systems at the center of their inquiries. But did such transgressions actually change anything? Or, as Butler herself asked in her later book *Undoing Gender*: "What departures from the norm disrupt the regulatory process *itself*?"[21] It

[19] Butler, *Bodies That Matter*, 1–4.

[20] Her description of the Joan/John case is a notable exception: Judith Butler, "Doing Justice to Someone: Sex Reassignment and Allegories of Transsexuality," in *Undoing Gender* (New York: Routledge, 2004), 57–74. Another exception is her discussion of the nineteenth-century Herculine Barbin case of doubtful sex; see also Mak, *Doubting Sex*, 66–70.

[21] Butler, *Undoing Gender*, 52–53.

seems to me that we have not been able to get beyond this question, despite the many intriguing stories and intelligent analyses of the complex relation between "unruly" subjects and historical discourses and contexts. Here, then, I want to experiment with another approach. I wonder what would happen if we refused to believe that heterosexuality is some sort of abstract essence, an all-encompassing system, structure, or matrix? What if we doubted its unity, internal stability, and coherence? What if we try not only criticizing it but undermining it from within? Instead of focusing on the relation between heteronormative discourse or structure and (transgressive) subjects, I propose shifting the focus toward instances of transgression that illuminate differences *between* the various versions of the heteronormative system.

Actor-network theory has taught us to take the practices, circumstances, locations, and techniques of different *versions* of the enactment of heterosexuality more seriously.[22] Therefore, instead of characterizing the clinical policies with regard to doubtful sexes in the first decades of the twentieth century as "heteronormative," in what follows I concentrate on the differences between these versions of heterosexuality. In a courtroom, heterosexuality may be something quite different from what it is in a clinical encounter, in a couple's bedroom, or on an urban street. This article is an attempt to use radical empiricism as a means of foregrounding these differences. Refusing to assume that heterosexuality or heteronormativity has a pure conceptual essence, I instead focus on how heterosexuality is enacted in practice and how heterosexual norms are *at work* in concrete historical situations where available techniques, practices, and routines play a role, where other norms and values interfere, and where differing contexts produce a variety of sexualities.

As Bruno Latour argues, a moment of radical change in technology, such as the introduction of surgery in cases of hermaphroditism around 1900, offers an invaluable opportunity to discern discrepancies and instabilities in systems of thought that we have hitherto taken for granted.[23] This account of the inconsistencies, variations, and conflicts between the many versions of heterosexuality and heteronormativity that emerged with new surgical possibilities at the turn of the twentieth century is thus a conscious attempt to open up a new critical space for recognizing other sexualities *within* the heteronormative.

[22] See, for example, Annemarie Mol, *The Body Multiple: Ontology in Medical Practice* (Durham, NC: Duke University Press, 2002); Mol, "Actor-Network Theory: Sensitive Terms and Enduring Tensions," *Kölner Zeitschrift für Soziologie und Sozialpsychologie* 50, no. 1 (2010): 253–69; Bruno Latour, *Reassembling the Social: An Introduction to Actor-Network Theory* (Oxford: Oxford University Press, 2005). To distinguish different *versions of* a phenomenon is fundamentally different from distinguishing different *perspectives on* a phenomenon; the latter assumes the phenomenon itself to remain the same, whereas the first doubts the unity of its ontology. See Mol, *The Body Multiple*, 1–51.

[23] Latour, *Reassembling the Social,* 63–86.

Subjective and Objective Desire

Dreger describes the gonadal criterion as a conviction that the gonads speak the ultimate, objective, scientific truth and as a medical diagnosis that ignored subjective feelings. However, clinical diagnoses in the late nineteenth and early twentieth centuries actually took many other factors besides the gonads into account. Subjective perceptions and desires were sometimes taken so seriously, in fact, that from the end of the nineteenth century onward many European and American physicians helped hermaphrodite patients to enhance their capacities for coitus and their physical appearance as either male or female according to their desires. While Reis judges doctors who did this as "privileging heterosexuality," she pays little attention to the fact that the feelings of the American hermaphrodites she describes were respected to a far higher degree than those of the English and French individuals in Dreger's studies. My collection of data demonstrates that the issue of whether "gonads" should be determinative in decisions about surgical treatment was hotly debated on both sides of the Atlantic.

With the increasing availability of plastic surgery for the genitals, many physicians reported being approached by hermaphrodites—mostly those raised as females—who wanted surgical help to open or create a vagina or to get rid of a "growth." Since we only have the doctors' reports as evidence of these requests, we cannot be sure that they originated from the patients themselves rather than in response to medical advice.

Neugebauer was adamantly opposed to complying with patient requests for surgery if the outcome would not match the gonads or if the character of the gonads could not be established. In one case, he had performed a risky diagnostic laparotomy before agreeing to operate according to a patient's request. In another case, he was simply outraged that a father and his daughter kept demanding surgery after he had concluded that she had testicles and was therefore male. There had been doubts about the girl's sex at birth, but she had been raised female. Her desire for surgery arose from the experience of having had an engagement broken off when it became evident that she would never have children. "The girl insisted upon an operation by which sexual intercourse in the role of a woman would have been enabled, for if she could not marry she would rather die." After having found testicles, an epididymis, and a spermatic cord, Neugebauer explained the situation to the father:

> Now the father is inconsolable about the sad fate of his daughter and wants to get her married at all costs. When I explained the "error of sex" to him and proposed a civil change of sex, he wouldn't hear of it: the entire city would mock her if she would suddenly dress as a man. He still wanted me to operate, "to create more air" for a husband, that is, "space," in other words the creation of a vagina. . . . I explained

> this would amount to deceit and that, when he would indeed get his daughter married to a man, this marriage would not last long because R.H. definitely was a man herself.[24]

Neugebauer refused to comply with a request that might have led to a marriage between what he considered to be two men. The example clearly corresponds to what Dreger described as the European standard of avoiding "gonadal homosexuality" in this period.

Many physicians who acted in ways that contradicted this standard felt the need to defend themselves in public for their actions. For example, in his series of articles for a Dutch medical weekly, Arie Geijl defended his decision to remove the penis and testicles of a woman who was engaged to marry a man. He fiercely rejected the gonadal criterion as the one and only basis for assigning someone a sex: "Both from a social and from a scientific perspective it is desirable to weigh the nature of the feelings, the intellect, and the sexual instinct, as well as the condition of the copulating parts, at least as much as the constitution of the sexual glands. As one will now understand, before I would incorporate the malformed into a particular category of sex, I would let him have a say and a rather major one at that."[25] In other words, Geijl expressed his doubts about the gonadal criterion thirteen years before a British physician did so for the first time, according to Dreger.[26] In Geijl's opinion, other aspects of sex were more important when it came to the treatment of persons of doubtful sex: "To determine the sex of a hermaphrodite and for our practical treatment of the person concerned, the constitution of the gonads are of lesser value than the condition of the organs of copulation and the nature of the inner life and soul of the person concerned."[27] Theodor Landau also considered the outer constitution of sex important, arguing that "if the genitals or their configuration represent a clear hindrance to the individual's own image of his or her sex, or to the enactment of conjugal relations, we must remove any excessive formations, such as a penis-like clitoris adjacent to a vagina, so that the unfortunate individual's psyche is not oppressed, at least not due to an external deformity."[28] And the New York gynecologist Goffe defended himself against the charge (leveled by his colleague Taussig) that he had not taken the sexual glands as justification for one of his surgeries by stating that he had complied with the wish of his patient, because in

[24] Neugebauer, *Hermaphroditismus*, 401.

[25] A. Geijl, "Over operatief ingrijpen bij pseudohermaphroditismus masculinus of femininus externus," *Medisch weekblad van Noord- en Zuid-Nederland* 9 (1902): 22–38, 281–84, 326–30, 381–88, 397–404, 413–20, 433–35, 464–71, 494–501, 512–19, 555–58, 567–70, 586–91, 632–39, quote at 326.

[26] Dreger, *Hermaphrodites*, 158–66.

[27] Geijl, "Over operatief," 590.

[28] Theodor Landau, "Über Hermaphroditen: Nebst einigen Bemerkungen über die Erkenntnis und die rechtliche Stellung dieser Individuen," *Berliner klininische Wochenschrift* 40, no. 15 (1903): 339–43.

order to understand the essence of sex, "you have to go beyond what the microscope can reveal."

In these and other justifications for complying with the request for surgery, heterosexuality provided the standard for matching the genitals to the desire of the patient to marry and to be capable of coitus. It took for granted that the sexual desire indicated the opposite of the patient's own sex. This is the heterosexual norm Reis referred to in her study of the situation in the United States around 1900, but it will be clear by now that *another* heterosexual standard—the gonadal standard—was diametrically opposed to this one.

Those physicians advocating adherence to the gonadal standard argued that it was short-sighted to trust the patient's subjective declarations. They were convinced that sexual desires were, in the end, dictated by the character of the gonads. In the case described above, Neugebauer explains why he does not take the daughter's sexual feelings as a possible justification for the requested surgery: "Until now, R.H. only reveals homosexual feelings, possibly as a consequence of the suggestion inherent to the raising of this man as a woman. It is not impossible that the sexual drive will soon reverse to the normal heterosexual drive."[29] Taussig, following Neugebauer in his critique of Goffe's operation, concurred: "We have recorded many instances in which, long after puberty, there was a change in the psychological sexuality of the individual. . . . [T]he possibility of change in such a mental attribute or inclination must be acknowledged, but no testicle has ever been known to change into an ovary."[30] In other words, *in the end* an "objective" criterion for sex was in the best interests of the subject.

Some gynecologists, such as Geijl and Landau, explicitly opposed such reasoning. Geijl built up a very complicated scientific argument to show that there was not one primary cause for sex development because sex fundamentally consists of different elements that are not strictly causally related to some foundational essence. Landau's reasoning was more straightforward; he argued that gonads could never be the only "real" cause for sexual desires because even people with a "normal" sexual constitution could have homosexual desires.[31]

At first sight, the different versions of heteronormativity we have seen here set objective truth (a reliance on gonadal sex to define which desires and acts are heterosexual) against a subjective truth (an insistence that sexual desire should define a person's sex). The picture becomes more complex upon closer inspection, however, because physicians also distinguished between desires that were "merely" caused by a person's upbringing as a woman and desires that were driven by biological (gonadal) causes. The latter, some physicians argued, were ultimately more reliable, meaning that

[29] Neugebauer, *Hermaphroditismus*, 401.
[30] Taussig, "Rejoinder," 316.
[31] Landau, "Über Hermaphroditen," 342–43.

a gonadal diagnosis of sex would in the end better serve the interests of the patient than her own (changeable) experiences.

Scientific versus Humane

Decisions about hermaphroditism in European and American medicine at the turn of the twentieth century were influenced by the growing tension between scientific medicine (based on pathological anatomy and histology), on the one hand, and clinical medicine, on the other. Scientific and clinical careers increasingly diverged.[32] The divergence between the two roles (scientific or clinical) was not, of course, absolute; the gynecologists involved in cases of hermaphroditism acted in both roles. But a conflict between scientific and clinical values can clearly be discerned in the discussions between physicians about "objective" versus "subjective" criteria. In 1902 the Dutch gynecologist Geijl described the distinction as follows: "I can easily explain the *pathologist's* interest in the purely scientific matter of the nature of the sexual glands present in hermaphrodites. But it is far less comprehensible to me why the *clinician* concentrates solely on this side of the matter. He . . . often becomes the cause of great suffering and unhappiness in those unfortunates who seek his help and advice."[33]

The sharpening of awareness of the difference between the two points of view was directly related to the emergence of new surgical options. In 1903 and 1904 Neugebauer and the Berlin gynecologist Theodor Landau publicly disagreed on the advisability of diagnostic surgery to establish the character of the gonads—a discussion that directly contrasted the goals of scientific truth and the motivation to help individuals fulfill their own desires. Landau described a young widow who "visited our clinic in order to be rid of her 'growth'; she wishes to marry again and fears that the protuberance will be a hindrance to intercourse."[34] Without having been able to establish the exact nature of the gonads, Landau complied with her request. Adamantly defending his decision, he explained in detail why physicians were often simply unable to define someone's sex if gonadal excretions or gonadal tissue were not available. He also declared himself opposed to the dangerous practice of diagnostic surgery, which involved cutting open the abdomen (laparotomy) just for the sake of establishing someone's sex. In such cases, he preferred to leave the choice to the hermaphrodite in question, exactly as Prussian law had ordained before the introduction of the general German civil code on 1 January 1900.[35]

[32] N. D. Jewson, "The Disappearance of the Sick-Man from Medical Cosmology, 1770–1870," *Sociology* 10, no. 2 (1976): 225–44; Bynum, *Science and the Practice of Medicine.*

[33] Geijl, "Over operatief ingrijpen," 328–29, emphasis added.

[34] Landau, "Über Hermaphroditen," 340.

[35] For a discussion of the law and its having been repealed, see Geertje Mak, "Doubtful Sex in Civil Law: Nineteenth and Early Twentieth Century Proposals for Ruling Hermaphroditism," *Cardozo Journal of Law & Gender* 12, no. 1 (2005): 101–15.

In contrast, Neugebauer triumphantly described how he had first insisted upon diagnostic laparotomy for a maidservant before performing the plastic surgery to bring outer physical characteristics in line with the evidence of the gonads. He criticized Landau for skipping the step of diagnostic laparotomy, arguing that while Landau might have been right from a practical perspective, he was theoretically wrong. In other words, Neugebauer implied that the scientific perspective should take precedence over the clinical.[36] Landau retorted with the view that the possibilities of modern surgery should not dictate decisions about sex assignment: "It cannot be the physician's duty to do justice merely to the *anatomical truth*; his duty is first and foremost to *extend help* to the individual seeking help."[37] In Landau's eyes, a scientific standard should not be allowed to entirely dictate a clinical decision.

Both Landau and Geijl thus prioritized physicians' role as helper over their role as scientist. Presented with female patients who wanted to marry men even though their sex had raised doubts, both prioritized the patients' desires over the physical evidence. Landau chose not to perform diagnostic surgery to confirm his patient's sex, and Geijl agreed to perform surgery despite the presence of testicles. In other words, both bypassed a scientific, gonadal definition of sex in favor of a self-definition of sex that allowed a person with testicles to marry another person with testicles. Shifting from a scientific context to a clinical context may therefore change the enactment of heterosexuality profoundly: in "the lab" it *is* something else than in a clinical encounter.

Appearance versus Inner Truth: The Subjectivity of Others

Only one author during this period proposed using the outward appearance of a couple as a general criterion for what should count as heterosexual. The legal expert Eugen Wilhelm stated that gonads should not be decisive for sex assignment because some people had an outward appearance completely "opposed" to their gonads. He had heard about recent cases in which even physicians had had no doubts about a patient's sex until surgery revealed the internal sexual organs. If a physician assigned such an individual's sex according to the gonads, he argued, that physician would create the possibility of marriages that looked like same-sex marriages. This would be harmful to society's moral order. Therefore, it was better to take both the sexual constitution and the subjective (sexual) feelings into account in any case of sex assignment.[38]

[36] Franz Ludwig von Neugebauer, "Mann oder Weib? Sechs eigene Beobachtungen von Scheinzwittertum und 'Erreur de Sexe,'" *Zentralblatt für Gynäkologie* 28, no. 2 (1904): 33–51, 43.

[37] Theodor Landau, "Mann oder Weib?," *Zentralblatt für Gynäkologie* 28, no. 7 (1904): 203–4, emphasis added.

[38] Eugen Wilhelm, *Die rechtliche Stellung der (körperlichen) Zwitter de lege lata und de lege ferenda* (Halle: Carl Marhold Verlagsbuchhandlung, 1909), 64. For Wilhelm's full proposal and arguments, see Mak, "Doubtful Sex in Civil Law," 205–8.

Wilhelm's warning about couples who were gonadally different while appearing to be same-sex couples is the complete opposite of more commonly voiced arguments that gonadal men "disguised" as women were threatening society's entire moral system. In such arguments, outward appearances were opposed to a single inner gonadal truth. By the turn of the century, appearances and impressions were increasingly called upon in individual cases to reject the gonads as the only criterion for sex and moral comportment. For the period between 1884 and 1908, I found eighty-four cases of hermaphrodites who had been raised as females but for whom the existence of male gonads had later been medically established. In nine such cases physicians declared that their patients made such an overwhelmingly female impression that the physicians had either decided not to inform their patients about their "true sex" or complied with requests for surgery to improve female appearance or sexual function. In thirty-five other cases it is not clear what the physicians did or did not tell their patients. Physicians like Heinrich Zangger (Switzerland, 1905), C. W. J. Westerman (the Netherlands, 1903), Landau (Germany, 1903 and 1904), König (Germany, 1908), Goffe (United States, 1904), and Geijl (the Netherlands, 1902) explicitly elaborated on the female impression their patients made on them.[39] Take, for instance, Dutch surgeon Westerman's case history of a twenty-year-old girl who had come to him to be operated on for appendicitis. Upon examination it was discovered that she had a hypospadiac penis and testicles in the groin. Westerman was absolutely sure that she was male: "The person in question is of the male sex, since the nature of the gonads determines one's sex." But "this person was brought up as befits a well-mannered woman and has acquired a woman's outlook on the world. Furthermore, the secondary female sexual characteristics are most pronounced, such as lack of facial hair, a high voice (not broken), a marked development of the breasts, and a rudimentary vagina. Indeed, the outward manifestations of womanhood are so striking that a preliminary inspection would not arouse the slightest doubt as to the female nature of this individual, and the true state of affairs is only to be ascertained after a meticulous inspection." The female characteristics were so prominent that it would not have been advisable to have this woman fulfill the role of the other sex, Westerman decided. To this he added that the testicles were so atrophied that the person was actually sexless and could be categorized as female simply on the basis of appearance. He determined that a microscopic investigation of the gonads to disclose masculinity would only have disturbed her perception of herself as a female, and, perhaps with a view to preserving

[39] Geijl, "Over operatief ingrijpen"; Goffe, "A Pseudohermaphrodite"; Goffe, "Hermaphroditism"; König to Neugebauer, quoted in Neugebauer, *Hermaphroditismus*, 604–5; Landau, "Über Hermaphroditen"; Landau, "Mann oder Weib?"; C. W. J. Westerman, "Over miskend pseudohermaphroditisme," *Nederlandsch tijdschrift voor Geneeskunde* 39, no. 18 (1903): 1009–12; Heinrich Zangger, "Über einen Fall von Pseudohermaphroditismus masculinus externus in pathologischanatomischer, psychologischer und forensischer Hinsicht," *Schweizerische Zeitschrift für Strafrecht* 18 (1905): 303–14.

his own understandings of her sex, he chose to keep her in "blissful ignorance" of her physiological sex.[40]

Wilhelm, Westerman, and others thus protected a version of heterosexuality that they themselves and the general public experienced in ordinary life. They were aware of the scientific gonadal criterion for sex, but they deliberately chose not to follow it in order not to disturb the everyday impression of their patients' sex. One reason to do so was not to disturb the person's own self-conception or, to use Landau's phrase, "an individual's own image of his or her sex." The other reason was to avoid disturbing the public impression of *others*, including the impression of the physician himself.[41] Those physicians who, like Westerman, prioritized the impression a person made above a gonadal standard for sex felt they had to explain themselves. They discussed their decisions at length, explicitly contrasting an abstract, scientific truth to the subjective experiences of both the patient and the doctor.

As we have seen in the opposition between scientific and clinical discussions of sex assignments, the physicians defending the clinical approach often referred to the values of providing help or being humane. These new clinical values concern the well-being of the hermaphrodite individual. However, physicians raised the question of the interest and well-being of *others* involved as well, for example, those of (future) lovers or husbands. In a more abstract form, these interests appeared as "morality." In this interpretation, Westerman's desire to protect "blissful ignorance" could easily be read as a practice of "conscious deceit" of a future husband. A particularly clear example is the previously mentioned case history of Louise-Julia-Anna, which was first published by the Catholic French conservative François Guermonprez in 1892.[42] It was not only the presence of testicles but particularly Louise-Julia-Anna's male-looking naked body that convinced Guermonprez that Louise-Julia-Anna actually *knew* she was male but had purposely molded her body into a female appearance. He thus interpreted her female dress, makeup, and appearance as a "lie in the act." To make sure she would not be able to deceive a husband, he decided to tell her plainly that she was a man. "You cannot marry as a woman," he told her, "for you are not one." And if she were to deceive a man, her husband would not even have to ask for a divorce, as the marriage would have been null from the outset: "With respect to you, you would have deceived him, and deceived *consciously*, and

[40] Westerman, "Over miskend," 1011.

[41] For a more recent discussion of the importance of the impression of physicians and psychologists in the diagnosis and treatment of transsexuals, see Stefan Hirschauer, *Die soziale Konstruktion der Transsexualität* (Frankfurt am Main: Suhrkamp 1993), 189–203.

[42] François Guermonprez, "Une erreur de sexe avec ses conséquences," *Annales d'hygiène publique et de médecine légale,* 3rd ser., 28 (September–October 1892): 242–75, 296–306. See also Dreger, *Hermaphrodites*, 110–19; and Geertje Mak, "Doubting Sex from Within: A Praxiographic Approach to a Late Nineteenth-Century Case of Hermaphroditism," *Gender & History* 18, no. 2 (2006): 360–88.

in that case you would be condemned to pay damages."[43] In other words, the fact that Guermonprez had told her the nature of her sex would make her guilty of conscious deceit if she married a man. If she had remained "innocent," she could never have been condemned for that reason. It was, in other words, deceit and fraud to change one's appearance in a way that made an impression that did not correspond to internal, gonadal sex. Neugebauer similarly accused the father and daughter who wanted him to create a vagina of deceit after he had established her male sex. Even the body, as Dreger has also argued, could be called deceitful if gonads did not correspond to the outward appearance of the body.

But there is an important distinction to be made. If a physician was convinced that the hermaphrodite in question did not suspect in the least that she was not a woman, he might have thought of the body as deceitful, but he was unlikely to accuse his patient of fraud. In the case studies that I have examined, it is clear that most physicians were very cautious not to unnecessarily disturb the female self-perception of their patients. Physicians struggled with the decision about whether or not to tell their patients that they were male; even Guermonprez explicitly defended his decision to tell Louise-Julie-Anna the "truth." Often, they decided not to tell the patient while advising against marriage and warning that reproduction would be impossible and coitus difficult. One German doctor, König, asked Neugebauer for advice about a patient, Emma R., because he was worried that not disclosing her male sex to her would leave open the possibility of a "homosexual" marriage. Emma R. was a tall, strong person with female secondary sexual traits. She had consulted König about a hernia. In König's words: "If you talk to her intensely you get the experience of meeting an unambiguously female being; all her thoughts and feelings are feminine."[44] She had a small penis between her labia. König suspected the hernia to contain a testicle—a suspicion that was confirmed when he surgically removed it. The surgery was conducted to alleviate the pain that Emma R. was experiencing but also to satisfy König's own curiosity. Emma R. and her fiancé had tried to have coitus, and the fiancé had asked whether something could be done to improve her capacity for intercourse. With the impending marriage in mind, König asked Neugebauer whether he should disclose his knowledge to Emma R.[45]

> Nothing would be simpler than to say "the female patient is a man and is forthwith to be categorized as such." There are however significant considerations arguing against this. The person's feelings are without doubt feminine, not only because of the skirts she has worn her whole life; nature has endowed her, on the outside indeed, with so much

[43] Guermonprez, "Une erreur de sexe," 298, 300.
[44] König, letter quoted in Neugebauer, *Hermaphroditismus*, 604–5.
[45] Ibid., 606–7.

> that is feminine, that it can really be questioned whether in this case the genital organs alone (*sensu strictissimo*) determine the attribution of sex. She simply would not understand that she is not of the female sex; indeed she has not learned the slightest thing which would enable her to make her way as a man in the world, whereas she clearly fulfills her role as a woman very well.[46]

In order not to disturb Emma R.'s feminine feelings, her understanding of herself as a woman, and her social and economic roles as a woman, König carefully avoided saying anything that might cause doubts about her feminine nature. He only warned her that she would never be able to have children and said he was not able to improve her capacity for copulation. Yet he continued to worry about the possible moral and legal consequences of his silence: "It is certainly possible that she will continue to have intercourse with the man; who knows, perhaps they will indeed get married? Am I then duty bound to prevent this eventuality? Should coitus between the two be understood as intercourse between two men, and does the circumstance of her attraction to men constitute homosexuality? In my view it can be of no concern to the state, aside from the fact that perhaps some fewer children will be born as a result, if the two people are joined as 'man and wife.'"[47]

These cases demonstrate that physicians were concerned not only with the welfare of their hermaphrodite patients but also with the feelings and experiences of those people closely involved, in particular their (future) sexual partners. Some adamantly argued that even if these people were not aware of their biological anomalies, it was the physician's moral obligation to avoid harming possible future spouses. Neugebauer and Guermonprez explicitly referred to fraud or deceit in the event that the person married in a sex that was not in accordance with her gonadal sex. Another example of such a fierce rejection comes from the New York professor of women's diseases James N. West: "They [female hermaphrodites] should be informed of their unfitness for the marital relation, of the outlook for sterility and advised to seek some useful occupation and give up all thoughts of matrimony." He fiercely condemned the use of surgery to "convert the uncertain sex into a female," as it would be "bitterly unfair to the other party to be joined by holy wedlock to such a being."[48]

Others—Geijl, Goffe, Landau, and James Gifford Lynds, for example—knew that the patients they surgically helped to enable coitus had the intention of marrying. Lynds tried to keep his patient from doing so after the operation, but she ran from the hospital and escaped his authority. Geijl was the most explicit in (re)defining the terms of the marriage contract. He

[46] Ibid., 606.
[47] Ibid., 607.
[48] James N. West, "Sterility from Vaginal Causes," *Medical News* 85 (1904): 58–61, 59.

suggested that it was advisable to avoid providing too much information if a patient was not aware of her sex and to only warn the hermaphrodite that copulation might be difficult and procreation impossible. In contrast to most other physicians, he emphatically rejected the idea that a physician would be morally obliged to prevent such a person from marrying.

> I would consider it, without exception, utterly impermissible and generally demonstrating little tact to advise a person not to marry on the basis of their sexual organs and expectations for the future. If caution is required anywhere, then it is certainly needed here, if the doctor does not wish subsequently revealed facts to prove him wrong. Every prediction regarding the possibility of copulation, of a happy or unhappy marriage, etc., rests on shaky foundations. One should consider above all, that people have different expectations concerning the psychological and physical nature of their prospective partner or lawful spouse.[49]

In Geijl's opinion, it was thus not a medically defined gonadal standard that should decide what was morally right in the event of marriage but the (future) psychological and physical satisfaction of both spouses as they defined it themselves. Physicians like König and Geijl believed that marriage required sincerity about the capacity for coitus and for reproduction. But it was not necessary to inform patients about a gonadal "truth" or about serious doubts as to whether they belonged to the female sex.

Professor Heinrich Zangger from Zürich also expressed his objections to telling his patient that she was male, for it would be "a terrible psychological trauma, a complete confusion and disorientation in the world." More interesting even is that he did not want to make her aware of the fact that she was gonadally male because that would make her guilty of homosexuality or deceit if she were ever to marry a man.[50] This was an exact reversal of the reason why Guermonprez *did* tell his patient.

In summary, heteronormativity was not only defined as the direct correlation between an *individual's* sexual desire, coital options, genital appearance, and/or gonadal sex, it also consisted of norms for proper sexual relationships with others (through marriage). Within the clinical context, heteronormativity was therefore also enacted as a normative regulation of sexual relations between people. However, doctors differed profoundly in their assessments of "fair" or "proper" relations. For some, the gonads had to be determinative; for others, the impression a person made or her capacity for coitus or reproduction was decisive. Some doctors left the unawareness and innocence of their patients explicitly intact and considered sincerity about possible sexual problems sufficient. Others accused their hermaphrodite patients of deceit if they wanted to conceal their unusual genitals through surgery, or the physicians informed their patients about

[49] Geijl, "Over operatief ingrijpen," 633.
[50] Zangger, "Über ein Fall," 312, 313.

the precise character of their gonads with the explicit intention of making them morally responsible.

I have demonstrated how different versions of "heterosexuality" appeared in different locations: in the lab (gonadal difference), in the clinic (difference of apparent sex), *within* a person (unity of body, identity, and desire), and *between* persons (for example, a convincing and satisfactory sexual difference of a married or yet to be married couple). In each location, another heterosexuality was enacted entailing other definitions. Moreover, the *normative* definition of heterosexuality never operated in isolation from other values and norms, including scientific truth, a patient's well-being, sincerity, the strength of the state, the well-being of the patient's partner, and moral or public order. As we have seen, *where* heterosexuality was *located* also had a profound effect upon which other values and norms were operational.

Turning now to legal discussions about marriage, I will explore one last setting for the enactment of heterosexuality. Like debates in the clinical setting, legal definitions of marriage were also influenced by the rise of surgery, and they produced yet another version of heterosexuality in this time period. Space considerations and the complexity of comparing different legal rulings force me to confine the discussion to late nineteenth-century France.[51]

Legal Cases: Coital/Reproductive Norm versus Civil Sex Categories

In 1881 the case *Hubert v. Hubert* came before the court of Domfort, France. A husband sought the annulment of his marriage because it had been medically established that his wife had no vagina, no uterus, and no ovaries. After having stated that the main objective of marriage was procreation and the legitimate satisfaction of natural desires, the plaintiff argued that each spouse should have a sex and that this sex should be different from the sex of the other spouse. If one of the spouses did not have sex organs, there could therefore be no marriage. Moreover, the plaintiff referred to "old French, ecclesiastical, and physiological law" and to "natural and moral rights," which would forbid "coupling that can only result in unnatural acts."[52] The marriage was annulled.

Mrs. Hubert appealed. The case was heard by the court of Caen, which rejected these arguments, arguing that marriage was in the first place "a union between two intelligent and moral persons."[53] Insisting that marriage

[51] For a more complete discussion of legal issues in nineteenth-century France and Germany, including discussions on the introduction of the legal category "doubtful sex," see Mak, "Doubtful Sex in Civil Law"; and Mak, *Doubting Sex*, 116–35.

[52] D. Dalloz, ed., *Jurisprudence Générale,* vol. 2 (Paris: Bureau de la jurisprudence générale, 1882), 155–56.

[53] The united chamber consisted of Houyvet, Lerebours-Pigeonnière, Carel (solicitor general), and Soret de Boisbrunet (solicitor). The source does not give details on who argued what precisely; it is a summary of the final deliberations of the court.

was a contract between a man and a woman, the court argued that "the woman cannot be belittled to the point of only being considered a sexual system, and to see in her only an organization good for making children and satisfying the passions of a husband; that the possibility of producing children and carnal cohabitation is not absolutely essential to the existence of marriage; [and] that this possibility is often lacking, in deathbed unions for example, and in those of the very elderly."[54] The argument clearly reflected Protestant norms of marriage and contradicted Catholic discourse, which considered reproduction the essence of marriage. The earlier verdict was overturned. Charles Debierre, a professor of anatomy in Lille, reacted furiously to the court of Caen's decision. He was one of the French medical scientists who, between the 1840s and 1880s, had insisted on creating a legal category of "doubtful sex" alongside male and female in order to be able to monitor these people from birth onward and prevent them from harming others and from negatively affecting public morality. Debierre exclaimed: "Is it not against nature to condemn a young man in the plenitude of his physical force, a man who wants, through marriage, to share his life with the person of his choice, to start a family, and to satisfy his legitimate passions, to suffer an indissoluble union with an incomplete creature, with whom any congress is impossible or in whom the organism lends itself only to relations too shameful to mention, like of the woman in the case before the court of Caen (1882) for example, a woman who has no vagina whatsoever!"[55] He concluded his diatribe by pointing out that such a couple would also be unable to reproduce, making their marriage a threat to the survival of the French nation.

Twenty years later Paul Brouardel, professor of forensic medicine at the Faculté de médecine in Paris, was asked to give his expert opinion on a similar case in Douai. A husband had demanded annulment of his marriage because his wife, whose outward appearance and secondary sex characteristics were female, lacked the female organs of generation. She did not menstruate. Medical examinations established that the wife had a vagina of three to five centimeters ending in a cul-de-sac; she had no uterus or ovaries. At first, the court of Douai declared the marriage null, but this decision was brought before the court of cassation—the court of appeal in Paris—where Brouardel was called to testify. He objected to the Douai court's judgment that "in order for a union of two people to be valid, *it is necessary* that the one belongs to the masculine sex and the other to the feminine according to *their entire constitution*" on physiological grounds. Listing off the many types of congenital or acquired genital anomalies that women might have, he argued that most could now be surgically remedied.

[54] Ibid.

[55] Charles Debierre, "L'hermaphrodite devant le code civil: L'hermaphroditisme, sa nature, son origine, ses conséquences sociales," *Archives de l'anthropologie criminelle* 1 (1886): 305–43, 335–38, quote at 341.

Consequently, the same person who would have been declared unfit for marriage twenty-five years ago could ten years later be declared marriageable after surgical intervention. When there was no vagina at all, skilled surgeons could create an artificial one. In cases such as that heard by the court of Douai, then, "the capacity to marry would be dependent upon the choice of surgeon." Taking another tack, Brouardel asked whether having a vagina with the proportions of a twelve- or thirteen-year-old girl was really enough to bar one from marriage: "Is that an incomplete constitution? At what point should one draw the line in declaring a person not to have complete sexual organs? Would the existence of a vagina but the absence of a uterus and ovaries constitute a reason to annul marriage?"[56]

Implicitly referring to Charles Debierre's arguments, Brouardel explicitly rejected proposals for creating a legal category "between the two sexes." He argued that the absence of organs, "even [those] most essential for generation," would not change the definition of an individual's sex in civil law. A French legal expert had already stated that in order to annul a "same-sex marriage," the judge would first have to assign the individual a different sex under civil law.[57] In order to be able to do so, the judge would have to have positive proof that the woman in question was male, for instance, proof of testicles or ejaculated sperm. The next problem, then, would be whether individuals could be forced to undergo such medical examinations in order to force them to legally change their sex.[58]

The debate between Debierre and Brouardel can be viewed as reflecting what Foucault described as fundamental historical shifts in the definition of "the abnormal." Whereas it had been more common in the Middle Ages to view abnormality as monstrosity—as something outside of law and nature—in later centuries the abnormal had come to be viewed as "moral monstrosity"—something that could be corrected and could still be understood within the terms of the law and definitions of nature.[59] Brouardel's reasoning reflects this later understanding, since he argued that strictly dimorphic legal definitions of sex actually allow for considerable variety or deficiency within the two categories; women without vaginas, ovaries, breasts, or uteruses could still be considered women, for example. This reasoning markedly differed from that of Debierre. In expressing his outrage at the decision of the court of Caen, Debierre insisted upon a

[56] Paul Brouardel, "Malformation des organes génitaux de la femme: Y a-t-il lieu de reconnaitre l'existence d'un troisième sexe?," *Annales d'hygiène publique et de médecine légale,* 4th ser., 1, no. 3 (1904): 93–204, 196, 197, 198, emphasis in the original.

[57] Philippe Jalabert, "Examen doctrinal de jurisprudence civile," *Revue critique de législation et de jurisprudence,* n.s., 2, no. 22 (1872): 129–49, 148.

[58] For an exploration of examples of such juridical discussions, see Mak, *Doubting Sex,* 116–35.

[59] Michel Foucault, *Abnormal: Lectures at the Collège de France 1974–1975*, ed. Valerio Marchetti and Antonella Salomoni, trans. Graham Burchell (New York: Picador, 1999), 55–80.

definition of marriage that was explicitly heteronormative and dependent upon the ability to reproduce. In order to prevent any possibility for such marriages "against nature," he advocated the introduction of a category of "doubtful sex," which would have prevented people with a doubtful sex to engage in situations in which their sex was important (the army, a boarding school, marriage). This example demonstrates that a less rigid binary in the legal definition of sex has the paradoxical potential of supporting rigid heterosexual/reproductive norms and of invalidating marriages that were previously possible. This raises the question whether increasing the number of gender categories encourages the enforcement of stricter norms about who belongs where—a concern that Judith Halberstam has raised in the context of exploring American "Butch/FTM border wars."[60] It makes me wonder, in other words, whether allowing for more genders really is the best way out of oppressive sexual systems.[61]

Beyond a Heterosexual Matrix

In this last section, I would like to consider the theoretical consequences of what has just been demonstrated. While historians (including myself) agree that in the period around 1900 in both Europe and the United States heteronormativity was pervasive. On the basis of a range of examples of clinical and legal cases of doubtful sex, it can be shown that this heteronormativity was neither stable nor unified. This one historical example demonstrates that different versions of heterosexuality emerge in different contexts and that these competing versions cause friction and outright contradiction. It is not enough to summarize medical and legal attitudes toward hermaphrodites as "heteronormative" or as driven by "fear of homosexuality," because these generalizations fail to do justice to the heated character of contemporary debates, and they overlook the fact that an understanding of these debates has the power to undermine heteronormativity itself.

Although state prosecutors in the court of Caen were not arguing against heterosexuality, they provided a definition of it different from that of the gynecologist Goffe (who enabled E.C. to have coitus so that she could marry), or the international expert on hermaphroditism Neugebauer (who wanted to prevent people with similar gonads from marrying), or the professor of anatomy Debierre (who wanted to preclude the marriage of women who could not have coitus and reproduce), or the legal expert Wilhelm (who simply wanted to prevent marriages that *looked* homosexual), or the gynecologist Geijl (who thought that people should have the right

[60] Judith Halberstam, *Female Masculinity* (Durham, NC: Duke University Press, 1998), 141–74.

[61] For an argument in favor of using more than two genders, see, for example, Anne Fausto-Sterling, "The Five Sexes: Why Male and Female Are Not Enough," *Sciences*, March–April 1993, 20–24; and Butler, *Undoing Gender*, 42–43.

to define for themselves what a satisfactory marriage might be). These men all articulated accepted norms of heterosexuality, but these norms are not the same.

My point is that differences between these varying heteronormative ways of "circumscribing the human" are too often simply added up in feminist, trans, or queer analyses, as if they are of the same order and always reinforce each other.[62] For example, Judith Butler describes the many forms that the regulation of gender and sexuality can assume, and she delineates the different consequences such regulations can have for different people, but she repeatedly refers to this variety of regulative mechanisms as "the norm."[63] I think that it is more logical, and more helpful, to understand how the very diversity of the politics of heteronormativity and the various understandings of the gender binary actually offer space for critique, change, renewal, or transgression. Moreover, it is critical to be aware of the fact that many dominant normative discourses and practices do not specifically address gender or sexuality but may play an enormous role in circumscribing the possibilities for transgressing heteronormativity. I have explored some examples of this: the insistence upon fairness and sincerity in contracts; the medical ideal of offering help; the insistence on scientific standards; or the belief that love should supersede most other values. But there are many more. We might also ponder the influence of narratives of heroic suffering and sacrifice, calls for the cultivation of a healthy body, or the modern imperative "to be oneself" at all costs. What is it, I wonder, that unifies such entirely different, sometimes conflicting or adversarial ways of thinking and reasoning into a single heteronormativity? More research into how these differences are overcome so that heterosexuality can present itself as entirely natural and self-evident is certainly needed. But I am afraid that our own critique and analyses may also have granted it more unity than it actually possesses. Indeed, by declaring medical discourses on sexuality at the turn of the century to be uniformly heteronormative, historians have tended to overlook the fierce debates between doctors about what heterosexuality actually is. Ultimately, the danger of (re)presenting certain people as failing to live up to *the* heterosexual norm is that it is an argument itself reliant upon the logic of *the* binary sex system; it sets up these individuals as having performed a courageous/sacrificial act of resistance but reifies the unity and dominance of the contested norm and system itself. It might be more productive to explore the frictions, disparities, impossibilities, and conflicts *within* the various "politics of truth" instead of adding them up.[64] We might also attempt to see how "intelligibility" can be created when subjects align with and cross normative prescriptions at the same time. Differentiating between discourses, norms, situations, technologies, contexts,

[62] For "circumscribing the human," see Butler, *Undoing Gender*, 57–58.
[63] See, for example, ibid., 40–56.
[64] See ibid., 72–74, for different norms as working together.

and periodizations might break open heterosexual norms and regulations much more effectively. Doing so will allow us to see and create critical spaces in which transgressive, alternative, and surprising situations, discourses, narratives, practices, techniques, and—yes, also—subjects can appear.

About the Author

Geertje A. Mak is assistant professor of gender history at the Institute for Gender Studies and the Department of History of the Radboud University Nijmegen. She has published works about the history of masculine women, gender history, and hermaphroditism, as well as about migrants in the Netherlands. Currently she is working on her project "Fabricating Identities," investigating the history of scientific and mundane techniques enacting racial, gender, and sexual identities. Her latest book is *Doubting Sex: Inscriptions, Bodies and Selves in Nineteenth Century Hermaphrodite Case Histories* (Manchester University Press, 2012).