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PER SCIENTIAM AD JUSTITIAM

MAGNUS HIRSCHFELD'S EPISTEME OF BIOLOGICAL PUBLICITY

Kevin S. Amidon

Introduction in Jena

In December 1912, Charles Sedgwick Minot, LL.D., D.Sc. (Oxon.), professor of comparative anatomy and director of the Anatomical Laboratories at the Harvard Medical School, presented a series of six lectures at the University of Jena in Germany, where he was exchange professor at the time. Jena held a leading position among centers of research in the biological sciences, based largely on the vigorous activity of Ernst Haeckel (1834–1919) and colleagues and students including Carl Gegenbaur, Oscar Hertwig, Wilhelm Roux, and Julius Schaxel. When published in English, Minot's lectures bore the general title *Modern Problems of Biology*, and were clearly pitched by the publisher toward an audience that reached beyond specialists in the life sciences.[1] Minot's goals therefore encompassed forms of persuasive argument meant to demonstrate the significance and power of the life sciences through broad intellectual, social, and even political impact. In this intention he paralleled Haeckel and his Jena colleagues.[2] His published lectures therefore provide a concise demonstration of the conceptual scope of the concept "biology" across national boundaries in the period around the turn of the twentieth century.

As was the case for many of his contemporaries, the term "biology" meant many things to Minot, which led him to make wide-ranging predictions about the bright future of the field.[3] Biology's disciplinary diversity also had a downside, however, which he saw as the fragmentation of scientific inquiry into life. In the crowning sixth lecture of his series, entitled "The Conception of Life," he addressed these concerns: "Unfortunately, biology has not yet become a united science, but consists of sundry disciplines more or less separated from one another."[4] All of these "sundry disciplines," however, which included both the longer-standing descriptive

and classificatory fields of anatomy, botany, and zoology as well as the newer, more specialized, and mechanistic discipline of physiology, had the potential to become integrated through the concept "biology." Minot's vision of biology was therefore one in which "true and real biology" and "unified biological science" would be one and the same.[5] Furthermore, Minot spoke assuredly of the integrated biology of the future as the dominant mode of scientific inquiry. Biology would achieve its crowning persuasive position through publicity both within and beyond disciplinary boundaries in the sciences: "This more complete biology of the future will I believe be recognized by all as the supreme science."[6]

"Complete" biological science further held, in Minot's argument, the potential to explain complex questions of human understanding and behavior. "Consciousness, the relation of the soul to the body, the origin of reason, the relations of the external world to psychical perception, and most subjects of philosophical thought are fundamentally biological phenomena which the naturalist investigates and analyzes."[7] Few of his contemporary investigators in the German biological field would have disagreed, and few would have refrained from attempting to persuade others that biology held this potential. Recent scholarship, especially that of Lynn Nyhart, has emphasized the centrality of this publicistic element in German biological discourse around 1900.[8] In speaking to a German audience in Jena, then still in the immediate post-Haeckel era, Minot surely believed that his claims would fall on receptive ears. Countless German scholars and commentators of 1912 would have fully supported his characterization of biology as a science that culminated most significantly in normative claims about human phenomena and behavior. Particularly in its German iteration, but also outside of Germany wherever German methods and training were valued highly, like the United States, the term "biology" therefore encompassed investigational techniques and methods, but also, and in many ways more importantly, the use of conclusions drawn from those investigations to make persuasive claims about social, political, and intellectual phenomena oriented well beyond the disciplinary boundaries of biological inquiry. These claims themselves became the basis for intervention-oriented disciplinary moves and movements like hygiene, eugenics, and the many forms of sex research—and especially that of Magnus Hirschfeld, which encompassed all of these spheres. German biological science in 1912 was thus more significantly shaped by its practices of persuasion than by its forms and strategies of investigation. In most cases this persuasion was oriented toward print publics but also took place through varied disciplinary networks, including textual and visual forms of persuasion and publicity.[9] Biology was therefore a set of networked, competing epistemes of investigational and publicistic intervention.[10]

Minot, as an American scientist speaking at a German university with a particularly distinguished tradition in several biological disciplines, thus reveals the central conceptual conflict that marked the development of scientific inquiry into living things in Germany in the late nineteenth and early twentieth centuries: the uncomfortable relationship between the two modes of scientific practice that I would like to name here *investigational practice* and *persuasive practice*. Simply put, investigational practice involves the observation of living phenomena with the tools of scientific inquiry: microscopes, stains, microtomes, preserved specimens, experimental populations of flies, moths, or butterflies—a vast and limitless range of proliferating objects of investigation. Persuasive practice encompasses the forms of communication used to disseminate scientists' claims, both within and beyond the fluid boundaries of disciplinary categories. It can therefore take the form not just of written, spoken, or printed words, but also of constructed representations: drawings, models, exhibitions, collection methods, even photographs. Persuasive practice can therefore relate either tightly or loosely to investigational practice. Where it becomes particularly loosely related to investigation, it becomes what so many commentators, Andreas Daum most sophisticated among them, have called "popularization."[11]

Minot demonstrates two common strategies among scientists of the day that show the dynamic relationships between investigational and persuasive practice. First, he frames his persuasive claims passively, often as speculations about future consensus: "Complete biology . . . will . . . be recognized by all." This assumes that something will happen that will in fact be persuasive to future individuals, whether they work within a discipline or not. Second, he attempts to subordinate or mask some of his persuasive claims by foregrounding investigational practice. He even claims that it is "by application of the microscope" that clarity of thought, investigation, and discovery can be attained.[12] Minot thus demonstrates how biological scientists always had to negotiate both investigational and persuasive practice at the same time. In many cases they held interests that motivated them to subordinate one to the other. Some scientists chose to focus their efforts closely on investigation and to attempt to link persuasion ever more closely to it. Most German scientists in the biological field around 1900 did precisely the opposite. They built grand persuasive edifices and subdisciplinary fiefs on minimal investigational results.[13] Until after World War II, disciplinary development and institutionalization in German biology thus generally tracked modes and strategies of persuasive practice more closely than techniques and methods of investigation. This duality had as a consequence an almost limitless proliferation of prefixes or modifiers to the term biology. Race biology, social biology, cultural biology, chemical biology, criminal biology, sexual

biology, holistic biology, biological medicine—all of these terms represented moves toward disciplinization in the German academic and research system around 1900 that built large structures of persuasive practice directed toward nondisciplinary audiences out of often very narrow investigational results. So pervasive was this proliferation of biologies in Germany at the time that the term "biology" itself can be read most generally as a marker of the pursuit of control over social and political advocacy by groups of subdisciplinary investigators of varying prestige and social interests.[14] Magnus Hirschfeld's investigational and persuasive practices represent with extraordinary depth and scope this protean character of discursive and institutional field of biology.

Magnus Hirschfeld and the Biological Science of Sociopolitical Intervention

In the months before Minot's residence in Jena, Hirschfeld had engaged in two significant publicistic interventions into the print and personal networks of publicity that constituted German scientific discourse: he had published a major book, *Naturgesetze der Liebe: Eine gemeinverständliche Untersuchung über den Liebes-Eindruck, Liebes-Drang und Liebes-Ausdruck* (Natural Laws of Love: A Generally Understandable Study of the Impressions, Drives, and Expressions of Love) and participated in the second (1912) Magdeburg congress of the German Monist League, the popularizing scientific-philosophical organization founded in the service of the ideas of Ernst Haeckel.[15] As Todd Weir has argued in his extensive work on monism in this period, monism provided a range of scholars and commentators, both within and beyond university contexts, with institutional forum for arguments and discussions linking ~~biology~~ and politics through concepts marked as "biological." Hirschfeld's varied forms of scientific and publicistic practice, and especially his publications and short-lived but energetic engagement with monism, therefore provide a nuanced case study of the discursive valences of the biological field at the time. Hirschfeld identified himself as a biologist, dedicating *Natural Laws of Love* to Ernst Haeckel, and stating unequivocally in the introduction to his 1914 magnum opus *Die Homosexualität des Mannes und des Weibes* (The Homosexuality of Men and Women) that he sought to study human beings upon "the only possible natural, biological-anthropological basis."[16] He therefore engaged willingly and energetically throughout his varied career by both rhetorical and investigational means with disciplinary, subdisciplinary, and what we might now think of as pseudodisciplinary popularizing fields, including endocrine research, heredity, eugenics, psychoanalysis, monism, and evolution. He embodied with striking scale,

scope, and density the interventionist episteme of the German biological field in the first decades of the twentieth century.

Hirschfeld's work was driven from its first publicistically effective moments in the 1890s by a complex and labile set of personal and political investments. He rapidly became well known for his theory of "sexual intermediates" and his efforts for the repeal of paragraph 175 of the Imperial German Penal Code. He nonetheless remained pragmatically circumspect in many debates about whether homosexuality represented a natural pathological development or a dangerous phenomenon of degeneration.[17] Beginning in 1899 he edited the *Jahrbuch für sexuelle Zwischenstufen* (Yearbook for Sexual Intermediaries), and in the first years of the twentieth century he published a number of significant tracts, both popular monographs and large academic articles, that elaborated on his theory of sexual intermediates and the ways that sexual behavior, particularly in urban settings like Berlin, revealed them. The most significant of these publications included "Ursachen und Wesen des Uranismus" (Causes and Character of Uranism [Male Homosexuality]; 1903), *Der urnische Mensch* (The Uranian [Male Homosexual] Person; 1903), *Berlins drittes Geschlecht* (Berlin's Third Sex; 1904), and *Geschlechtsübergänge* (Sexual Transitions; 1904/1905). He achieved particular notoriety for his testimony in 1908 during the series of criminal and civil trials known as the Harden-Eulenburg affair, in which a circle of close friends and advisers of Kaiser Wilhelm II, including Prince Philip zu Eulenburg-Hertefeld and Kuno von Moltke, became embroiled in a dense thicket of accusations of homosexuality and counteraccusations of defamation.[18] Soon after the Eulenburg scandal he published his three largest and most famous monographs: *Die Transvestiten* (The Transvestites; 1910), *Naturgesetze der Liebe* (Natural Laws of Love; 1912), and *Die Homosexualität des Mannes und des Weibes* (The Homosexuality of Men and Women; 1914).

Hirschfeld's Scientific Constellation of Text and Image

Hirschfeld's representations of his work in print generally centered around case narratives, though, as Kathrin Peters explains in this volume, he always found both visual and narrative evidence useful. The case narratives around which he builds his arguments are often dozens of pages long. He relied particularly on extensive narratives of individual sexual life stories gleaned from thousands of "psycho-biological questionnaires"—a form of survey research that he developed. He pulled together patients' responses to questions about their childhood, their sexual desires, their habits of dress, and physical comportment to weave long narrative case studies. He

employed similar narratives in all of his subsequent writings. His "Ursachen und Wesen des Uranismus" (1903), for example, contains numerous lengthy quotations from individual narratives as well as a thirty-four-page appendix entitled "life story of the Uranian [homosexual] worker S., as told in his own words."[19] Nonetheless, in a rhetorical trope found commonly in the biological and psychological literature of the time, Hirschfeld's rhetoric in "Ursachen" also regularly couches conclusions drawn from narrative representation in visual metaphor: "We see in this case"; "We thus see here," suggesting that the traits could be literally *seen* by readers.[20] Hirschfeld was drawing upon the practices of clinical demonstration, common in all medical fields since the middle of the nineteenth century, and in precisely following these conventions, he sought to present his research as objectively observable fact to a scientific audience.[21] He interpretively concludes nine pages of narratives from homosexuals about their childhoods with the words "these true-to-life reflections, selected from a large number of similar ones, grant most valuable insight into the psychology of the Uranian [homosexual] child-soul."[22] Hirschfeld thus embeds a combination of visual-diagnostic interpretation and textual-narrative explication at the deepest level of his rhetoric.

Hirschfeld also wrote an epilogue to one of the most significant memoirs about sexual identity of his day, *Aus eines Mannes Mädchenjahren* (Memoirs of a Man's Maiden Years) by Karl Baer (1885–1956), who published the work under the pseudonym "N. O. Body" in 1907.[23] Baer had been assigned a female gender in childhood because he had physiologically ambiguous genitalia. He eventually declared his gender identity to be male. Visual surveillance forced his gender transition as well. Beginning in late adolescence he was regularly suspected by police of being a man dressed as a woman, which was a crime in many European jurisdictions.[24] Hirschfeld's summary of the case repeated the visual rhetoric he deployed in "Ursachen" in 1903 and developed in Geschlechtsübergänge in 1904/1905:

> We see here how far-reaching conflicts may occur already in the souls of children, certainly an instructive example for our times in which we, unfortunately, have far too many occasions to read of suicides committed by schoolchildren and other tragedies involving children. . . . We further see an absolutely classical example of the struggle between a congenital disposition and external influences, between the inherited and the acquired. We observe how, with elemental force, certain inner impulses break through barriers that education and environment have erected, and how in spite of everything, in the end it is the spirit that molds life.[25]

Not only does this summary emphasize the links between visualization and narra-

tive, but it prefigures Hirschfeld's testimony just months later during the Harden-Eulenburg affair by highlighting tensions between "inherited" traits, unconscious "disposition," conscious or "acquired" behavior, and observable "external influences."[26]

In the earlier stages of Hirschfeld's career, the technique of the case history generally took precedence over visual evidence. Later, he tended to deploy a greater range of visual material. This apparent shift in his practice took place for three reasons, which together reveal the interlacing of scientific-investigational and publicistic elements and motivations in his work. The first is that between Hirschfeld's first publications combining description of and advocacy about homosexuality in the 1890s and the publication of his multivolume medical textbooks in the 1920s and 1930s, printing technology advanced rapidly, and made possible the inclusion of large numbers of high-resolution glossy plates in reasonably priced publications. Second, microscopic, cellular, and biochemical techniques for linking behavioral and physiological phenomena through investigation of the endocrine system also advanced rapidly in the first three decades of the twentieth century, and Hirschfeld often sought to make reference to recent innovations in biological-scientific practices in his work.[27] Third, Hirschfeld's own varying, but generally increasing professional and disciplinary status (especially as the director of his own institute after 1919) made it possible for him to frame his publications in the style of authoritative textbooks collecting authorized medical-biological knowledge, rather than scholarly or popularizing works promulgating his own arguments and positions. His *Die Homosexualität des Mannes und des Weibes* (The Homosexuality of Men and Women; 1914) can be seen as a transitional work between these two publication styles—part scholarship-advocacy and part textbook. Revealingly, the circa one-thousand-page book contains no visual images.

The initial publication of Richard von Krafft-Ebing's *Psychopathia Sexualis* in 1886 and its subsequent success as a biomedical "best seller" cemented the growing position of the narrative case history as the primary means of medical and scientific access to the relationships between behavior, identity, and pathology.[28] The fraught and still controversial field of psychoanalysis, with its focus on the invisible phenomena of the unconscious accessible through the process of a "talking cure," demonstrates particularly clearly how constructed narratives became central to scientific and scholarly practice at the time. For a few years around 1910, Hirschfeld was regularly in contact with Sigmund Freud and the growing psychoanalytic movement.[29] Like Hirschfeld, Freud regularly analyzed individuals not just through a "talking cure," but also through an examination of their memoirs and other texts. The most famous of these was his extensive monograph on the 1903 book *Memoirs*

of My Nervous Illness by the judge Daniel Paul Schreber, who believed himself to be turning into a woman.[30]

Analogously to Freud, Hirschfeld in several of his most significant works published between 1903 and 1914 chose to emphasize narrative case studies of homosexuals and those we would now call intersex individuals and their behavior. He did begin to explore the use of photography as evidence for his claims during this period but generally expanded visual material into case study-based narratives and theoretical structures in his major published works. As Kathrin Peters argues in this volume, Hirschfeld's practice of using images in his early study *Geschlechtsübergänge* (Sexual Transitions, 1904/1905) was ambiguous. On the one hand, he saw photography as a medium that objectively documented reality. But a closer examination of the photographs he used—most of which did not come from medical or scientific sources—and his practices of photographic documentation reveals that these images constructed sexual difference in very specific ways. Furthermore, as David James Prickett has emphasized, Hirschfeld's work (in *Geschlechtsübergänge*) shows "reliance on written *and* visual testimony of hermaphrodites and homosexuals."[31] This constellation of textual and visual elements characterized Hirschfeld's work for the remainder of his career, including in his large multivolume works *Sexualpathologie* (Sexual Pathology; 1916–20) and *Geschlechtskunde* (Sex and Sexuality Studies; 1926–30). Beginning around 1914, however, new endocrinological methods and microscopic techniques induced Hirschfeld to consider more deeply how visual evidence for the characterization sexual difference could serve his arguments about sexual self-understanding and pathology. All through these shifts in his practice, Hirschfeld claimed biology as his primary field of investigation.

Hirschfeld, of course, understood the strategies of subdisciplinary conflict and appropriation only too well, at least after his bruising experience with the politics of homosexuality in the Harden-Eulenburg affair. He followed the general tendency toward disciplinary cross-fertilization and cross-appropriation in scientific research, and his work shares much with what Atina Grossmann has called the "motherhood-eugenics consensus"—the widespread conviction that eugenic ideas had to guide scientific investigations of sex, sexuality, and reproduction.[32] Eugenics also was often known in Germany under the more specific term "race hygiene," or *Rassenhygiene* (see below).[33] Hirschfeld logically preferred the Anglo-Greek term *Eugenik*, coined originally by Francis Galton, rather than the Germanization "race hygiene." In 1913 at the time that Hirschfeld was working extensively to expand his reputation, he, Max Marcuse, and Albert Eulenburg founded the *Ärztliche Gesellschaft für Sexualwissenschaft* (Medical Society for Sex Research). They added "*und Eugenik*" to its name just months after its founding.[34] The organization did not

become highly effective in its efforts to promote what the founders suggested were acceptable sexual and reproductive practices. Nonetheless, Hirschfeld never lost his enthusiasm for the potential of positive eugenics.

Particularly after the foundation of Hirschfeld's Institute for Sexual Science in 1919, his work grew to incorporate a wider range of visual material. Between 1916 and 1920 he published his three-volume textbook *Sexualpathologie* (Sexual Pathology), in which the entire second volume treated "intermediate sexual forms." During and after World War I, Hirschfeld became particularly interested in the work of the Viennese physician Eugen Steinach, who experimented in the early 1920s with the transplantation of testes as therapy for homosexuality.[35] (For a more detailed discussion of the popularization of Steinach's work in film, see the contribution of Rainer Herrn and Christine N. Brinckmann to this volume). Steinach explored glandular explanations for the development of the intermediate sexual forms that Hirschfeld believed to be the basis for homosexual behavior. Experience with research like Steinach's led Hirschfeld to rely less on the complex narrative case studies that had characterized the earlier stages of his research because he increasingly came to believe that the etiology of homosexuality could in fact be visualized, including microscopically. Between 1926 and 1930, he published his richly illustrated five-volume *Geschlechtskunde* (Sexual Knowledge). The entire fourth volume was filled with plates, drawings, and illustrations ranging from drawings of microscopic observations of cellular phenomena to anthropologically and anthropometrically staged photographs of representative individuals, sometimes but not always described as pathological.

Hirschfeld's identification of his field of sex research with biology was, furthermore, by no means outside the mainstream of German biological thought at the time. Here the reflections of Charles Minot again become revealing. In the fifth lecture in his series, Minot explored something that he could only introduce with the following cliché: "There is probably no phenomenon which has always seemed to mankind at once so interesting and so mysterious."[36] That phenomenon was, of course, sex, and the lecture carried a title that did in fact relate it clearly to a particularly lively sphere of biological investigation at the time: "The Determination of Sex." Minot went on, in his introductory remarks, to bring up a bothersome terminological issue that still rankles today. In both the colloquial and disciplinary usage of 1912, just as today, sex and sexuality were concepts that related not only to phenotypic dimorphisms and chromosomal structures, but also to the varied behaviors of organisms related to reproduction and the physiology of the reproductive system. Minot surmised that "the basis of all clear thinking in regard to the questions of sex is the difference between sex and sexuality.[37]" By "sex" and "sexual-

ity," however, he does not immediately denote sexual behavior here. "Sex" is a characteristic of individual male and female organisms and their bodies, and "sexuality" is a description of the "reduced number of chromosomes" in the gametes produced by these individual organisms.[38] Importantly, this distinction has also only emerged through the scientific investigation, and Minot claims that "by the application of the microscope we have discovered sexuality proper."[39]

Despite this unambiguous investigational claim, Minot's language does not exclude the interpretation of sex and sexuality as terms relating to behavior. He also certainly did not exaggerate the importance of sex difference in scientific practice at that time. He was, however, particularly thorough in his attempts to make the exploration of sex and sexuality a question of disciplinary investigation. Minot thus chose specifically to make cellular phenomena the basis of his claims. Other biological scientists of the time were more willing to speak overtly of this uncomfortable physiological and behavioral dualism in the understanding of sex and sexuality. Hirschfeld, especially in his congruent interest in—and linking of—sex research and eugenics, richly represents the complex valences of biologically based publicity, persuasion, and advocacy within and beyond disciplinary contexts in the early twentieth century.

Homosexuality, Race Hygiene, and Biological Disciplinarity

The phenomenon of homosexuality and its varied behaviors as scientific object richly demonstrates how these moves toward disciplinization pursued by groups of investigators attempting to establish themselves as authoritative came into conflict in the sphere of persuasive practice. The invention of the diagnostic category "homosexuality" during the nineteenth century has, at least since the first volume of Foucault's *History of Sexuality*, been understood as a narrative of discipline. Particularly in its German branches, this narrative is a constitutive part of the history of the development of academic organization. The two disciplines in which the investigation of homosexuality first grew were medicine and law. Foundational documents of the analysis of homosexual behavior like Johann Ludwig Casper's *Clinical Reports* (*Klinische Novellen*) (1863) and *Handbook of Forensic Medicine* (*Handbuch der gerichtlichen Medizin*) (1857) emerged precisely in forensic psychiatry, the intersection of medicine and law. In his *Handbook*'s third edition of 1860, Casper even divided the two volumes between the "biological" and the "thanatological." Here, of course, the division is broadly between the living—the biological—and the dead.

Sexuality and homosexuality (though Casper does not yet call it that) are therefore biological issues for him.[40]

From this moment to well into the twentieth century, the potential of biological methods and disciplines to provide a total explanation of human behavior—and potential new means for its disciplinary control—made biology the primary disciplinary trope for the investigation of homosexuality. At the same time, the problem of the explanation of homosexuality reveals the tensions that kept German biology from coalescing into a single and authoritative disciplinary network, and caused a proliferation of competing subdisciplinary developments and accretions. Competing explanations of homosexuality in fact became the most important locus of persuasive practice among two interest groups central to disciplinization moves in race hygiene and sex research. The first of these was the Society for Race Hygiene (*Gesellschaft für Rassenhygiene*) that emerged in 1905 from the journal entitled *Archiv für Rassen- und Gesellschaftsbiologie* (Archive for Racial and Social Biology), founded in 1904 and led by Alfred Ploetz, Ernst Rüdin, and Richard Thurnwald.[41] I will henceforth employ the term "Archive circle" to refer to this close-knit but widely varied group of advocates. The second group was constituted by Hirschfeld himself, and to some extent the circle of scholars and commentators around him that advocated for sex research and social justice. In 1919, this group took on a more solid disciplinary form through Hirschfeld's Institute for Sexual Science in Berlin. Henceforth I will call them the "Hirschfeld circle."

In the earlier nineteenth century in Germany, the empirical investigation of human life and diversity marked by the term *biology* developed increasingly powerful and persuasive institutional and disciplinary structures. In the biological sphere a number of loci of argument developed in competition with one another. Two in particular stand out: the diagnostic and the narrative. The diagnostic strand attempted to organize the forms of diversity, including especially pathology and race, into categories independent of time. Diagnostic explanation sought a sophisticated description of what *is*, placing the object of investigation directly before the senses, tools, and methods of the investigator. This was the dominant strand of biological argument from the development of early cell theories in the 1830s until the dissemination of Darwinism in the 1860s and 1870s.[42] In it biology manifested the roots in medicine that had been growing since the first instances of the wide dissemination of the concept of biology in the later German Enlightenment among scholars and physicians like Karl Friedrich Burdach and Gottfried Treviranus.

The early medical, psychiatric, and forensic investigators of homosexuality after Casper hewed closely to these diagnostic moments of argument, and could

therefore see their work as both medical and biological at once. The range of work on homosexuality by psychiatrists including Westphal, Kraepelin, Krafft-Ebing, Schrenk-Notzing, Tardieu, Morel, Binet, Eulenburg, Löwenfeld, and Forel takes place largely within this diagnostic mode, emphasizing time-independent physiological and neurological etiologies and manifestations of homosexuality.

The dissemination of Darwinism in Germany, however, revived a strain of argument that was advanced in competition with the diagnostic by a range of biological scholars: the narrative. Narrative forms of argument foregrounded the temporal and contingent character of the living object of inquiry: its determinants and that which it determines. Narrative explanation was thus often subjunctive, addressing that which *might have been* and that which *could result*, and often attributed purpose and purposiveness to this chain of contingency. The morphological and teleomechanist traditions of the period before 1840 explored by Timothy Lenoir, Stephen Jay Gould, and Robert Richards first grounded the tropes of this mode of argument.[43] The powerful experimental and observational methods of the laboratory, the museum, and the clinic, with their focus on the object at hand, often seemed to best support the diagnostic strain. Nonetheless the narrative strain gained power through the later nineteenth century through the efforts of scholarly partisans of evolutionary theory—and especially the work of Ernst Haeckel. Haeckel, the central public figure in many of these debates, claimed that biology was specifically a historical science and not a laboratory one, because living phenomena are fundamentally time-contingent, and because current living forms can only be understood as one part of a long chain of historical causality and future contingency. Scholars and thinkers as widely varied as Friedrich Nietzsche and Sigmund Freud took elements of this narrative mode of biological argument and developed them into wholly new scholarly tropes.

After about 1870, a new generation of biologists trained not in medicine but in the biological sciences by the generation of Haeckel and Virchow was increasingly seeking to establish itself and its interests in branches of the academic economy. Many of them could not map their interests or their work cleanly or comfortably onto the diagnostic or the narrative—and in their attempts to represent their innovative potential, they sought new persuasive strategies. They therefore attempted to establish and institutionalize subdisciplines in which the diagnostic and narrative strains of argument could be reconciled. Heredity was the key concept that immediately demanded elements of both diagnostic and narrative argument, and which therefore drove many attempts at disciplinization. Heredity marked the pursuit of mechanisms, causes, and determinants of the forms of life in future generations. It also required a focus on reproductive mechanisms and behaviors. The race hygiene

of the Archive circle and the sex research of the Hirschfeld circle were both part of this proliferation of hereditarian argument immediately around 1900.

Heredity was a constitutive concept for both subdisciplines, allowing them to make arguments from traditional positions of both diagnosis and narrative. Both also engaged, however, with a further concept that itself demanded reconciliation with hereditarian thought. This was the concept of hygiene. A diffuse and nondisciplinary conceptual field in the nineteenth century, hygiene had developed as a means of making future-oriented arguments from diagnostic standpoints in the present, especially as microbial, bacteriological, and microscopic techniques and arguments advanced rapidly in the later nineteenth century. It was therefore a kind of political medicine that flirted with the temporal arguments of biological narrative, but with less interest in historical and evolutionary determinants.[44] Leading figures in biological diagnosis like Rudolf Virchow made constitutive contributions to hygiene as a system of persuasive practice linking medicine, biology, and politics.[45]

A further moment of argument related in part to hygiene was particularly significant in the construction of race hygiene: the issue of value. Building on a long tradition of German philosophical argument about judgment with roots in aesthetics and in Kantian categories and ethics, the race hygienists (and especially the Archive circle, foremost among them Fritz Lenz) argued that especially in biology, values are prior to scientific inquiry, and thus that biological knowledge is contingent on established values and their associated judgments.[46] This discourse of values enabled the race biologists to speak of "race welfare" as the foundational value structure of both scientific inquiry and political action. The conflicts between race hygiene and sex research thus provide vast evidence of persuasive practice in the proliferating field of biological subdisciplines around 1900. I argue that they were in fact so closely linked by their forms of persuasive practice, by their claims to scientific legitimacy through biological claims, and by their conflicts with one another that they must be seen as two parts of the same field of disciplinary advocacy.

Race hygiene and sex research both claimed to be the appropriate site of the reconciliation not only of diagnosis and narrative, but also of heredity and hygiene. Both inquired into the diversity of human forms and behaviors, but specifically as a means of establishing arguments that could guide action and policy. They also claimed both to define and to represent biology itself, insisting that their own methods, results, and policy prescriptions were the best-founded in biological knowledge. Arguments and interests in both fields paralleled one another strongly, and individual scholars and their chosen tropes of argument crossed the boundaries between them in both directions. Among race hygienists, these arguments took the

form of critiques of the investigational and persuasive practices of the sex researchers, fears that the sex researchers were skewing the purpose and goals of hygiene, and claims that sex research could not be legitimate because it evinced comparatively little interest in race as a determinant of behavior. Among sex researchers, these arguments took a curiously different form, including critiques of the race hygienists' inordinate interest in surface phenomena of human diversity, but in many respects accepting, defending, and often vigorously advocating "eugenic" ideas in contrast to or competition with "race hygiene."

Extraordinary evidence for these claims about the interlocking debates on the etiology, significance, and hygienic status of homosexuality pursued by the Archive circle and Hirschfeld's derives from a group of related articles in the *Archiv für Rassen- und Gesellschaftsbiologie* (hereafter *Archiv*) in the years from 1904 to 1916 that were contributed primarily by the leading founders and editors of the journal: Ernst Rüdin, Otto Ammon, Alfred Ploetz, Fritz Lenz, and August Forel. The final article of the group, remarkably, was contributed from outside the Archive circle by a biologist of great institutional prestige: Richard Goldschmidt, a director of the Kaiser Wilhelm Institute for Biology in Berlin-Dahlem. The arguments in these articles in the *Archiv* addressed materials by sex researchers including Magnus Hirschfeld, Benedict Friedlaender, Emil Kraepelin, Richard von Krafft-Ebing, Ivan Bloch, and Albert Moll, some of whom answered directly the claims made by the Archive circle.

Four articles or sets of exchanges in the *Archiv* between the founding of the journal in 1904 and 1916 show how the issue of homosexuality motivated the persuasive practice of the Archive circle. The first is in the very first issue of the journal, dated January 1904. It includes a large article by the psychiatrist Ernst Rüdin (a student of Eugen Bleuler und Emil Kraepelin and later the chief editor of the *Archiv*) on homosexuality and the "life processes of race."[47] Rüdin's article stimulated a rebuttal by Benedict Friedlaender, a scholar associated with Magnus Hirschfeld's *Wissenschaftlich-humanitäres Komitee* (but who differed strongly with Hirschfeld over the question of the existence of sexual intermediates) that was published in the second issue of the journal. Friedlaender's rebuttal was accompanied, in typical *Archiv* fashion, by a further response from Rüdin.[48] Five years later, in 1909, the race biologist (*Sozialanthropologe*) Otto Ammon (prompted in part by Alfred Ploetz, the founder of the *Archiv*) stimulated a major controversy among the *Archiv* scholars themselves with an article about evolution, homosexuality, and masturbation.[49] Ammon's article provoked a series of energetic responses from Ernst Rüdin and August Forel.[50] In 1912, another future chief editor of the *Archiv*, the young Fritz Lenz, produced an article on the heredity of sex-linked traits and pathologies

that participated, though in a subtle and coded fashion, in the *Archiv*'s discursive patterns of inquiry into homosexuality.[51] Finally, in 1916, Richard Goldschmidt extensively revisited the literature on homosexuality in the light of the problem of intersexuality—which he considered well demonstrated from his work on the gypsy moth *Lymantria dispar*.[52] Goldschmidt was the only one of these scholars who could claim to be a practicing biologist, rather than a biologically interested medical doctor or anthropological researcher. His article—pitched clearly toward an audience of both disciplinary experts and those committed to the Archive circle's rhetoric of race hygiene—therefore participated in the same kind of persuasive practice as the Archive circle, but the disciplinary authority of his investigational claims as the word and practice of academic biology largely dissolved the immediate conflicts about disciplinarity that had stimulated the Archive circle's interest in homosexuality in the first place.

Several moments of persuasive practice conceptually subordinate to heredity and hygiene motivated this inquiry into homosexuality, including the question of degeneration and the problem of the legal regulation of sexual and reproductive behavior. The crucial issue in the circle's interest in homosexuality was, however, precisely the question of discipline: how a kind of scientific inquiry into homosexuality could be pursued that might reveal its causes through investigation and ground a consistent persuasive practice relating to reproductive and eugenic policy. Such inquiry would incorporate the arguments of forensic psychiatry, law, medicine, and also several biological subdisciplines, enabling the writing together of both diagnosis and narrative. This meant that the *Archiv* scholars could not engage simple discourses of the repression or the proscription of homosexuality. Rüdin, in fact, led the way immediately in 1904 in arguing that paragraph 175 of the imperial penal code—the ban on "lewd and lascivious acts between males"—should in fact be repealed. This was not for the reasons enumerated by sex researchers like Hirschfeld, however, which focused on claims of justice or civil rights, but largely on questions of social hygiene and eugenics like the prevention of blackmail and marriages by homosexuals. Rüdin's claims were rather part of the Archive circle's race hygiene arguments that homosexuality endangered the discipline of sex as the mechanism of the transmission of eugenically valued and selected traits to subsequent generations—and that legal proscriptions were meaningless and immaterial to these eugenic values. The potential that homosexuality represented sexual acts conducted for their own sake, with no attention to eugenic or reproductive considerations, meant that it was the necessary first locus of the discipline of sex as reproductive behavior through biological inquiry and argument. A further benefit to the Archive circle of this strategy was that it could undermine the legitimacy of

sex research as a discipline by both co-opting and contradicting its methods and arguments. Here we begin to see how both the Archive circle and the sex researchers attempted to stake out the same elements of persuasive practice as their own.

The Archive circle's strategy of achieving authority over questions of homosexuality had one particularly common refrain: the argument that their work was "biological." Rüdin and Ammon specifically begin their articles by arguing that biology is the appropriate and adequate disciplinary locus of inquiry into homosexuality, and Lenz does so in his usual coded fashion—he was, after all, only one year past his medical examinations at Freiburg. Rüdin and Ammon denigrate medical interest in the question and lament journalistic treatments. Rüdin sets the tone with the following statement:

> Even if those varieties of sexual activity that doubtless exist within the general spectrum of health are undeniably assigned to the field of scientifically biological investigation, objective explanations of the sexual perversions and inversions . . . remain buried in textbooks, monographs, and scholarly journals in medicine, or are on the other hand the object of the most despicable journalistic speculation.[53]

Ammon repeats this language in a close paraphrase: "Recently more than usually the daily press has concerned itself with discussions about homosexuality and its origin. . . . The strictly scholarly investigations of homosexuality [however] stand hidden in psychiatric books and journals."[54] Ammon chooses the discipline of *Anthropologie*, rather than biology, as his preferred locus of inquiry. This is to be understood, however, as a synonym for race hygiene in the sense of Gobineau and Chamberlain and as a vestige of Ammon's archaic language~~, rather than advanced age~~. Goldschmidt, of course, the credentialed, academically sanctioned, and institutionally secure biologist, stakes the clearest claim to biology as his master trope of argument. He claims that inquiry into homosexuality has been disciplinarily diffuse, but that the time has arrived that many insights "can now be grasped precisely biologically" (*jetzt präzis biologisch gefaßt werden können*).[55]

Focus on biology as the appropriate scene of the discipline of homosexuality must of course take place in the mainstream of persuasive practice in biology of the time. The Archive circle thus participates in the writing together of diagnosis and narrative through heredity and hygiene. Rüdin does this directly as part of his critique of medicine, demanding that hygiene be seen not as focused on the well-being of the individual, but rather on the well-being of the race.[56] He further focuses a critique of Magnus Hirschfeld's "Causes and Character of Uranism [Male

Homosexuality]" ("Ursachen und Wesen des Uranismus") around Hirschfeld's chapter "Heredity and Homosexuality" ("Heredität und Homosexualität"), concentrating directly on his own reading of heredity as the transmission of valued traits across time.[57] Ammon takes a similar but less rigorous tack, using the concept of inheritance (*erben*/*Vererbung*) so loosely that it becomes a marker for transmission not only through sexual reproduction, but also through suggestion. In a discussion of the "vice" (*Laster*) of the French Foreign Legion, he claims that "the vice is passed down ['inherited forward'] and new recruits are informed of it" (*Das Laster erbt sich fort und wird den Neueintretenden mitgeteilt*).[58] Ammon's less than rigorous Lamarckism is obvious here, but must of course itself remain unspoken, because Ammon has forced the concept of inheritance outside the bounds of sexual reproduction and into the discussion of sexuality independent of reproduction. He has done so with the specific goal of demonstrating the evolutionary impossibility of innate homosexuality as the basis for his argument that all homosexuality is acquired through masturbation.

Lenz's attitudes come only at the end of his lengthy article, in his claim that the "Nordic race" (*nordische Rasse*) demonstrates the strongest sexual dimorphism, and in snide footnotes like the following: "One should not misunderstand me. I recommend to no one that he should cause his own destruction, should he wish to be anything less than a whole man; I ascertain only a fact."[59]

Goldschmidt dissolves the basis of the debate with his disciplinarily authoritative article from the perspective of the biologist. He concludes as follows:

> From the foregoing we can conclude that two logical conclusions must be drawn from the biological facts: 1. There is *genetic* sex that need not, however, correspond with that of the glands. It is exclusively determined by chromosomal relationships at fertilization. 2. There exists a true physical and psychic intersexuality of all gradations.[60]

Thus Goldschmidt regards legal attempts to ascribe intersexual human beings to one sex or another as false and ungrounded.[61]

The stakes of these debates in the *Archiv für Rassen- und Gesellschaftsbiologie* point to the stakes involved in the investigation of homosexuality in numerous fields in the later nineteenth and early twentieth centuries. These are disciplinary stakes, and the Archive circle pursues, in Foucault's phrase, a "putting into discourse of sex" as claims to disciplinary authority.[62] The field on which they focused, and for which they attempted to compete with other groups like the sex researchers, was a field that itself was often in need of discipline: biology.

Conclusion in Berlin

A forced resolution of these debates took two more decades and was achieved not in the sphere of scientific inquiry and publicity, but through the political. At the very moment—10 May 1933—that the library and papers of Hirschfeld's Institute for Sexual Science were providing fuel for the great book-burning on the Berlin Opernplatz, Ernst Rüdin was assisting with the preparation of drafts of the National Socialists' Law for the Prevention of Genetically Diseased Offspring (*Gesetz zur Verhütung erbkranken Nachwuchses*), which was passed into law on 14 July 1933, and for the first time in German history allowed—and mandated in various cases—sterilization of individuals judged inferior.[63] Hirschfeld was already in exile, never again to return to Germany. His plaintive—and posthumous—last publicistic blast against racial thinking in its many different forms, the publication of his book *Racism* in 1938, could do little to stem the Nazis' tsunami of biologistic rhetoric justifying increasingly genocidal policies and actions. Despite the conflicted and multivalent character of Hirschfeld's work and his willingness to embrace rapidly and sometimes uncritically a wide spectrum of scientific concepts and ideas that would lose their persuasive power over time and even come eventually to be seen as exploitative or destructive, his savvy and layered forms of practice, as well his commitment—in part—to a vision of stronger social justice for some, if not all, retains some model character into our own time.[64]

Notes

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1. Charles S. Minot, *Modern Problems of Biology: Lectures Delivered at the University of Jena, December, 1912* (Philadelphia: P. Blakiston's Son, 1913). There appears to be no corresponding German publication, so it is possible that the lectures were delivered in English.

2. On Haeckel see Robert J. Richards, *The Tragic Sense of Life: Ernst Haeckel and the Struggle over Evolutionary Thought* (Chicago: University of Chicago Press, 2008); Sander Gliboff, *H. G. Bronn, Ernst Haeckel, and the Origins of German Darwinism: A Study in Translation and Transformation* (Cambridge, MA: MIT Press, 2008).

3. J. A. Caron, "'Biology' in the Life Sciences: A Historiographical Introduction," *History of Science* 26 (1988): 223–68.

4. Minot, *Modern Problems of Biology*, 103.

5. Minot, *Modern Problems of Biology*, 103, 104.

6. Minot, *Modern Problems of Biology*, 104.

7. Minot, *Modern Problems of Biology*,104.

8. Lynn K. Nyhart, *Modern Nature: The Rise of the Biological Perspective in Germany* (Chicago: University of Chicago Press, 2009).

9. Andreas Daum, *Wissenschaftspopularisierung im 19. Jahrhundert: Bürgerliche Kultur, naturwissenschaftliche Bildung, und die deutsche Öffentlichkeit 1848–1914* (Munich: Oldenbourg, 2002).

10. Paul Weindling, *Health, Race, and German Politics between National Unification and Nazism, 1870–1945* (Cambridge: Cambridge University Press, 1989).

11. Daum, *Wissenschaftspopularisierung*, esp. 33–41.

12. Minot, *Modern Problems of Biology*, 82.

13. Sheila Faith Weiss, *The Nazi Symbiosis: Human Genetics and Politics in the Third Reich* (Chicago: University of Chicago Press, 2010).

14. Kevin S. Amidon, "Sex on the Brain: The Rise and Fall of German Sexual Science," *Endeavour* 32, no. 2 (2008): 64–69.

15. Andreas Seeck, "Wilhelm Ostwald, Monistenbund, Energie und Sexualwissenschaft," *Mitteilungen der Magnus-Hirschfeld-Gesellschaft* 22–23 (1996): 67–97, esp. 86–92; Todd Weir, "The Fourth Confession: Atheism, Monism and Politics in the Freigeistig Movement in Berlin, 1859–1924," Ph.D. diss., Columbia University, 2005.

16. Magnus Hirschfeld, *The Homosexuality of Men and Women*, trans. Michael A. Lombardi-Nash (Amherst, NY: Prometheus Books, 2000), 30.

17. Volkmar Sigusch, *Geschichte der Sexualwissenschaft* (Frankfurt am Main: Campus, 2008), 64–65.

18. The centenary of this scandal produced a spate of dense German-language historical research, as yet largely unprocessed in English-language scholarship: James Steakley, *Die Freunde des Kaisers: Die Eulenburg-Affäre im Spiegel zeitgenössischer Karikaturen* (Hamburg: MännerschwarmSkript, 2004); Norman Domeier, *Der Eulenburg-Skandal: Eine politische Kulturgeschichte des Kaiserreichs* (Frankfurt am Main: Campus, 2008); Peter Winzen, *Das Ende der Kaiserherrlichkeit: Die Skandalprozesse um die homosexuelllen Berater Wilhelms II. 1907–1909* (Cologne: Böhlau, 2010); Peter Jungblut, *Famose Kerle: Eulenburg—Eine wilhelminische Affäre* (Hamburg: MännerschwarmSkript, 2003). Accusations of homosexuality had also played a large part in the Krupp scandal of 1902. Harden and Eulenburg had even crossed rhetorical swords previously in the *Kladderadatsch* scandal of 1893. Domeier, *Der Eulenburg-Skandal*, 24–25.

19. Magnus Hirschfeld, "Ursachen und Wesen des Uranismus," *Jahrbuch für sexuelle Zwischenstufen* 5 (1903): 1–193.

20. Hirschfeld, "Ursachen und Wesen des Uranismus," 26, 31.

21. Michel Foucault famously documented these practices in *The Birth of the Clinic: An Archeology of Medical Perception* (New York: Vintage Books, 1973).

22. Hirschfeld, "Ursachen und Wesen des Uranismus," 55–64.

23. N. O. Body [Karl Baer], *Memoirs of a Man's Maiden Years*, trans. Deborah Simon (Philadelphia: University of Pennsylvania Press, 2006).

24. Sander L. Gilman, "Preface: Whose Body Is It Anyway? Hermaphrodites, Gays, and Jews in N. O. Body's Germany," in N. O. Body, *Memoirs of a Man's Maiden Years*, xvii.

25. Magnus Hirschfeld, "Epilogue," in N. O. Body, *Memoirs of a Man's Maiden Years*, 109.

26. For details of Hirschfeld's testimony see Erwin J. Haeberle, "Justitias zweischneidiges Schwert: Magnus Hirschfeld als Gutachter in der Eulenburg-Affäre," http://www2.hu-berlin.de/sexology/GESUND/ARCHIV/DEUTSCH/JUSTITIA.HTM#4, aaccessed 11 June 2012.

27. Jutta Schickore, *The Microscope and the Eye: A History of Reflections, 1740–1870* (Chicago: University of Chicago Press, 2007); on endocrine research see Chandak Sengoopta, *The Most Secret Quintessence of Life: Sex, Glands, and Hormones, 1850–1950* (Chicago: University of Chicago Press, 2006).

28. Harry Oosterhuis, *Stepchildren of Nature: Krafft-Ebing, Psychiatry, and the Making of Sexual Identity* (Chicago: University of Chicago Press, 2000), 12, 16–17, 185, 220–30.

29. George Makari, *Revolution in Mind: The Creation of Psychoanalysis* (New York: Harper, 2008), esp. 123, 298.

30. Eric L. Santner, *My Own Private Germany: Daniel Paul Schreber's Secret History of Modernity* (Princeton, NJ: Princeton University Press, 1997).

31. David J. Prickett, "Magnus Hirschfeld and the Photographic (Re)Invention of the 'Third Sex,'" in *Visual Culture in Twentieth-Century Germany: Text as Spectacle*, ed. Gail Finney (Bloomington: Indiana University Press, 2006), 103–19, here 105–6; emphasis added.

32. Atina Grossmann, *Reforming Sex: The German Movement for Birth Control and Abortion Reform, 1920–1950* (Oxford: Oxford University Press, 1995), 14–15.

33. *Rassenhygiene* is usually translated as "racial hygiene" but I prefer "race hygiene" for its clearer connotation of "hygiene of/for the race" rather than "hygiene by/through means of race."

34. Sigusch, *Geschichte der Sexualwissenschaft*, 91–93.

35. Sengoopta, *Most Secret Quintessence*, 75–82.

36. Minot, *Modern Problems of Biology*, 82.

37. Minot, *Modern Problems of Biology*, 85.

38. Minot, *Modern Problems of Biology*, 85.

39. Minot, *Modern Problems of Biology*, 82.

40. Amidon, "Sex on the Brain."

41. On Richard Thurnwald see Kevin S. Amidon, "'Diesmal fehlt die Biologie!' Max Horkheimer, Richard Thurnwald, and the Biological Prehistory of German *Sozialforschung*," *New German Critique* 104 (Summer 2008): 103–37.

42. Henry Harris, *The Birth of the Cell* (New Haven: Yale University Press, 1999).

43. Timothy Lenoir, *The Strategy of Life: Teleology and Mechanics in Nineteenth-Century German Biology*, 2nd ed. (Chicago: University of Chicago Press, 1989); Stephen J. Gould, *Ontogeny and Phylogeny* (Cambridge, MA: Belknap Press of Harvard University Press, 1977).

44. Weindling, *Health, Race, and German Politics*, esp. 29–34, 184–88.

45. Constantin Goschler, *Rudolf Virchow: Mediziner, Anthropologe, Politiker* (Cologne: Böhlau, 2002).

46. Renate Rissom, *Fritz Lenz und die Rassenhygiene* (Husum: Mathiessen, 1983); Herbert Schnädelbach, *Philosophy in Germany, 1831–1933*, trans. Eric Matthews (Cambridge: Cambridge University Press, 1984).

47. Ernst Rüdin, "Zur Rolle der Homosexuellen im Lebensprozess der Rasse," *Archiv für Rassen- und Gesellschaftsbiologie* 1 (1904): 99–109.

48. Benedict Friedlaender, "Bemerkungen zu dem Artikel des Herrn Dr. Rüdin über die Rolle der Homosexuellen im Lebensprozess der Rasse," *Archiv für Rassen- und Gesellschaftsbiologie* 1 (1904): 219–25; Ernst Rüdin, "Erwiderung auf vorstehenden Artikel Benedict Friedlaenders," *Archiv für Rassen- und Gesellschaftsbiologie* 1 (1904): 226–28.

49. Otto Ammon, "Der Ursprung der Homosexualität und die Deszendenzlehre," *Archiv für Rassen- und Gesellschaftsbiologie* 5 (1909): 649–78.

50. Ernst Rüdin, "Bemerkungen zur Abhandlung Dr. Ammons über die Homosexualität," *Archiv für Rassen- und Gesellschaftsbiologie* 5 (1909): 679–81; August Forel, "Die Theorie Dr. Ammons über die Homosexualität," *Archiv für Rassen- und Gesellschaftsbiologie* 5 (1909): 803–5; Otto Ammon, "Erwiderung auf die Erklärung des Herrn Prof. Dr. Forel," *Archiv für Rassen- und Gesellschaftsbiologie* 6 (1910): 93; August Forel, "Erwiderung an Herrn Dr. Otto Ammon," *Archiv für Rassen- und Gesellschaftsbiologie* 6 (1910): 90–91.

51. Fritz Lenz, "Über die idioplasmischen Ursachen der physiologischen und pathologischen Sexualcharaktere des Menschen," *Archiv für Rassen- und Gesellschaftsbiologie* 9 (1912): 545–603.

52. Richard Goldschmidt, "Die biologischen Grundlagen der konträren Sexualität und des Hermaphroditismus beim Menschen," *Archiv für Rassen- und Gesellschaftsbiologie* 12 (1916): 1–14.

53. Rüdin, "Zur Rolle," 99.

54. "Mehr als sonst beschäftigt sich seit einiger Zeit die Tagespresse mit Erörterungen über die *Homosexualität* und ihren Ursprung . . . , Die streng-wissenschaftlichen Abhandlungen über die Homosexualität . . . stehen verborgen in psychiatrischen Büchern und Zeitschriften." Ammon, "Der Ursprung," 649.

55. Goldschmidt, "Die biologischen Grundlagen," 1.

56. Rüdin, "Zur Rolle," 99

57. Hirschfeld, "Ursachen und Wesen des Uranismus"; Rudin, "Zur Rolle," 101.

58. Ammon, "Der Ursprung," 654.

59. "Man mißverstehe mich nicht. Ich rate niemandem, er solle sich zugrunde richten, wenn er anders als ein ganzer Mann sein wolle; ich konstatiere nur eine Tatsache." Lenz, "Über die idioplasmischen Ursachen," 592–93, 602.

60. "Aus dem Vorstehenden folgt, daß zwei logische Folgerungen aus den biologischen Tatsachen gezogen werden müssen: 1. Es gibt ein *genetisches* Geschlecht, das aber mit dem der Keimdrüsen nicht übereinstimmen muss. Es ist ausschließlich in den Chromosomenverhältnissen bei der Befruchtung gegeben. 2. Es gibt eine aktuelle physische und psychische Intersexualität aller Grade." Goldschmidt, "Die biologischen Grundlagen," 14.

61. Goldschmidt, "Die biologischen Grundlagen," 14.

62. Foucault, Michel. *The History of Sexuality*, vol. 1: *An Introduction*, trans. Robert Hurley (New York: Vintage, 1990), 12.

63. See Robert N. Proctor, *Racial Hygiene: Medicine under the Nazis* (Cambridge, MA: Harvard University Press, 1988), 96–117.

64. Hirschfeld's position as a model figure remains contested. A recent scholarly treatment that makes the case that he should be is Elena Mancini, *Magnus Hirschfeld and the Quest for Sexual Freedom: A History of the First International Sexual Freedom Movement* (New York: Palgrave, 2010).