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Medical Discourse's Epistemic Influence on Gender Classification in Three Editions of the *Dewey Decimal Classification*

Abstract

The first (1876), second (1885), and seventeenth (1965) editions of the *Dewey Decimal Classification* each represent a major change in the way sex and gender are classified. The intention in this paper is to determine how closely the changes in the *DDC* correspond to shifts in medical thought regarding sex and gender classification. The metanarrative underpinning gender classification in American intersexuality medical discourse is illuminated using Foucault's genealogical discourse analysis to determine a selection of epistemic considerations including teleology, authority/subjectivity, rhetorical space, necessary and sufficient conditions. The same criteria are used to examine the DDC's internal discourse to detect if similar epistemic shifts are at play or not and if a detectable influence can be identified.

Introduction

The classification of human groups leads to uncomfortable questions of the epistemic nature of identity, which may or may not be supported by the notion of biological membership in groups. Yet, transgender, transsexual and intersex individuals have caused a "category crisis," (Garber 1991) as they confront and confound a deep-seeded binary and fundamental division of humans both socially and biologically. The recognition of ambiguously gendered and sexed people, as well as those who wish to change their sex or gender, has prompted questions as to whether genders or sexes have essential properties at all. Gender and sex are formally classified for myriad purposes, including marriage, identification, medical treatment, prison, and in some cases, jobs. However, formal classifications tend to marginalize ambiguously gendered people or those who do not identify with traditional understandings of gender. The category crisis is also an epistemic crisis, as epistemology governs how much agency humans have in knowing or defining themselves as members of categories. Are characteristics of a gender class authored by an expert, an outsider? Should one be able to "choose" a sex or gender? How far can the conventional understandings of gender be pushed without oppression? This ongoing research seeks to find specifically how bibliographic conceptualizations of gender have been constructed through the discursive "metanarrative" present at the time of the classification's conception and revision, and the consequent epistemic outlook present. This paper will focus on medical discourse in the United States; however, it is one slice of a larger work that also examines legal, pedagogical and media depictions of sex and gender; those areas are only mentioned to provide context. Each of the chosen editions of the *Dewey Decimal Classification* - first (1876), second (1885), and 17th (1965) each signifies a major change in the way

gender is classified in the *DDC,* and the intention is to determine how closely it relates to shifts in medical and scientific thought.

Methodology

Foucault (1977) argues that power occurs in micro-locations - such as classifications - rather than in overarching power structures. These apparatuses hold "the power to constitute domains of objects" rather than just oppress (Foucault 1981, 73). In genealogical discourse analysis, Foucault (1981) calls for the examination of "internal procedures," or the discourse directly associated with the classification, as well as "external discursive activities," to reveal the "prevailing metanarrative" of the time the classification was created. This method has been recommended and operationalized in LIS by Frohmann (1994), Budd and Raber (1995), and Budd (2006), among others.

"Internal procedures" includes the text of the classification, as well as the associated discourse such as the introduction, scope notes, discussion papers or blog. For external discourse, the American medical conventions used to classify sex and gender at the time of the *DDC*'s revisions are examined, including medical literature, treatment protocols for transgender and intersex individuals, and the resulting "definitions" of sex and gender. A set of consistent criteria was identified for analysis, including teleology, authority, necessary and sufficient conditions, and rhetorical space (Code 1995). Consequently, the research focuses on the constitutive aspect of power rather than the repressive, by examining the relationship between specific discourse and the corresponding classification. Produced under a particular medical metanarrative about sex and gender, I attempt to identify what epistemic authority was at work in conceptualizing the formal sex and gender classification for the timeframe during the *DDC*'s revisions. Space restrictions prevent the ability to show the discourse in granularity, so in this forum, the metanarrative will instead be discussed at a broad level.

Background and definitions

The medical discipline emerged as a profession and began to formalize its discourse in the United States during the 19th century, heavily influenced by and inclusive of European medical journals. The concept of sex up until that time rooted from the Greeks, either as opposing essences (Aristotle) or a balance of sexual essences (Hippocrates) that manifested in the genitals (Rosario 2007, 264). From the 19th until the mid-20th century, the term "sex" covered characteristics that would eventually be separated between "sex," or biological and anatomical markers, and "gender," the social markers. Consequently, the medical and psychiatric discourse that examines what was historically called "hermaphrodites" (now called "intersex,") provides useful insight into the medical criteria to classify sex and gender because it involves people whose sex or gender either are ambiguous, atypical, or in some way do not fit into the binary system deemed legitimate by much of the world. Because of the uncertainty,

doctors are forced to define what made someone a man or women or male or female, since the notion of having no gender or two genders was and still is impossible to comprehend for many people.

"Intersex," as it is used today, encompasses a number of conditions, some dangerous (i.e. if a malformed genital prevents urination), mostly not. According to Rosario (2007, 262), no standardized rubric, registry or even consensus about what constitutes "intersexuality" exists. The Intersex Society of North America (ISNA) (2008) simply uses the term to mean "biological variation," making clear that they consider intersexuality - and the concept of sex, for that matter - a social construction. Some people live their entire life having no idea that they are intersex and experience no gender identity confusion at all. Intersexuality comes in many forms, but as examples, in some cases stray organs are found during an unrelated surgery or in autopsies. Intersex is distinct from transgenderism and transsexuality.

Though much of this project relies on the medical attention paid to those in the physical borderlands, a byproduct of the "defining" is that the expectations are also laid bare for those who identify with and perform the gender associated with their physical sex. In their quest to find the "true sex" of individuals, the expectations are set for what constitutes "true sex" including many social markers and sexual practices. A growing body of literature explores the historical and contemporary medical reactions to intersex phenomena. Because of space limitations, a brief summary of the discursive factors will summarize the medical metanarrative over the timeframe of the 19th- early 21st centuries. The timelines will be compared with the major changes in sex and gender classification that occurred in 1885 and 1965 to identify if and where they correspond. Finally, I will tentatively identify the epistemic approach underpinning each era.

Medical metanarrative 1871-1885

Teleology is the explicit or implicit purpose of the classification. Classifications are teleological, whether stated or not. In the medical sex and gender classifications of the late 19th century, the structure was clearly binary (male-female/man-woman). However, the emergence of gynecology led to a surge in cases of people presenting anatomy that was not clearly male or female. In those cases, the goal was to determine the individual's "true sex" for the purpose of marriage, reproduction, avoiding same-sex intimacy, and for men, avoiding celibacy. They were expected to sexually function in a normative manner in marriage, regardless of the individual's current practices (Reis 2009).

The invariable authority of determining "true sex" in intersex cases is the physician. Reis (2009) writes that in the end of the 19th century, medical literature contained spirited debates about what sex they thought hermaphroditic patients were, even making guesses on historical cases or other doctors' cases that they had never seen in person. The subject rarely if ever, has a voice, and often it is overruled. Code (1995)

describes a rhetorical space as "locations whose (tacit, rarely spoken) territorial imperatives structure and limit the kinds of utterances that can be voiced within them…with an expectation of being heard, understood, taken seriously (p. ix). Subjects were accused of being deceptive if they disputed the doctor's stated opinion of the "true sex." The deception, it was believed, was so that "perversion" could be practiced.

Dreger (1999) categorizes the late Victorian sex classification as the "Age of the Gonads" where gonadal tissue, functional or not, was used to determine "true sex" regardless of any other physical or social indicators. Prior to that sex often was based on behaviors that exhibited a particular gender. In other words, doctors relied on external visual cues including sex organs, breasts, skin texture, menstruation, etc., but if they were still unclear would turn to behavior, tastes, sex drive, voice, and other social cues to confirm their opinions (Reis 2009, 54). Instead, if a manly man with all the standard equipment and behaviors was found to have an internal non-functioning ovary, he was classified as a female pseudo-hermaphrodite.

First Edition of DDC

The stated teleology of the *Dewey Decimal Classification* at its genesis was to make access to information efficient, but unlike the medical discourse, make no claim for accuracy: "Theoretical harmony and exactness has been repeatedly sacrificed to the practical requirements of the library" (1876, 4). As an example of an oversight, no class exists for "women," or "men," but a few feminine-related headings appear in the scheme and relative index (See Table 1). Dewey, intentionally or not, did not consider sex as a class as important or necessary, other than the probably warrant-inspired classes of woman-education and woman-suffrage. As the author of the scheme, Dewey oddly relinquished authority. He published it anonymously (but was careful to copyright it) and included the disclaimer that "The author has no desire to claim original invention for any part of his system" (1876, 10). In terms of rhetorical space, women were only taken seriously in maternal and reproductive capacities (echoing the medical narrative) and were otherwise treated as exceptions to the male norm (Olson & Schlegl, 2001).

Second Edition

In 1885, the classification was greatly expanded, and women finally got their own class, the infamous 396 class, shown in Table 1. Presumably, in practice a class was needed, but little effort was put into determining an appropriate location. Teleologically, women are an afterthought, stuffed into an odds-and-ends class seemingly without thought under "Customs, Costumes, Popular Life." The 1885 changes signify an improvement in that women actually have a class, but keeping in mind the principle of allied topics, women find themselves associated most closely with etiquette and outcast races and loosely associated with suicide, cannibalism and embalmment. That women landed in a catchall category at all exemplifies that lack of

respect Code requires to be taken seriously within a rhetorical space. The oddity of the overall 390 class contrasts the seriousness of the subdivisions, which include emancipation, legal status, and political status of women and more. Despite the medical discourse being focused on sex, *DDC* leaned toward political and social topics.

Mid-20th Century

In 1905, X and Y chromosomes were found to hold the secret to "true sex" (Rosario 2007, 266), thus leading to the genetic age, still a factor in determining sex. A burst of research from doctors and scientists again worked on concepts of sex and gender in the 1950s. The definitions began to shift to include psychosocial aspects and in some cases completely reject biology. Stoller and Rosen (1959, 261) include "chromosomes, gonads, hormones, sex organs, and psychic pattern" in their definition. Stoller, a psychiatrist, at first believed biological force to be influential in determining gender; however, he changed his mind, and began to blame childrearing, such as the effeminacy of boys caused by too much contact with their mothers (Rosario 2007). However, Money and Ehrhardt (1972) developed the conceptual distinction between "sex" and "gender" "gender identity" and "gender role." Both sex and gender came to be considered completely learnable (but still binary). Consequently, "true sex" was replaced by "optimal sex," or the best sex to be assigned in particular circumstances. Though doctor-recommended, surgical "corrections" were practiced continuously since the 19th century,

Dreger (1999) considers the mid-century the beginning of what she calls "The Age of Surgery," which became the standard protocol to ensure bodies fit into the pre-established categories that the world recognizes. For example, boys born with a "micropenis" or no penis were recommended to be "assigned female sex, undergo surgical feminization, and be raised as a girl" to avoid the "intolerable psychic burden" it would be to have a small penis (Rosario 2007, 263, 267). Money and Ehrhardt's (1972) theory stated that surgically and/or hormonally transitioned children will accept any gender assignment as long as they are unaware of the change. No consideration was given for their chromosomal or anatomical sex. Money's approach supported the authority of the professional (he had no medical degree), and since he often focused on children, the parents were enlisted to support and enforce the decision.

Seventeenth Edition

In 1965, the professed goal of the *DDC* was "Keeping pace with knowledge" (DDC17, 1). In keeping pace with knowledge, women finally were emancipated from 396, which had undergone only slight revision in 80 years, and landed as a subdivision of "The sexes" (see Table 1). In the spirit of the 1960s, the scope note reads "feminism, superiority." This was the first time men had a class at all, previously considered the unstated norm. The rhetorical space gained a sense of forced equality, perhaps influenced by Money's theories that gender is writable rather than innate. Man had no

subdivision, but women again had similar subdivisions that ghettoized them from the broader categories (Olson and Schegl 2001). The classes suggested by "the sexes" are celibacy, courtship, sex outside of marriage, which includes a laundry list of "perversions," putting a larger focus on non-reproductive sexual relations than in the previous revisions, which is unsurprising, give the era's sexual liberation.

Table 1: Changes to DDC's Gender Classification

1876 - 1st Edition	1885 - 2nd Edition	1965 - 17th Edition
376 Education—Female 618 Obstetrics and Sexual science [allied with Veterinary Medicine] In the relative index: woman—education woman—suffrage housewifery midwifery, pregnancy, maternity, mothers, classed under family [no fathers]	390 Customs Costumes Popular Life 391 Costume and Care of person 392 Birth, Home and Sex Customs 393 Treatment of the Dead 394 Public and Social Customs Including fairs; chivalry, tournaments; dueling, suicide 395 Etiquet 396 Women's position and treatment 397 Gipsies Nomads Outcast races 398 Folklore Proverbs 399 Customs of war Weapons, war dances, treatment of captives, scalping, mutilation, burning, cannibalism, etc	301.4 Institutions and Groups Social characteristics and problems 301.41 The sexes .411 Man .412 Woman Scope: feminism, superiority .412 1 Emancipation .412 2 Careers .412 6 In the home .412 9 In history, public affairs, war .413 Celibacy .414 Courtship 301.425 Including preparation for marriage 301.415 Sex life outside marriage; Concubinage, premarital relations, adultery, prostitution, homosexuality and other perversions

Where are we now?

The influence of Money's theories has persisted into the early 21st century, even though his research has been continually disputed by sexologist Milton Diamond and others for 50 years. In 1997, a popular non-fiction book about one of his research subjects exposed fraud in his research methods and questioned the notion that children will unquestioningly mold into whatever gender role is chosen for them. More and more intersex testimonials and advocates came to light, challenging the authority of the doctor and protesting against what was considered surgical mutilation. The Intersex Society of America has been in existence for over 20 years, advocating for children and parents, attempting to make them human to the clinicians who treated them and were confounded by them. A clear shift has occurred in the medical discourse, changing the authoring on sex and gender from the doctor or body to the subject and mind. The characterization has slowly changed over time, although only recently is surgery is starting to be discouraged unless it is the wish of the individual—what Dreger (1999) calls "the Age of Consent." Many consumer medical resources are directed toward

parents and patients, and medical discourse emphasizes the anguish of parents in the face of social gender pressure.

In both the *DDC* and medical gender discourse, the epistemic authority followed the same arc from universal, one-man's-impression of observable knowledge to an epistemology that values the knowing subject and considers more perspectives. For example, in 2011, the *DDC* transformed gender into a facet from a class (which may reverse Dewey's original intention by solving a theoretical problem, but causing a practical problem of gathering). Regardless, the *DDC* editors solicited feedback from users thorough the Dewey website and blog to assist in placement and naming intersex and transgender categories, a good effort toward sharing the epistemic responsibility.

Dreger (1999) credits a postmodern epistemology for the shift in authority. What had previously been considered non-authoritative voices - that of the patient or the user - became valued, assisted by the recognition that no one narrative or "true story" was the story of everyone. The increase in testimonials and participation, enabled by the internet, provides rhetorical space where those previously denied a voice can be taken seriously. Regardless of the epistemic shift from doctor to patient, editor to user, the real teleology remains society's gender norms. The goals are mostly to have people shoehorned into the rigid, two-gender system, so they can lead a "normal" life. "Normal" ensures socially-enforced and heteronormative rules such as men urinating standing up, that a penis is "large" enough, or making sure a vagina is deep enough to be penetrated. Both women and men are subject to heteronormative assumptions, and despite more subjectivity, these are forms of classification are still engrained in society.

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