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BLIND TO SAMENESS: THE SOCIO-OPTICAL CONSTRUCTION OF MALE AND FEMALE BODIES

by

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ABSTRACT OF THE DISSERTATION

Blind to Sameness: The Socio-Optical Construction of Male and Female Bodies By ASIA M. FRIEDMAN

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In this dissertation I explore two central questions: how does perception work sociologically and how does perception specifically function in the case of sex attribution? To capture the normally taken-for-granted process of sex attribution, I interviewed "outsiders" – people who either do not participate in sex attribution or do it very differently – and "experts" – people who are unusually self-conscious and deliberate about sex attribution. I chose to interview blind people because they literally cannot see sex, and as such their narratives reveal rarely-foregrounded non-visual perceptions of sexed bodies. I chose to interview transgender people as experts on sex attribution who view the human body in light of the possibility of transitioning between sexes. As a result, they are deeply aware of the underlying similarities between male and female bodies as well as their most recalcitrant differences. They offer an account of sexed bodies that is similar in its sensory content to the dominant perceptual experience (in that it is visual), but with a heightened awareness of sex cues that non-transgender people take for granted, and a unique point of view that brings some of the normally unseen similarities between male and female bodies into the foreground. In short, both groups,

for reasons of circumstance, speak from unique perspectives that magnify the social construction of visual perceptions of sex. While sex attribution is my case, I also use my data to advance a more general theory of *how* – through what specific cognitive processes – visual perception is shaped by social categories and expectations. I argue that selective attention is a fundamental mechanism of the social construction of perception and that this dialectic of attention and disattention is most evocatively represented by the metaphor of a filter. In addition to capturing what I believe is going on interpretively when we see sex, or more broadly when we see anything *as* something, the filter metaphor also provides a new way to think about the relationship between social constructionist perspectives and material realities, one that captures the interaction of biology and culture without denying either one.

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A synopsis of the theoretical argument of this dissertation is forthcoming in the journal *Cultural Sociology*. An early version of Chapter 1 is also forthcoming in *La Sociologie Cognitive*, edited by Fabrice Clement and Laurence Kaufman (Paris: Ophrys/Maison des Sciences de l'Homme).

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INTRODUCTION

[A] world of two 'sexes' is the result of the socially shared, taken-for-granted methods which members use to construct reality. Suzanne Kessler and Wendy McKenna, *Gender: An Ethnomethodological Approach* (1978: vii)

The body is what it is perceived to be; it could be otherwise if perception were different.

David Armstrong, "Bodies of Knowledge" (1987: 66)

Suppose we stopped participating in gendered grooming practices – foregoing sex-specific haircuts, make-up and clothing, just as a start. Suppose we were also taught from birth that eye color (or some other feature) was the most meaningful distinction between people, whereas details of appearance that signify maleness and femaleness were never emphasized and rarely discussed. How might we perceive the human body? Would there still be noticeable bodily differences between males and females?

The short answer is yes, unquestionably. Some men would still have pronounced hair loss, most men would still have more facial hair, many more women than men would have prominent breasts, and the genitals would of course still exist. But what about the rest of the body? Are eyes, ears, noses, arms, legs, hands, and toes "male" and "female," or are they simply "human"? And if a significant proportion of the body is not sexdimorphic, what happens cognitively that we perceive male and female bodies as more different than similar?

It has been well established by gender theorists that the creation and display of sex difference on and through the body is an important aspect of the social construction of gender. In general terms, this work has highlighted the ways that cultural norms shape how we present our physical differences as the *objects* of perception. But the role of the *perceiver* in sex attribution is much less understood. In light of this asymmetry, in this dissertation I explore *how* – by what kinds of cognitive and sensory processes – *perception* contributes to the social construction of male and female bodies. My general argument is that, when we see sex, some parts of the body are noticed, and some ignored. In fact, the proportion that is relevant for sex attribution is considerably smaller than the proportion that is disregarded. The sexes, in other words, are not nearly as physically different as they typically seem, yet we are socialized to be blind to their sameness.

I was pregnant with twins during much of the writing of the first draft of this dissertation. I mention this because one might think this would make me question my thesis that sex difference is a social creation, and that male and female bodies are more physically similar than we usually perceive them to be. I cannot deny that I have never felt so different, physically, from other people. Interestingly, I felt just as physically different from non-pregnant women as I did from men. A pregnant female body is experientially and visually nothing like a non-pregnant female body. No part of me felt "normal" or the same as it does when I am not pregnant. Pregnancy is an extreme physical state that many (even most) women experience, but only for a very small portion of their lives. Using the approximate measure that the average woman has two children, if she lives to age 80, she has spent less than two percent of her life pregnant. While clearly a physical difference between the sexes, this very temporary, extreme version of female physicality is not a fair representation of sex difference. Which begs the question: how

should we understand physical sex differences? Is there a way to see them in proportion with the androgynous, human aspects of bodies? And what analytical tools and sociological data might allow for such an account of sex differences?

While sex attribution is my case, I also have a much broader agenda, which is to present a theory of how perception works sociologically. I argue that the social construction of visual perception is a key mechanism of the social construction of reality in general, and that attention and disattention are among the primary socio-cognitive processes involved. To make my case, I demonstrate that some notion of selective attention underlies five of the major concepts scholars have previously developed to describe the social construction of reality (frame, schema, habitus, perspective, and thought style).

Method and Theoretical Approach

In trying to capture the process of sex attribution, I faced a methodological challenge shared by anyone who studies the taken-for-granted processes informing social life: How do I study a process that is largely automatic and subconscious, and that most people believe is self-evident? My solution to this problem was to talk to "outsiders" – people who either do not participate in sex attribution or do it very differently – and "experts" – people who are unusually self-conscious and deliberate about sex attribution. Given the centrality of visual information to sex attribution among the sighted, I chose to interview blind¹ people because their narratives provide access to a perceptual experience

of sexed bodies that is totally different in sensory content from the typical sighted experience. Their rarely foregrounded non-visual modes of perceiving bodies bring to light aspects of the process of visual sex attribution that I might otherwise have taken for granted as a sighted person. Their descriptions also allow me to clarify the extent to which our dominant understanding of sex is specifically sex *seen*, as opposed to sex *sensed* more broadly.

While blind people made interesting informants primarily because they do *not* participate in visual sex attribution, transgender² people possess varying degrees of "expert knowledge" about seeing sex. Many transgender people actively and consciously present themselves as female (if they were assigned "male" at birth) or male (if originally assigned a "female" sex). In part because they often view the human body in light of the possibility of transitioning between the sexes, they are deeply aware of the differences between male and female bodies – as well as their underlying similarities.

In short, both groups, for reasons of circumstance, speak from unique perspectives that magnify the social construction of dominant visual perceptions of sex. By highlighting their experiences, I aim to challenge the self-evidence of sex differences – to tell a story that helps the reader see the body differently. One way I do that is by examining the ways their descriptions reveal the taken-for-granted cognitive and perceptual map of the body, bringing some of what is normally backgrounded into the foreground. Generally speaking, although both groups I interviewed are in an exceptional position with regard to sex, I use their narratives not to highlight their differences, but to shed light on more commonplace practices of sex attribution.

My research mostly took the form of semi-structured life-history interviews, which ranged in length from 30 minutes to approximately three hours. In total, I interviewed 41 transgender people and 27 blind people. While I had a number of different questions in mind based on my interest in the socio-cognitive and perceptual processes behind sex attribution, I also encouraged the respondents to direct the discussion in order to learn what was most salient to them about bodily sex and sex attribution. As a result, many of the interviews covered a huge variety of topics, and in my analysis I have bracketed and set aside all information that does not relate to sexed bodies and sex attribution. In addition to the interview questions, about half of the transgender respondents completed a one-page survey which asked them to rate 23 different body parts on a scale of one to ten in terms of their importance for sex attribution.

The participants came from 23 different states plus one respondent each from Guam and Kosovo. Due to this geographic dispersion, I interviewed many of them either over the telephone or via Internet chat. In total, 22 of the interviews took place in person. The vast majority of the respondents are Caucasian, and they range in age from 19 to 71 years old. Among the blind respondents, the majority have been blind since birth or early childhood, although a number became blind in their teens or in adulthood. The sample of transgender respondents includes four self-identified cross-dressers, 27 transsexuals (whether pre-operative, post-operative, or non-operative), seven people who prefer the term "transgender," and three intersexuals. The vast majority of the transgender respondents are male-to-female (MTF); only five are female-to-male (FTM). (For more detailed information about my samples and research methods, see the methodological appendix.) In my analysis I also include a number of compelling fragments of popular culture that capture aspects of the hegemonic cultural narrative about sexed bodies. These include a New Yorker cartoon, an advertisement for the disposable heating pad product Thermacare, and a photograph of a sculpture by the artist Ron Mueck. I also bring in anthropometric measurements and images from anatomy and figure drawing textbooks to broaden the evidence for my claims. My data allows me to discuss only contemporary U.S. norms, though I briefly present evidence that other cultures participate in at least some comparable sex-differentiating practices.

In the interest of analytic clarity, I mostly discuss sex attribution in isolation, but in reality there are always a number of different social filters in play simultaneously. Sexuality and norms of sexual attraction are particularly entangled in sex attribution because of the role of both sex difference and perception in attraction. This interrelatedness is further evidenced by the multiple meanings of the term "sex," which can refer to a drive, an act, or an identity, in addition to a category of bodies. I explicitly told my respondents that I was studying how they distinguish male and female bodies, as opposed to what they find attractive. It was clear during the interviews that this separation was not always easy for the respondents to maintain, however, and comments about sexuality came up from time to time. As a result, I have made sexuality one dimension of my analysis in Chapter 3, where I discuss norms of relevance and attention.

The cultural dynamics of gender and race are also inextricable; in Jane Flax's words, "in contemporary America we never encounter an ungendered but raced person or a gendered but unraced one" (Flax 1998: 439). The particular cues we use to determine sex can also be racially variable and racially marked. For instance, one of the FTM

transgender respondents, who is Asian, told me that he has observed that Asian males have an easier time transitioning from male to female because they tend to be shorter and have much less facial and body hair. This interaction of sex and race cues is something that I was not able to fully explore, and it deserves much more explicit consideration.

I did ask the blind respondents to describe how they recognize another person's race in addition to how they recognize sex. Their near-unanimous response was that they almost never think about race, and many respondents shared stories about being surprised to learn – sometimes after several years of knowing someone – that he or she is not white. It is notable that my respondents seem to imagine race based on an unmarked white norm. In other words, they assume people are white until something contests that view. Whether their strongly professed "color blindness" would hold up in a larger, more racially diverse sample of respondents requires further research. It certainly seems unlikely that a blind person of Afro-Caribbean descent, for example, would assume whiteness in the same way. Regardless, a study of blind people's phenomenal experiences of race could provide an interesting prism through which to examine the relationship between sex and race attribution as well as an instructive challenge to hegemonic sighted assumptions about the self-evidence of racial differences.

There is a lot of theoretical ground to cover in order to contextualize my claims about sex, gender, and the sociology of perception. But before I present the first thread of my argument in Chapter 1, which deals with the role of visual perception in the social construction of reality, I want to preview some of the contributions and critical interventions I believe this work is poised to make. In relation to gender theory, I join those who argue that sex is as much a product of social norms and conditioning as it is a product of nature,³ which means that the sex/gender distinction is a false dichotomy, based as it is on the idea that what separates sex from gender is that sex is purely biological. Sex is most often investigated biologically – especially recently in the brain (for instance, Baron-Cohen 2003 and Brizendine 2006) – but sex is also a socio-cultural product. Looked at one way, the sex/gender distinction was meant to capture that fact – to acknowledge the cultural dimension of maleness and femaleness – but because of its conceptual structure, it partitions off a terrain of "sex proper" that is defined as purely biological. Biological contributions to the study of sex have value, but they are not the entire story.

There are various ways scholars have previously argued that sex is socially constructed, including highlighting the exceptions to binary sex,⁴ identifying historical differences in conceptualizations of sex,⁵ and analyzing the ways gender norms influence the science on sex differences.⁶ The particular way that I have chosen to illustrate that sex is a social product is to treat the concepts of "gender" and "sex difference" as categories of the mind that construct our experience of bodily sex. Stated differently, I argue that sex difference is a mental filter through which we construct visually distinct things called "male" and "female" bodies. This is quite similar to Suzanne Kessler and Wendy McKenna's view of gender as "an apriori category that structures the phenomenal world" (Hawkesworth 1997: 31). As Mary Hawkesworth argues, however, the notion of a cognitive schema that underlies Kessler and McKenna's work is under-theorized. I go further than they did in specifying the mechanics of the cognitive and perceptual dimension of gender, and I propose that using the metaphor of a social filter to analyze visual perception allows me to provide more precise descriptions of what is going on interpretively when we see sex.

This notion of a "socio-cognitive filter" is the conceptual tool I bring to cognitive and cultural sociology. Although the cognitive psychologist Donald Broadbent proposed a filter model of attention in 1958 to explain how certain sensory data are passed over with very little processing, the filter metaphor has not had much influence in cognitive and cultural sociology. This is despite the fact that selective attention is a central concern of the sociology of the mind.⁷ In addition, as I demonstrate in Chapter 1, some notion of selective attention actually underlies many of the most prominent theories of the social construction of reality.

One of the benefits of filter analysis is that it allows for a sustained focus on the visual foundation of the social construction of reality. While sociologists have long claimed that reality is socially constructed, they have not sufficiently attended to the role of sensory perception in the process of social construction. By focusing specifically on the mechanics of social perception, and drawing out the scattered comments on perception available in existing theories of social construction, I highlight the important role of selective visual perception in constructing the self-evidence of taken-for-granted social realities.

In addition to providing one answer to the question of how perception works sociologically, the metaphor of filtration also offers a new way to think about the relationship between social constructionist perspectives and material reality, one that captures the interaction of biology and culture without denying either one, redirecting often oversimplified debates. While biology certainly structures our perceptions, it cannot fully account for the visual attention and disattention that lead us to group human beings into visually distinct things called "male" and "female."

Like the "silence breakers" Eviatar Zerubavel describes in his work on conspiracies of silence, who defy social conventions of what should be noticed by discussing the undiscussable (Zerubavel 2006: 16), one of my main objectives in this work is to highlight the many physical similarities between the sexes that are there, ready to be acknowledged, but are normally relegated to the background of our perceptions. The observation that the shape of background regions is often not registered perceptually (even though it is technically equally available to the senses) dates back to the Gestalt psychologist Edgar Rubin ([1915] 1921), whose famous figure/ground vase demonstrates the cognitive practice of selective attention (see Figure 1). While some amount of backgrounding is necessary to see any meaningful "figure," when norms of disattention become reified, sex differences begin to seem as though they are *actually* more salient than sex similarities, when they are only more *socially* salient. What silence breakers do generically is to break these norms of attention, bringing the background into the foreground (Zerubavel 2006: 65). Indeed, when the background is pointed out, one begins to see both the vase and the faces in Rubin's example, suggesting that acknowledging the background promotes mental flexibility.

This is my approach to demonstrating the social construction of sex. Using the metaphor of a social filter to guide my analysis, I examine the socio-mental act of sex attribution, highlighting both what we are socially expected to notice and what we are socially expected to ignore. By increasing the visibility of the background of "male" and "female" bodies, I foreground the proverbial elephant in the room, sex sameness,

illustrating the powerful role selective perception plays in the social construction of "male" and "female" bodies. This more proportionate attention to sex similarities and sex differences, I argue, cultivates the mental flexibility necessary to see both possibilities.

FIGURE 1: THE RUBIN VASE



Image source: <u>http://en.wikipedia.org/wiki/File:Rubin2.jpg</u> ©John Smithson, 2007 (image released into the public domain)

Overview of the Chapters

I have organized this dissertation thematically, rather than in the more traditional manner beginning with a literature review, and then presenting one or more "case studies." This is primarily because I view my interviews with blind and transgender people collectively as illuminating the formal features of normative practices of visual sex attribution, as opposed to understanding them as distinct "case studies," and I wanted this to be the focus of my analysis rather than the differences between the two groups.

In broad strokes, the progression of my argument is as follows: In Chapter 1 I explore socio-optical construction, the visual dimension of the social construction of reality, and present filter analysis as a conceptual system for the development of a more comprehensive sociology of perception. In Chapter 2, I bring this focus on perception to the sexed body, introducing the mental filter of sex difference and the concept of "sexpectations," the expectation that everyone is always either male or female that organizes our visual perceptions of bodies. I also highlight the overwhelming number of social norms and institutions that emphasize sex differences. Chapter 3 considers in much greater detail the socio-optical construction of sex difference, focusing specifically on social norms of selective attention and relevance. In Chapter 4 my primary target is what is typically *not* seen – those bodily details that are filtered out of our perceptions or eliminated through polarizing practices. I present evidence that "male" and "female" bodies are proportionately more similar than different, but we are socialized to be blind to sex sameness. Chapter 5 extends this exploration of sex sameness beyond my respondents' narratives, bringing in evidence from anatomy textbooks, drawing

textbooks, and body measurements, among other things. In Chapter 6 I conclude by

considering the broader intellectual implications of "bodily excess" and "perceptual

residue," two of the key conceptual insights of filter analysis.

Notes to the Introduction

¹I use the term "blind" because, on the whole, my respondents use the term rather than other labels such as "visually impaired".

² I use the term "transgender" as an umbrella term that encompasses transsexuals, crossdressers, and anyone else who self-identifies as transgender or whose gender identity does not correspond normatively with his or her birth sex.

³ Kessler and McKenna 1978; Butler 1990; Laqueur 1990; Martin 1991; Kessler 1998; Fausto-Sterling 2000; Fujimura 2006; Moore 2007.

⁴ Kessler 1998; Dreger 1998; Fausto-Sterling 2000; Preves 2003.

⁵ Laqueur 1990.

⁶ Martin 1991; Oudshoorn 1994; Fausto-Sterling 2000; Fujimura 2006; Moore 2007.

⁷ See Goffman [1974] 1986: 201–246; Zerubavel 1997: 37; Cerulo 2002: 17-18; Brekhus 2007: 458.

CHAPTER 1

TOWARD A SOCIOLOGY OF PERCEPTION

Sociologists have long argued that reality is socially constructed. They have not, however, specifically theorized the role of sensory perception in the process of reality construction. There is also a need for much more work on how sensory perception itself is socially constructed. Conventional folk beliefs about perception remain fundamentally empiricist; in their daily lives, most people do not understand perception as a cultural process in which socialized humans collaborate in the creation of our sensory experience of the empirical world (Burnett 2004: 32-34). As Maurice Merleau-Ponty points out, this "common-sense" view fails to acknowledge the role of pre-existing expectations in our perceptions. As he so pithily puts it, "Empiricism cannot see that we need to know what we are looking for, otherwise we would not be looking for it" (Merleau-Ponty [1945] 1962: 28).

In light of this, the broad question that motivates this chapter is, "How does perception work sociologically?" Drawing on a cognitive sociological perspective, I highlight *selective attention* as a key process in the social construction of perception, and propose "filter analysis" as a conceptual framework for the development of a more comprehensive sociology of perception. The primary analytical benefit of using the metaphor of a filter is that it brings attention to what is normatively "disattended," or filtered out. One of the advantages of highlighting disattention is that it facilitates a useful and interesting new understanding of the relationship between social constructionist perspectives and material reality. This will become even more evident in Chapter 2, where I apply filter analysis to the case of sex and gender. By bringing analytic attention to normally disattended "unsexed" features of bodies, filter analysis allows for a constructionist account of bodily sex that does not require denying all physical differences, and as such helps to complicate ongoing debates about biology and culture.

Defining the Sociology of Perception

Socio-Optical Diversity

There is always more than one way to see something. Bronislaw Malinowski observed in 1929 that the Trobriand Islanders usually perceived children as resembling their father, even when he saw stronger resemblances to the mother (Malinowski 1929: 204). James Bagby's 1957 experiment similarly demonstrated that Mexicans and people from the United States perceived notably dissimilar things when receiving identical stimuli. Presented with two different images simultaneously, one depicting a scene from U.S. American culture (such as a baseball game) and one depicting a comparable scene from Mexican culture (such as a bullfight), participants had a strong tendency to see the scene from their own culture. Other studies have similarly shown that people from India and people from the United States tend to recall different details of wedding ceremonies (Steffensen et al. 1979), and that East Asians are more likely to attend to a broad perceptual field, while Westerners tend to center their attention on a focal object (Nisbett and Masuda 2003: 11163).

Such optical diversity is not just cross-cultural, however. Different historical periods can also constitute distinct "optical communities" (Zerubavel 1997: 33). Donald Lowe (1982: 85) and Thomas Laqueur (1990) both maintain that people saw very different things when looking at the human body in different historical eras, making essentially the same point as Thomas Kuhn, who argues that scientists perceive the exact same materials differently under different historical "paradigms":

[A]fter the assimilation of Franklin's paradigm, the electrician looking at a Leyden jar saw something different from what he had seen before. The device had become a condenser, for which neither the jar shape nor glass was required [...]. Lavoisier [...] saw oxygen where Priestly had seen desophlostated air and where others had seen nothing at all. (Kuhn [1962] 1996, 117)

Ludwick Fleck ([1935] 1981) similarly argues that historically distinct "thought styles" led bacteriologists to perceive entirely different information in otherwise identical cultures. Eviatar Zerubavel (1992 [2003]) has also examined the social history of perception in his analysis of cartographic representations of the "new world," and Ruth Simpson (2006) documents a historical shift from a "hyperopic" to a "myopic" style of focusing, resulting in a totally different conception of disease transmission.

Visual perception of the same sensory information also varies *within* the same culture and the same historical period. Gender, race, class, occupations, disabilities, and even hobbies can all entail distinct perceptual conventions and forms of perceptual expertise. Studies of eyewitness accounts, for instance, have found that males and females tend to notice different aspects of a scene and thereby remember somewhat different details (Powers et al. 1979). An extensive array of research has also demonstrated that people are much better at recognizing faces of their own race or ethnic group (Meissner and Brigham 2001). In the case of occupations, C. Wright Mills (1963: 460) argues that "different technical elites possess different perceptual capacities," an

assertion underscored by N. R. Hanson's (1965: 17) observation that "[t]he infant and the layman can see: they are not blind. But they cannot see what the physicist sees; they are blind to what he sees." Fleck ([1935] 1981: 92) similarly maintains that scientific training includes visual socialization through which scientists gain a "readiness for directed perception." Furthermore, Pierre Bourdieu (1984: 44) has argued that class position is attended by "perceptual schemes" which structure aesthetic judgments about art, among other things: "When faced with [...] works of art, people [...] apply to them the perceptual schemes of their own ethos." Meanwhile Oliver Sacks (1989: 87) has noted that only deaf researchers are able to visually perceive the difference between the sign for "chair" and the sign for "sit" as the complexity of the linguistic use of space by deaf people is "overwhelming for the 'normal' eye, which cannot see, let alone understand, the sheer intricacy of its spatial patterns." Finally, in his ethnography of recreational mushroom hunters, Gary Fine (1998: 102, 113) likewise found that mushroomers can perceive amazing amounts of sensory detail invisible to the uninitiated, who lack the relevant "template for looking."

Despite the existence of these and other accounts of diverse optical communities, very few sustained sociological examinations of perception have emerged. Each of the optical communities alluded to above gives rise to distinct perceptual patterns that are neither individual nor universally human. Rather, these patterns are the result of "optical socialization," constituting a characteristically sociological dimension of visual perception.¹ The distinct scope and focus of the sociology of perception is the intermediate level of analysis *between* "perceptual individualism" and "perceptual universalism," which consists of the many *perceptual norms*, *perceptual traditions*, and

processes of perceptual enculturation associated with membership in different social groups. Another way of putting this is that the sociology of perception ignores perceptual idiosyncrasies, but does not assume everyone perceives in a universal way. Given what we already know, the most interesting questions that motivate the sociology of perception do not have to do with *whether* culture influences perception, which has been at least preliminarily established, but with *how* – through what kinds of cognitive and perceptual *processes* – this optical diversity is created.

Toward a Sociology of Perception

Among the most important reasons to foreground a sociology of perception is that it challenges the taken-for-granted epistemology of sight – the assumption that our visual perceptions are "unfiltered and veridical" (Fiske and Taylor 1991: 99). Before turning to the sociology of perception, then, it is helpful to more fully define this "common sense" view. We typically take for granted that seeing is a passive "input process" in which sensory images "overwhelm the viewer" (Burnett 2004: 32-34). In this understanding, which Rod Michalko (1998: 142) calls "sensual finality," seeing does not involve thinking or interpretation but is a matter of direct sensory perception; sensory stimuli are the only influence. As Georgina Kleege (1999: 96) puts it, "We apparently believe that the brain stays out of it."² The metaphor that best captures the dominant view that seeing is a "no-brainer" is the mirror. We believe that what we see is a mirror image of empirical reality, a direct "point-by-point correspondence" (Merleau-Ponty [1945] 1962: 7) without distortion or selection. Understood in this way, seeing is a complete, undistorted reflection of the sensory stimuli provided by the empirical world. This constellation of beliefs leads us to trust sight uniquely among the senses. Many of our sayings reflect this faith in vision: "I saw it with my own eyes;" "sight unseen;" "seeing is believing;" "a picture is worth a thousand words." Seeing is believed to be unique among the senses in terms of its ability to provide the undisputable truth. Sayings that capture this association between vision and enlightenment are to "have vision," to "see the light," and to "see things as they really are" (Kleege 1999: 22).³

Despite the many examples of different optical communities, then, we are typically unaware of socio-cultural influences on visual perception. This is the first reason to develop a sociology of perception. Our taken-for-granted folk theory of sight does not acknowledge socio-optical diversity or its epistemological implications.

Another important reason to foreground a sociology of perception is that perception is a powerful but understudied dimension of the social construction of reality. For instance, in *The Social Construction of Reality*, Peter Berger and Thomas Luckmann ([1966] 1967: 140) make the claim that conversation is the *most important* vehicle of reality maintenance; perception, on the other hand, does not receive any explicit acknowledgement as playing a role in the social construction of reality. There is no entry in the index under "perception," "vision," "visual," "sensory," or "senses." Yet many passages, such as the one below, seem to demand an analysis of the social construction of perception:

The reality of everyday life is taken for granted *as* reality. It does not require additional verification over and beyond its simple presence. It is simply *there*, as self-evident and compelling facticity. I *know* that it is real. (Berger and Luckmann [1966] 1967: 23)

How do we gain this "sense" that reality is "simply *there*" without need for additional verification? *How* do we come to experience it as "real"? It is through perception that

information enters our minds in the first place. As such, subconscious cultural influences at the level of perception undergird this broadly shared analytic perspective, as well as a number of sociological sub-fields such as the sociology of knowledge. As Zerubavel has said in relation to cognitive sociology,

A good way to begin exploring the mind would be to examine the actual process by which the world "enters" it in the first place. The first step toward establishing a comprehensive sociology of the mind, therefore, would be to develop a *sociology of perception*. (Zerubavel 1997: 23)

Visual perception is a mostly unacknowledged but uniquely powerful dimension of the construction of taken-for-granted social realities. It is this visual sub-structure of social construction that I aim to capture here.

Despite the very limited number of works that specifically sail under the banner of "the sociology of perception"⁴ – taking the social construction of perception as their central object of analysis – one can find passing references to sensory perception throughout classical and contemporary sociology. For instance, Karen Cerulo (2002: 283-294) locates traces of what she calls a "sociology of sensation" in Durkheim's ([1912] 1995; [1897] 1966) concept of "collective conscience," Marx's (1978) concept of "class consciousness," Cooley's ([1909] 1962) work on collective attention, Schutz's (1951) claim that symbols can have the effect of synchronizing the attention of social groups, and Weber's (1946) reference to the role of formal organizations in directing individual attention. Perception also plays a central role in much of Erving Goffman's (1963) thinking, for instance the concept of "civil inattention," and in Harold Garfinkel's ([1964] 1967: 35-75) work on "background" knowledge. Georg Simmel ([1908] 1924: 356-361) offers one of the more extended discussions of the sociological importance of the senses in the section of *Soziologie* called "Sociology of the Senses: Visual Interaction" in which he makes the argument that vision plays a unique sociological role because "the union and interaction of individuals is based upon mutual glances" (p. 358). Other sociologists who have explicitly argued for the centrality of perception to sociological inquiry include Arthur Child (1950), who claims that perception buttresses the sociology of knowledge, and Donald Lowe (1982), who offers that perception is the link between the content of thought and the structure of society. Given this long history of nods to the role of perception in social life – not to mention the outright statements of its sociological significance – the topic seems ripe for an extended treatment that not only emphasizes the *importance* of a sociology of perception, which has been at least partially established, but explores *how* vision functions sociologically.

This aim can be approached in a number of different ways. One strategy is to systematically capture and catalog varying perceptions of the same object, analyzing the differing structures of attention involved in different ways of seeing (or hearing, smelling, tasting or touching) the same thing. Another area of research that falls under a sociology of perception is documenting historical shifts in conventions of perception and the primacy of different senses.⁵ A third important area of inquiry is to investigate the ways that perceptual processes are enlisted in other processes of social construction (of reality, of race, of gender, of aesthetic judgment, and so on). These projects do not of course exhaust the concerns of a sociology of perception, which can include any work that aims to examine perception as a social process.

Here I employ a cognitive sociological approach, emphasizing the link between perception and cognition and highlighting the socio-cultural organization of both. Although there is some debate surrounding the timing and the extent to which the different senses are penetrated by cognition and culture,⁶ there is broad agreement that cognition shapes what we perceive at some level prior to conscious meaningful perception. As Harry Lawless (1997: 168) put it in relation to olfactory perception, it is not just a matter of "how well the nose is working" but also "how well the brain that is hooked to the nose is working." It is important to maintain a distinction between sensory stimuli and what we consciously perceive (Kohler 1929: 71-85; Kuhn [1962] 1996: 192-193; Matthen 2005: 2). What human beings see, feel, taste, touch and smell is not the world, but a version of the world their minds have created.

One of the most powerful concepts cognitive sociology provides for an analysis of perception is "attention." Following Goffman's ideas in *Frame Analysis* ([1974] 1986), as well as his concepts of "rules of irrelevance" (1961) and "civil inattention" (1963), the cognitive sociological use of "attention" and "disattention" highlights the mental fences with which we typically frame social reality, regarding most things as "out of frame" and unworthy of our attention (see Goffman [1974] 1986: 201–246; Zerubavel 1997: 37; Brekhus 2007: 458). Defined in this way, attention can refer to the mental act of selectively focusing our awareness, but it can also refer to selective *sensory* attention – registering only selected details among the technically available stimuli while disattending the rest. In the next section I argue that selective sensory attention is a key process underlying the social construction of perception (and, by extension, the social construction of reality), and that in fact some notion of socially directed selective attention is at the heart of many of the most prominent accounts of the social construction of reality.

Expectations, Selective Attention, and Social Construction

Scholars have used a variety of concepts to describe social construction, including "paradigms" (Kuhn [1962] 1996), "perspectives" (Mannheim 1936: 266; Shibutani 1955: 564), "styles" (Fleck [1935] 1981: 39; Mannheim 1936: 3), "models" (Mannheim 1936: 275), "schemas" (Bartlett 1932; Kessler and McKenna 1978: 158), "mental maps" (Chayko 2002: 35-36), "habitus" (Bourdieu 1984: 101), "frames" (Bateson [1955] 1972; Goffman [1974] 1986), and "filters" (Davis 1983: 285 n.17; Schutz and Luckmann 1973: 250; Zerubavel 1997: 24). Deborah Tannen (1993: 14-16) has suggested that the notion of expectations unifies a number of these seemingly very different theories. Although she mostly focuses her analysis on frames and schemata, each of the other concepts listed above also relies on some notion of expectation. Zerubavel (1981: 23) has likewise highlighted expectations as powerful clues that reveal the social order. My interest is in identifying *how* such "structures of expectation" (Tannen 1993: 5, 15) work on our thoughts and perceptions.

To answer this question, one might begin by turning to findings in social psychology about cognitive processing biases, such as "expectation effects" (Jones 1990: 82, 84) and "confirmatory hypothesis testing" (Taylor et al. 2000: 56-57), which lead us to unconsciously reject or ignore information that challenges our expectations. At the same time, also without realizing it, we selectively seek out information that confirms our expectations. This point is captured well by Kuhn's description of Bruner and Postman's playing card experiment in which participants were shown ordinary cards mixed with anomalous cards (such as a red two of clubs): Until taught by prolonged exposure that the universe contained anomalous cards, they saw only the types of cards for which previous experience had equipped them. Yet once experience had provided the requisite additional categories, they were able to see all anomalous cards on the first inspection [...]. What a man sees depends both upon what he looks at and also upon what his previous visual-conceptual experience has taught him to see. (Kuhn [1962] 1996: 112-113)

Another example is the discovery of asteroids in the early nineteenth century. While they technically could have been seen through early telescopes, only after 1781 when William Herschel discovered Uranus, the first sighting of a "new" planet in several millennia, did the expectation that more was "out there" to be seen mentally prepare astronomers to start seeing asteroids (Kuhn [1962] 1996: 116; see also Zerubavel 1997: 45-46). Simpson's discussion of the history of the microscope similarly shows that while technically what we now call germs were always visible through this technology, it was only once microscopists were cognitively sensitized into what she calls a "myopic style of focusing" that these microorganisms could be seen in any meaningful way (Simpson 2006: 86).

It is important to emphasize that the expectations that I am concerned with here are specifically *social* expectations. This focus follows Garfinkel's ([1964] 1967: 37) concept of "background expectancies," or "expectancies that lend commonplace scenes their familiar, life-as-usual character," which emerge from and reproduce "the stable social structures of everyday activities." Although expectations based on individual experience also produce expectation effects, it is the influence of social expectations on perception that is most relevant to the sociology of perception and the social construction of reality.

The perceptual effects produced by social expectations reflect an unmistakably social logic; they are organized to produce particular socially shared and socially anticipated meanings. Social expectations create a state of "perceptual readiness" (Bruner 1958: 92-93) to quickly recognize particular socially relevant cues and thus to "experience events in certain consistent and *selective* ways" (Bruner 1958: 85, emphasis added). In other words, one of the key effects of social expectations is to enact and organize selective attention. We are "perceptually readied" to seek out and register those details that are consistent with our collective expectations, while overlooking other details that are equally perceptible and "real." Social expectations thus prime us to perceive in particular, socially shared ways. Priming is part of "implicit cognition"; that is, "judgments, actions, and decisions that are under the control of automatically activated evaluation without the person's awareness" (Taylor et al. 2000: 53). Part of the basis for this subconscious "evaluation" is increased sensitivity to certain stimuli due to prior experience, including social expectations. Primed by shared expectations, in other words, we collectively attend and ignore particular details of our sensory environment.

Stated differently, social expectations prime us to push certain sensory information into the *background* of our perceptions. The distinction between figure and ground originated with Edgar Rubin, whose vase/face optical illusion demonstrates that seeing something in the "foreground" always involves *not* perceptually registering the surrounding background region. My focus here is the ways that figure and ground can be created by social norms and expectations. Ruth Hubbard, Mary Henifin, and Barbara Fried highlight this connection between social norms and backgrounding when they describe scientific "facts" as "generated within a fabric of societal norms" that "pushes certain realizations into the foreground, while others readily merge with the background of the unnoticed and hence remain undescribed" (Hubbard et al. 1982: 11-12). The background is not simply what is *empirically* less salient; it is also a reflection of what is less *socially* salient. Selective attention is sometimes defined as the result of an actor's conscious intentions, i.e. the conscious focusing of attention involved in the purposeful execution of visually guided action (see van der Heijden 2004). Here what I am highlighting is the *normative* character of our attention. In his recent work on the sociology of denial, Zerubavel describes the social exclusion of details that are technically within our field of vision as follows:

[...] ignoring something is more than simply failing to notice it. Indeed, it is quite often the result of some pressure to actively disregard it. Such pressure is usually a product of social norms of attention designed to separate what we conventionally consider 'noteworthy' from what we come to disregard as mere background 'noise.' (Zerubavel 2006: 23)

Attention is not simply a reflection of what we as individuals *want* to look at. While it can be a tool that we direct and control, attention is also a form of social constraint, reflecting what we *must* look at as members of social groups. One powerful illustration of this point is the influence of language on perception

Alfred Schutz and Thomas Luckmann (1973: 250) offer the following description of how language shapes our sensory perceptions: "We can thus say that the reality to which the child awakens and grows is 'filtered' and consolidated by means of language. [...] The typical meaning-structures of the normal adult's experience are essentially *determined* by language" (emphasis added). Prior to that, Benjamin Whorf famously argued that we perceive "nature" in the "types" dictated by our linguistic system:

The categories and types that we isolate from the world of phenomena we do not find there because they stare every observer in the face; on the contrary, the world is presented in a kaleidoscopic flux of impressions which has to be organized by our minds – and this means largely by the linguistic systems in our minds. (Whorf [1940]1956: 213-214)

This point is also evident in John Carroll and Joseph Casagrande's (1958) finding that since Navajo grammar necessitates recognition of shape, when Navajo speakers were presented with objects that could be grouped by color or by shape, they tended to ignore color and privilege shape. Since color and shape were equally *empirically* salient in the experiment, this finding illustrates the decidedly normative organization of our visual perceptions.⁷

Further, some concept of selective perception underlies at least five of the major concepts scholars have previously developed to describe the social construction of reality (frame, schema, habitus, perspective and thought style). Although not necessarily central to his or her analysis, in each case the author makes some reference to social norms of attention and disattention. In drawing attention to this common conceptual thread, my point is to demonstrate, first of all, that a shared socio-cognitive and perceptual process underlies each of these apparently very different theories of the social construction of reality, and second, that the social organization of visual attention is an important process underlying the social construction of reality that is ripe for a comprehensive analysis.

Selective attention is a well-known theme in Goffman's work on reality maintenance, for instance in the practice of "face-work" (1955; 1967), in which we ignore other actors' potentially face-threatening behavior. Not to mention that the concept of "framing" fundamentally boils down to a process of selective attention. To "frame" something is to determine which details are "in frame" and which can be disregarded as "out of frame," which is in essence a process of selective attention. The concept of a "schema" similarly refers to norms of attention and disattention. When Frederic Bartlett (1932) reintroduced the term "schema" (originally introduced by Kant [[1781] 1998: 273] to signify procedural rules for applying concepts to sense impressions) it was to emphasize that memory is selective, as opposed to the storage and retrieval of all available information. More recently, Susan Fiske and Shelley Taylor (1991: 15) defined "schema" as a "cognitive structure" that selectively represents "relevant attributes," and David Morgan and Michael Schwalbe (1990: 156) described schemata as "knowledge structures" which determine "what aspects of the social environment are taken into account, how they are interpreted, and how we react [...]." Cerulo (2002: 8) offers another definition that similarly highlights selective attention: "schemata [...] allow the brain to exclude the specific details of a new experience and retain only the generalities that liken the event to other experiences in one's past. [...] Discrepant features [...] are adjusted or omitted so that the information conforms to the schema in use."

Bourdieu also relies on the concept of a schema (his exact wording is "schemes of perception and appreciation") when describing perception as a function of habitus (1984: 2, 28, 44; [1992] 1996: 318) and specifically mentions selective attention as one way habitus operates. In his words, habitus serves as a "pertinence principle" or "principle of selection" (1984: 50) that allows for an "unconscious deciphering of the countless signs which at every moment say what is to be loved and what is not, what is or is not to be seen [...]" (p. 86).

Tamotsu Shibutani (1955: 131) likewise describes "perspectives" in terms of selective attention, explaining that "people with dissimilar perspectives define identical

situations differently, responding selectively to diverse aspects of their environment." And Fleck ([1935] 1981: 93) recounts that the expectations of their particular "thought style" led bacteriologists to disattend bacterial cultures that were either very fresh or very old as "not even worth examining." "As a result," he explains, "all secondary changes in the cultures [...] escaped attention. [...] The thought style, developed in this particular way, made possible the perception of many forms as well as the establishment of many applicable facts. But it also rendered the recognition of other forms and other facts impossible."

Note that in many of these examples, the authors not only highlight the role of selective attention in the social construction of reality, they explicitly emphasize the role of selective *sensory* – specifically visual – attention. Attention can refer to the mental act of selectively focusing our awareness, but it can also refer to selective sensory attention – registering only selected details among the technically available stimuli while disattending the rest. Such *selective visual attention* is a key process underlying the social construction of visual perception (and, by extension, the social construction of reality), and the one I focus on here.

I want to further underscore the pivotal role of selective visual attention in the social construction of reality by introducing two more examples. Goffman ([1974] 1986: 343) refers to our "very considerable capacity for perceptual discrimination in regards to matters of frame," and he further underscores the uniquely powerful role of *visual* perception (over other forms of sensory perception) in framing in the following passage: "What is heard, felt or smelled attracts the eye, and it is the seeing of the source of these stimuli that allows for a quick identification and definition – a quick framing of what has

occurred" (p. 146). Likewise, in Kuhn's theory of scientific revolutions, paradigm shifts are fundamentally about the reorganization of visual stimuli; where earlier scientists saw one thing, adherents of a new paradigm literally see something else. In his words, "Led by a new paradigm, scientists adopt new instruments and look in new places. Even more important, during revolutions scientists see new and different things when looking with familiar instruments in places they have looked before" (Kuhn [1962] 1996: 111).

Having established, at least preliminarily, that selective visual attention is one answer to the question of how reality is socially constructed, I want to turn my attention briefly to another equally important question: Why do we do this? What is achieved by collectively ignoring so much of the sensory information that confronts us in the course of our daily lives? One answer is that social norms of selective attention are among the primary ways we cognitively coordinate social life. Goffman has written extensively about the precariousness of social interaction. Without ongoing normative practices of disattention – "rules of irrelevance"⁸– we could not maintain the shared, ever-fragile "definition of the situation."⁹ Consider in this light the following description of the importance of "disattending" socially irrelevant events: "A significant feature of any strip of activity is the capacity of its participants to 'disattend' competing events – both in fact and in appearance – here using disattend to refer to the withdrawal of all attention and awareness" (Goffman [1974] 1986: 202). Joan Emerson's relatively extreme example of the gynecological examination illustrates the necessity of collective and coordinated practices of disattention to maintain a shared medical reality against competing sexual meanings (Emerson 1970: 76). While the reality of a gynecological exam is particularly

"precarious," competing meanings must be kept at bay through disattention in any situation, lest they threaten definitions of reality.

In the most general terms, what Emerson is highlighting is the prevalence of ambiguity in social life and our efforts to manage it cognitively. Edmund Leach makes two related points about ambiguity and selective attention: First, any time we disambiguate a figure from its surrounding ground, we are cognitively creating boundaries out of an underlying continuousness (Leach 1976: 33-34). Second, this underlying continuousness implies an inherent ambiguity that is a source of great anxiety. In Leach's words, "Our day-to-day behaviour is full of logical ambiguities" and "it is [...] by refusing to admit that there is any ambiguity that we manage to perceive the world as we do" (32). In other words, it is through cognition (specifically through disattending ambiguity) that we manage our anxiety about the inherent complexity of the external world. As I argue in the next section, the conceptual system of *filter analysis* is specifically conceived to capture these social dynamics of attention and disattention, and therefore to analytically recoup some of the complexity that we do not normally acknowledge.

Social Filter Analysis

Because of the mental image it evokes, the metaphor of a filter is uniquely wellsuited to capture the processes of selective attention underlying the social construction of reality (DeGloma and Friedman 2005). The notion of an attention filter actually originates with Donald Broadbent, who used it to explain that, as a result of the limited capacity of our nervous systems (1958: 174), we are only able to consciously perceive a small number of the many different types of stimuli that normally surround us. Broadbent describes various properties of stimuli that make them more likely to be selected by the attention filter for further processing, including intensity, novelty, and spatial location (p. 174). Broadbent thus primarily emphasizes the features of the *stimulus* that make it "relevant" or "irrelevant". When he does address the state of the *perceiver*, relevance is framed in the language of "drives," understood as biological states – for example, hunger (p. 298).¹⁰ My approach is to borrow the concept of filtration, but to extend our understanding of selective attention to include *social* rules of relevance that create in the *perceiver* a mental state that predisposes them to select particular sensory details over others.

The metaphor of a filter has been briefly alluded to by other sociologists, though no one has presented a sustained theoretical examination of the concept. The most fully articulated use of the term comes from Murray Davis (1983), who explicitly uses "filter" as opposed to "frame." His explanation for why he prefers the term "filter" is as follows:

The term 'frame' directs the reader's attention to the different organizations of experience within and without a boundary. I prefer the term "filter," which directs attention to the modifications experience undergoes as it passes through a contextual scheme. (Davis 1983: 285 n.17)

Davis also hints at the important dimension of "disattention" or "blocking" in the filter metaphor when he writes that "filters obscure all but a few aspects of sexual experience and activity" (p. 216). While it is clear that Davis was aware of many of the nuances of the filter metaphor, and used it quite deliberately, even the pointed reader must infer a lot

from his descriptions, filling out a portrait of the analytic tool from what amounts to an extremely suggestive sketch.

Zerubavel (1997: 24) directly references Davis when he employs the term, writing that "what we experience through our senses is normally 'filtered' through various interpretive frameworks." Zerubavel is one of those readers of Davis who sensed the richness of the concept of filtration, quite deliberately borrowing the language. However, while his broader argument in *Social Mindscapes* (1997) has played a central role in my thinking about filters, he himself did not explicitly undertake the project of theoretically exploring the concept. Other sociologists who have used the term "filter" in an informal way, without explicit theoretical reflection, include Alfred Schutz and Thomas Luckmann (1973: 250), Jeffrey Alexander (2004), and Ron Eyerman (2004).

When using the metaphor of a "filter" I specifically have in mind a mental "strainer" through which visual stimuli pass before they are perceived, letting in culturally approved details while sifting out the culturally irrelevant. Merriam-Webster Dictionary defines the function of a filter as "holding back elements or modifying the appearance of something" and The American Heritage Dictionary offers that a filter is "any porous substance through which a liquid or gas is passed in order to remove constituents [...]."¹¹ Writing about the filters used by scientists in interpreting nature, for instance, Hubbard, Henifin, and Fried provide the following description: "Science is the result of a process in which nature is filtered through a coarse-meshed sieve: only items that scientists consider worthy of notice are retained" (1982: 1-2). Filters in general function to allow selected elements to pass through a set of holes while blocking others.

Although the size, shape and number of openings vary, all filters perform this function of "straining" or "sifting." Thinking in terms of filters thus usefully directs our analytical focus to these questions about which features or details pass through and are attended and, perhaps more importantly, which are blocked by the filter and thus remain unnoticed. Filter analysis is explicitly conceived to reveal social norms of attention and to make visible previously disattended information.

While not incompatible with filter analysis, most of the other available concepts for the social construction process (including schema, habitus, and paradigm) are not based on a concrete spatial image that provides a specific, useful guide for an analysis of attention and disattention. Stated differently, while these concepts all describe the broad idea of a shared perception, they do not provide a model to understand *how* particular perceptions are cognitively structured. The metaphorical blockages and holes of a filter, however, bring our analytical focus directly to the dialectic of attention and disattention, and specifically highlight the vast amount of potentially perceivable data that is normally blocked from our awareness.

While one of the virtues of the metaphor of a frame is that it is based on a similarly evocative spatial image, due to its structure, filter offers two important analytic advantages. First, although frame also offers a clear depiction of "in" and "out," it is a binary representation in which the attended and disattended are fully separated and spatially contiguous, rather than interwoven in the same conceptual space. Compared with filter analysis, this is a coarse representation of attention and disattention that separates the attended from the disattended too starkly. Second, the filter metaphor offers a more balanced representation of attention and disattention than frame. While Goffman

pioneered the sociology of disattention,¹² conceptually speaking, the metaphor of a frame – which focuses on the distinction between some "relevant" content (a painting, for instance) and that which it is not (the surrounding wall, everything outside of the picture frame) – primarily brings analytical focus to what is "in frame"; everything else is lumped together as "out of frame." In other words, the frame metaphor directs attention to those details that are marked as relevant, but does not invite the same kind of specific analysis of what is "irrelevant" and disattended because the space outside the frame is infinite and undefined. Analytically, filter offers a systematic way to identify both the figure and the background.

A disproportionate analytic focus on attention over disattention also applies to the concept of a "schema," which is used most frequently to describe a rapid and unconscious mental "filling in" of expected attributes based on the perception of a small number of highly marked cues. As such, conceptually speaking, schemata emphasize what is seen and what is mentally "added" based on what is seen, but not what is overlooked and ignored. This is significantly different from the metaphor of a filter, which equally highlights what is seen and what is not seen because it structurally represents the dialectical relationship between attention and disattention. Further, as I mentioned above, the concept of a "schema" also does not provide a clear metaphorical structure to direct an analysis of attention and disattention. The same critique applies to the concept of "habitus." While Bourdieu directly states that habitus should be understood as a "principle of selection" (1984: 50), he actually relies on the concept of a schema to describe how habitus shapes perception ([1992] 1996: 318; 1984: 2, 28, 44). In any case, while fundamentally compatible with filter analysis, neither concept provides a

concrete spatial image that can as effectively guide a proportionate analysis of both attention and disattention.

I keep emphasizing this point about bringing analytic focus to what is normally *not* seen because identifying the disattended is particularly valuable for constructionist analysis, as what remains unnoticed are the evidence and details that would support alternate perceptions and categorizations. One of the most important effects of attending to such alternatives is that they unravel obviousness and self-evidence. If sociology's task is in part to examine self-evident ideas (Schutz [1932] 1967: 9), filter analysis is a uniquely useful tool, since highlighting the disattended – which amounts to highlighting alternatives – by definition precludes self-evidence. As Emerson put it, "A reality can hardly seem self-evident if a person is simultaneously aware of a counterreality" (Emerson 1970: 76).

The concept of disattention also facilitates a new and productive understanding of the relationship between social constructionist perspectives and the material world. The key insight of filter analysis is that empirical reality – bodily or otherwise – is always richer and more complex than what we perceive and thus experience. Things in the world exceed any and all filtered perceptions of them, and our perceptions always represent just one possible version or selection of elements. In light of this, one can conceptualize the social construction of the body as a process of selectively emphasizing and mentally weighing different bodily similarities and differences. This version of constructionism does not dispute the existence of biological differences, but highlights the cultural work that amplifies them, focusing on the question of how – by what kinds of cognitive and sensory *practices* – the social construction of material reality is accomplished.

It is also important to note that filter analysis posits that there is no such thing as "unfiltered" perception. Even at the level of Goffman's "primary frameworks" ([1974] 1986: 21), filter analysis assumes no "base" or "original" perception, but only perception shaped by different filters and different combinations of filters. The idea that there is no such thing as unfiltered perception has important analytical consequences. When trying to access the "perceptual residue" (i.e. that which is "filtered out") via filter analysis, the aim is not to gain access to "the Real," but to provide conceptual tools to contest dominant discourses. In the context of the sociology of the body, for instance, filter analysis is most useful as a device to identify bodily excess, those features or details of bodies which do not perfectly fit the available social categories. However, identifying bodily excess is not the same as identifying a "real" or "extra-social" body.

One final benefit of using the metaphor of a filter is that it may provide a common language with cognitive scientists, who have used the same idea to talk about the brain of the perceiver. As I mentioned already, cognitive psychologist Donald Broadbent (1958) proposed that the information flowing in from the senses is reduced through a "selective filter" prior to processing by the perceptual categorization system. According to Janine Mendola (2003: 40), some visual neurobiologists have also used the term "filter" to refer to neurons because of the way they "break down visual scenes by extracting particular features from small regions of space." More recent studies in cognitive science that emphasize selective attention include Jun Wang et al. (2007), who looked at the neural correlates of selective attention using electroencephalogram (EEG) recordings, and Claire Wakefield et al. (2002: 430), whose research strongly suggests that blind children outperform sighted children on certain odor and sound perception and recognition tasks not because of an enhanced sense of smell or hearing, but because of improved selective attention to relevant cues and disattention of irrelevant sensory "white noise." If it is the case that a process of filtration is taking place at the level of the brain and in the social organization of perceptual processes (and also, arguably, in memory and cognition more broadly), this common form may provide a useful basis for exploring the similarities and differences among these different filters as well as an opportunity to reflect on the implications of the mirroring of biological and cultural processes (see Cerulo 2006: 236).

In the chapters that follow I further illustrate the analytic benefits of filter analysis by using the metaphor of a social filter to analyze the visual perception of male and female bodies. I have chosen to study sex because historically sex and the matter of the body more broadly have been a stumbling block for constructionist theories. In taking on one of the "hard cases" of social construction, the unique insights facilitated by filter analysis are all the more apparent.

Notes to Chapter 1

¹ On the socio-cultural dimension of perception see Zerubavel 1997: 23-34.

² See also, Jay 1990: 62.

³ See also, Lakoff and Johnson 1980: 48; Jay 1993: 2, 587.

⁴ Notable previous attempts to explicitly develop a sociology of perception include an article by Child ("The Sociology of Perception" [1950]), Douglas's edited volume, *Essays in the Sociology of Perception* (1982), and "Social Optics" and "The Social Gates of Consciousness," the second and third chapters of Zerubavel's *Social Mindscapes: An Invitation to Cognitive Sociology* (1997).

⁵ See, for instance, Jay (1993), Lowe (1982), and Tuan (1979).

⁶ For one account of these debates in the context of visual perception, see Pylyshyn 2003: 50-53, 62-67, 72-73; see also: Jacob and Jeannerod 2003: 140; Jay 1993: 9; Zerubavel 1991: 6; Zerubavel 1997: 23-24.

⁷ See also John Lucy, *Grammatical Categories and Cognition* (1992), which compares English to Yucatec speakers, and in which he similarly finds that differences in number marking patterns correlate with memory and classification preferences.

¹¹ "Filter." Merriam-Webster Online Dictionary. 2008. Merriam-Webster Online. 22 September 2008. <u>http://www.merriam-webster.com/dictionary/filter</u>. "Filter." The American Heritage Dictionary of the English Language, New College Edition. 1978 [1969]. Boston: Houghton Mifflin: 492.

¹² See, for instance, Goffman [1974] 1986: 202; Goffman 1961 on "rules of irrelevance"; and Goffman 1963 on "civil inattention."

⁸ See Goffman 1961: 19-26. See also, Berger and Luckmann ([1966] 1967: 44-45) on "relevance structures."

⁹ See W. I. Thomas ([1923] 1969), and Goffman (1959).

¹⁰ See Epstein (2002: 46) for a discussion of drive as a biological concept.

CHAPTER 2

PERCEPTION AND THE SOCIAL CONSTRUCTION OF THE SEXED BODY

In the last chapter I made a number of claims about perception, social construction, and the metaphor of a filter: I argued that visual attention and disattention are among the primary mechanisms of the social construction of reality, and that the metaphor of a filter is particularly well-suited to capture these social dynamics of selective attention and thus to illustrate in concrete terms how social construction is functioning in any specific case. I also suggested that the analytic emphasis of what is normatively disattended that is facilitated by the metaphor of a filter can buttress a constructionist standpoint. Here I further illustrate these claims by using the metaphor of a social filter to analyze the visual perception of male and female bodies.

One of my central claims is that filter analysis provides a new way to conceptualize the interaction of biology and culture, one that acknowledges obdurate material reality without simply taking it at face value. While perception is not her main focus, Alice Dreger highlights my exact point of entry into these debates about social construction and materiality: "Certainly we can observe some basic and important patterns in the bodies we call "male" and the bodies we call "female." And the *patterns* we *notice* depend in part on the *cognitive* and material tools available at a given moment" (Dreger 1998: 9, emphasis added). In other words, my view is that it is not necessary to espouse a "pure constructionist" or "blank slate" position to develop a useful and interesting constructivist account of bodily sex difference. Filter analysis does not require denying real biological differences or eschewing all biological explanations. It does, however, focus on aspects of both perception and bodily difference not typically addressed in the biological and cognitive sciences.

In addition to cognitive sociology and the small body of work on social perception I discussed in Chapter 1, my analysis builds on previous research on the social construction of sex and the body more broadly. Both sociology and gender studies have recently seen a remarkable upsurge in attention to the body. Notable earlier works certainly exist, for example Robert Hertz's ([1909] 1973) work on the cultural construction of right-hand dominance, David Efron's ([1941] 1973) study of the cultural construction of gestures, and Raymond Firth's ([1970] 1978: 99) demonstration that the Tikopia communicate primarily through the nose and disregard hands and overall facial expression. However, Bryan Turner's *Body and Society* was truly path-blazing when it was first published in 1984, and only since then has the body emerged as a central and distinct area of both theoretical and empirical research (Howson 2005: 1). The first sociology journal explicitly devoted to the sociological investigation of the body, *Body and Society*, was founded in 1995 to capture this new interest in the social and cultural aspects of the body.

One important topic some of this work addresses is the impact of technological advances on the body. As John O'Neil (1985) has pointed out, there are very few – if any – parts of the body which technology cannot restructure in some way. Examples of such technologically "enhanced" bodies include those with hair implants, false teeth, organ transplants, pacemakers, artificial limbs or valves, and so on.¹ Another related example is the way that virtually every part of the body can be altered by pharmaceutical drugs,

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including circulation, respiration, neurochemistry, hormones, muscles, bones, and sexual response.²

Taking the sociology of the body in a slightly different direction, Debra Gimlin (2002) has highlighted the prevalence of "body work" in contemporary culture – for instance exercise, grooming, plastic surgery, tattooing, and body piercing – through which we consciously and actively shape our bodies to approximate cultural (and sub-cultural) norms.³ Others have noted the ways that different patterns of physical activity and muscle use can influence the shape of skeletal development and stature (D. Lowe 1982; see also, Fausto-Sterling 2005). And still others have pointed out that different cultural beliefs about medicine and health lead to vastly different experiences of the body; the anatomical charts used by acupuncturists, for instance, show structures unseen in Western biomedicine (Lancaster 2003: 37). In general terms, sociologists have begun to take the body seriously as a surface on which cultural rules and norms are inscribed (Foucault 1978) as well as a site of direct social control, as in the case of table manners or grooming.

Further, gender scholarship now constitutes one of the most sustained and systematic attempts to take embodiment seriously. One early example is Sandra Bartky (1988: 64), who discusses the social creation of physical gender differences in walking, eye contact, smiling, touching, stance, skin, and hair, among other things, referring to the sum total of these physical social practices as "the social construction of the feminine body" (p. 75). Elizabeth Grosz (1994), Iris Marion Young (1980 [2005]), and Toril Moi (1999) have also explored the specificity of women's bodily experiences. For instance, in her essay "Throwing Like a Girl," Young uses concepts drawn from Simone de Beauvoir

and Maurice Merleau-Ponty to theorize feminine body comportment, motility and spatiality. Another example is Raewyn Connell, who has used the notion of a "theory of practice" (Connell 1987: 61) to argue that the body is practically transformed in the social structure of gender, and this transformation is not just symbolic but has actual physical effects (p. 87). Karin Martin's (1998) study of pre-schools, for instance, demonstrates that teachers (as well as parents) treat little boys' and little girls' bodies differently, in turn leading the children to experience and use them differently, which creates actual physical differences in bodily mannerisms, shape and size. Other key texts on gender and the body include Hubbard, Henifin, and Fried's Biological Woman: The Convenient Myth (1982), a collection of essays which examine the pathologization of women's bodies, and Susan Bordo's Unbearable Weight (1993), which analyzes a whole range of issues connected to the gendered body – weight and weight loss, exercise, media images, movies, advertising, anorexia and bulimia. Finally, highlighting the importance of the socio-cognitive dimension of embodiment, Moira Gatens examines the "imaginary body" - a cultural idea constructed by shared language and psychical privileging of particular body zones and parts (Gatens 1996: 12).

While gender scholars have written effectively and relatively extensively about social practices that "gender" the body, until recently "sex itself" was often explicitly excluded from their accounts (Friedman 2006). An unexamined conceptual boundary seemed to separate sex from the rest of the body. For example, despite their sensitivity to the social construction of the body, both Connell and Lorber have made the point that we are born sexed but not gendered (Connell 1987: 191; Lorber 1994: 22); Connell (1987: 137) has stated that the categories "male" and "female" are not social or political

categories; and Bordo (1999: 263) argued that the "very fact" of sexual difference is "obvious." In these and other accounts, sex is portrayed as an exception to the social construction of gendered bodies and the omnirelevance of gender.⁴ Ironically, most of these scholars have also acknowledged that understanding sex as a fixed biological dichotomy hinders the acceptance of their conclusions about the social construction of gender.⁵ As Connell (1987: 91) put it, ideas about natural sex differences are "the lion in the path of social theories of gender."⁶

More recently a number of key gender scholars have argued that it is important to problematize hegemonic understandings of sex as well as gender. This growing body of research on the social construction of "sex itself" is the closest in focus to my own work. There are many different answers to the question of how sex is socially constructed. My approach is to highlight the role of cognition and perception, but previous work has pointed out the exceptions to binary sex, identified historical differences in conceptualizations of sex, and analyzed the ways gender norms influence the science on sex differences.

Thomas Laqueur argues that in the past, specifically prior to the 19th Century, male and female bodies were seen very differently than they are today.⁷ They were perceived as more similar than different, and instead of two sexes, there were just two variations of one sex. Laqueur further demonstrates that the shift in perception to seeing the sexes as two categorically different things was not the result of gaining more scientific knowledge, since many of the relevant discoveries were actually made after the fact. In his words: To be sure, difference and sameness [...] are everywhere; but which ones count and for what ends is determined outside the bounds of empirical investigation. The fact that at one time the dominant discourse construed the male and female bodies as hierarchically, vertically, ordered versions of one sex and at another time as horizontally ordered opposites, as incommensurable, must depend on something other than even a great constellation of real or supposed discoveries. (Laqueur 1990: 10)

So the question for Laqueur is, if it was not due to advances in specific scientific knowledge of sex differences, what was responsible for that shift from seeing one to seeing two sexes? And his answer is essentially cultural change. He argues that sex or the body is the epiphenomenon, while gender, what we would normally take to be the cultural category, is what is primary. Marian Lowe makes a similar point when she argues that "if race, sex, and class were not politically and economically significant categories it is likely that no one would care very much about biological differences between members of these groups. To pay attention to the study of sex differences would be rather peculiar in a society where their political importance was small" (Lowe, M. 1982: 109).

Writing concurrently, though in a very different disciplinary context, Judith Butler's well-known statement that sex is always already gender (Butler 1990: 7) is also paradigmatic of the argument that social norms about gender are the source of the sex categories and our experience of sexed subjectivity. For Butler, there is no "naturally" sexed subject who preexists the performance of gender. The sexed body that is assumed to be behind the expression of gender is "performatively constituted by the very 'expressions' that are said to be its results" (Butler 1990: 25). In the most general terms, this stream of scholarship characterizes sex as the product of the social and psychological discourse of gender and, as such, either implicitly or explicitly suggests that sex can be eliminated as a category; it is more accurate to call everything gender. However, accounts that assert the primacy of gender as a category can often eliminate a discussion of the matter of the body entirely and, as a result, perhaps unintentionally imply that materiality is not important (Chanter 2000: 1238).⁸ For example, while Butler's attempts to theorize the social construction of sex are commendable for their complexity and attention to social norms and the psychological mechanisms by which they operate to form our experience of ourselves as having a fixed sex, as she herself confesses (Butler 2004: 198; see also Butler 1993: ix), her analysis rarely actually takes the physical body as its explicit focus. Both Butler's suspicion of the category "sex" and her tendency to slip past the physical into other realms (Prosser 1998: 41) reflect the intellectual strengths and limitations of queer (and other radical social constructionist) theory more generally.⁹ Moving forward, it will be important to create research projects that maintain some of the insights of this important body of work while engaging more directly with the materiality of the body.

One example of research that does this difficult work of bringing ideas about language and the fleshy materiality of bodies into conversation is Anne Fausto-Sterling's *Sexing the Body* (2000), which draws on evidence from intersexuality to argue that for every biological "indicator" of sex difference, including genitals, gonads, hormones, chromosomes, and brain structures, what nature seems to provide us with is some form of a continuum rather than two discrete categories. She argues that "since intersexuals quite literally embody both sexes, they weaken claims about sexual difference" (Fausto-Sterling 2000: 8).¹⁰ These scholars emphasize that bodies that fall somewhere in the continuum between male and female are natural, even if statistically unusual; nature provides variety beyond male and female, and it is only cultural norms and institutions,

such as the state and medicine, that erase the center of the continuum.

The challenge of scholarship that argues from the evidence of exceptions is that, when it comes to the work of making the notion of naturally binary sex differences "anthropologically strange," it can be constrained in its influence by its own design. It is possible, in other words, to dismiss such challenges to binary sex as based on a small minority with "birth defects" and/or "psychological disorders." Surely, the logic goes, the vast majority of people are actually naturally dichotomously distributed. This tendency to dismiss the evidence of exceptions is also institutionalized in social science and science in general, which are based on aggregate patterns, not exceptions. As a result, in these domains, claims based on exceptions may be particularly strongly resisted.¹¹ Yet it is important to question what is lost by focusing primarily on aggregate patterns. In ignoring the cases that do not conform to the dominant patterns, this way of thinking effectively erases differences, eliminating "extreme values" and the continuum that technically exists between any two categories. It is also interesting to consider how many exceptions are required for the falsification of an aggregate pattern. There is a technical statistical answer to that question, but should we rely on the statistical answer conceptually, or in terms of our daily lives? Are there ever cases where one exception should be regarded as falsifying a pattern? What about 1.7% of cases? Is that ever enough to introduce doubt into our categories? That is one estimate of the number of intersexuals (Fausto-Sterling 2000: 51). For comparison, the genetic difference between humans and chimpanzees is estimated at between one and three percent, with 1.2% as the generally agreed-upon textbook statistic (Richardson 2010: 6).

Further, historically, some of the most innovative and influential scholarship has

relied on the data of exceptions. Durkheim identified the protective function of social integration through analyzing cases of *exceptionally* high or low social solidarity (Durkheim [1897] 1966). Likewise, much of Freud's scholarship offers theories of "normal" psychological development derived from the observation of "pathological" cases (Freud [1905] 1962). To take a more contemporary example, queer theory makes "the centrality of marginality" a central theoretical premise (Epstein 2002). As Kuhn argues, sometimes exceptions are actually important anomalies, the seeds of revolutionary thinking and discovery. Ultimately, it is these anomalies that – when attended and studied – lead to periods of groundbreaking science and paradigm shift (Kuhn [1962] 1996: 52).

Any concerns about the persuasiveness of research based on the evidence of exceptions applies to my own work as well, since I chose the two groups I interviewed explicitly because of their extraordinary position vis-à-vis seeing sex. Blind people literally cannot see sex, and as such their experiences raise interesting questions about why the sighted rely mostly on vision when categorizing bodies, and what the trade-offs for privileging vision might be. They are also an unusual group to study in relation to the concept of gender performativity, which is the basis for so much of current gender theory, since most aspects of gender performance are not available to them. Transgender people, on the other hand, are arguably hyperaware of the nuances of gender performativity, and conscious of cues that non-transgender people take for granted. When writing about these two groups, however, I try to use their exceptional perspectives not simply to illustrate their uniqueness, but to examine more mundane aspects of visual sex attribution and to highlight the socio-cognitive construction of taken-for-granted ideas about sex.

The final strategy scholars have employed to argue sex is socially constructed is to demonstrate that cultural norms about gender differences have infiltrated scientific research on biological sex differences. In an early example, Emily Martin proposed that there are gender stereotypes "hidden within the scientific language of biology" (Martin 1991: 486). Specifically, Martin uncovers remarkable parallels between stereotyped notions of gender difference and the character of the egg and the sperm as portrayed in biology textbooks. Fausto-Sterling similarly analyzes scientific definitions of sex and finds that "what bodily signals and functions we define as male or female come already entangled in our ideas about gender" (Fausto-Sterling 2000: 3). Nelly Oudshoorn's work on sex hormones is another example of how what she calls the "prescientific idea of sexual duality" was a "major guideline structuring the development of endocrinological research" (1994: 39). Lisa Jean Moore's (2007) research on the biological and cultural construction of sperm in relation to masculine stereotypes also deals with the power of metaphors about sexual differences in science, and Rebecca Young makes a related point in her critical work on the ongoing claims by scientists that male and female brains are "hardwired" differently.¹² As she and her co-author Evan Balaban put it in a critical review of one such work, Louann Brizendine's The Female Brain, "Human sex differences are elevated almost to the point of creating different species, yet virtually all differences in brain structure, and most differences in behaviour, are characterized by small average differences and a great deal of male-female overlap at the individual level" (Young and Balaban 2006: 634). Melanie Blackless et al. (2000) likewise stress the importance of thinking beyond the metaphor of sex difference: "If [...] one relinquishes

an a priori belief in complete genital dimorphism, one can examine sexual development with an eye toward variability rather than bimodality" (Blackless et al. 2000: 151).¹³

What all of these studies have in common is the idea that scientific accounts of biological sex differences cannot be uncritically accepted. Joan Fujimura states this explicitly in her study of the historical production of knowledge about the genetics of sex, explaining that while sex differences are indeed material, the materiality of sex cannot be accepted at face value, since both how we recognize and "deal with" that materiality is culturally mediated (Fujimura 2006: 50). In her words, "The biology of sex is too important to leave to biologists alone because they usually are not trained to attend to and analyze how socio-cultural frames influence their own experimental processes" (p. 74).

The importance of such studies cannot be denied, and yet there may be a limit to their disruption of our quotidian experience of the facticity of binary sex. There is a disconnect between knowledge about the social construction of sex in scientific scholarship and our unwavering acceptance of biological notions of sex difference in our daily lives. To unsettle our routine belief in sex difference requires scholarship aimed more directly at challenging those aspects of our ongoing daily experience of sex differences that typically go unnoticed by us, both as academics and as everyday individuals. This is one of the reasons I chose to examine seeing sex, which is about as automatic and ubiquitous a process as any I can imagine. While the populations I interviewed may be exceptional and unique, as I already mentioned, my goal is to use their "exotic" perspectives to study a decidedly "ordinary" process that is widely shared and yet rarely noticed. In short, although scholars have approached the question of the social construction of sex from several different angles, it is far from fully fleshed out as a scholarly idea, and further still from destabilizing binary perceptions of sex in everyday life. To extend and strengthen the project of disrupting the "self-evidence" of sex difference begun by each of these scholars requires pursuing research projects that respond to their limitations. First, such projects must be much more attentive to the fleshy materiality of bodies than is typical of approaches that collapse sex into gender. In addition, future research should focus more on everyday experiences that are widely shared rather than specialized areas of social life, such as scientific research, that can be mentally compartmentalized and thus fail to disrupt our quotidian sense of sex. Furthermore, while scholars have effectively demonstrated that cultural influences penetrate and shape the body, one important and neglected dimension of how bodies are socially constructed is cognition and perception, which I explore using filter analysis, the conceptual system I introduced in Chapter 1.

Filter Analysis: A New Conceptual Framework for the Social Construction of Sex

Gender and Perception

A number of gender scholars have previously identified perception as central to "doing gender" in everyday life, most notably Suzanne Kessler and Wendy McKenna in *Gender: An Ethnomethodological Approach* (1978), which prefigures my analysis of sex attribution in several important ways.¹⁴ Mary Hawkesworth describes their most

noteworthy contribution, a shift to conceptualizing gender as a mental schema, as follows:

What is important about Kessler and McKenna's conception of gender is not merely their insightful account of the mechanics of gender attribution, but their subtle shift of gender's terrain. Gender moves from a stylization of the body to a category of the mind. It is, in an important sense, an immaterial substance – an intangible idea with palpable consequences, an apriori category that structures the phenomenal world. (Hawkesworth 1997: 31)

Kessler and McKenna's book thus initiated the important work of studying the cognitive and perceptual dimension of gender. When they write that "the constitutive *belief* that there are two genders [...] creates a sense that there is a physical dichotomy" (Kessler and McKenna 1978: xi), for instance, Kessler and McKenna provocatively highlight the socio-cognitive dimension of our experience of male and female bodies. In fact, as they put it, "most of the work is done for the displayer by the perceiver" (Kessler and McKenna 1978: 137). My analysis adopts precisely this notion of gender as "an apriori category that structures the phenomenal world."

In the course of their analysis, Kessler and McKenna make several crucial points about the social rules of sex attribution. For instance, they point out that visual sex attribution is never based on genitals, even if we believe they are the basis for our categorization (Kessler and McKenna 1978: viii). In reality, we do not normally see each other's genitalia, so the attribution process depends on "cultural genitals" (p. 154) – more visible "gender clues," for instance hair or clothing, that stand in as proxies for anatomical genitals.¹⁵ This idea raises several of the key questions I aim to address, including: What are these proxy genitals specifically? And what are the other cognitive mechanics of the "gender attribution process"?

Kessler and McKenna's overlay experiment (pp. 145-153), in which they created images of people with different combinations of "male" and "female" body parts and asked research subjects to decide whether the resulting figures were male or female, was designed to capture the relevance of different body parts in sex attribution. However, the insight this experiment can provide is limited by certain elements of the study's design, which presupposes some of what it sets out to investigate because it includes a number of unexamined assumptions about what is and is not relevant for sex attribution. The only body parts that Kessler and McKenna varied in the experiment were genitals, breasts, body hair, head hair, and hips (Kessler and McKenna 1978: 145). They did not change the faces, arms, legs, hands, feet, necks, overall stature, or any other feature of their figures. Their experimental design thus presupposes that genitals, breasts, and hair are "relevant," whereas faces, stature, arms, legs, hands, necks and feet are "irrelevant." They also assume that there are in fact "male" and "female" hips, hair, breasts, etc.; how else could they "mix" "male" and "female" body parts to create "ambiguous" figures? As one of my goals is to challenge the prevailing cultural logic about which body parts are "relevant" for sex attribution, and to identify the proportion of the body that is different between the sexes, it is important for me to consider the entire body, especially those parts that seem intuitively irrelevant.

Further, despite the fact that Kessler and McKenna highlighted the important role of the perceiver in sex attribution over thirty years ago, these questions about how – by what cognitive and sensory processes – perception contributes to the social construction of male and female bodies have yet to motivate further in-depth study. Kessler and

McKenna's account – "see someone as female only when you cannot see them as male" (1978: 158) – remains one of the few available explanations, and much of current gender theory instead hangs on the notion of performativity, the enactment of sex and gender norms through reiterative acting out and display (see Butler 1990, 1993). However, the body is always sensed (Howson 2005: 2), and cultural norms work to construct sex difference from at least two directions simultaneously – organizing perception as well as organizing our norms of grooming, adornment, and bodily demeanor. Yet while our understanding of the display side of the interaction has become quite complex and interesting, the experience of the perceiver is much less understood.

This is particularly problematic since, if the body is always sensed, perception arguably constitutes the entire realm of our experience of bodies, both other people's and our own, whether as the displayer, the perceiver, or both. As such, perception also represents an interesting case to explore in relation to criticisms that research on the social construction of the body (and sex specifically) is typically overly textual and ironically rather disembodied. Perception is actually *doubly* embodied. Not only is it our only mode of experiencing bodies, but it is an embodied experience in and of itself, and automatically overcomes the mind/body bifurcation, as it is always both (Grosz 1994:94).

Part of what makes it difficult to study the perceptual dimension of the social construction of sex, however, is that the visual experience of bodies as always either male or female is profoundly taken-for-granted. As I discussed in Chapter 1, the sighted trust vision uniquely among the senses; we typically believe that what we see is a complete, objective representation of empirical reality. When we see people as sexed, then, it is

usually without any consideration of the socio-cognitive or perceptual *processes* that might create that experience. To really think critically about sex difference, we need an epistemological jolt – an alternate perspective that, if acknowledged, so strongly challenges our expectations that it forces us to problematize the seeming perceptual "obviousness" of sex. I have tried to construct this epistemological break both methodologically and analytically.

I chose to interview blind people because I imagined that they would allow me to access just such an "outsider perspective" on visual sex attribution that could bring to light aspects of the process that I might otherwise take for granted as a sighted person. Stated another way, I am studying blind people as a case that can illuminate more universal dynamics. In my interviews I aimed to capture the cognitive and sensory process by which blind people attribute sex and to compare that process to visual sex attribution to learn how much of the dominant understanding of sex is specific to sight. This is not to say that a blind phenomenology of male and female bodies is necessarily any more (or less) accurate than the hegemonic sighted experience, but it does provide access to an alternate perceptual reality that challenges taken-for-granted assumptions about the "self-evidence" of visual sex differences.

Transgender people, on the other hand, can provide access to a perceptual experience of sexed bodies that is similar in its sensory content to the dominant experience (in that it is primarily visual), but with a significantly elevated awareness of the intricacies of all that is involved in seeing sex. Accounts by and research on transgender people suggest that they tend to be hyperaware of how sex and gender are constructed.¹⁶ In order to live in a sex different from the one they were assigned at birth,

they have to be. The stakes for them are much higher, in that their very lives may depend on their knowledge of how people "read" bodies as male or female.

Analytically, I argue that reconceiving sex as a mental filter provides unique insight into what is going on phenomenologically when we see sex. The filter metaphor is organized around a dialectic of attention and disattention in which certain details of empirical reality pass through our filters and are attended, while others are socially blocked from our awareness. Attention and disattention are well-known dynamics of categorization that have not been fully mined for their conceptual insights regarding sex attribution and seeing bodies more broadly. In part by building on this insight about the centrality of disattention, filter analysis pushes us to recognize and define how social relations enter into and transform the body in ways that have not been fully theorized.

Sex Difference as a Social Filter

A number of scholars have previously provided descriptions of sex/gender that are evocative of a socio-mental filter in their pointed emphasis of attention and disattention. Butler, for instance, describes a "grid of legibility" that "defines the parameters of what will and will not appear within the domain of the social" (Butler 2004: 42). Nicholson similarly highlights socio-mental dynamics of attention and disattention when she describes perceptions of sex differences as "missing much":

Like a lens that only illuminates certain aspects of what we see by shadowing others, these visions kept from sight the many contexts that we as women and men deviate from the generalizations these analyses generated. (Nicholson 1994: 98)

Selective attention is also the key mental process underlying Kessler and McKenna's concept of a "gender schema." For instance, consider the following passage in which Kessler and McKenna describe the gender attribution process:

[T]he attributor contributes to the accentuation of gender cues by selective perception. For example, members of our culture may look for facial hair, while in other cultures this might not be considered something to inspect. In learning to look for facial hair, the attributor perceives in greater detail signs of facial hair than would be the case if facial hair were not a cue. (Kessler and McKenna 1978: 157)

Based on this description, gender attribution is a form of selective attention. Again, in

their words: "Certain differences take on importance, while others are seen as irrelevant

[... and] may be ignored" (Kessler and McKenna 1978: 156). The metaphor of a filter

offers significant analytical precision and richness when it comes to identifying these

crucial processes of selective perception.

Several of the transgender people I interviewed also described sex attribution as a

process of selective attention. In the following descriptions, for instance, note the way

that the perceiver disattends – "filters out" – sex ambiguities:

I read once that for every male attribute you need to have two other feminine attributes to compensate...to tip the balance in the other direction. (White MTF transsexual, 18)

Like there are plenty of biologically born women who have big shoulders or are like 6 foot 5, but they have other things where it kind of cancels out. (White MTF transsexual, late 20s)

It's like a point system for taking someone's license away. I couldn't tell you how it breaks down. It's jewelry, makeup, what does your face look like, deportment, I think that deportment gets overlooked. [...] It's kind of a pass/fail test, which is why everybody says passing. (White MTF transsexual, 30)

The idea that certain physical attributes "cancel out" others, or that a determination of sex

can be cognitively "tipped," highlight the key role of cognitive processes in sex

attribution. More specifically, they show that we are always required to disattend the ambiguities and complexities of bodies when categorizing them as "male" and "female". This is precisely the logic of a "pass/fail" test or a "point system," both of which allow for some amount of ambiguity to be present but "irrelevant."

It is not surprising that transgender people have an especially keen awareness of these processes of cognitive exclusion, since, as Jacob Hale points out, one defining feature of transgender identities is the inability to fit into the available categories – or to fit only by denying ambiguous or contradictory (according to the available categories) aspects of themselves. In his words,

those of us who live in borderzones constituted by the overlapping margins of categories [...] do so because our embodiments and our subjectivities are abjected from social ontology: we cannot fit ourselves into extant categories without denying, eliding, erasing, or otherwise abjecting personally significant aspects of ourselves. (Hale 1998b: 336)

Without this denial, elision, and erasure, Hale explains, "lost in language and in social life, we become virtually unintelligible, even to ourselves" (Hale 1998b: 336). To some extent, however, this is true of everyone. We all fall somewhere in the "overlapping margins of categories" Hale describes. Chris Shilling (2003: 10) takes this broader position that the body in general is irreducible to social classifications: Bodies are "classified into simplistic *social* categories (for example, male/female, black/white, upper/middle/working class)" he writes, "which ignore overlaps in, and stress the differences between, human bodies [...]" (p. 60).

One of the things I highlighted in relation to filter analysis in Chapter 1 is that social expectations set in motion collective processes of socio-mental filtration, which lead us to selectively note those aspects of empirical reality that confirm our expectations. As a starting point, the most simple, generic statement of the argument is this: When we see bodies, we do not take in all of the technically available information; we note certain details while ignoring others. Depending on his or her optical socialization, education, and training, one person will notice details to which another person is blind. Dermatologists can differentiate between healthy and dangerous moles that look identical to an untrained observer. Experienced mushroom hunters perceive distinctions among "bodies" of mushrooms that to the uninitiated are indistinguishable (Fine 1998). One can continue in this vein virtually indefinitely: podiatrists notice feet, chiropractors notice posture and spinal alignment, orthodontists notice jaw alignment, dancers notice leg alignment, aestheticians notice pore size, and so on.

Each of the distinctions alluded to above is based on subcultural conventions of attention and focusing. However, norms of attention operate much more broadly as well. I know I am not alone, for instance, in the way that I frequently do not register someone's eye color, but I virtually always notice whether they are male or female. Likewise, it is not unusual for me to say "I remember him as taller" – or heavier, or fairer – whereas it is highly unlikely that I would say "I remember him as female." The norm of attending to those details of bodies that provide information about sex differences is no less conventional than the other, distinctly subcultural norms governing seeing bodies. This normative attention to sex differences is clearly not the *only* way we see bodies, as the above-referenced examples of subcultural norms of perception make clear. While not monolithic, selective attention to sex differences is nonetheless a hegemonic perceptual norm – in part because, as countless gender scholars have shown, gender is culturally "omnirelevant" (West and Zimmerman 1987: 136).

I use the term "sexpectations" to refer to the specific set of social norms and expectations through which we perceive bodily sex differences. The concept of sexpectations thus extends the generic idea that social expectations create an intersubjective state of "perceptual readiness" to quickly recognize socially expected cues (Bruner 1958: 92-93, 85) to our perceptions of bodies and specifically to the perception of sex difference. Butler (2004: 28) has similarly argued that social norms provide a framework through which we think about and perceive human bodies:

Indeed if we consider that human bodies are not experienced without recourse to some ideality, some frame for experience itself, and that this is as true for one's experience of one's own body as it is for experiencing another, and if we accept that that ideality and frame are socially articulated, we can see how it is that embodiment is not thinkable without a relation to a norm, or a set of norms.

One of the most powerful effects of our sexpectations is the way they define certain aspects of the body as "relevant" and others as "irrelevant." In this way, they lead us to take note of certain parts of the body and to filter out other parts. They tell us what is the *figure* and what is the *ground*. It is important to emphasize – again – that these patterns of selective attention are *social norms*. It is not simply that certain body parts are more available for us to inspect and it is therefore those empirically salient details that we attend. Although some details may in fact be more visually salient, that alone cannot account for what we notice. Breasts and facial hair are no more empirically salient than elbows and earlobes. At times, in fact, social norms of attention direct us to seek out and attend physical details that are far from obvious and to ignore those that are technically more salient.

Our sexpectations influence not only what bodily details we notice, but *how* we perceive different parts of the body; specifically, whether we view those parts as fixed or

malleable. For example, when people adjust their crooked teeth using braces and even surgery, we do not continue to believe that they have crooked teeth (and are falsely representing themselves as "straight-toothed"). Though crooked teeth are a biological "fact," orthodontic interventions can permanently alter biology. However, other body parts are viewed as fixed for life. Consider in this light the sex reassignment surgeries undergone by transsexuals. Even though technically these interventions are equally – even, arguably, more – permanent than orthodontic adjustments, due to the prevailing beliefs about the naturalness and fixity of sex, outsiders often feel that transsexuals remain on some fundamental level their birth sex, even after surgery. Stated another way, orthodontic interventions "count," whereas sex reassignment surgeries "don't count" as a legitimate change.¹⁷ This view is reflected in the following comments from two transsexuals about their friends' and family members' difficulty making the cognitive and perceptual switch:

There are a few who are very diligent about using male pronouns with or about me, but that's because they care about my feelings. [...] Most are having a very difficult time using appropriate pronouns. I think a small part is simply habit, but a large part is changing the perception. And don't get me wrong, these people are supportive and do try. It's just difficult for them to flip that switch. (White FTM transsexual, 37)

So many of my friends have known me for so long as [male] [...] I don't feel like they're ever really going to see me as female [...] even if everyone else in the world just kind of is like 'hello miss.' [...] The assignment's been there for a really long time; it's not going to shift that much. [...] They'll look at my face and still see [... a male] face. There's still going to be all these masculine attributes that they had seen previously, which wouldn't necessarily be masculine, but they would attribute them just because they knew that those were there before. (White MTF transsexual, 18)

In large part, "flipping the switch" when it comes to sex is so difficult for people because,

when compared with the rest of the body, our emotional and moral investment in the

reality and fixity of sex is much stronger. This point can also be illustrated through a

comparison with other medical interventions, such as bariatric surgery. If one's child or friend became thin after this or a similar medical procedure, it would be surprising if one continued to perceive them as fat (disregarding their new medically created bodily appearance as "false"), yet this idea somehow seems logical in the case of sex differences.

We are not only socialized to see sex as more fixed and essential than other parts of the body. We also learn to see the pelvic area as more private and sexual. It would be possible, given different social norms and expectations, to experience the genitals as the sexual equivalent of the ears or the elbows. Emerson makes this point explicitly when discussing the medical view of genitals in the context of a gynecological examination: "In the medical world the pelvic area is like any other part of the body; its private and sexual connotations are left behind when you enter the hospital. [...] Their [the medical staff's] nonchalant pose attempts to put a gynecological examination in the same light as an internal examination of the ear" (Emerson 1970: 78).

When we see male and female bodies, what we see is not a direct mirroring of empirical reality. Social norms and expectations intervene between the perceiver and the perceived. Consequently, we should not think of sex as purely biological: Sex is always perceived through the interplay of social norms, cognition and matter. In this view, sex is as much a "social fact" (Durkheim [1895] 1982) as the biological fact we normally take it to be. One way of characterizing the particular social norms and expectations through which we perceive bodily sex differences is the "natural attitude," the taken-for-granted view that everyone who has ever lived and will ever live is either male or female, and that this dichotomy is natural, normal and functional (Kessler and McKenna 1978: 4-6; see also Garfinkel [1967]1996). These beliefs about the obviousness, naturalness, and inevitability of sex differences are a direct reflection of normative ideas – both implicit and explicit – circulating in our social worlds from birth.

Sexpectations and the Social Overdetermination of Sex Differences

Beginning in early childhood with language acquisition and the messages communicated by families, other childcare providers, and consumer culture, the social world sends an unambiguous and relentlessly repeated message about sex differences: that they are both real and important. As one intersexual I interviewed put it, "From the moment we are born and labeled with a sex we are thrown into two completely different worlds" (white intersexual who lives socially as male, 48). Even those parents who consciously try to avoid exposing their children to gender stereotypes are unable to fully shield them from subtle and not-so-subtle differences in clothing, toys, and the different ways that *other* people (grandparents, teachers, doctors, strangers) relate to little boys and little girls. Further, the reality is that many families are not skeptical of gender norms, and continue to teach them to their children uncritically.

Both groups I interviewed commented insightfully on the transmission of social norms about sex differences in the context of family life. The transgender and intersex respondents tended to have particularly strong memories of sex differences being rigidly enforced and reinforced in childhood, likely because these messages were in direct conflict with their intense desire to explore ambiguity and fluidity.

I used to make clothes for my teddy bear but also I played with trucks and such. My daddy went crazy whenever I did anything that girls would do. (White intersex person who appears socially as male, no age provided) I started cross-dressing at around probably like 2 or three [...] and for me it was just like totally normal back then, like I never thought of it, ooh I'm cross dressing, you know? It was just like I used to just wear my sister's clothing and play around. And over time, I would get into trouble, and kept getting into trouble. (White MTF transsexual, 28)

In the basement I found in a box some of my mother's old clothes from when she was a child. There was this yellow sundress and I just had to put it on and I did. And my father beat me badly because of doing it [...] and then hundreds of times after that throughout my life. (White MTF transsexual, 56)

Similar tales of emotionally charged incidents from early childhood came up in many of the interviews with trans people. While the tension and conflict surrounding sex difference in these respondents' childhoods may have intensified this message, both in terms of frequency and emotional investment, all children are exposed to similar messages about sex. The blind respondents also shared stories about how they learned social norms about sex differences from their families. They had to be explicitly told about any visual norms, since they could not learn them through observation, and as a result their accounts also magnify the social construction process. For instance, one respondent commented that "many parents try very hard to get them [their blind children] to sit and walk and hold things the way sighted people do" (white male, 61, blind since birth). Another respondent expressed a similar point:

When you're blind there are things that you don't see that you have to be taught because [...] it is learned vicariously by being in the environment and seeing other people do it. Body language such as shaking your head yes and no. Stuff like this, such as waving at someone if you're riding in a car; do you show them the front of your hand or the back of your hand? What is that gesture? Those are things that you learn because you're taught, not because you see other people doing them. (White male, 38, blind since birth)

He also went on to specifically state that this includes being taught sex differentiated gestures, for instance that males and females should sit differently:

Crossing your legs: men cross their legs with the ankle on the knee and women tend to cross them one knee over the other. I was taught. Taught by my family when I did the wrong thing. They didn't make it a negative thing. They just said 'females tend to cross their legs like this. Males generally cross their legs like this.'

In addition to parents, influential figures in the rest of children's social worlds,

such as teachers, doctors, relatives, and peers, often disseminate these messages about the

importance of maintaining sex differences. For instance, one transgender respondent

recalls his kindergarten teacher's negative response to his desire to challenge norms about

play:

I can actually remember back in kindergarten when I was wanting to stay inside and play in the kitchen with all that stuff and playing house and the teacher forcing me to play outside with the guys in the sandbox with the trucks. I just didn't want to do that but that's what they forced me to do and I had temper tantrums on the floor crying and everything else. (White MTF transsexual, mid-40s)

A mother of another respondent's childhood friend made a strong impression with her

angry and hurtful reaction to his desire to break norms regarding sex-specific clothing:

When I was quite young, me and the girl next door were playing, and I had the strongest urge to want to try on her clothes, which she thought would be funny, so she let me. We were in a tree house that my brother built. Later she told her mom about it and she flipped out, wouldn't let me near her daughter for quite a while. She called me a "dirty little boy" and that hurt deeply, something that stayed with me all my life. (White MTF transsexual, 67)

Even if the mother's response was not a reaction to his exploring "girl's" clothing, but to

a little boy seeing her daughter naked, this is also a form of marking the importance of

sex differences, since she presumably would not have had the same intensity of response

if he was the same sex as her daughter.

Another central factor in the acquisition of powerful expectations about sex

differences is the structure of language, which emphasizes sex differences over other

forms of difference. As I discussed generically in Chapter 1, the categories we have available to us guide and organize our perceptions, directing our attention to certain "relevant" details and away from others that are "unimportant." In light of this, consider the fact that, in English as well as many other languages, one must speak of people as "he" or "she." As a result, it is virtually impossible to refer to another person without first attributing sex. Moreover, in some languages, for example Hebrew and Russian, sex determines not only the pronouns used but the form of verbs. In such cases, speakers must take into account someone's sex to speak to or about him or her at all. This is not true of other differences; there is no comparable grammatical category for eye color, hair color, skin color, height, weight, or any other visual variable. If there were, we would likely perceive people differently. For instance, I frequently do not register someone's eye color, but if language required that I take eye color into account, I would be unable to ignore it. These conventions of language help to create the expectation that all human bodies are either male or female, and that this is a significant difference, more important than other, equally perceptible differences.

A variation of this idea that the available categories influence perceptions of sex came up a number of times in the interviews with the transgender respondents, many of whom told me that they felt people perceived their sex quite differently in places where the category "transgender" was known and used, such as New York's Greenwich Village, than in places where the category was not familiar and a part of the extant sexpectations.

People in like suburban areas, they don't know anything about this, so they're not going to see someone and go, 'oh, transsexual.' It's either girl or guy, that's it. (White MTF transsexual, mid-20s)

People who are aware of this kind of thing will be more likely to read someone as in transition; when I was in transition, if I was out in Jersey or in Oklahoma, no

problem. I'm a girl. If I go to the West Village, it's more difficult to pass. [...] In any city with a big queer population, I think even straight people are more tuned in because you're exposed to it and you're just more aware of how things can be [...]. (White MTF transsexual, 28)

I suppose if you compared perception in, for example, rural Wisconsin versus downtown West Hollywood, it would be different. In Wisconsin someone like myself [...] might have been referred to with male pronouns, while in West Hollywood they might be unsure and use gender neutral terms. [...] People unfamiliar, I suppose, tend to put people neatly in a box, either male or female. In places where TG people are more numerous or more public, people have learned and adjusted how they categorize people. (White FTM transsexual, 37)

Based on these accounts, depending on the categories available to the perceiver, the same person – providing the same exact sensory stimuli – can be perceived as "male," "butch," "transgender," and so on. In perceiving sex, then, what we see in part depends on what we "know about" (which is one way of describing what we have categories for) – and thus what we expect and what we *look for*.

Expectations regarding the salience of sex differences may be established in childhood, but they are also relentlessly reinforced throughout the life course. For one thing, a disproportionate emphasis on sex differences suffuses many social institutions, among them scientific and other academic institutions, both of which transmit the idea that sex differences are uniquely important. If we tend to be blind to the sameness between men and women, in other words, it is in part because of a lack of available evidence to the contrary, as some of the major sources of "evidence" or "truth" in our culture do not publish findings of sameness as often as they publish findings of difference. Yet this is not because such data do not exist, or could not be collected.

Several prominent gender scholars have previously discussed the academic bias in favor of data that demonstrates sex differences. Fausto-Sterling (2000: 126-232), for

example, reviewed biological research on sex differences and identified numerous studies that technically demonstrate no clear distinction between the sexes but were not presented as such. As Carol Tavris (1992: 336-337) has put it, "Typically, when scientists haven't found the differences they were seeking, they haven't abandoned the goal or their belief that such differences exist; they just moved to another part of the anatomy or a different corner of the brain." They do not, however, generally publish a finding of "no sex differences." Similarly, in social scientific research on gender it is an institutional norm that finding no gender difference is tantamount to having no finding, and as a result there is a high level of non-reporting of "negative" data.¹⁸ In other words, in most social scientific research comparing men to women, the majority of the data does not reveal significant gender differences. In fact, most variables suggest that there are more similarities than differences between men and women. Yet these results do not often appear, or at least are not the data that are highlighted, in journal articles and books (Caplan and Caplan 1994). What is of interest from the standpoint of having "findings" to report and publish is the much smaller number of variables showing statistically significant gender differences.

The medical establishment likewise transmits ideas about the naturalness and fixity of sex in the context of patient care. One admittedly extreme example is the medical "standard of care" for transsexuals, which explicitly incorporates these messages in both the psychological and surgical phases of transition. A number of the transgender respondents, for instance, explained to me that at a certain point their psychotherapists pushed them to avoid ambiguity and fully inhabit either one sex category or the other.

My therapist [...] was asking me, "do you want to be a woman or not?" And I was like, "I really don't know." And he goes, "are you a woman?" and I was like, "I

don't know. I don't even know what that means, like, how do you know you're a woman?" I was like, "biologically I'm not. I don't know." And he was like "you need to think about it, because you need to know if you are in order to be comfortable with yourself." And it really freaked me out, because I had no idea. I don't know what it is to be a girl. I'm not sure I even know what it is to be a guy, you know? (White MTF transsexual, late 20s)

I went to a therapy group. [...] We were asked to tell our employer that we would be "presenting" ourselves full time as women/men depending on where we were headed. This was a monster for me and I dreaded every thought of it. (White MTF transsexual, 67)

In fact, something called a "real life test" or "real life experience," where one is encouraged to move out of ambiguity and live full-time as one's sex of transition for a period of time, is strongly recommended by the World Professional Association for Transgender Health (WPATH), formerly known as the Harry Benjamin International Gender Dysphoria Association (HBIGDA), widely viewed as the authority on the standards of medical care of gender variant individuals.

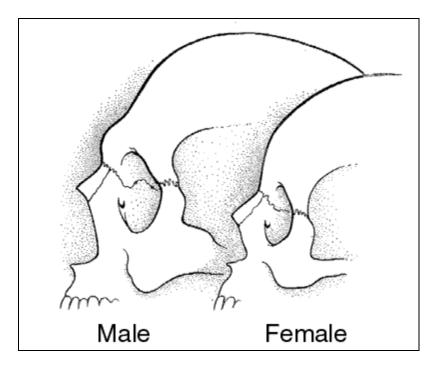
In addition, Hale (1998: 107) reports comments by surgeons who perform sexreassignments that reflect their investment in maintaining the sex binary. For instance, one surgeon explained that "although a number of his ftm patients seeking breast reduction/chest reconstruction tell him that they do not wish to have their nipples or aureole reduced, almost all patients *need* such reductions" (emphasis added). Another reportedly stated that "he will not allow ftm patients on whom he performs phalloplasty to retain their vaginas, because to do so would be to make 'a chick with a dick - and no one would want that!'" In such cases, doctors act as gatekeepers, refusing to blur the sex categories and carefully preserving the social reality of bodily dimorphism.

One transgender respondent also directed me to an article written by Dr. Douglas Ousterhout, a cosmetic surgeon well-known among transgender people for his facial feminization surgeries. In the article, Ousterhout summarizes his view of the important differences between male and female faces as follows:

Females have a more pointed chin and less nasal prominence than males. The forehead is quite different, especially the areas of the brow and the mid forehead. The shape of the skull affects the drape and contour of the skin. Changing the shape of the skull will assist in changing one from distinctly male to female. Modifying the angle of the lower jaw and the prominence of the cheeks can also help improve femininity. (Ousterhout 1994, no page number)

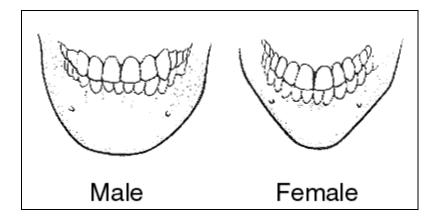
In short, he finds that sex differences permeate the face and skull – and he accordingly performs feminization surgery on virtually every feature, including the forehead, cheek, nose, chin, mandible, Adam's apple, and scalp/hair (as well as breasts and abdomen/trunk). His maximalist position is also evident in the following description of sex differences in foreheads, which one might have otherwise thought was a relatively androgynous facial feature: "As the male forehead is *so different* than the female forehead, this may be one of the most important areas to modify. Males have brow bossing, with a flat area in-between the bossing, while females tend to have a *completely* convex skull in *all* planes" (emphasis added). The article also includes several illustrations which are intended to illustrate the "obvious" differences between the male and female head and face. (See Figures 2 and 3)

FIGURE 2: DR. DOUGLAS OUSTERHOUT'S VIEW OF SEX DIFFERENCES (SKULL)



Source: Ousterhout, 1994 (with permission of the author)

FIGURE 3: DR. DOUGLAS OUSTERHOUT'S VIEW OF SEX DIFFERENCES (JAW)



Source: Ousterhout, 1994 (with permission of the author)

considering the point he is trying to make, and the fact that his business is based on maleto-female transsexuals believing that the facial differences between males and females are significant enough to warrant undergoing extensive, expensive and painful surgery to eliminate them. Interestingly, even when exaggerated, the sex differences he presents are still arguably much smaller than the underlying similarities. That said, the relevant point for my argument in this chapter is simply that medical practitioners treating transsexuals share and reproduce dominant ideas about the obviousness and naturalness of bodily sex differences, which then circulate in the transgender community more broadly.

I think it is fair to assume that these images exaggerate sex differences,

For example, I was very surprised by the number of transgender people who mentioned the forehead and eyebrows as noticeably different between the sexes. Many respondents also mentioned noses, which I had never considered. The following comments are examples of these maximalist descriptions of facial sex differences.

Nose shape is pretty important. [...] A lot of girls have smaller noses that kind of point upwards or are very small at the tip. Guys sometimes have a really big ridge. [...] There's also lips. If you have a masculine face if you have really big lips it's kind of feminizing, typically. Everything, really, if you want to analyze it. Guys have bigger chins. Women tend to have really pointy smaller chins. The jaw line is usually more rounded on a female, especially where the ear is. This is not really noticeable, but guys have an extra bone behind their ear too, that you can feel. (White MTF transsexual, late 20s)

Facial-wise, not so much the shape but the forehead, the nose, the chin sometimes, especially the forehead and the brow. That's the hardest. Because males have a brow ridge that sticks out. Some have a lot, some have a little. But I think that people kind of zero in on that, the brow and the forehead. (White MTF transgender person, 54) A number of respondents specifically told me that they learned about these facial differences directly from plastic surgeons they saw for consultations and/or procedures. In other cases they were presented as "common knowledge," and the respondents seemed surprised I was unaware of them.

Although to this point I have focused my discussion on examples from science, medical practice, and academic research, ideas about the importance and naturalness of sex differences are also institutionalized and communicated through religion and law. For example, Bordo (1998: 29) argues that Judaism promotes the idea that sex is fixed because it is created by God, and Hopkins (1998: 33) explains that Christian ideology similarly includes beliefs about "the divine purpose of sexual difference and scripturally derived gender roles." Consider also the whole realm of law and legal documents, the vast majority of which require one to claim membership in a sex category, but not any other category of bodily difference, communicating that sex is different from other aspects of the body – more important, more self-evident, more fixed, and more natural.

In addition, many sexual identity categories and hegemonic ideas about sexuality are conceptually rooted in – and in turn transmit – beliefs about fixed, natural sex differences. In other words, without the categories "male" and "female," the categories "heterosexual" and "homosexual" do not make sense. We can only think of people as "homosexual" or "heterosexual" because we can think of them as "male" and "female" (Dreger 1998: 127-128). These terms are meaningless unless we can see bodies in two categories. In addition to our sexual identity categories, heteronormativity – dominant assumptions about the naturalness of heterosexuality – contributes to the experience of a

sex differentiated reality. As an illustration, consider the photograph taken from behind of two people with their arms draped over one another's shoulder and waist in Figure 4. This particular image is an interesting test case because it eliminates some of the most common sex attribution cues, for instance hair length (both figures have long hair), body hair (none is visible on either person), and facial hair/make-up (neither is visible from the back). It is still "obvious," however, that the figure on the left is female and the one on the right is male. For one thing, the person on the left is wearing very feminine clothing (a very short sundress and a ribbon in her hair). She is also slightly shorter and smaller than the person on the right. But it is certainly possible that the person on the right is also a female; he or she has no visible body hair, is not particularly large-framed or muscular, has long hair, and is dressed very neutrally in jeans and a white T-shirt. Yet, assuming the context was not marked explicitly as gender-bending or non-heterosexual, we respond not with the sense that he *may* be a male. The perception is that anything else is inconceivable. Heteronormativity plays a powerful role in that judgment, especially when we see two people together and touching. Under heteronormative logic, because the figure on the left is very clearly female, the figure on the right is automatically male.



FIGURE 4: HETERONORMATIVITY IN SEX ATTRIBUTION

Source: Glamour, May 2003

In light of the fact that so many different social forces all simultaneously demand categorization in terms of sex differences, sex is best understood as "overdetermined." Freud first used this term to describe the idea that there were multiple causes of the psychological phenomena that interested him, such as dreams and hysteria, and that no psychological symptom could be cleared up without taking each of these multiple causes into account (see, for instance, Freud [1911] 1950). The concept of "overdetermination" was later adopted by Althusser in a positive sense to describe the fundamental complexity of every meaning and form of identity (Gibson-Graham [1996] 2006: 26-28). The term also refers to the deconstructionist position that any textual "reading" is unconsciously shaped by various assumptions, presuppositions, and institutionalized interpretative strategies. The idea that sex difference is overdetermined raises questions about how best to conceptualize the power dynamics that sustain its salience. In other words, considering its overdetermination, how should we understand who or what maintains the hegemonic view of sex differences? For example, are the biologists and other academics researching sex and gender intentionally distorting their findings or trying to hide something when they disproportionately emphasize sex differences? Or is it more accurate to say that they are socialized into the cognitive and optical norms of the prevailing culture, and thus see as "irrelevant" data that does not demonstrate sex difference? As Lancaster (2003: 76) has put it, following Kuhn and Fleck (among others): "The eye of the scientist, like that of everyone else, is a *trained* eye that has *learned* to see."

In this view, dominant ideas about the significance of sex differences are not strategically promoted and imposed by elites who benefit in some way from the elimination of sex sameness. It is not that the "bad guys" impose the binary, while the "good guys" expose it. On the contrary, the power dynamics securing the prevailing norms regarding sex differences are better described as a form of discursive power (Foucault 1978) in which dominant discourses coordinate and shape our perceptions (and our bodies) through ideas about normality. As such, no one person or group is imposing these ideas, and neither is anyone outside of their reach.

Butler has famously drawn on Foucault's notion of discursive power to illustrate how power functions through gender norms (see Butler 1990; 1993; 2004). In this view, power is not held or exercised by one social group (men, elites, whites, etc.) that defines gender in a manner that serves its interests and then restricts other people to that definition. Instead of repression, discursive power relies on the viewpoint of the objective and the normal as the mechanism of power's enforcement (Foucault 1978). In other words, the "force" of discursive power is to constitute the realm of the thinkable. Rather than policing our behavior through restriction (you can't act that way, you can't look that way), gender constrains our behavior through the circulation of ideas about what is "normal" and "possible."

Foucault's concept of discursive power has much in common with Kuhn's notion of a "paradigm," Fleck's notion of a "thought style," and the broader idea of "sociomental control." As Kuhn ([1962] 1996) explains, a paradigm is a mental model that dictates meaning and perception for its adherents, specifying "not only what sorts of entities the universe does contain, but also, by implication, those that it does not" (p. 7; see also pp. 192-196). In other words, paradigms subconsciously determine what is thinkable and perceptible. Fleck ([1935] 1981: 93) similarly argues that "thought styles" dictate the conceivable as well as the inconceivable, as thought styles literally *prevent* us from seeing certain things. In delineating the realm of the normal, the knowable, and the perceivable, paradigms and thought styles result in what Zerubavel (1997: 51) calls "socio-mental control" (see also, Bruner 1958: 94). Like discursive power, the concept of "socio-mental control" refers to circulating norms about what is "real" and "normal" which function to simplify and coordinate our cognition and perceptions. Butler explicitly highlights the connection between power and self-evident perceptions of the body in the following: "The moment materiality seems like a given, or 'outside' discourse, is the moment power is most effective" (Butler 1993: 34).

Sex Differences and Socio-Mental Control

I initially anticipated that I would find many differences between the blind and transgender respondents – particularly in light of some of the differences between vision and other senses, such as touch and hearing, identified in previous research. For instance, touch requires contact with the object perceived (Berger [1972] 1977: 8-9; Michalko 1998: 82), which for some makes touch less prone to distortion (Michalko 1998: 82). It has also been suggested that sight is a uniquely relational sense. As Berger put it, "We never look at just one thing; we are always looking at the relation between things and ourselves. Our vision is continually active, continually moving [...]" (Berger [1972] 1977: 8-9). Further, hearing may not allow for as precise distinctions as sight (Zerubavel 1991: 71). One of my respondents, for instance, told me that if he was suspended in a hot air balloon to touch the carvings on Mount Rushmore, even if he could tell that they were human faces, he would not be able to tell that one of them was George Washington. Given these potential differences, I expected that touch and hearing might lead to

perceptions of bodies less influenced by the prevailing discourses regarding sex differences. While to some extent this is true (and I spend a lot of time mining some of the interesting differences in Chapter 4), it is also very clear in the narratives of the blind respondents that they "know" sex is obvious and have the expectation of perceiving it unproblematically, and that this knowledge colors the way they perceive bodies through hearing and touch just as it shapes the visual perception of sex by the sighted.

One of the blind respondents described something akin to socio-mental control when she explained that blind people and sighted people categorize bodies in the same way because what we perceive is an effect of social conditioning (which we all share):

But in terms of the way we categorize people and size them up, because I think that's so much social conditioning, most of what you're actually seeing. I really think we pretty much do it the same. People say, you can't be racist because you're blind and you can't see color, but it's really not about the physical characteristics. It's all of the learning that we've attached to those characteristics. Blind people, we're conditioned just like everyone else. We might have to find sort of alternative ways of finding out that information, but we still categorize people and size them up just like everyone else. (White female, 30, began losing sight at age 12)

Another respondent similarly emphasizes that she was taught about sex differences in

fundamentally the same way as her sighted peers:

Well, I don't think I was probably taught differently. A lot of that teaching to children is verbal, rather than physical touch, if you get my drift. And in sex ed classes, again a lot of the teaching is verbal. I'd have raised diagrams of the male and female anatomy compared to the other students' print ones, though. As for now, I think I probably experience the difference the same way as sighted people. (White female, 25, born blind)

The point is that everyone – blind or sighted – is socialized into the prevailing discourses

regarding the unique salience of sex differences.

Accordingly, a sense of deep certainty of the reality and "obviousness" of sex

differences was present in the narratives of virtually all the respondents:

I can always tell. [...] There is a certain something. It's hard to put in to words, but you can generally just tell. It's almost instant as well if that gives you an idea. It's not like I even have to really try all that hard to know, almost instinct. (White male, 33, blind since age 3)

It is very easy to decipher between the sexes 99% of the time. (White female, college age, lost vision at age 15)

Most of the time, it's really incredibly easy to distinguish a male from a female. (White male, 24, mostly blind since birth)

Most of the time it's not conscious, no. Because it's so obvious most of the time. (White female, 30, began losing vision at age 12)

One of the things that jumped out of the data is that my blind respondents care

profoundly about sex differences and take the task of sex attribution very seriously. In

fact, many of my blind respondents stated or implied that they feel uncomfortable and

anxious when sex attribution is difficult. In the example below, a blind respondent begins

by describing the cues he typically uses to determine sex. Then in the middle of the

passage he shifts to describing an instance when someone's sex was not self-evident.

Sometimes I can see if she's got long hair, and most guys don't. Earrings, if large enough, and bright enough, are a possibility. And sometimes, you can tell by the way a woman moves. I can't get that every time, but once in a while. [...] Now, I should admit something. I went to the school for the blind here in Iowa from 9th grade on. There was this kid there, probably 12 or 13 at the time. It took me 3 or 4 months to realize this person was a female. (White male, 28, blind since birth)

The experience of sexual ambiguity is described as something he has to "admit to,"

suggesting that there is something wrong or shameful about not finding sex obvious. In

the next example, perceiving sex ambiguity is portrayed in similarly negative terms as

something that "weighs on you" and is "disconcerting."

There was one [...person] who a lot of us knew and we would get really disconcerted because with his voice we couldn't tell if he was a male or a female,

and his name was 'Jackie' so we couldn't get a cue from the name either, so it was really interesting. [...] It's interesting because it is sort of so important. It kind of weighs on you not knowing. [...] You just keep wanting to know. (White female, 30, began losing sight at age 12)

The implicit logic of these accounts is that perceiving sex as self-evident is correct, whereas perceiving ambiguity is wrong – something that must be confessed.

Although I have deliberately highlighted only one aspect of their narratives here, my blind respondents' take on bodies and sex was actually very complex, sometimes to the point of seeming self-contradictory. In other words, even as they insist that sex is real, obvious, and important to perceive, they also demonstrate that it is social. I fully explore this tension in Chapter 4, where I highlight the challenging ambiguities of sex attribution for blind people, so here I will just note that my respondents' insistence that sex is obvious was not always consistent with their more detailed descriptions of their phenomenal experiences. In a different way, this is also true of some of my transgender respondents, who often claimed that sex is strictly biological even as they demonstrated through their experiences that it is also social. I intentionally chose to interview two groups whose circumstances logically should (and do, to an extent) make them uniquely aware of the non-necessity of the sex categories. Blind and transgender people arguably have access to more non-dichotomous information, and may even have the opportunity to see the world without sex difference to an extent. Yet one of my findings is that this does not always disrupt their investment in sex as a natural binary, highlighting the way that dominant beliefs can perform socio-mental control even on people whose social position predisposes them to "deviant" perceptions.

The two big questions this raises for me are: 1) *how* is the sense of obviousness and necessity created, cognitively and perceptually; and 2) *why* sex differences? Why is this particular way of understanding bodies so strongly emphasized? Answering the "how" question is one of the central aims of this dissertation. I have just given one possible answer, which is that ideas about what is "normal" collectively calibrate our perceptions and perform socio-mental control. I will continue to explore this process empirically in the next two chapters, where one of my key claims is that social expectations about the centrality and obviousness of sex differences create a collective state of cognitive and perceptual blindness when it comes to the many underlying similarities between male and female bodies. As one transsexual put it:

If there was room for some sexual difference, but we could group everyone as human, we would probably get that same thing that we kind of put onto a squirrel, oh they all look alike! But with human beings we perceive all these differences, but if someone from the outside was perceiving they wouldn't see as many differences as we like to say are there. A cottontail rabbit is a cottontail rabbit. It's not that they do not propagate the species, but they do not take that one dimension of difference and highlight it, amplify it, and point a big flashing arrow at it. We learn the cues that we're supposed to display as we grow up, so we expect those cues. (White FTM transsexual, age not provided)

However, the question of *why* this happens, why we are culturally obsessed with determining sex and marking it as the most important and obvious difference among human bodies, deserves some discussion as well.

There are many ways to answer the question of why the male/female distinction is such a heavily emphasized social and cognitive organizing principle. Biologicallyoriented theories typically explain the importance of gender differentiation as a requirement of reproduction; in other words, we need to attend to (and become attracted to) the differences between males and females in order to become aroused and engage in heterosexual intercourse. Taking a very different lens to some of the same ideas, Shulamith Firestone also points to the reproductive relationship as the source of social beliefs about sex differences in *The Dialectic of Sex* (1970), where she argues that it is only through the elimination of women's reproductive function that they will achieve equality with men. Charlotte Perkins Gilman provides yet another take on the relationship between social differences and reproductive differences with the concept of "excessive sex-distinction." Gilman accepts certain necessary sex distinctions appropriate to sexual reproduction, and dismisses others as "excessive sex-distinctions," arguing that it is only these "excessive" distinctions which led to sex inequity (1898: 29-32). In her now classic article "Is Female to Male as Nature Is to Culture?" (1974), Sherry Ortner rejects all biological explanations for the social segregation of the sexes, suggesting that the reason for socially differentiating men from women is to create and maintain women's subordination, and to dominate "nature" (with which women are associated). In The Second Sex, Simone de Beauvoir similarly argues that patriarchy exploits sexual difference to create systems of inequality, and explains that one reason the dichotomized system endures is that women are emotionally attached to their role as the "Other" of men ([1949] 1973: xxiv-xxv). A Marxist explanation, by contrast, would maintain that gender inequality is an epiphenomenon of a more fundamental process of emphasizing the differences between the sexes in service of the capitalist mode of production.

There is also a cognitive answer to the question of why sex differences are so rigidly emphasized, which is mental anxiety about ambiguity.¹⁹ From a cognitive sociological perspective, this anxiety about sex ambiguity is just one instance of a more general mental discomfort with uncertainty and the desire to maintain the mental "purity"

of a rigidly classified universe, which we combat by obsessively creating dichotomies (Zerubavel 1991: 35). In addition to quelling our mental anxieties regarding indeterminacy, the social creation of clear-cut dichotomies is also about avoiding cognitive and perceptual "overload," since "a world with no lines is a chaotic world" (Zerubavel 1991: 119). While socio-mental control protects us from being bombarded by undifferentiated stimuli, as one might expect this is achieved only at a cost. The trade-off is that variety, diversity, and ambiguity are essentially eliminated from our perceptions.

In eliminating complexity from our perceptions, socio-mental control makes certain ways of perceiving bodies "obvious" and others "impossible to imagine." Not only do we collectively perceive sex as "obvious," we also cannot see human bodies as other than male and female, as coming in more or fewer than two categories. Put differently, it is almost impossible for us to be blind to sex (Epstein 1988: 39). A number of gender scholars have commented on this failure of imagination when it comes to (un)sexed bodies. Lorber (1994: 26), for instance, has said that "possible alternatives are virtually unthinkable," while Butler (2004: 176) argues that sex difference functions as a "necessary background to the possibility of thinking, of language, of being a body in the world." As a result, she finds that the "the structuring reality of sexual difference is not one we can wish away or argue against, or even make claims about in any reasonable way" (p. 176). While it is possible to conceptualize non-dualistic ways of thinking about other topics, sex seems to close down our faculties for creative thinking. In Vance's (1989: 17) words: "When we come to sex, our minds grind to a halt: normal distinctions become incomprehensible, and ordinary logic flies out the window." To capture this resistance, Connell (1987: 66) refers to sex as "a limit beyond which thought cannot go"

and Kessler and McKenna (1978: 164) describe the belief in fixed natural binary sex as an "incorrigible proposition."

Berger and Luckmann use the terms "externalization," "objectivation," and "reification" to refer to the process by which human activity and society attain the character of objectivity (Berger and Luckmann [1966] 1967). In the case of seeing sex, not only are sexed bodies obvious to us and unsexed bodies unimaginable, but we do not experience sex difference as socially imposed on us from without, or as created through human action or thought. Rather, we tend to feel that our perceptions of sex are rooted in and verified through our experiences, which we take as objective representations of "Reality." Stated differently, our optical socialization in the cultural context of the overdetermination of sex creates particular perceptions and experiences of sex that in turn serve to validate the reality of sex difference in a kind of closed circuit. Merleau-Ponty ([1945] 1962: 67) has described this circular process as follows: "Our perception ends in objects, and the object once constituted, appears as the reason for all the experiences of it which we have had or could have." Of course, what gets overlooked in this formulation is the intervention of social norms in the act of perception, which, as we have seen, shapes our sensory experiences in socially shared and socially acceptable ways.

The culmination of all of the various social forces simplifying and synchronizing our perceptions of bodies is that sex difference becomes self-evident and taken-forgranted. Sex difference is experienced as irrefutable common sense – everybody knows, it's obvious – and the myriad of social forces relentlessly highlighting and disproportionately emphasizing sex differences drop below the level of social visibility. Despite – or rather because of – this invisibility, from a sociological perspective, that

which is self-evident is what most needs to be called into question. In fact, it is arguably one of the discipline's defining tasks to expose and study the taken-for-granted, even if doing so is always a challenge, as ethnomethodologists and symbolic interactionists have long pointed out. Garfinkel's ([1964] 1967) famous "breaching experiments," for instance, were designed to help problematize the taken-for-granted by serving as "aids to a sluggish imagination." In the same way, learning to see bodies differently requires that we imaginatively distance ourselves from the perceptual norms of the sex difference paradigm – to the extent that this is possible – and treat as problematic that which is normally taken for granted. My argument is that, by clearly identifying the parts of the body that are attended and disattended when we see bodies as male or female, filter analysis can facilitate more awareness of how the social norms regarding sex differences influence our perceptions. I devote the next chapter to empirically identifying some of these norms of attention. I use my interviews to highlight the ways that socio-optical filtration and polarizing display practices both create perceptual bias in the same direction - attention to sex differences – and thus function together to obscure other possible perceptions of bodies. Then in Chapter 4 I explore the complementary norms of disattention by asking the defining question of filter analysis: "What is being filtered out?"

Notes to Chapter 2

¹ The idea that "we are all cyborgs" is the central metaphor of Donna Haraway's cyborg theory, which challenges dualisms like nature/culture and human/machine (1991:150). ² See Gorman 2004.

³ See also Featherstone 1982.

⁶ Examples of recent accounts that highlight biological sex differences and make some form of causal claim about gender based on them include Eugenides' novel *Middlesex* (2002), Colapinto's (2000) biography of David Reimer entitled *As Nature Made Him: The Boy Who Was Raised As a Girl*, Rhoads' *Taking Sex Differences Seriously* (2004), as well as several articles appearing in some of the most prestigious journals in sociology. (See, for example, Lueptow, Garovich-Szabo and Lueptow 2001 and Udry 2000.) See also Baron-Cohen (2003) and Brizendine (2006), both of which have received significant media attention. I would also include the well-known speech by former Harvard University president Lawrence Summers in which he suggested that there are biological roots to gender differences in math (Summers 2005).

⁷ On historical changes in perceptions of sex, specifically in relation to the history of transsexuality, see also: Dreger 1998, and Meyerowitz 2004.

⁸ Other scholars who are critical of the inadequate treatment of the body in scholarship that takes gender as its focus include Connell 1987: 74; Gatens 1996: 4; Moi 1999: 30; Young 2005: 4-12. However, as mentioned earlier, while these scholars are critical of the elision of the body, they tend to limit their discussion to the gendered body and retain sex as a fixed natural binary.

⁹ See Epstein 2002: 49-52; See also Stein and Plummer (1994: 181-182) on queer theory's critique of the sex categories (and binary oppositions more broadly).

¹⁰ See also, Kessler 1998, Dreger 1998, and Preves 2003.

¹¹ Debby Carr, personal communication.

¹² See, for example, Baron-Cohen 2003, Rhoads 2004, and Brizendine 2006.

¹³ See also Fried 1982: 62-63.

¹⁴ See also, Lorber 1994: 26; Lucal 1999: 791; West and Zimmerman 1987: 126.

¹⁵ Kessler and McKenna adopted this term from Garfinkel [1967]1996, p. 157.

¹⁶ See: Garfinkel ([1964] 1967: 146-147; Feinberg 1997, 1999; Finney-Boylan 2003; Howey 2003; Rupp and Taylor 2003.

¹⁷ See Mullaney 1999.

¹⁸ Epstein 1988: 39; Lorber 1994: 39; Cealy Harrison and Hood-Williams 2002: 111; Lancaster 2003: 20; Lorber and Moore 2007: 15.

¹⁹ See Zerubavel 1991: 46-47.

⁴ For other examples of this position, see: Gatens 1996: 8-10; Moi 1999: 112-114; West and Zimmerman 1987: 127; Young 2005: 32-36.

⁵ See: Bordo 1999: 37; Connell 1987: 66; Lorber 1994: 17-18.

CHAPTER 3

ATTENTION AND RELEVANCE: SEEING BODIES AS MALE AND FEMALE

When we visually perceive human bodies through a sex difference filter, their materiality passes through a mental strainer that sifts and sorts the body, marking certain details as "relevant" and important to note, and others as "irrelevant" and "uninformative." The result is a visual perception in which certain bodily details are foregrounded, while others are backgrounded and unseen, or technically seen but not consciously noticed. As we have seen, the filter metaphor is specifically conceived to draw analytic attention to these mental practices of backgrounding and foregrounding. In this chapter and the next, I use this metaphor to focus my analysis as I draw on my interviews to empirically explore attention (here) and disattention (Chapter 4) in seeing sexed bodies. Collectively, then, these two chapters represent the conceptual structure of filter analysis, and are intended to demonstrate what we can learn about the social construction process by thinking about it in terms of perceptual filtration.

One of the key claims of the last chapter was that sexpectations and the sex difference filter include normative rules of relevance for seeing "male" and "female" bodies that direct our attention not to the parts of human bodies that are the largest (or otherwise most empirically prominent) but to the sex differentiated parts. Consider, for instance, that we tend to notice small differences in male and female eyebrows rather than focusing on the much larger similarities. We similarly attend to differences in the

texture of "male" and "female" skin and body hair rather than the empirically greater similarities. On one level this is stating the obvious: Seeing sex requires us to note sex differences. But thinking about the process in terms of filtration and relevance reminds us that, in focusing on sex differentiated details, our vision is constrained by social norms. We are looking for and recognizing certain features that are predefined by our social expectations as relevant. Another way of saying this is that the "choice" of what to note and attend about bodies is actually an effect of social norms, and reflects and reinforces the organization of the social world in terms of sex differences. If we were not compelled by social norms to seek and attend sex differences, we might find different parts of the body relevant. In short, one of the most productive analytical innovations of filter analysis is that it directs us to specify what is marked as "relevant" in any given perception. This does two things: It gives us an opportunity to ask why particular details are marked as important, which highlights the normative character of our attention. It also leads to questions about other possibilities. In other words, analyzing selective attention also encourages thinking about what is *not* attended.

Although certainly not a definitive list, both transgender and blind people offered many ideas in the interviews about what bodily cues are used in sex attribution. For totally different reasons, members of both of these populations are able to shed light on the parts of the body that are most relevant and attended when seeing sex. Many transgender people actively and consciously present themselves as female (if they were determined to be "male" at birth) or male (if originally assigned a "female" sex), making them hyper-aware of cues that non-transgender people may take for granted. This is both because the stakes of successful sex attribution are higher for them, and because they are still in the process of learning the gender norms that other people have also learned, but so long ago that they may feel "natural" and unremarkable (Garfinkel [1964] 1967: 146-147). Blind people, on the other hand, do not participate in visual sex attribution. Their descriptions of the sensory cues that are relevant for them in identifying a person's sex provide an instructive contrast to the visual experience. Despite the interesting differences between blind and sighted sensory experiences of sex attribution, however, I argue that they are governed by a shared cognitive process of filtration.

"Transdar" and Transition: Transgender "Experts" Discuss Sex Cues

One topic that consistently revealed that the transgender respondents are acutely aware of which body parts are relevant sex cues is what several of them referred to as "transdar" (a variant of "gaydar" in which one can pick out who is a transgender person). One respondent defined "transdar" as follows:

We know what to look for, the things you can't change. The size of the hands and wrists. That's really the first thing. And of course if someone still has an Adam's apple, that's a clue, or if someone is covering up an Adam's apple. There isn't too much you can do about the width of your shoulders. (White MTF cross-dresser, 67)

Other respondents offered similar descriptions of "transdar" as a keen understanding of

immutable sex differences. One put it this way:

I can get on the subway, and there are a fair number of transgendered people on subways now. [...] I can tell. I know. [...] Adam's apple, skin roughness, oh, another big one is hands. [...] A lot of men have the thick spatula hands. That's a giveaway. [...] Shoe size, big feet. [...] We know what's harder to disguise. (White MTF cross-dresser, mid-60s)

Based on these and other similar descriptions, my transgender respondents view

themselves as experts on sex cues who are much more aware of them than non-

transgender people.

One particularly rich source of information about the key indicators of sex was

my transgender respondents' descriptions of the first body parts they decided to alter in

order to change sexes socially, or – what typically amounts to the same thing – what they

believe makes them "read" as one sex over the other.

Hair is big. General facial features. And your body motions. Sitting like a female is generally very different from sitting like a guy. Walking too. Because I didn't have huge bone structure. I didn't have the chiseled facial features men sometimes have. (White MTF transsexual, 45)

Chest is now flat, body is more muscular and thick, voice is deeper, facial hair is prominent, haircut is more "male." (FTM transsexual, no age or race provided)

Well number one is definitely the face, including hair, facial structure. Number two is height. I would say number three is, um, I don't know if it's attitude, but presence? How you walk, or your body motions, things like that. (White MTF transsexual, 27)

To provide a sense of the full range of their answers, in Table 1 I summarize all of the body parts the transgender respondents mentioned in response to these questions about what makes them read as one sex or the other, as well as more general questions about what they feel are the relevant cues for assigning someone to "male" or "female" (not just in their specific case, but more broadly). I created this list inductively from the interview transcripts, and recorded the number of respondents mentioning each cue. In cases where they mentioned a particular cue multiple times, I only counted the first instance.

Cue	# of Respondents who Mentioned the Cue
Body motion/deportment/demeanor	31
Head hair	28
Breasts	22
Voice	22
Body shape/silhouette	22
Facial hair	19
Facial features overall	18
Make-up	18
Body hair	14
Clothing	14
Hand size	13
Stature	13
Eyebrows/brow ridge	11
Shoulder size	10
Hip size	9
Legs	9
Adam's apples	8
Shoe style	7
Nose shape	6
Eyes	6
Lips	6
Butt size	5
Foot size	5
Skin texture	5
Chin size	4
Jewelry	4
Arms	3
Jaw line	3
Waist size	2

TABLE 1: TRANSGENDER RESPONDENTS' LIST OF SEX CUES (N=41)

This list of sex cues provides a rare opportunity to break the body down into parts and specifically consider their sex dimorphism (or lack thereof), since sex is normally perceived as a holistic gestalt. In other words, in attributing sex, the perceiver does not typically first assess the sex specificity of individual body parts and then infer the whole. Rather than reacting to individual stimuli, we normally react to a constellation of stimuli (Kohler 1929: 106, 193). However, thinking individually about body parts – deconstructing the usual gestalt by separating out the individual elements – can be instructive, allowing access to some of the variability in the actual stimuli that is obscured through gestalt perception. As Kohler describes it, perceptual objects essentially achieve experiential constancy by learning to disregard some amount of variation in the sensory stimuli themselves (p. 80). By decontextualizing body parts and individually assessing their sex specificity, however, it is possible to recover some of the information that is lost when bodies are seen rapidly and all at once, and to begin to establish a more accurate account of the proportion of the body that is actually sex-dimorphic.

While the transgender respondents seem to agree that certain cues are reliably indicative of sex, particularly demeanor/deportment, which was mentioned by all but 10 of the 41 respondents, and head hair, breasts, voice, and silhouette, all of which were mentioned by over half of the respondents, the list also includes a huge range of less frequently mentioned cues (everything from chin size to nose shape to shoe style). Another thing to note is that approximately a third of the cues listed are indisputably social and have little if anything to do with natural bodily differences between males and females, for example make-up, jewelry, and clothing. Among the remaining cues, many, while biological, are arguably quite variable within the sexes, such as body hair, waist size, skin texture, and nose shape. Very few are actually sex-dimorphic, or even nearly sex-dimorphic.

While Table 1 simply presents the universe of cues the transgender respondents mentioned, my survey questionnaire, which was completed by approximately half of the respondents, can provide more specific insight into the relative salience of different body parts. Participants ranked the importance of 23 body parts, which I provided to them in a list, on a scale from 1 to 10, where higher scores indicate higher relevance for sex attribution. The body parts as well as their mean "relevance scores" are summarized in Table 2 below, and a copy of the survey is available in the appendix.

TABLE 2: SURVEY RESULTS - MEAN "RELEVANCE SCORES" ASSIGNEDTO 23 BODY PARTS BY TRANSGENDER RESPONDENTS (N=19)

Body part	Relevance for seeing sex
	(mean score, out of 10)
Chest	8
Hands	8
Head hair	8
Buttocks	7
Eyebrows	7
Shoulders	7
Cheeks	6
Chin	6
Feet	6
Forehead	6
Lips	6
Neck	6
Abdomen	5
Calves	5
Genitals	5
Lower arms	5
Thighs	5
Upper arms	5
Ankles	4
Ears	4
Knees	4
Elbows	3
Shins	3

Most of the cues ranked highest in the survey – chest (breasts), hands, hair, eyebrows, and other facial features – roughly correspond with those that came up most frequently through coding the interview narratives. (Each appears in the top ten most commonly mentioned parts of the body.) This may suggest somewhat more consistency than the data supports, however. For instance, many of the body parts assigned the highest scores on the survey are the same body parts that were assigned the *lowest* scores. Table 3 below lists all the body parts assigned one of the two lowest scores (by number of respondents). If no respondent assigned the body part one of his or her two lowest scores, it was not included, so this list should capture the *least* relevant body parts for sex attribution. However, the body parts that are bolded and shaded in grey appeared in *both* the top two and the bottom two lists on the survey; in other words, these body parts - all 18 of them – were given one of the two highest scores by one or more respondents, and one of the two lowest scores by at least one other respondent. In short, all but *two* of the body parts receiving the two *lowest* scores also appear on the list of body parts receiving the two *highest* scores, suggesting disagreement about what body parts are the most important sex cues.

TABLE 3: SURVEY RESULTS - COMPARISON OF BODY PARTS ASSIGNED THE LOWEST AND HIGHEST SCORES (N=19)

Body PartNumber of Respondents who gave it one of their two lowest rankingsNumber of Respondents who gave it one of their two highest rankingsEars101Elbows10			
Elbows10Shins9Ankles71Genitals75Knees72Abdomen52Forehead44Lower arms43Upper arms43Feet37Calves25Cheks25Chin15Eyebrows111Hands15Shoulders13	Body Part	Respondents who gave it one of their two <u>lowest</u>	Respondents who gave it one of their two <u>highest</u>
Shins9Ankles71Genitals75Knees72Abdomen52Forehead44Lower arms43Upper arms43Feet37Calves25Cheeks26Chin15Eyebrows111Hands15Shoulders13	Ears	10	1
Ankles71Genitals75Knees72Abdomen52Forehead44Lower arms43Upper arms43Feet37Calves25Cheeks26Chin15Eyebrows111Hands110Neck15Shoulders13	Elbows	10	
Genitals75Knees72Abdomen52Forehead44Lower arms43Upper arms43Feet34Lips37Calves26Cheeks26Chin15Eyebrows111Hands110Neck13Shoulders13	Shins	9	
Knees72Abdomen52Forehead44Lower arms43Upper arms43Feet34Lips37Calves25Cheeks26Chin15Eyebrows111Hands10Neck15Shoulders13	Ankles	7	1
Abdomen52Forehead44Lower arms43Upper arms43Feet34Lips37Calves25Cheeks26Chin15Eyebrows111Hands15Shoulders13	Genitals	7	5
Forehead44Lower arms43Upper arms43Feet34Lips37Calves25Cheeks26Chin15Eyebrows111Hands15Shoulders13	Knees	7	2
Lower arms43Upper arms43Feet34Lips37Calves25Cheeks26Chin15Eyebrows111Hands10Neck15Shoulders13	Abdomen	5	2
Upper arms43Feet34Lips37Calves25Cheeks26Chin15Eyebrows111Hands15Neck15Shoulders13	Forehead	4	4
Feet34Lips37Calves25Cheeks26Chin15Eyebrows111Hands110Neck15Shoulders13	Lower arms	4	3
Lips37Calves25Cheeks26Chin15Eyebrows111Hands110Neck15Shoulders13	Upper arms	4	3
Calves25Cheeks26Chin15Eyebrows111Hands110Neck15Shoulders13	Feet	3	4
Cheeks26Chin15Eyebrows111Hands10Neck15Shoulders13	Lips	3	7
Chin15Eyebrows111Hands110Neck15Shoulders13	Calves	2	5
Eyebrows111Hands110Neck15Shoulders13	Cheeks	2	6
Hands110Neck15Shoulders13	Chin	1	5
Neck15Shoulders13	Eyebrows	1	11
Shoulders 1 3	Hands	1	10
	Neck	1	5
Thighs 1 1	Shoulders	1	3
	Thighs	1	1

Given this variation, it seems important to consider whether there were systematic differences within the sample of transgender people. In other words, do transsexuals and cross-dressers agree on the most important sex cues? For example, are cross-dressers less likely to mention genitals and breasts, since they do not typically change them, and instead focus on clothing and make-up? Are transsexuals more likely to mention the body parts they have physically altered, such as breasts, body hair, or genitals? What about older and younger respondents? Were the younger respondents more likely to challenge the idea that there are obvious differences between the sexes and focus on socially created distinctions? Which respondents were more likely to have a "social constructionist" outlook compared with a more "biological determinist" perspective? Did this influence their beliefs about the most relevant parts of the body for seeing sex?¹

Comparing the five oldest people in the sample (all of whom were 67 years old or older) with the five youngest people (18-36 years old), I did not detect much variation. For example, looking at the top three cues mentioned by each respondent, which in most cases I asked for directly ("What do you think are the top three cues people rely on in attributing sex?"), I observe that, out of the universe of the 29 possible cues mentioned by the transgender respondents collectively, both the oldest and the youngest groups included stature, deportment, voice, hair, silhouette, and facial structure. Beyond this, the older group included breasts and make-up, while the younger group added body hair. The level of variation observed between cross-dressers and transsexuals was similarly minimal. Both groups included deportment, stature, silhouette, facial hair, and head hair

in their top three cues. Some of the minor differences were that the cross-dressers also included make-up and clothing, and the transsexuals mentioned breasts and voice.

Regarding the question of "social constructionist" attitudes within the sample, I categorized only four respondents (out of 41) as having a consistently biological determinist perspective on sex and sex attribution. I based this on my overall impression of their views on the degree to which sex differences are purely biological, fixed, and determinative. This group did not correlate with any one category of respondents: It contained one FTM transsexual, two MTF transsexuals, and one MTF cross-dresser, and they ranged in age from 36 to 67. The respondents I categorized as having a highly constructionist view of sex differences included two of the three intersex people I interviewed, two MTF transsexuals, and one MTF cross-dresser. They fell in a similar age range to the more "biological" group, ranging from 30 to 67. Both groups highlighted stature, deportment, breasts, body hair, and facial hair as among the most important sex cues. The low social construction group also mentioned voice and facial features, while the high construction group mentioned silhouette and make-up. But there were many more similarities than differences in their responses, and I do not find the small differences to have any obvious meaning. In other words, at least in my data, the respondents' outlook in relation to whether sex is purely biological or socially constructed did not seem to strongly influence which cues they felt were most important for sex attribution.

Also interesting to consider is whether the FTM respondents provided substantially different answers from the MTF respondents. My ability to examine this question is very limited, since my sample contained only five FTM respondents, but just preliminarily, I did not observe any notable differences. Like many of the respondents, they offered that stature, deportment, silhouette, facial hair, head hair, breasts, and voice were among the most important cues.

Overall, the transgender people I interviewed consistently expressed the centrality of a certain features in sex attribution, including hair, breasts, stature, and demeanor/deportment; beyond that, however, their view of the most relevant cues varied, and the universe of potentially informative cues they collectively mentioned was quite large. Further, many of the most highly ranked cues, for instance hair style and deportment, are not always sex-dimorphic, nor are they "natural" differences, but reflections of sex-differentiating social norms of behavior and self-presentation.

The variation in my respondents' beliefs about the most important indicators of sex brings to mind Kessler and McKenna's suggestion that the key to understanding sex attribution may not lie in identifying a set of mutually agreed-upon cues. As they put it, the attribution process "cannot be reduced to concrete items that one might list as differentiating women from men" (1978: 6). "Members need to know, for example, when to disregard eyebrows and look for hand size" (p. 158). While I agree with these claims, I believe it is still enlightening – particularly epistemologically – to create a list of relevant sex cues, since the process of sex attribution is normally so taken-for-granted. However, if the process of sex attribution is not a mechanical application of a set of rules, but a more complex process of "mental weighing" (see Mullaney 1999), wherein particular cues "count" only in some circumstances, or "don't count" in combination with certain other cues (for instance, long hair generally signifies femaleness, but if combined with

other cues that signify maleness, such as facial or body hair, it does not "count"), then creating a list of sex cues alone is not enough; we must also try to identify some of the mechanics underlying the more complex socio-mental processes by which we interpret the cues.

As a starting point, if we can use a range of different cues to attribute sex, some of them not at all biological, some of them quite variable within the sexes (and therefore only sometimes informative), this suggests that the *content* of sex attribution – what we actually see when we see sex – may be quite *flexible*. In other words, we can perceive sex in any number of different ways, using many different combinations of cues. What is much less flexible is the compulsion to see sex – however that may be achieved in practice. In light of this, we might think of sex attribution as a cognitive process by which perceivers take in a range of stimuli – perhaps even attending to totally *different* cues in *different* cases – and yet seem always to come to the *same* conclusion: male or female.

One interesting question to consider in light of this flexibility in content is the role of the genitals and sexuality in sex attribution. Kessler and McKenna (1978: 17) made the argument that, while sex attribution is essentially a decision about whether someone has a penis or a vagina, it is almost always made in the absence of information about genitals. Therefore, while genitals are culturally marked as highly relevant for knowing someone's sex, they almost never actually serve as a cue – even in the rare cases they are available for our inspection. My data basically supports this view of genitals as a highly marked but functionally irrelevant sex cue. Genitals and sexual reassignment surgery (SRS) came up very rarely in the interviews, perhaps because the respondents knew I was specifically interested in sex attribution, and they recognize just how irrelevant genitals usually are in everyday perceptions of sex. In fact, two respondents actually assessed the importance of the genitals as <u>zero</u> on a scale of one to ten on my survey, while five additional respondents gave them either a one or a two. There is widespread awareness in the transgender community that not all transsexuals (particularly female-to-male transsexuals, for whom the constructed penis is far less functional) choose to undergo sexual reassignment surgery, and yet they still "pass" unproblematically. Others delay the surgery for a long time – sometimes decades – while they live as their sex of transition. In a similar vein, one respondent commented that if you have a receding hairline, "hair surgery is more important than SRS because it's more important for passing" (White MTF transsexual, 45). Another respondent, an intersex person who has ambiguous genitals (a very small penis/large clitoris), actually said that, even when he is naked, his genitals are not very influential in other people's perceptions of his sex.

I spend several weeks every summer at clothing optional gay camps, where I regularly wander around naked. No one has ever confused me for being female, or even thought that I might be FTM. They always see me as male. After all, every other visual clue about me IS male. (White intersex person, 48)

While practically the genitals may not play a significant role in sex attribution, it is undeniable that they are highly eroticized and culturally marked. As an illustration, consider the absurdity of a strip tease in reverse, where one would start out with everything covered *except* the genitals, and maybe the breasts. Pornography can also illustrate in an exaggerated way that the genitals are highly culturally marked: In an erotic context, we can look at a naked body, but not even notice most of it. The actors' eyebrows, earlobes, and elbows are not entering into our perceptions! Despite this erotic marking, the genitals do not seem to be highly relevant for attributing sex, which raises another related question: What is the nature of the relationship between sexual attraction and sex attribution, if any?

Because "sex" can be such a confusing term – invoking as it does both sexual activity and male/female – in the interviews I explicitly told the respondents that I was studying how they know male from female, and not sexual identity or what attracts them; as a result, there was not extensive discussion of the role of sexuality and attraction in sex attribution. While sexuality was mostly bracketed in the interviews, this is an artificial separation, since sex differences are interconnected with norms of attraction and sexual identity categories in a number of ways. For one thing, as I mentioned in Chapter 2, all sexual identity categories require us to differentiate "male" from "female." In other words, without distinguishing the sexes, the categories "heterosexual" and "homosexual" (and even "bisexual") have no meaning. Further, biologically-oriented theories have proposed that it is necessary to attend to the differences between males and females in order to engage in heterosexual procreative intercourse. In other words, if a heterosexual man cannot see those physical features that "make women women," he cannot get an erection and cannot impregnate his partner. Making a similar point, one respondent expressed the view that we are "naturally" drawn to those body parts that communicate sex difference because of our sexual "instincts": "One of the reasons I think people do this [automatically attribute sex] is an instinctual urge: do I want to have sex with this person or not?" (White MTF cross-dresser, 67). Aside from the problematic way this argument ignores non-heterosexual attraction, it is of course also possible that the eroticizing of sex differentiated body parts is *normative* rather than "natural" or "instinctual," since sexual categories are also social categories, with significant influence

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over our beliefs and experiences. Further, the direction of causality needs to be clarified: Is our attention drawn to sex differences because they are eroticized, or are they eroticized because of the cultural obsession with differentiating male from female? Lynn Chancer (1998: 104-105) makes a similar point in her work on the sociology of attraction when she argues that biological causal stories about attraction are overwhelmingly cultural in their origins, and that the biological and the social are so intertwined in attraction that one can extricate them only with great difficulty.

Underlying this family of ideas are related questions about whether sexuality is best understood as a biological drive or a social script.² In a "drive" view of sexuality, coital procreation in the service of creating families is what motivates sexuality and defines what is eroticized. A biological instinct for reproduction comes first, in other words, and eroticism emerges to reflect it. When defined as a social script, by contrast, sexual practices and eroticism are taken as fundamentally social, created by the prevailing social norms and discourses. Drawing on the same dramaturgical metaphors that sociologists have long used to study social interaction in general, script theory suggests that sexuality can be understood as created in the same way as the rest of social life. "People become sexual in the same way they become everything else. Without much reflection, they pick up directions from their social environment" (Gagnon 1977: 2). In either understanding, eroticism might reflect sexual differences. In the case of a drive view, sex differences are eroticized because they facilitate procreation. In a script view, the eroticization of sex differences would be a reflection of the disproportionate emphasis on sex differences in the culture at large.³

While it is not possible for me to draw any firm conclusions based on my data, since I intentionally steered the respondents away from sexuality for the purpose of clarity, telling comments about eroticism did sneak in from time to time. For instance, the following reflection from an intersex respondent who has ambiguous genitalia, but otherwise appears physically male, highlights in general terms the intersection between physical sex differences and eroticism (although counter to any claims about an "instinct" to be attracted to sex differences, in this case it is an eroticization of sameness):

I know that I feel at home with other gay men and that I'm sexually attracted to people who are more like me than different from me. (White intersex person, 48) The next comment, also from an intersex respondent, again highlights the role of sex differences in eroticism. What is fascinating here, however, is the way that the sexual ambiguity of the respondent's body is actually reframed as eroticized sex difference:

I could look down at my legs and masturbate like I was looking at some woman's legs. (Native American intersex person, age not provided)

Perhaps even more interesting than the question of whether sex differences play some role in eroticism, which both drive and script theory would predict, is the question of what role eroticism plays in sex attribution. In other words, beyond the genitals, are the other body parts the transgender respondents claimed were the most informative sex cues the same body parts that are marked as erotic, or are these two different ways of filtering the body? In order to use my data to look at this question, I first have to establish that the transgender respondents are not sexual outliers, and fundamentally share the prevailing beliefs about the eroticism of different body parts. For the most part, my respondents expressed directly that being transgender and attraction/sexuality are independent of one

another. As one respondent explained it to me,

I'm changing my gender, not my preference for who I sleep with. I was a married heterosexual to a woman. Now I'm a lesbian transsexual, still with a woman. So I didn't change my sexual preference. It's exactly the same ratio of gay to straight in the transgender world as in the heterosexual world. (White MTF transsexual, 48)

However, a small number of respondents did express that they feel there is a particular

eroticism associated with being transgender:

I think you'll find for most cross dressers we each have something that excites us. At least in the beginning, it was sexual. And for me it was my legs, stockings. I love the feel. And my wife always knew, from the time we got married, even though she didn't know I was cross-dressing, that I always loved the feel of her clothing. The blouses, the stockings. (White MTF transgender person, 55)

That said, if we assume that the transgender respondents' experiences basically reflect

dominant erotic patterns - which of course does not preclude some percentage of men

feeling aroused by wearing women's stockings – it is not at all clear, at least from my

data, that the filters for sex attribution and eroticism are the same. The breasts and

buttocks, both of which the respondents identified as important sex attribution cues, could

support that connection, but some of the other commonly mentioned cues do not, for

instance hands, shoulders, and eyebrows, which actually came up more frequently than

some of the more commonly eroticized parts of the body, including lips and legs.

The Sound of Sex

When describing how they determine whether someone is male or female, the blind respondents' near-universal first response was "tone of voice." For example:

Masculine voices are usually a little bit deeper and run at a lower decibel rate. I think [that] is probably a way to describe it. And they are sometimes more gravelly although not always. I tend to think of feminine voices as being a little higher pitched, so the pitch has something to do with it. For me, masculine voices are heavier and feminine voices are lighter. (White male, 38, macular degeneration since birth)

Another common response was that the sound of someone walking – the type of shoe and

the sound of the footfall – can often serve to indicate sex. Further, due to blind people's

expertise in sorting out aural information, they can also use a wide range of surprising (at

least to a sighted person) sound cues to decide if someone is male or female in the

absence of voice, for instance the sound of a skirt on someone's legs, a sneeze or cough,

or even his or her cell phone ring:

Usually I pick up on subtle things like the sound of their shoes to identify their gender. Also, girls are usually more chatty when they enter the room so it's easy to tell. Or, if they cough or sneeze, or laugh I can tell. [...] As I mentioned, I can usually pick up on one's gender by little cues they make with their voice, or other alerting sounds like sounds of a girl's skirt brushing against her leg as she walks, a man's heavy boots hitting the ground, or even their cell phone ring sometimes. (White female, college-age, blind since age 15)

Sometimes by the sound of their walk, like if a woman is wearing high heels, and sometimes men tend to have a heavier walk. (Hispanic female, 23, visually impaired since birth, totally blind since age 16)

I would notice, I suppose, how fast they walked. I might infer from that some approximation of how tall they were. I would be able to tell if they were carrying a plastic bag, or wearing a backpack. The backpack would make noise as it rubbed against their shirt. (White male, 24, blind since birth)

Basically without exception, the blind respondents told me that this highly developed

sense of how sex sounds is the primary way that they perform sex attribution.

However, any discussion of a blind phenomenology of the body would be

incomplete without a discussion of smell; almost all of the respondents also mentioned

that scent cues played some role in sex attribution, as well as in their perceptions of

people's bodies more generally, and in their daily experiences navigating from place to

place. Many mentioned perfume, cologne, scented lotions, and other products as cues that

alert them to whether someone is male or female.

I have noticed that men and women have a different scent to them... a scent that can only be detected if I am very near them. Also, an obvious indication is the cologne or perfume they wear. (White female, college age, blind since age 15)

I could figure it out if the person was wearing perfume or cologne. Not a whole lot of guys wear Tommy Girl. And not too many girls wear English Leather. (White male, 24, blind since birth)

If the subject is wearing cologne or perfume, I could tell between a man and woman. (White male, 28, visually impaired since birth)

Speaking more broadly, other respondents noted that smells are often integral to their

experience of physical spaces like buildings. The following respondent, for instance,

relies heavily on scent cues when walking across her college cafeteria:

Without sight, it is very common for me to depend on my smell to identify objects and even locations. [...] At the university I attend I have to walk through the main eatery on campus several times a day to get to various places. The area is very large and sometimes confusing. Through my sense of smell I can identify my position based on the smells around me. For instance, as soon as I smell coffee I know I am near the stairs and the doors that lead outside because the coffee shop runs parallel to these areas. As the smell of coffee becomes stronger I know I am approaching this area. (White female, college age, blind since age 15)

Other respondents commented that they are sometimes surprised that sighted people do

not experience smells as intensely as they do.

I have a friend and she used to be married to this guy and [...] he just had the foulest B.O. [body odor]. He just smelled like sweat all the time. And – because we were like best friends – I said to her, how can you have sex with him? He's so gross smelling. (White female, 37, blind since birth)

These comments collectively suggest that the blind respondents use and privilege scent in

ways that sighted people do not, both in sex attribution and in daily life more generally.

While I recognize that they do not typically attribute sex through touch in

everyday life - my respondents were all very quick to point out that the stereotype of the

blind person feeling someone's face is not a real reflection of how blind people recognize

another person - it is still interesting to think about what parts of the body are sex-

dimorphic through rarely-foregrounded non-visual modes of perception, and to learn

more generally what blind people believe they can know about bodies through touch. For

example, just as the blind respondents seemed able to find much more useable

information in sound and scent cues, many told me that just by touching a person's arm

or hand, they can determine his or her approximate height and weight.

I can actually tell quite a bit about someone just by walking holding their arm...things like height, sometimes a guesstimate on weight, how muscular, etc. (White female, 25, blind since birth)

I learn how tall they are. Just yesterday I went to the dentist and the dental assistant walked me in and I said to her, my goodness, have you lost some weight? And she had. Because I had taken her arm before and it was very sort of firm and now it was thinner but [...] kind of soft. (Male, 61, blind since birth, race not provided)

Specifically regarding sex attribution, the question is, do blind people have a very different phenomenal experience of the differences between male and female bodies through touch?

To capture some of their tactile experiences of bodily sex differences, as part of the interviews I asked the blind respondents to participate in a thought experiment. I described a hypothetical scenario in which they would be presented with a line of people – a mix of males and females – and asked to decide where to touch the people to most reliably determine their sex. A very small number of respondents stated or implied that they would first touch the genitals – although interestingly most people did not mention them, possibly assuming that they were not "allowed." As a whole, the blind respondents' answers to this question were all over the map: some wanted to begin with facial hair,

some with head hair, some with height, some with "midsections," and some with legs.

One respondent explained his view as follows:

If you said touch whatever you want to, I would touch their cheek because with a man you would immediately feel – even if he had just shaved. Yeah, there are women who have facial hair, but that would be the most accurate I think. (White male, 61, blind since birth)

Now contrast his perception of what the "best" sex cues are with the following responses:

I believe I would have the easiest time if I were able to touch their midsection or their legs. (White female, college-age, blind since age 15)

Height would be a way to start to sort a little, facial features (hair, shape, etc.), throat area (Adam's apple, etc.), and that's just with the face and head. (White male, 33, lost vision between ages 1 and 3)

A few people also mentioned skin texture and chests, one mentioned shoulders, and one mentioned hair texture.

In Table 4 I summarize all of the sex differences the blind respondents mentioned during the interviews. I culled this list from the transcripts, and included both the cues they reported using most often to attribute sex, for instance voice, scent, and footfall/type of shoe, as well as their responses to my hypothetical questions about the sex differences they perceive through touch (even though in practice they rarely rely on touch for sex attribution). In cases where a respondent mentioned the same cue more than once, I only included the first instance.

Sex Difference	Number of Respondents
<u>Hearing</u>	
Voice	21
Speed/weight of footfall when walking	10
Sound of shoe (e.g. high heels)	10
Name	9
Content of conversation (subject, word choice, intonation)	4
Sound of clothing	2
Laugh	2
Cough/sneeze	1
Cell phone ring	1
Bracelets	1
Scent	
Products (e.g. perfume/cologne, shampoo, lotion)	15
"Natural smell"	3
<u>Touch</u>	
Body/facial hair	12
Head hair	10
Hand size	7
Skin texture	6
Arm/elbow size	6
Jewelry	6
Type of clothing	5
Ear size	5
Nose size	5
Height	4
Weight	3
Leg size	2
Muscle mass	2
Neck size/Adam's apple	2
Shoulder size	2
Breasts	2

TABLE 4: SEX DIFFERENCES, BLIND RESPONDENTS (N=27)

Foot size	1
Hip size	1
Buttocks	1
Bra strap	1
Overall body shape	1

Interestingly, because of their heavy reliance on hearing (and, to a lesser degree, smell), the blind respondents do not usually base their decisions about sex on the matter of the body at all. In fact, they reported that – even beyond sex attribution – they are typically not very aware of other people's bodies during everyday interactions. As one respondent put it, "I don't have any perception of them, their body, or what they're like if they're just walking by. I'm mainly concerned with not bumping into them" (Male, 61, blind since birth, race not provided). Another respondent similarly said that:

Actually physical characteristics really don't mean anything to me, because then you get into the questions of what is beautiful, what is ugly, so I really don't pay that much attention to people's physical characteristics. I don't really care. (White male, 50, age of onset of blindness not provided)

A third respondent recounted the following story about his nephew, which further

highlights just how irrelevant the physical body can be for blind people.

I have a nephew, and he's blind, and when he would play hide and go seek, he wouldn't hide, he would be quiet, because to him, as a blind boy, if you're quiet you're not there. (White male, 53, blind since birth)

Returning to the earlier discussion of the relationship between sexual attraction and sex attribution, one implication of the idea that the body's physical appearance is less

relevant for blind people is that eroticism may interact with sex attribution in distinct

ways. Indeed, many of the blind respondents reported that, for them, sexual attraction is

not connected to the body at all. As one respondent put it:

I really like what this person is saying and humor and all that kind of interaction so that for me has to happen first as opposed to just being attracted by what someone has on, or what they look like, or what their shape is, or all the other foolish things (I'm sure they're not foolish) that people in the visual world talk about that don't mean much to me. (White male, 54, blind since infancy) Based on these and other similar comments, it is clear that blind people do not fully share in conventional sighted norms of physical attraction. Further, although sex difference remains an important determination for them, blind people rely on very different cues in deciding on someone's sex. This significantly complicates any discussion of the relationship between sexual attraction and sex attribution.

It also begs the further question of what *is* eroticized for blind people, if not the parts of the body that differentiate males from females, or even the body at all. While I did not specifically ask them about this, a number of blind respondents brought it up themselves. For instance, one man mentioned that a woman's scent is central to attraction for him:

There are certain women whom I have dated or been friends with who have a distinctive odor to them. One of the women I dated, I thought she had the most wonderful natural smell. [...] My wife has a very fragrant, nice smell. And I say to her, I like to be close to you when you haven't had a bath for a while, because you smell so good. You smell feminine. There was also a woman in choir [...] and I said, [...] get away from me. You smell attractive. So women do smell. They do have a fragrance to them. And some are ugly, by the way. (White male, 56, blind since birth)

Another respondent remarked that someone's name can be eroticized:

Sometimes a name can say a lot about a person. Intelligence, personality, background, beauty, and sometimes possibly even sexiness, believe it or not. (White male, 28, blind since birth)

A number of respondents also said that they are attracted to certain voices, although one

respondent commented that an "attractive" voice does not always correlate with physical

attractiveness:

A lot of the things that you "learn" from voices turn out to be wrong. Voice really isn't a good indicator of things like level of attractiveness or anything. (White male, 33, blind since age 3)

It is notable that the three things these respondents described as erotic – scent, name, and voice – are also three of the most commonly mentioned cues for attributing someone's sex. So, once again, there seems to be some relationship between sex cues and eroticism, but it is not totally clear that an "instinct" for reproduction is the reason. It may be that the concept of sex difference is so socially meaningful that whatever cues symbolically or practically indicate sex are rendered erotically salient by extension.

Summarizing what goes into a blind person's phenomenal experience of another

person, one respondent put it this way:

Verbal images. Sound images. Touch images. And that's what you make your composite of, your sound, your touch, and your recollections. I've never seen anything so I wouldn't have any idea [about visual appearance]. (White female, mid-50s, blind since birth)

Picking up on this theme of multi-sensory perception, some respondents questioned what

sighted people miss by relying largely on vision. For instance, several respondents argued

that the sighted can have a distorted view of people because we are "hindered" and

"consumed" with the body and appearances.

Usually my husband is more than happy to just blurt out what someone looks like because he's more consumed with that as a visual person. I think one thing I observe with him is that vision can sometimes be a hindrance in being consumed with what somebody looks like. It's like, "She's fat" – and he's just got a thing about fat people – and I don't necessarily have that. And I can figure it out. If I grab onto somebody's arm, I can tell if they're fat or thin or short or tall. You know, that type of thing. But I'm not consumed with it. It doesn't hinder me. If I like a person, I'm not going to sit there and worry about if they're fat. [...] But it is a hindrance to my husband at times. It gives a lot of people prejudice against them. What are they going to be like because they're fat, they're lazy or whatever. I just don't have that kind of thing going on. (White female, 37, blind since birth)

In other words, sighted people so heavily privilege visual appearance – as one respondent

said, "Our culture is very high on looks and appearance and visual attributes" - that we

miss the wealth of information that is available through the other four senses. Another

respondent critical of occularcentrism, or any form of mono-sensory perception, put it

this way:

I believe that, if you rely on any one sense for all of the information you receive about something, the potential for inaccuracy exists. (White male, 24, vision loss ongoing)

I also interviewed the wife of one of my blind respondents, and one of the things she

most emphasized in her comments was that her husband has made her aware of how

much more sensory information is out there beyond what the sighted typically notice.

Before I only found a scenic location beautiful for what I can see. In February we went to a bed and breakfast and walked around a nearby creek. I loved listening to the sound of the water and animals. We skipped rocks around the pond and enjoyed the sounds that different size rocks made, and [...] the smell was wonderful and refreshing as well.

Another respondent summarized the same set of ideas as follows, bringing the

question of what the sighted miss specifically to the body:

If you got to touch someone or look at them, how is the information you're going to get out of it different? I think that they would be, and I don't have any way to compare, but I know that touching someone I can learn a hell of a lot. (White male, 54, blind since birth)

This respondent went on to argue that the information our sense of touch provides about

other people is important and underutilized. He points out that, even for the sighted, there

is a threshold of intimacy where vision "crosses over" to touch because touch can convey

different and valuable information.

And what's interesting is sort of the cross-over between [vision and touch] [...] We use that [visual display] to attract or appeal or entice, but what is fascinating though is that at some point that switches over or results in touching which becomes more intense or more or sort of a better way or I would argue a more complete [...] a stronger way to express one's self or feelings and yet in the normal discourse of daily events touch is sort of taboo or it's not used. It is I think underutilized in some way. It is undeniable that blind people rely on much different information than the sighted to determine someone's sex, and that their phenomenal experiences of other people's bodies are significantly different even beyond sex attribution. At the same time, blind people take the task of sex attribution seriously and share in many broad social beliefs about the importance and self-evidence of sex differences (and, by extension, their cognitive effects). In the following comments, for instance, two blind respondents highlight the way that they share the same mental "boxes" as sighted people, but fill them using different information.

I think blind people, we're raised with the same social conditioning as everyone else. [...] The difference is that sometimes we have to sort of find clues to put people in their proper boxes, if that makes sense. [...] Blind people, we're conditioned just like everyone else. We might have to find sort of alternative ways of finding out that information but we still categorize people and size them up just like everyone else. (White female, 30, began losing sight at age 12)

I take somebody's arm and tell how big they are and you see that. What's the difference? We both come to the same conclusion. (White male, 56, blind since birth)

In other words, there is a shared set of expectations, but those expectations are met with very different sensory experiences. While admittedly a relatively extreme example, this returns us to the earlier discussion of flexibility in the content of sex attribution. Here again, one might say that despite substantial differences in *content*, the *cognitive process* of sex attribution, organized by the expectation that sex differences are real and important, is common across all modes of perception.

A Sex Cue can be Anything (as Long as it Provides Information about Sex)

Considering my transgender and blind respondents together, I collected a wide array of different answers to the question of what cues are most relevant for sex attribution. As I have been arguing, one way to make sense of the range of different responses is to shift the terrain of the question being asked; rather than a fixed set of mutually agreed-upon cues, what if it is actually this flexibility in content that can help clarify the cognitive dimension of sex attribution? In other words, in terms of the specific sensory content of our perceptions, there seems to be a lot of room for variation; in this view, anything that *can* indicate sex is relevant *if* it indicates sex in that instance. If this is true, sex attribution is not fundamentally about the body, but about efficient categorization. This formulation actually represents a renewal of Kessler and McKenna's insight that social practices, rather than body parts, are the foundation of sex attribution (Kessler and McKenna 1978: 8-9; see also, Gerson 2005: 180).

In addition to highlighting the commonalities between visual and non-visual practices of sex attribution, this formulation can also extend beyond the mode of perception one employs. For instance, different cues are used when categorizing a naked body than a clothed body. Further, different cues must be used depending on the characteristics of the particular body being categorized, i.e. some "female" bodies do not fit stereotypes about the sex-dimorphism of hair, stature, or breasts, so different cues are used. In other words, while there is significant flexibility in content, a common – and quite *in*flexible – socio-cognitive filter applies across these different cases, creating a binary perception no matter what kinds of cues are available. This explains how sex attribution is always simultaneously practical, in flux, and situated (Gerson 2005: 180), and yet totally consistent in its outcome.

Thinking of sex cues as a system of signs that can be studied semiotically can shed more light on this dynamic in which the cues are flexible, while the meaning remains rigid. A sign really consists of two separate things, the signifier and the signified, where the one recalls the other in our minds. The signified is the concept represented, while the signifier is what represents it (Saussure 1986: 66). The meaning of a sign does not come from any necessary relationship between the concept signified and the specific signifiers that represent it, however. Rather, the meaning of a sign is the result of socially shared conventions regarding the relationships between different signifieds: "Concepts are purely differential and defined not by their positive content but negatively by their relations with the other terms of the system. Their most precise characteristic is in being what the others are not" (Saussure 1986: 117). The meaning of a sign, then, is based in the opposition between the signified and other signifieds. By extension, if we analyze our bodily sex cues as a system of signs, the rigidity is in the relationship between the two signifieds – the syntactic separation between the concepts "male" and "female." The signifiers that represent that difference are flexible. The semantic relationship between the various signifiers of maleness and the concept "man" is arbitrary, and is only functional insofar as they maintain their opposition to the signifiers that represent the concept "woman."

One of the implications of this formulation is that sometimes a nose might serve as a cue and sometimes a nose is uninformative. In other words, specific body parts are not necessarily consistently sexed, but exhibit a spectrum of sex ambiguity. Body parts that are indicators of sex in some circumstances are ambiguous in other cases. This ambiguity is theoretically interesting, but does not practically disrupt the sex attribution process (because uninformative attributes are mentally and perceptually filtered out as "irrelevant"). Even if all body parts come in a spectrum of sex dimorphism, in other words, sex attribution still functions efficiently because even normally informative body parts are disregarded when they are uninformative. This is how the system cognitively "deals with" ambiguity without it becoming a threat to the strictly binary categories.

In light of this, consider that even a cue that we have been strongly socialized to believe is very informative of sex is ignored when it is ambiguous. For example, one of the most "reliable" cues, according to both groups of respondents as well as some of the other available evidence, is head hair. Consider the following commentaries on hair from both blind and transgender respondents:

I can have every male sign removed, all my make-up, all my jewelry, and without the hair, the hair is like the final crown. [It will] make or break you. [...] No matter what else I did [without the hair] I wouldn't pass. (White MTF cross-dresser, late 50s)

I had a hair transplant [...] sort of in preparation. [...] Hair is big. (White MTF transsexual, 40s)

My best attribute... that would have to be my hair. (White MTF cross-dresser, 54)

I'm not sure if you've ever noticed, but to me, women's hair just seems to be somewhat of an entirely different feature than a male's hair. I can't explain it, but they're just not the same. (White male, 28, blind since birth)

Sociologist Besty Lucal similarly emphasizes the importance of hairstyle in her account

of her own experiences being perceived (and not) as female:

I again let my hair grow out for several months, although I did not alter other aspects of my appearance. Once my hair was about two and a half inches long (from its original quarter inch), I realized, based on my encounters with strangers, that I had more or less passed back into the category of "woman." Then, when I returned to wearing a flat top, people again responded to me as a man. (Lucal 1999: 789) An advertisement for Thermacare (Figure 5), a disposable heating pad that adheres to the body, similarly demonstrates that hair alone can be a strong enough cue to induce us to interpret a figure as female. The fact that the figures in the ad are otherwise identical is not really noticed because the long hair serves as such a strong signifier of femaleness. The New Yorker cartoon that follows (Figure 6) similarly plays on the way apparently female hair is immediately recognized as a meaningful sex cue to the exclusion of attention to the equally real but ambiguous, uninformative details (in this case, the fact that the doctor is actually a man in a feminine wig).

WEAR IT WHERE IT HURTS.

FIGURE 5: HAIR AS A POWERFUL SEX CUE (THERMACARE AD)

Source: Newsweek, April 14, 2003, Special Advertising Section, p. 10

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FIGURE 6: HAIR AS A POWERFUL SEX CUE (NEW YORKER CARTOON)

With permission of The New Yorker (originally appeared February 2, 2004, p. 39)

Despite the widely held expectation that hair is an important, informative sex cue, in instances when it is ambiguous, we disregard it. Hair is "irrelevant" on a woman when it is very short (or we probe instead for the subtle details that make it a short feminine style while ignoring the ways it is similar to men's short hair). As one respondent put it to me, "You could shave your head and you'd still be a woman, because you have the other attributes" (White MTF cross-dresser, 40-something). Likewise a man with long hair is a man despite his "feminine hair." Even if it is something we have been socialized to understand as a key indicator of sex, when a cue is uninformative in practice it is ignored. What this demonstrates is that, once again, the flexibility of the content of our sex attributions rarely disrupts the categorization process in practice.

Breasts are also widely regarded as a particularly reliable and informative sex cue. Recall, for instance, that "chest" received the highest mean "relevance score" in Table 2, and was the third most often mentioned sex cue behind hair and demeanor/deportment in Table 1. To take another example, in her autobiographical book chronicling her experimental attempt to pass and live as a man, Norah Vincent describes one occasion when she had to "prove" to someone that, despite appearances, she is a biological woman. The cues she emphasizes to make her case are the absence of an Adam's apple and the presence of breasts (Vincent 2006: 51). Yet breasts are only relevant when informative of sex. A female with a totally flat chest is still unproblematically seen as female. Rather than disrupting the sex attribution process, or bringing the sex categories into question, her breasts are ignored as uninformative. For instance, one of the transgender people featured in the documentary *Gendernauts*, Stafford, said that she is never taken as female (her birth sex), even if "I'm just wearing a T-shirt and I have breasts showing." At six feet tall, she explains, her height is taken as a secondary sex characteristic that overwhelms the other "female" cues. One of my transgender respondents shared similar sentiments about breasts. In her words, "People often focus on breasts. To me, they're not so important as emotional and postural elements" (White MTF transsexual, 28). Eyebrows were similarly identified by many of my transgender respondents as an extremely important sex cue, while others said they could be easily disregarded. As one person put it, "My eyebrows are not interfering with my ability to pass."

In short, then, we are primed by our sexpectations to scan bodies in a structured way – looking for cues we expect to be indicative of sex, such as hair. This scanning process is doubly biased in favor of perceiving sex differences: When we scan the body, we disattend all uninformative cues, rather than "counting" them as evidence that sex differences are questionable. At the same time, our expectations direct us to look at likely indicators of sex first (but then we disregard even these likely indicators if they turn out not to indicate sex!). The effective result of this filtration process is that we cognitively create as many sex differences as possible in each instance without taking into account the relative proportion of bodily ambiguity. This perceptual bias in favor of sex differences is even further exaggerated by the cognitive distortions identified in the next section.

Cognitive Distortions in Seeing Sex

I have been arguing that, in perceiving sex, some body parts (those that demonstrate sex difference) are attended, and others that are equally real and empirically available are ignored. However, in addition to the question of *what* we see, it is necessary to consider *how* we see it. Our perceptions of the body are subject to a number of cognitive and perceptual distortions all of which influence our perceptions in the same direction, toward seeing (or sensing) sex differences as more prevalent than they are. The two perceptual distortions I will examine here are "topological perception" and "sex seepage."

As Zerubavel describes it, topological perception "leads us to mentally inflate distances across boundaries" (Zerubavel 1991: 24). Such mental inflation involves highlighting differences across social boundaries and downplaying differences within boundaries. Zerubavel also refers to this process as "lumping" and "splitting." He explains lumping as follows: "As we group items in our mind (that is, categorize the world), we let their similarity outweigh any differences among them" (Zerubavel 1991: 16). Splitting, by contrast, involves heightened attention to information that separates the members of differences that are relevant for categorization. Metric perception, by contrast, which refers to standardized units of measurement such as millimeters or ounces, is *proportionate*. A metric perception of visual similarities and differences is based on precise, measurable, standardized units and is unaffected by things like category membership.

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Both groups of respondents described male and female bodies in markedly topological terms. Note the inflation of sex differences in the following descriptions of bodies, for instance:

Facial-wise, not so much the shape but the forehead, the nose, the chin sometimes, especially the forehead and the brow. That's the hardest. Because males have a brow ridge that sticks out. Some have a lot, some have a little, but I think that people kind of zero in on that, the brow and the forehead. (White MTF cross-dresser, 54)

A man's hands are typically more rough than a female's. The bone structure throughout the hand is generally thicker in the male's hand and more petite in the female's hand. [...] A man usually has thicker hair on their fingers and their nails are wider. (White female, college-age, blind since age 15)

The differences these respondents emphasize – the shape of the brow area, and differences in hand size, skin texture, and hair – are all examples of small differences in a context of greater similarity. While there *may* be subtle differences on average in the male and female brow ridge, the overall shape and size of male and female eyebrows and foreheads is still much more similar than different. The same is true of human hands and body hair – there may be sex differences, but there is certainly more similarity overall that is overlooked in such topological descriptions. There is also, of course, wide variation within each of the sexes. Within-sex variation and between-sex similarity are not defined as relevant by our sexpectations, however, and are mentally and visually deflated, while sex differences are inflated. The same analysis applies to facial hair, stature, and many other supposedly categorical sex differences; small distinctions in a context of much greater similarity are viewed as categorical sex differences because they are differences across a very heavily emphasized social boundary.

The topological inflation of sex differences can also expand into *sex seepage*, in which the entire human body is viewed as sex-dimorphic. The following two comments illustrate this view.

A lot of girls have smaller noses that kind of point upwards or are very small at the tip. Guys sometimes have a really big ridge... There's also lips. Everything, really, if you want to analyze it. Guys have bigger chins. Women tend to have really pointy smaller chins. The jaw line is usually more rounded on a female, especially where the ear is. This is not really noticeable, but guys have an extra bone behind their ear too, that you can feel. (White MTF transsexual, late 20s)

In general women would have different shapes of almost all things than men so you might be able to tell in lots of ways. Some I'd think would be less effective, but I do think you could tell though from just about everything. (White male, 33, blind since age 3)

In these descriptions, sex differences are not limited to the primary and secondary, or even the "tertiary" social behavioral sex characteristics (Birdwhistell 1970: 42), but are perceived over the entire surface of the body.

The effect of topological perception and sex seepage is to exaggerate social norms of relevance and selective perception. In other words, it is not simply that sex differences are "relevant" and thus noticed more; we also see sex differences *in places that are actually ambiguous* by picking out the fine details of sex differences and distorting their degree of salience in relation to sex similarities. Both of these distortions are on the perceiver's end; however, they are also buttressed by "polarizing practices" which disproportionately *display* sex differences. In other words, this exaggeration of sex differences on the part of the perceiver is supported (and maybe even surpassed) by the exaggeration of sex differences enacted by the displayer. Up to this point, I have artificially separated two social processes that are in practice experienced simultaneously and feed off of one another. It is difficult to talk about "relevance" in perception without

discussing the social norms of self-presentation that highlight certain parts of the body as meaningful signs, ready to be perceived – thus producing and reproducing sex differences as relevant in a dialectic of perception and display.

Polarizing Practices

While my primary objective in this chapter is to capture the parts of the body that are cognitively and perceptually marked as relevant in sex attribution, complementary though distinct rituals and norms of self-presentation operate simultaneously with our socio-cognitive filters. Social norms regarding grooming, dress, adornment, comportment and body shape and size facilitate seeing difference.⁴ Through this polarizing process of *filtration preparation*, body parts are ritually prepared to be seen, and to pass unproblematically through the binary sex difference filter. In other words, we manipulate the appearance of body parts that are naturally similar for males and females – body parts that exist in a natural continuum, rather than a dichotomy – to display difference rather than resemblance (Connell 1987: 80).

It has been well-established by gender scholars that the display of difference on and through the body is a pivotal aspect of the social construction of gender. For example, Kessler and McKenna refer to a "dichotomization process" (Kessler and McKenna 1978: 161, 164), West and Zimmerman argue that "doing gender" is essentially the creation of difference (West and Zimmerman 1987: 137), and Connell introduces the concepts of "negation" and "transcendence" which describe the cultural creation of physical gender differences where none exist "naturally" (Connell 1987: 80-81). Through the work of these and other gender scholars, we are reminded that the body is a gendered cultural product; the social construction of gender extends to the body, to the creation of dichotomous differences in behavior and appearance.⁵

Dress, for instance, can function to make sex difference more visible in several different ways. Certain types of clothing, such as plunging necklines, highlight by revealing. Clothing can also highlight sex differences by what it covers: "women's" bathing suits cover the breasts while "men's" do not, drawing attention to – and in the process helping to construct – the "difference" between male and female breasts. Clearly, clothing is culturally variable and it is difficult to generalize about whether dress always functions to emphasize sex. In cultures where it is customary for women (and men) to be topless, for instance, highlighting the distinctness of female breasts by covering (or revealing) would not apply. Further, highlighting sex differences by revealing does not appear to apply in certain Muslim cultures in which women traditionally wear a full body veil (*burga* or *abaya* and *niqab*). However, a variant of emphasizing sex differences by covering could still apply, since veils function as categorical signifiers of sex (Killian 2003: 570; Lindisfarne 2002: 417; Marshall 2005: 110-111; Mernissi 1991: 93). In fact, Marshall quotes one woman who wears a veil as saying: "We don't cover our womanhood. On the contrary, we underline it" (Marshall 2005: 110). Ironically, it is particularly effective to mark sex difference by fully covering the body, because it eliminates all visual ambiguity. To a lesser extent this is also true of modified forms of veiling, which cover only the hair for instance. Wearing a headscarf is an unambiguous

cue indicating femaleness. No matter what the hair that is covered actually looks like (it could even be a crew cut), covering it with a headscarf makes it "female."

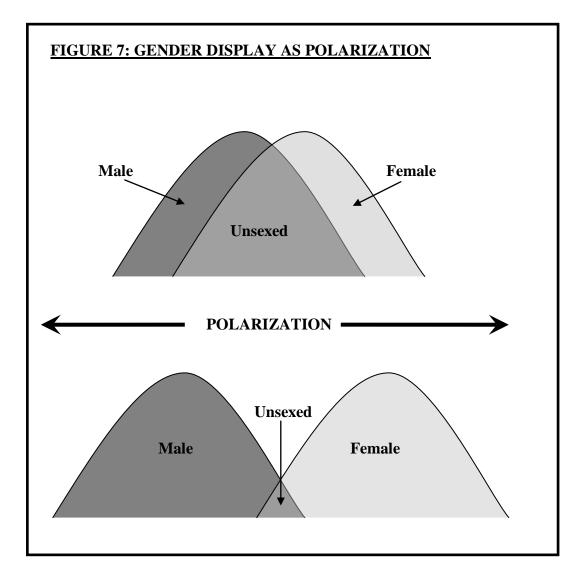
Sex-differentiating display practices also extend beyond clothing to the matter of the body: Male and female eyebrows are not very different naturally, but females frequently pluck and style theirs, creating difference. Similarly, male and female head hair is not naturally different, but social convention dictates that we cut and style it to display difference rather than similarity. Women who have facial hair almost always remove it. Men who have breasts disguise them. Women also tend to moisturize and otherwise take care of their skin in different ways than men, a point made repeatedly by the transgender women I spoke with:

A lot of being feminine is just personal hygiene. It really is. [...] I take care of my skin. [...] I use alpha-hydroxy everything. (White MTF transsexual, 56)

[Part of my transition was] really concentrating on skin care. When I can afford it, getting facials. I still use some of the products, like every morning I use a special serum, like vitamin C kind of stuff, special moisturizers. (White MTF transsexual, 40-something)

The point is that it would be possible, given different social conventions of grooming and dress, for men and women to look much more similar than they do. This point is powerfully illustrated in Lucal's (1999: 785) account of being consistently perceived as a male because she is "a woman who does not do femininity." Similarly illustrative is the caption to a photograph of a group of first-year West Point students in regulation dress with short haircuts which challenges the reader to locate the only woman in the room (Barkalow 1990, as cited in Lorber 1994: 305n19). In each of these cases, when polarization is not performed, sex recognition begins to "break down."

These gendered grooming practices and conventions of dress have no apparent function aside from eliminating the underlying sameness between male and female bodies; their exclusive purpose is polarization (see Figure 7). Polarizing grooming practices reduce the proportion of human commonalities male and female bodies would "naturally" share (represented by the space of overlap between the curves in Figure 7). Polarization very effectively disambiguates male and female bodies because it reduces their similarities while increasing their differences.



Our understanding of such polarizing practices can be further enhanced by understanding them as "rituals of separation" (Van Gennep [1909] 1960: 11; see also, Zerubavel 1991: 18-24), which involve playing up the crossing of socio-mental divides in order to make them seem more "real."⁶ Such rituals can be understood as ways to "substantiate" or "enhance the experience of discontinuity" (Zerubavel 1991:18). Norms of grooming literally materialize the social distinction between males and females by creating more sex differences than exist naturally. While a small number of body parts differentiate the sexes naturally, conventionally groomed (ritually separated) female and male bodies are actually much more different than similar. Through these ritual practices of filtration preparation, the balance shifts and more body parts display difference than similarity. (Compare Tables 5 and 6).

TABLE 5: THE UNGROOMED BODY

SEX-DIMORPHIC ⁷	NON-SEX-DIMORPHIC
Facial hair	Head hair
Adam's apple	Forehead
Breasts	Eyebrows
Body hair	Eyelashes
Overall stature	Eyes
Hips	Nose
Genitals	Lips
	Ears
	Nape
	Collarbone
	Shoulders
	Armpits
	Elbows
	Insides of elbows
	Wrists
	Hands
	Abdomen
	Back
	Buttocks
	Thighs
	Knees
	Backs of knees
	Shins
	Calves
	Ankles
	Feet

TABLE 6: THE GROOMED BODY

SEX-DIMORPHIC	NON-SEX-DIMORPHIC
Facial hair	Forehead
Adam's apple	Nose
Breasts	Elbows
	Insides of elbows
Body hair Overall stature	Abdomen
Hips	Back
Genitals	Dack
Genitais	
Head hair (cut, style)	
Eyebrows (plucking, waxing)	
Eyelashes (make-up)	
Eyes (make-up)	
Lips (waxing, plucking, make-up)	
Ears (jewelry)	
Collarbone (jewelry, neckline of clothing)	
Nape (jewelry, collar/neckline of clothing)	
Shoulders (exercise, cut of clothing)	
Armpits (shaving, waxing)	
Wrists (jewelry)	
Hands (nails)	
Buttocks (cut of clothing, type of underwear,	
shoes, e.g. high heels)	
Thighs (shaving, waxing, cut of clothing)	
Knees (shaving, waxing)	
Backs of knees (shaving, waxing)	
Shins (shaving, waxing)	
Calves (shaving, waxing)	
Ankles (jewelry, shoes)	
Feet (nails, shoes)	

While one can certainly disagree with my categorization of individual body parts as "sex-dimorphic" or "non-sex-dimorphic," or identify parts of the body I have overlooked, the overall proportional shift is undeniable. What is more, even some of the body parts that are still not sex-dimorphic after grooming can be socially enlisted in other ways to mark the difference between males and females. Many social conventions of comportment and style are singularly devoted to reinforcing gender distinctions (Epstein 1988: 229). For instance, in the aggregate, males and females learn to hold or gesture with their fingers and wrists in different ways, even further polarizing the presentation of human bodies (Bartky 1988). My transgender respondents spoke extensively about these additional polarizing behavioral norms for males and females:

A man would never hold a pen like that. (White MTF cross-dresser, 55)

Sitting like a female is generally very different from sitting like a guy. Walking too. (White MTF transsexual, 45)

I think you generally can make a woman because she's more graceful. Because her facial expressions are more emotional and interesting; the smile, the look. Men tend to be more deadpan looking. [...] And also body language. Men tend to be flat. (White MTF cross-dresser, 60s)

In short, through conventions of grooming and other norms of bodily adornment and presentation, virtually all of what is naturally the same about "male" and "female" bodies is eliminated. One respondent described polarizing norms of self-presentation as follows: While "there is definitely a continuum, there are very few people in the very center" (white MTF transsexual, 19). An intersex respondent made the same point from a different perspective, explaining that no social norms of self-presentation exist for those people who are between male and female: "There are no norms for me to adhere to, unlike if you were one or the other. I have found society polarizes women and men" (Native American intersexual, age not provided).

Just as gender is an interactional accomplishment (Kessler and McKenna 1978: 6, 157; West and Zimmerman 1987: 126, 130, 133, 140), seeing sex involves both the "reader" – the person whose visual perception is structured by the sex difference filter – as well as the person perceived, whose presentation of self is expressly designed to allow them to be seen unproblematically through this filter. As Kessler and McKenna put it:

Concrete displays are not informative unless interpreted in light of the rules which the attributor has for deciding what it means to be a female or a male. As members of a socio-cultural group, the displayer and the attributor share a knowledge of the socially constructed signs of gender [...]. (Kessler and McKenna 1978: 157)

The binary sex difference filter thus works to enact sex difference from two directions simultaneously – it organizes perception as well as organizing our norms of grooming, adornment and bodily demeanor. When we shape and style our bodies, we are presenting ourselves to viewers who are well-schooled in the same perceptual and semiotic language.

Stated differently, polarization is filtration preparation. Grooming and other forms of bodily socialization are fundamentally about preparing the body to be seen as sexed. There is a mutually reinforcing dialectical relationship between filtration and polarization that *makes selective attention to sex differences not feel selective*. Polarization increases the salience and obviousness of sex differences (and eliminates ambiguity), and thus assists in easy and unproblematic perceptual filtration and categorization.

While we may experience maleness and femaleness as "obvious" and selfexplanatory, this "obviousness" is the product of a number of different social processes, all of which emphasize and draw attention to the singular distinction of sex differences. Without this overdetermination, sex would not appear to us as the indisputable Reality of bodies. Although I have focused my analysis at the level of interaction, as I discussed in Chapter 2, sex differences are also relentlessly emphasized and institutionalized at much more macroscopic levels, including medicine, academic research, childrearing, and education.

Furthermore, seeing bodies as male or female, or, more broadly, seeing anything as something, requires not seeing the other possibilities. We do not simply see human bodies; we *look for* male and female body parts. The distinction between looking and seeing has been alluded to by a number of other scholars, all of whom emphasize that looking is an "essentially social act" (Levine and Murphy 1958: 40) distinct from "simple observation" (Lancaster 2003: 76). Looking is a social intervention that functions "to mark, cut, extract, foreground, or isolate" whatever is perceived. As such, "the act of looking, and what is sought, affects what nature discloses" (Lancaster 2003: 76). "Nature" does not tell us which details to look for; we construct nature in the shape of our expectations by the act of looking for socially relevant features. Because we expect sex differences, that is the information we seek out, and thus what "nature discloses." Of course, what unavoidably remains *unnoticed* are the evidence and details that would support other perceptions and categorizations – and by extension other social worlds, organized around different rules of relevance. In the next chapter I try to use my interview material to peer around the mental filter that encourages us to see sex difference – and bracket the polarizing practices that make sex differences more empirically salient – to gain access to some of these normally disattended alternate perceptions of bodies.

Notes to Chapter 3

¹ I would have liked to look at whether there were differences by race as well, but my sample did not contain enough racial variation to do so.

² For an overview of this distinction, see Plummer 2002.

³ See also Chancer (1998: 100-104) for a critical discussion of the assumed connection between sexuality and reproduction.

⁴ It is necessary to emphasize the cultural specificity of these statements. It is well known that different cultures have different social norms of physical presentation. Here I base my analysis on hegemonic U.S. norms. Whether the grooming practices in other cultures share the formal features of dominant U.S. practices requires further research.

⁵ See also, Bordo 1999: 26, 39; Connell 1987: 79, 83; Lorber 1994: 18-19, 22-24; West and Zimmerman 1987: 130, 134.

⁶ See also Gerson and Peiss (1985: 319-320) on the creation and maintenance of gender boundaries.

⁷ The use of the terms "sex-dimorphic" and "non-sex-dimorphic" here is for emphasis only, and is undoubtedly an overstatement. The body parts in the left column, even when artificially polarized by grooming, are not fully sex-dimorphic. And in some circumstances, the apparently non-dimorphic body parts in the right column are actually relied on to attribute sex. Thanks are due to Judith Gerson for pointing this out to me.

CHAPTER 4

BLIND TO SAMENESS

If human beings stopped participating in polarizing grooming practices – foregoing all the social norms of self-presentation that eliminate the overlap between male and female bodies – would we still see physical differences between the sexes? One response to this question is that it depends *how* one looks at them. Viewed with an expectation of sex difference, one might still see virtually all parts of the body as either "male" or "female" because of the norms of selective attention and cognitive distortions such as topological perception and sex seepage I explored in Chapter 3. But suppose we did not see them with the expectation of sex difference, but through a different mental filter?

One example of such an alternate filter is the "one-sex model" described by historian Thomas Laqueur (1990). Laqueur's claim is that in the past, specifically prior to the 19th Century, male and female bodies were seen very differently than they are today. They were perceived as more similar than different, and instead of two sexes, there were just two variations of one sex. With a one-sex model as a mental filter, what bodily details were considered relevant? What evidence did people selectively seek out and attend in order to substantiate their belief in sameness? What did they see that we normally do not? This chapter is an exploration of these counterfactual questions about seeing bodies differently. Laqueur himself provides a starting point when he explains that, under the one-sex model, the differences between male and female bodies were often overlooked as irrelevant: "No one was much interested in looking for evidence of two distinct sexes, [...] anatomical and concrete physiological differences between men and women, until such differences became politically important" (Laqueur 1990: 10).

Today, by contrast, primed to perceive sex differences, we are much more likely to ignore sex similarities. As an illustration, consider Michael Messner's (2002) observations about a group of parents watching two soccer teams, one all boys and one all girls:

In the entire subsequent season of weekly games and practices, I never once saw adults point to a moment in which boy and girl soccer players were doing the *same* thing and exclaim to each other, "Look at them! They are so *similar*!" [...] In fact, it was not so easy for adults actually to "see" the empirical reality of sex similarity in everyday observations of soccer throughout the season. (Messner 2002: 67-68)

Reversing this normative structure of attention, my goal in this chapter is to bring some of these backgrounded sex similarities into the foreground. Drawing on interviews with blind people that reveal rarely acknowledged non-visual perceptions of bodies, and interviews with transgender people that mine their expert knowledge about those parts of the body that are *not* relevant for appearing as one sex or the other, I map out some of the normally disattended similarities between male and female bodies.

This is not to say that the blind and transgender people I interviewed do not share at all in the hegemonic cognitive practice of backgrounding sex similarities. As I mentioned in Chapter 2, it is evident in their narratives that they "know" sex is obvious and have the expectation of perceiving it unproblematically. More specifically pertinent to the subject of this chapter – disattention – they also view as "irrelevant" any similarities between male and female bodies that do enter their awareness. This was illustrated in the interviews in two ways. Both groups of respondents often seemed dumbfounded by my questions about what body parts are the same between males and females. They also expressed surprise (and sometimes even laughed) when I specifically asked about those body parts that are culturally marked as "irrelevant." For example, when I asked one transsexual if there are any body parts that are the same between men and women, she said: "Now that's a tough one. I don't know. I've never thought about that. I can't answer that" (white MTF transsexual, 71). When I probed further, asking her whether she thought the back might be one part that is often similar, she said she "never gave it much thought." Other transgender respondents seemed surprised and/or confused when I mentioned particular parts of the body (for instance knees and shins), suggesting that their unconscious expectations about what is "relevant" had been breached. Consider the following comments in this light:

Knees...hmm. I never thought about that one. [...] I mean, it's not something I notice. I notice like hands and things like that, the big stuff. [...] Ankles... Is it important? Not really. [...] Shins... never thought about that one. [...] I haven't even heard anybody talk about that. (White MTF transsexual, 48)

Some of the blind respondents had similar reactions when I mentioned noses and ears.

Hmm... Nose and ears?? I guess I never considered either of these places. (White female, college age, blind since age 15)

That's a funny question! Ears. Ears I couldn't tell. If I were able to get the nose without touching anything else or without factoring the height into it I couldn't tell. [...] I never thought about that! But I'm certainly gonna be thinking about it the next time! [...] That would be funny! (White female, mid-50s, blind since birth)

The tone here is totally different from their assertions of the obviousness of sex

differences, which were typically expressed with certainty and confidence. My

interpretation is that these reactions of dumbfounding and surprise reflect the fact that

they have unconsciously assigned certain parts of the body the status of "irrelevant."

Further, these reactions often correlated with discussions of more androgynous body parts

(note that in the above examples it was noses, ears, backs, shins, and elbows), specifically moments when these "irrelevant" parts of the body were explicitly – and unexpectedly – brought to the fore of their attention.

The concept of a cognitive "blind spot" can be helpful here. Like scotoma, the physiological blind spots – such as the one created where the optic nerve attaches to the retina – that prevent us from perceiving some portion of the visual field, cognitive blind spots *mentally* block certain technically available information from entering our awareness. Daniel Goleman argues that these blind spots, which he refers to as "lacunas," typically emerge to help us cognitively avoid anxiety-evoking information. "Lacunas are the black holes of the mind, diverting information from select bits of subjective reality – specifically, certain anxiety-evoking information" (Goleman 1985: 107). Ironically, here the anxiety-evoking parts of the body are not at all what one might expect. Normally when one imagines the "forbidden zones" of the body that evoke anxiety, what comes to mind are the sexualized parts, such as the breasts and genitals, which we even explicitly tell children are "private" or "bad touch" areas. In the context of sex attribution, however, the areas of the body that produce sufficient anxiety to manifest as blind spots are not the genitals, but things like elbows, ears and knees. Obviously, elbows and knees are not inherently threatening (nor are the breasts and genitals, for that matter). Rather, we are socialized to have these blind spots about bodies, to banish certain body parts to the background of our attention, because they threaten social norms. In this case, the threat is to the self-evidence of sex differences.

For the most part, both groups of respondents shared this normative blindness to sex similarities. However, at the same time, the underlying presumption that similarities between male and female bodies do not exist, or are not particularly salient in comparison with sex differences, often seemed to be maintained in great tension with other features of their knowledge and experiences. By mining for these moments of dissonance, I was actually able to find out quite a bit about the similarities between male and female bodies, despite the fact that they are normatively marked as irrelevant and filtered out of our perceptions. I devote the next two sections to highlighting these unique features of transgender and blind experiences of male and female bodies.

Transgender Narratives and the Filter of Transition

Many transgender people view the human body in light of the possibility of transitioning between sexes, a perspective that makes them unusually aware of the underlying similarities between male and female bodies. In other words, the transition process changes their disposition to notice and believe certain things about human bodies. As a result, sex similarities become prominent in ways that they do not for people not invested in the possibility of transitioning. Integrating this observation into the conceptual language of relevance and filters, one might say that the defining experience of and investment in transition forms an additional, subcultural socio-mental filter that gets layered on top of the hegemonic filter of sex difference. Due to this unique perspective, certain physical features take on new prominence and centrality ("relevance"), moving from the background into the foreground of their perceptions. For example, one idea that came up repeatedly in the interviews is the notion that

it is easy to pass. In the following comment one respondent reflects on the ease of her

transition, explaining it in terms of her pre-existing androgynous - even feminine -

physical characteristics.

I have nice cheekbones, so that makes it easier to pass. [...] Because I have naturally those features, those things aren't major things for me: facial features, body shape, and chest size. (White MTF transsexual, mid-40s)

Below another respondent similarly reflects on the surprising lack of difficulty she faced

in her own transition. Implicit in her comment is the belief that gendered "mannerisms"

very effectively differentiate otherwise very similar body parts.

I guess this is obvious to you, but the relative ease to cross over, at least in cursory appearance. If you work on your voice and your mannerisms, who's gonna know? It's a lot about how you display it. I could go like this [gestures with her arm], or I could go like this, and it looks fairly different. (White MTF transsexual, early 40s)

For many of my transgender respondents, then, the knowledge that it is not only possible

but at times quite easy to shift in appearance from one sex to the other is associated with

a heightened awareness of physical similarities.

In fact, the experience of transition so powerfully influenced some of my

respondents' beliefs about human bodies that they are no longer able to

unproblematically perceive sex differences. For example, one respondent explained that,

for people who have transitioned:

You can make people out to be either sex. You might see a woman and say, okay, if you cut your hair short, and with men, a little different, a little different. You just have a sense of how fluid it is, and it's hard to go back to the sense that most people have where those are very strictly defined things. (White MTF transsexual, 29)

This description beautifully captures the point that transition can enact a cognitive and

visual shift that heightens attention to the ambiguities of sex.

Another idea that came up repeatedly in the interviews is that "male" and "female" features are co-present in all bodies but exist in a "balance," "proportion," or "percentage." Sex differences always exist amid sex similarities, in other words, but "on balance" bodies tend to lean one way or the other.

Things don't have to be completely perfect, but you need to have a certain percentage of things looking like a female side in order to be passable. (White MTF transsexual, late 20s)

In the same vein, one respondent mentioned that an impediment to passing she has observed in some transgender people is having surgery to make all of their features uniformly sexed; the result is that, in failing to acknowledge the natural androgyny of human bodies, they become not passable in a new way. As she put it, "Sometimes it's better to leave a few things that are neither/nor" (white MTF transsexual, early 30s). According to this respondent, not only is ambiguity always present, it is actually part of what makes people look typically sexed. One might say that sex sameness is the necessary background of our perceptions of sex difference.

If, as these comments suggest, sex differences and similarities co-exist in all human bodies, they also serve as an important reminder that transitioning is not about changing bodies per se. Transitioning is about changing body *parts*, which means that a lot of the body remains the same pre- and post-transition and does not interfere with sex attribution. Much of the body, in other words, does not need to be changed because it is "irrelevant" for sex attribution. For example, when one respondent reflected on the parts of his body that remain the same, he concluded that the transition was really limited to a small number of body parts: I had a bilateral mastectomy, so there's that. I've been on hormone therapy 3.5 months; my voice has dropped quite a bit. There really aren't any other significant changes other than a bit more hair on my chin. (White FTM transsexual, 37)

Another respondent, a transsexual who recently transitioned, described the unchanged

parts of her body as follows:

I'd say that one's skeletal structure is unaffected by all this as to mass and shape. I can't think of what else to say [...] ears, eyes, nose, toes. (White MTF transsexual, 67)

One of Jason Cromwell's interview respondents similarly highlights just how small sex differences are in relation to the rest of the body when he describes himself as "a man in every way [except] the lower part of his body" (Cromwell 1999: 104). Cromwell further emphasizes the very small proportion of the body that is relevant when considering sexual reassignment surgery:

Many are dissatisfied with having breasts and menstruating, neither of which accounts for the entire body [...]. The majority of FTMs and transmen do not have gender dysphoria [...]. What many experience, however, is body-part dysphoria, which focuses on elements such as breasts and menstruation that are quintessentially female. (Cromwell 1999: 105)

Again, the point is that transgender people do not change bodies – just some combination of breasts/chest and/or genitals. Some MTF transsexuals also have plastic surgery to alter their facial features to make them more feminine. In extreme cases, they might have liposuction, or have a rib removed, or other similar procedures to reshape their silhouette. Nevertheless, in all cases they retain the vast majority of their bones, muscles, organs, and much more, but those parts that they do change somehow extend in our minds to the whole body. One implication of this insight is that the "wrong body" discourse, so prominent in the medical "standards of care" for transsexuals, among its other problems,¹ also helps reinforce the "sex seepage" I discussed in Chapter 3, which is the distorted

idea that the whole body is sexed. Rather, as my transgender respondents suggest, much of the body is naturally androgynous and therefore irrelevant for sex attribution.

A small subset of my transgender respondents, those who identify as intersex, spoke particularly eloquently on sex similarities and bodily ambiguity. In this case, their heightened awareness of sex sameness is not due to experiencing sex transition, but to living outside of the binary sex categories. One respondent, who is perceived as male but regards that as a distorted view, spoke at length about the fallacy of the hegemonic view of sex differences, framing his beliefs explicitly in terms of his experience of living outside of the sex categories.

I think that being intersex and intergender has made me more resistant to this brainwashing. [...] I don't buy all this "men are from mars, women are from venus" nonsense. I am from planet earth. People forget that sex itself is a social construct. There are not just two sexes. Most people are a mixture, not just one or the other. But we all try to fit into this norm for male or female, and it mutilates many people, not just intersex people. I have thought about this a lot, and frankly, I have come to the conclusion that most people are making a big deal out of very minimal differences in many cases. [...] We learn a lot of it. I am convinced of this. It is mostly culturally imposed on us. Not totally, but I would bet that cave people would not make such a big deal out of all this supposed difference because it simply is not there. (White intersex person who appears socially as male, age unknown)

Another respondent similarly emphasized that his experiences living as an intersex

person provided the perspective that drew his attention to sex sameness.

Intersexuality has made me more aware of perceptions of male and female. My gift as a two spirit helps me to see through this veil of control. I would say the bodies are more similar. Some men's bodies actually look better than women's if you look at them form-wise. Some women have a man's buttocks and vice-versa, for one example. (Native American intersex person, age not provided)

He further illustrates his belief in the prevalence of physical sex similarities by reflecting

on the androgyny of his own body.

I am perceived as a male because of the way I dress in public I suppose. My legs and arms look female. Sometimes it messes men up because they get excited by my legs when I wear shorts. I don't have any body hair, and the little patches that are there I get rid of to make myself look neat and clean.

In short, whether through the experience of transitioning between the sex categories or the experience of having an intersex body, the transgender people I spoke with have developed a heightened awareness of the physical similarities among human bodies. Given their unique points of view, the question is, which specific body parts did these respondents define as androgynous? In the above comments alone, at least eight different body parts were mentioned as potential sites of androgyny: arms, legs, buttocks, chest, cheekbones, facial features, body shape, and body hair. As I already mentioned, many examples of neutral or unsexed body parts emerged in discussions of my respondents' experiences with passing, specifically their reflections on what makes it easier and more difficult to read successfully as their sex of transition. The following examples provide a sense of the range of body parts they identified:

I didn't begin with a female 'figure'. My body shape and general appearance was pretty androgynous before hormones so it didn't take much to 'jump' the boundary between female and male. [...] I never had a narrow waist and wider hips as do most females. My face is kind of round, even a little squared. I closely resemble my dad and the other men in his family. I also never picked up mannerisms that are stereotypically female ([w]alk, hand movements, etc.). I've always been a bit more broad in the shoulders and had hands just a little larger than 'normal' for women. Men's pants always fit me better than women's, due to the cut and my shape. (White FTM transsexual, 37)

A lot of males are very thin framed and feminine to begin with and if they are inclined to become a woman it's easier for them to pass. (White MTF cross-dresser, 50s)

There are plenty of biologically born women who have big shoulders or are like 6 foot 5, but they have other things where it kind of cancels out. (White MTF transsexual, late 20s)

My face is, thank god, pretty feminine as it is. I mean I haven't had any facial surgery. (White MTF transsexual, 50)

There are a lot of women who have lower voices. Right now, I'm in the middle. (White MTF cross-dresser, 45)

Taken together, these five respondents mentioned the following body parts as potential locations of sex ambiguity: face, voice, shoulders, height, legs, frame size, body shape, waist, hips, and hands.

In Figure 8, I represent all of the body parts designated by the transgender

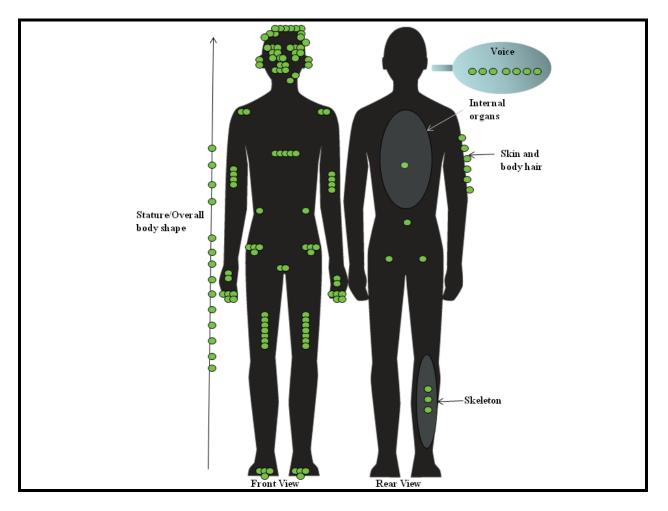
respondents as similar between the sexes as a map of the body. I gathered this

information inductively from the transcripts, looking both for body parts they explicitly

stated were androgynous and those they implied are often the same or very similar. Each

of the small green ovals represents one respondent.

FIGURE 8: MAP OF SEX SIMILARITIES MENTIONED IN INTERVIEWS, TRANSGENDER RESPONDENTS



Each green oval represents one respondent.

In total, the transgender respondents identified twenty-nine different parts of the body that are potentially the same or very similar between males and females. There is a heavy concentration of responses around the head (with over twice as many mentions as any other area of the body), but other than that, the responses are approximately evenly distributed over the surface of the body. The one exception is the back, which, while very large in surface area, and also arguably a fairly sexually neutral part of the body, was conspicuously absent from their comments on ambiguity. My sense is that this is simply an oversight, rather than an indication of my respondents' judgment that the back is a particularly sex-dimorphic part of the body. In large part I base this on the fact that the back was never mentioned by my respondents as an important sex cue in Chapter 3.

Additional information about what the transgender respondents view as the most ambiguous body parts is available in my survey data. Of the 23 body parts participants ranked from least to most likely to indicate someone's sex on a scale of one to ten, those body parts receiving the *lowest* mean score – indicating that they are not usually informative of sex – were elbows and shins, followed by ankles, ears, and knees (see Table 7).

Body part	Relevance for seeing sex (mean score, out of 10)
Elbows	3
Shins	3
Ankles	4
Ears	4
Knees	4
Abdomen	5
Calves	5
Genitals	5
Lower arms	5
Thighs	5
Upper arms	5
Cheeks	6
Chin	6
Feet	6
Forehead	6
Lips	6
Neck	6
Buttocks	7
Eyebrows	7
Shoulders	7
Chest	8
Hands	8
Head hair	8

TABLE 7: "IRRELEVANCE" (SURVEY DATA, N=19)

These results differ somewhat from those generated through coding the interview narratives. Whereas there the sex similarities were most dense around the head, here the legs are the most common site of ambiguity, with shins, ankles, and knees emerging as particularly indistinct. By contrast, the ears are the only body part on the head that received a low relevance score. One factor that may help explain this variation is that being presented with a list of body parts is a very different experience than spontaneously mentioning parts of the body, and it provided the opportunity for participants to reflect on the salience of body parts they might not have otherwise thought to mention. On the one hand, then, providing a list might have helped disrupt taken-for-granted assumptions about what body parts are relevant and worth mentioning. On the other hand, providing a list also limits my ability to capture my respondents' operative beliefs about what body parts are so irrelevant they would never mention them. Even if we consider only the twenty-nine different sites of sex similarity I inductively assembled from their narratives, however, this represents a significant proportion of the body.

If there are many parts of the body that are similar between the sexes (in at least some instances), this also further underscores my observation in Chapter 3 that body parts are not *either* sexed *or* unsexed in all instances, but come in a spectrum of dimorphism. A nose or an arm, in other words, could be totally ambiguous in terms of sex or it could err in one direction or the other. For instance, head hair and chest were two of the most frequently mentioned sites of ambiguity; as I discussed in Chapter 3, however, they are also the two most frequently mentioned sex cues, indicating that they must be very informative of sex, at least some of the time. The explanation I offered there is that the content of our perceptions of sex – the actual body parts we use as cues – is flexible, and depends on the mode of perception being used, and the particular body being perceived, among other things. What I am highlighting here is the flip side of this flexibility, which is that one reason the content of sex attribution is so variable is that even the most informative sex cues are ambiguous some of the time. The implication is that the notion of "self-evident" sex differences is more a feature of our minds than a feature of bodies. It is not something we read off of naturally dichotomous bodies, in other words, but something that precedes and structures our experience of the material world. In the next section, I further illustrate this point by mining my blind respondents' narratives for examples of the non-dichotomous body.

A Blind Phenomenology of Sexed Bodies

When a person – blind or sighted – encounters someone for the first time and wants to classify him or her, there is a lot of sensory information potentially available – the sound of the voice, the texture of the hair or skin, the smell of the breath, etc. Theoretically, one could differentiate people through any of these sensory experiences. However, part of the socialization of sighted people involves learning to privilege visual information – especially in relation to classifying human bodies in face-to-face interaction.² By privileging vision, however, one might say the sighted miss a lot.

For one thing, some of the available evidence suggests that blind people have a different temporal frame for sex attribution – one that is slower, and more deliberate –

which may allow for the perception of more complexity and ambiguity. According to Hans Jonas, such temporal differences are one of the defining distinctions between sight and the other senses. He argues that sight "is preeminently the sense of simultaneity, capable of surveying a wide visual field at one moment: Intrinsically less temporal than other senses such as hearing or touch, it thus tends to elevate static Being over dynamic Becoming, fixed essences over ephemeral appearances" (Jonas 1982, as cited in Jay 1993, 24). Elizabeth Grosz similarly contrasts the successiveness of the impressions gained through touch and hearing with the synchronic nature of vision (Grosz 1994: 98).

Several of my blind respondents also emphasized these temporal distinctions,

describing their impressions of bodies as being built diachronically, as they encounter

different features and characteristics individually over time.

The one thing I can tell you is when you as a sighted person, when you met me for the first time, all of the idea of what I look like would hit you at once – my height, my approximate weight, my hair, [...] you'd have all those impressions at once, whether you wanted them or not. Whereas for a blind person, if I met you, I would gain impressions of you one thing at a time. If I held your arm that would be one thing, but I would have no idea what your hair was like, or if you were wearing earrings. Whereas if you saw me, all those things would be impressed upon you at once. For a blind person they come piece by piece. So I might, for example, know how tall a woman is but have no idea what her hair was like. And that wouldn't happen to you. Unless you just plain forgot what his hair was like or her hair was like. So it's a piece by piece physical impression that you gain as opposed to the entire impact when you see someone for the first second and it all hits you at once. (White male, 61, macular degeneration since birth)

Another respondent used the parable of the blind men and the elephant to illustrate this

idea of a "piece by piece physical impression":

I assume you know the story of the 3 blind men who try describing an elephant. One man is feeling the trunk, another man is feeling a leg, another man is feeling the tail. The difference between folks like me and most folks is that I describe the tail without asserting that it is an elephant. After I've groped everything in the area [...] *eventually* I figure out what is elephant and what is circus floor. (White male, 54, legally blind since birth, completely blind since age 34, emphasis added)

As opposed to a holistic gestalt that impresses itself upon them rapidly and all at once, these respondents describe blind people as building their impressions much more slowly and deliberately. As a third respondent put it: "You can glance and see. I can't glance and see; I have to listen" (White male, 53, blind since birth). What all of these accounts suggest is that the sensory "maps" of bodies created diachronically through touch and hearing incorporate more complexity and ambiguity, and do not lend themselves as easily to fast, sharp, static identification.

It is also important to remember that blind people do not have access to many of the most common visual sex cues, including facial expressions, gestures, and body language.

I'd like to understand body language better but I can't because there's so much of it that you have to see to know. (White female, mid-50s, blind since birth)

I think I'm aware that they [gestures] exist. [...] I told somebody one time, I want you to teach me how to give dirty looks. I want you to teach me how to look impatient. [...] But I'm not very successful with that. But I know that gestures exist. [...] I know gestures exist but I probably don't know what they are, and unless I'm touching the person I probably wouldn't know that they made them. (White male, 61, blind since birth)

Body language such as shaking your head yes and no. Stuff like this, such as waving at someone if you're riding in a car – do you show them the front of your hand or the back of your hand? What is that gesture? Those are things that you [blind people] learn because you're taught, not because you see other people doing them. (White male, 38, macular degeneration beginning at birth)

This lack of access to facial expressions and body language strongly influences my

respondents' experiences of social interaction in general, as these three comments

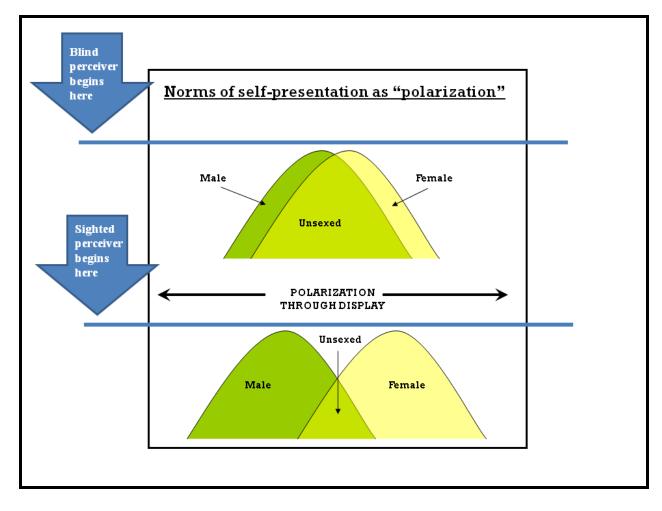
suggest. It has a uniquely powerful effect on their perceptions of sex differences,

however, since so many of the social norms governing the display of sex and gender are

visual, and these norms are automatically bracketed for blind people. As one respondent

put it, "In the blind community it is not uncommon for there to be a lack of awareness of gendered ways of presenting one's self" (White female, 30, began losing vision at age 12). Another way to capture this point is to return to my earlier discussion (in Chapter 3) of the dialectic between perception and display in sex attribution. In a blind phenomenology of bodies, the initial process of polarization through display is absent, and as a result, sex similarities are much more prominent. In other words, the sighted perceiver's process of sex attribution usually begins with a pre-polarized body, whereas the blind perceiver's does not (see Figure 9).

FIGURE 9: SEX ATTRIBUTION WITHOUT POLARIZATION (BLIND PERCEIVER)



A number of my blind respondents even described sex attribution as a "draining"

process, a puzzle that is occasionally a struggle to piece together, indicating that for them

bodies can be sufficiently indistinct in terms of sex to be difficult to interpret and

categorize.

It [sex] is not always obvious. Sometimes it works, sometimes it doesn't, but I gather information through whatever I hear – their movements, the way they walk, and, of course, the way they speak; and from what I smell. Yeah, it's pretty draining a lot of time. (White male, 33, blind since age 3)

Another respondent explained that it can take some time – and sometimes even someone

else's help – for her to sort out whether a person is male or female:

It took a little while to sort it out, or I just shut up and listened and waited for someone else to clue me in. [...] You can be confused. (White female, mid-50s, blind since birth)

Others framed the same point in terms of intention, explaining that they often have to

intentionally try to figure out someone's sex, particularly if they are not interacting with

the person directly. For example, one respondent offered this description of how she

figures out the sex of those around her in her college classes:

I try to introduce myself to those around me. I pay close attention to names when the professor is taking role. I like to have an idea of who is in the class. I tend to listen to what is going on when we are doing group work. What I mean by listening is, pay attention to how the people around me interact or who is sitting near me by their voices. (White female, 23, blind since age 16)

The implication is that, without this conscious, concerted effort, she would not know the

sex of many of her classmates.

In fact, in the interviews, almost all of the respondents stated or implied that they

are not aware of the sex of most of the people they encounter in the course of their daily

lives – unless they explicitly interact with them, or they intentionally try to figure it out.

I usually don't try to tell their gender unless I am trying to decide out of self interest, e.g. feeling social, wanting to make a friend, or feeling flirty. [...] It

really depends on the situation. [...] Out of the hundreds of people I pass throughout the day I probably know the gender of ten of them. (White female, college age, blind since age 15)

If I'm not interacting with someone, I don't really think about his or her gender; it simply doesn't cross my mind. I don't think "Hmm. I wonder if that's a man or a woman," or anything like that. I might pick up on something, high-heeled shoes and perfume, for example, and realize that a woman is walking by, but that's about it. (White female, 19, blind since birth)

Well, I don't try to figure it out. Every once in a while you'll notice by the scent of somebody's cologne. Or, like I said, footfall, type of shoes. So sometimes I can tell a woman is walking by me because she's wearing high heels, but it has to stick out. It's got to obviously stick out or intrude into my consciousness [...]. (White female, mid-50s, blind since birth)

What these examples collectively illustrate is that the everyday experiences of blind people are significantly less punctuated by sex difference; while sighted people almost always immediately identify every human being we encounter as either male or female (regardless of whether we interact with the person, even just passing on the street), blind people are usually aware of sex only when they are directly interacting with a person, or when they intentionally try to figure it out. As a result, one defining characteristic of a blind phenomenology of bodies is that most people in the world are androgynous. By implication, if sighted people did not so strongly privilege vision, sex differences would become a significantly less prominent feature of their phenomenal experience as well, largely restricted to interaction.

Before discussing the specific parts of the body that emerged in the interviews as sexually ambiguous for my blind respondents, however, I must once again reiterate that, almost universally, they initially said sex is usually obvious to them. My respondents' commitment to the obviousness of sex differences – despite the fact that these beliefs do not always match up seamlessly with their everyday experiences of sex attribution –

illustrates the way that dominant cultural messages about sex can perform "socio-mental

control."³ This socio-mental control is not absolute or seamless, however, and in the

moments of dissonance between their beliefs and experiences, a more complex portrait of

human bodies was sometimes available. For instance, I observed an interesting tension in

their narratives between this stated obviousness and the ambiguity they revealed when I

probed for the details of their phenomenal experiences of particular body parts. Consider

the following exchange with one respondent. (The italicized portions are my questions.)

If I lined up a bunch of men and women and you were told that you could touch them to identify their sex, do you think that you could do that easily?

There is no question in my mind that I would get 9999 [sic] right out of a thousand. [...] I believe that typically every part of the body would alert me to a person's gender.

Ok. I'm going to ask you to specifically consider several parts of the body and tell me how you think they would tell you whether someone is male or female. The first one is hands.

A man's hands are <u>typically</u> more rough than a female's. The bone structure throughout the hand is <u>generally</u> thicker in the male's hand and more petite in the female's hand. When examining a hand to determine gender I would most likely pay close attention to the fingers. A man <u>usually</u> has thicker hair on their fingers and their nails are wider.

Okay, thanks. What about elbows?

As a blind person I hold onto a person's elbow very often, as this is how they guide me. A man's elbow, again, are [sic] typically broader and hairier. <u>I have found this particular area to be more difficult when determining gender especially when the person is heavier.</u>

(White female, college age, blind since age 15, emphasis added)

While this respondent begins with a very strong claim of certainty and obviousness - "no

question," "999 out of a thousand," "every part" - she shifts into more qualified language

as soon as she considers specific body parts. This progression from an initial default

assumption of obviousness to a later description that includes significant qualification

and uncertainty was present in a great many of the interviews. One more example of this

slide from obviousness to ambiguity:

In general women would have different shapes of almost all things than men so you might be able to tell in lots of ways but some I'd think would be less effective. I do think you could tell though from just about everything. Even something as simple as skin texture might be a hint.

What about noses?

Noses, hmmm. I don't have a large cross section of noses to work with but noses <u>might</u> give clues by women's noses being finer and smaller than male noses but yeah <u>I think it would be hard to tell</u>. Same with ears. Again smaller <u>might</u> be an indicator but <u>not with 100% accuracy on its own</u>.

(White male, 33, blind since age 3, emphasis added)

Given that most of my respondents strongly believe that sex differences are

obvious, I often had to read their narratives "against the grain" to access the evidence of

sex similarities that is present. In many cases, including those I just discussed, this

evidence is located in the hedges and qualifications in their descriptions. Two additional

examples are provided below. Both comments are *intended* to communicate that it is easy

to attribute sex, but they can also be read for the references to ambiguity they contain.

I am <u>usually</u> aware if someone is a male or a female. It is <u>sometimes</u> unclear at first, e.g. <u>some women I know have low voices</u>, but once I find out the person's name and hear him or her talk for a bit, things are <u>no longer</u> unclear. I have never been in a situation where I gave up on figuring out whether someone was male or female. (White female, 19, blind since birth, emphasis added)

[...Y]ou <u>might</u> be able to tell <u>something</u> about somebody's shoulders, <u>although</u> there are a number of women who are athletic who've got really strong, broad <u>shoulders</u>. So I'm thinking that's a <u>possibility</u>, but I wouldn't rely on that as much, but I would say face, yes, <u>if</u> you can tell if someone shaves or not, then, you know, the <u>majority</u> of men have facial hair and the vast <u>majority</u> of women don't. (White male, 54, blind since infancy, emphasis added)

I treated these kinds of qualifying comments as evidence of sex similarity along with the

blind respondents' more explicit characterizations of certain parts of the body as

androgynous.

In total, the blind people I interviewed directly identified approximately fifteen

different parts of the body that are similar between males and females at least some of the

time, including hair, feet, noses, backs, and shoulders. The following examples roughly

capture the range of tones and body parts in these direct statements of similarity.

A person's back or legs or feet, particularly if they're covered by clothing, but even without it, I think those would be the most difficult parts of the body to make assumptions about. (White female, 24, blind since birth)

The shin I wouldn't have a clue. (White male, 38, macular degeneration beginning at birth)

I am not sure I could correctly decipher between males and females based on the feel of their ears. In fact, I don't believe I could with a high success rate. I may have an easier time with the nose, although I still believe it may be difficult. (White female, college age, blind since age 15)

Most women shave their legs. Most guys don't. But it could be fairly difficult to tell one set of hairy legs from another. I mean, if you got the average woman and a skinny guy side by side, neither of whom had shaved their legs, it would be difficult to distinguish which was a female. (White male, 24, mostly blind since birth)

At times these were responses to a question about a specific body part, such as "Do you

think that you could tell the difference between a male and female arm?" Other times, the

respondent spontaneously mentioned that a particular body parts can be androgynous

following more general questions about assigning people to sex categories, such as

"What body parts would be most/least useful to you in determining someone's sex?" In

Table 8, I summarize the body parts that emerged (both via direct characterization and

indirectly) as potentially similar or ambiguous in the narratives of the blind respondents.

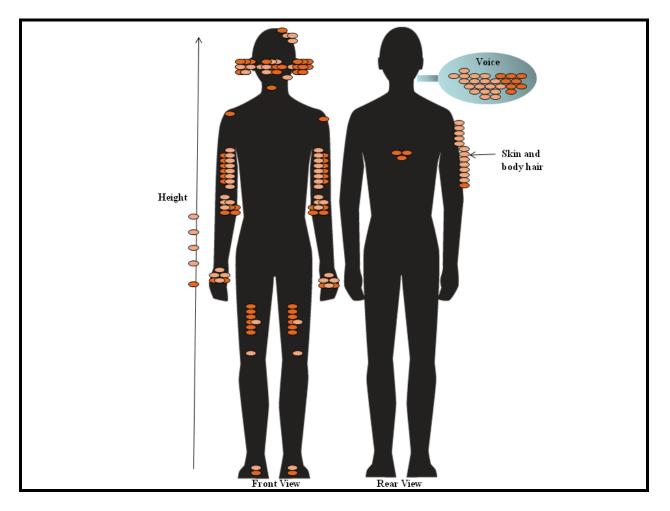
The number of respondents mentioning each body part is indicated in parentheses.

Direct Characterization	Hedging/ Qualification
Ear (9)	Voice (18)
Nose (9)	Body hair (10)
Voice (8)	Arm (8)
Arm (6)	Elbow (4)
Leg/shin (6)	Hands (4)
Elbow (5)	Height (4)
Back (3)	Ear (3)
Hands (2)	Face (3)
Body hair (1)	Hair (3)
Face (1)	Nose (2)
Feet (1)	Skin (2)
Hair (1)	Facial Hair (1)
Height (1)	Feet (1)
Neck (1)	Knee (1)
Shoulder (1)	Legs (1)
	Neck (1)
	Shoulder (1)

TABLE 8: AMBIGUOUS BODY PARTS, BLIND RESPONDENTS (N=27)

The first thing to note is that there is a significant amount of overlap between the two columns. Of the ten most frequently mentioned body parts, eight appear on both lists. In other words, overall, when my respondents indirectly implied that particular body parts were potentially androgynous, these were the same body parts they identified directly. This correspondence indicates some kind of basic agreement about which body parts are unclear in terms of sex, even when the ambiguity is only acknowledged implicitly. This point is also visually illustrated in Figure 10, which is a body map of the sex similarities mentioned by my blind respondents. As in Figure 8, each small oval represents one respondent. The darker orange represents those body parts they directly identified as sex similarities, while the lighter orange depicts those they indicated indirectly. For the most part, the two colors tend to track together.

FIGURE 10: MAP OF SEX SIMILARITIES MENTIONED IN INTERVIEWS, BLIND RESPONDENTS



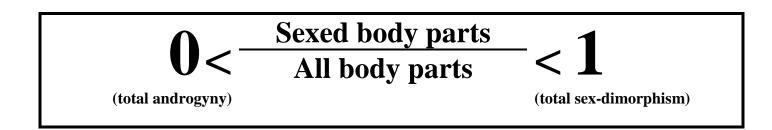
Each oval represents one respondent.

Although the numbers cannot be compared directly, since I interviewed forty-one transgender people versus twenty-seven blind people, here again the largest concentration of responses is around the head (34 mentions), which is the same pattern as the map I constructed based on the transgender respondents' narratives. However, there is a significant difference in the number of blind respondents that mentioned the arms, hands, and shoulders (31, as opposed to 13 mentions by the transgender respondents). One reason blind people might have this area of the body in the forefront of their minds is that they often hold a sighted person's arm, elbow, or shoulder when walking with them as a sighted guide. For this reason, they are probably more attuned to the spectrum of different arms and elbows than the average sighted person. Further, it is striking that so many of the blind respondents mentioned the voice as a site of androgyny, considering that it is their primary sex cue. Fewer transgender respondents found the voice to be naturally similar, and a fair number expressed great concern over their voice as an impediment to passing, although several people did express to me that it is possible to pass with a voice that is "somewhere in the middle." I suspect they would be comforted by the blind people's comments, which suggest that the voice may actually be more ambiguous than they think, even in non-transgender people. Finally, with the exception of the torso, which was mentioned only a handful of times, it is notable that - as was the case with the transgender respondents - a considerable proportion of the surface area of the human body is represented here. As a result, one is left with the impression that a great deal of the body can be phenomenally similar for blind people.

Sex Differences in Proportion

Both the blind and transgender respondents identified many parts of the human body that are neither obviously male nor obviously female in all cases. In fact, based on their comments, very little of the body is always sex-dimorphic. Considering all of my interview data together, then, the conclusion I am able draw – in its very *weakest* formulation – is that only a *portion* of the human body is universally different between males and females. For this reason, it may make sense to think of sex differences and similarities as a *proportion* – a numerical comparison that can be approximated (even measured). In this view, the numerator represents the number of sexed body parts and the denominator represents all body parts (see Figure 11). As with all fractions, proportions always have a value between zero (no sex differences) and one (indicating that the body is 100 percent sex differentiated). In other words, bodies always fall somewhere between total androgyny and total sex difference. While my qualitative data does not allow me to precisely characterize the proportion of the body that can reasonably be called sex differentiated, based on my respondents' collective descriptions, much of the body is potentially ambiguous. Despite this significant commonality, we are socialized to be blind to sex sameness, focusing instead on the proportionately smaller sex differences.

FIGURE 11: SEX DIFFERENCE AS A PROPORTION



Thinking of sex differences and similarities as a mathematical proportion, as I am advocating, is a "metric" measurement. As I discussed in Chapter 3, metric descriptions of sex can be thought of as a true average, which takes into account all similarities and differences, whereas the more common topological view is a weighted average, in which certain characteristics, those socially defined as "relevant," are mentally "weighted" and exert a disproportionately large influence.

Far from denying the existence of sex differences, then, I am suggesting that we *also* pay careful attention to sex similarities and weight them proportionately in our perceptions of human bodies. Such proportionate perception requires that we acknowledge both similarity and difference. Just as we can learn to see both the vase and the faces in Edgar Rubin's famous optical illusion, we can learn to see *both* similarities and differences in human bodies. Cultivating such a "flexible minded" view of the body entails recognizing that there are multiple ways of carving up the body, all of which are, in the end, figments of our minds (Zerubavel 1991: 122). The data I collected on blind and transgender people's impressions of the similarities between male and female bodies promotes this mental flexibility because it illustrates the possibility of alternate perceptions, thus calling into question both the assumed veracity of visual perception and the dominant belief that sex differences are obvious and undeniable.

More broadly, this standpoint is consistent with Lancaster's (2003) definition of "a properly thought out constructionism":

A properly thought-out constructionism does not deny the materiality of physical things, but it does suggest that the objectivity of objects is itself the product of a certain highly subjective work. It argues that what marks the object as such is countless unmarked decisions about what to foreground and what to background, what to hold constant and what to see as variable. (p. 72)

In other words, one can conceptualize the social construction of the body as a process of selectively emphasizing and mentally weighing different bodily similarities and differences. This version of social constructionism does not dispute the existence of some biological differences, but highlights the cultural work that amplifies them, focusing on the question of *how* – by what kinds of cognitive and sensory *practices* – the social construction of the sexed body is accomplished. My general argument is that dominant conceptions of sex are constructed largely in the visual realm through selective attention to sex differences and backgrounding of similarities. Here I have focused on identifying some of these sex similarities that are normally relegated to the background when we perceive bodies as male or female.

In the opening paragraphs of this chapter, I raised the question of whether different expectations would lead us to note different features of bodies. In other words, if we "knew" male and female bodies were very much the same, what would we see that we currently do not? Here I began the process of answering this question by mining my interview data for evidence of normally backgrounded sex similarities. In the next chapter I extend the same question beyond my respondents' narratives. Drawing on a number of different forms of data, including body measurements, anatomy textbooks, and drawing manuals, I argue that evidence of physical similarities between males and females is "out there" in the background of cultural discourses and cultural artifacts, ready to be seen – if only we were looking for it.

Notes to Chapter 4

¹ For one critique, see Cromwell 1999: 105. ² In other contexts, for instance on the telephone, other sensory information is more relevant than visual information. Whenever visual information is available to us,

however, we heavily emphasize and privilege it. ³ Zerubavel 1997: 51; see also, Bruner 1958: 94.

CHAPTER 5

SEEKING SAMENESS

It is a useful exercise to imagine how a human body might look if we were blind to all the details of the body's appearance that represent sex difference and what we noticed – what "stood out" to us perceptually – was everything that demonstrates the sameness among human bodies. We would register people's foreheads, eyes, elbows and ears, for instance, but ignore their hair, breasts, and make-up. When I try to imagine how a person would appear to me through such a filter, I picture a series of line drawings in which noses, elbows, ears, eyes and foreheads are rendered in great detail, whereas head hair is uniform and schematic, and breasts are de-emphasized if they are included at all.

Unlike the transgender people I interviewed, most of us will never perceive human bodies through the mental filters created by the experiences of transition or intersexuality, which challenge presumptions about how much of the body is truly sexdimorphic. Nor will sighted people ever fully escape the rapid, automatic visual sorting process that reduces the complexity of bodies. However, we may be able to imaginatively adopt a different mental filter, one that foregrounds the underlying commonalities between male and female bodies and filters out sex differences. This requires disregarding socially created sex differences and deliberately noting ambiguity while downplaying distinctions. The question I examine in this chapter is, if we adopted such a filter, what might we see? I recognize, however, that it is never possible to fully bracket cultural norms and see the "naked" body, nor is sex sameness the singular empirically correct view. It is more accurate to say that, in adopting the filter of sex sameness, I am describing the human form as perceived through a different paradigm, one defined by an expectation of a biological continuum between males and females rather than two separate categories. Perceiving the body through this filter – while it cannot provide a portrait of the "Real" body, only *a different* body – does effectively demonstrate that sex difference is not the only possibility for seeing bodies, and that there are alternatives to the currently hegemonic perceptual paradigm.

Sex without Polarization

When we bracket social norms of perception and self-presentation – intentionally ignoring the cultural practices that normally help disambiguate male and female bodies – what we begin to see is what Eviatar Zerubavel calls "visually undifferentiated flux": "[A] boundless, unbroken world with no lines" (Zerubavel 1991: 80). In this chapter, my goal is to present just such a "fuzzy-minded" (Zerubavel 1991: 115) portrait of the human body, highlighting only the androgyny of human bodies and bracketing those distinctions between male and female bodies that normally seem so "obvious."

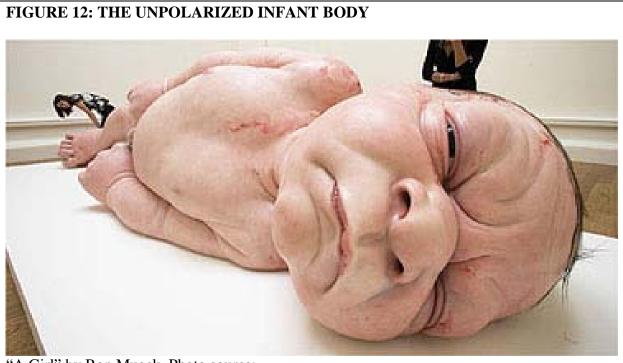
As a preliminary foray into a fuzzy-minded view of bodies, consider examples where polarizing practices are absent, or mostly absent – for instance animals, infants, and the interior of the body. In such cases, the necessary bracketing is done for us, making it much easier to see sex sameness. In certain species of animals, sex is an obvious and highly marked physical characteristic. For instance, male pheasants possess bright plumage, where females are usually a drab brown. More often than not, however, the sex of animals is *not* obvious to us at first glance, and we have to ask. One possibly extreme example is the spotted hyena, a species in which the male and female are indistinguishable right down to their genitals (Meadows 1995). Similarly, Cynthia Eller recounts a telling story about determining a python's sex, which is a hidden, minute difference in an otherwise identical physical appearance.

Karen walked her way hand-over-hand down several feet of python until she came to a little flap on the snake's underside, about three-quarters down its length. "See this?" she said. "Boy snakes have two little hooks on either side called 'spurs.' This snake doesn't have them, so she's a girl." (Eller 2003: 1-2)

A more commonplace example is dogs. One intersex respondent reminded me how normal it is for us to ask about a dog's sex – something that is almost never asked about another human. In his words, "When we look at other species this [sex ambiguity] is even more obvious. People will ask what sex your dog is, for example, but we make a big to do over it."

For the most part, the existence of extensive physical similarities between males and females is both perceptually obvious and cognitively unproblematic when seeing animals. The logical question this raises is whether the sex similarities among humans are actually equally pronounced. Without polarization, would the sex of human bodies be equally visually ambiguous as the sex of dogs? There is no reason to think not. In fact, according to Ray Birdwhistell, compared with other species, humans are "weakly dimorphic" (Birdwhistell 1970: 39-46). And on the very rare occasion that we do see human bodies absent polarization, for instance infants, sex differences are certainly much less visually prominent.

I recently observed a group of children looking at a large-scale sculpture of a naked newborn baby by Ron Mueck (see Figure 12), a sculptor whose work is known for being incredibly life-like, except in its exaggerated scale (this particular sculpture is just over 16 feet long). The first question the children asked about the sculpture, which is anticipated by Mueck's title ("A Girl"), was whether it is a boy or a girl. The newborn is naked, its genitals clearly visible, but there are no "artificial" indicators of sex, such as clothing, hats, or bows. The children continued discussing this question amongst themselves for several minutes, but were never able to decide on the sex. One possible explanation is that the children were simply not yet fully socialized in *how* to see sex. These perceptual skills are still developing in young children, who do not always see sex "properly," for instance perceiving males with long hair as females. However, without contextual cues, it can be quite difficult for anyone to determine the sex of babies and very young children. In fact, while the children at the museum were discussing the infant's sex, I was standing facing the back of the sculpture, and I had to walk around to the other side to inspect the genitals before I could come up with an answer myself. So much of the infant's body is androgynous – the back, butt, head, neck, torso, arms, legs, feet, etc. – that I could not determine the baby's sex *except* by looking at the genitals.



"A Girl" by Ron Mueck. Photo source: <u>http://arts.guardian.co.uk/features/story/0,,1840033,00.html</u> Reprinted with the permission of the photographer, Murdo McLeod.

The degree of sex dimorphism of an infant is much more similar to other animals than to socialized, groomed, polarized adult humans. Not to mention, it is only in very unique circumstances – consider again the image of a group of West Point students in regulation dress with short haircuts mentioned in Chapter 3 (see Barkalow 1990) – that adult males and females present themselves unpolarized. Nonetheless, one way to bracket a lot of what gets socially added to heighten the differences between males and females is to compare bodies metrically. As I explained in Chapter 3, I use the term "metric" in contrast to "topological" (Zerubavel 1991: 21-32) to indicate a precise dimension that can be measured in a standardized unit. In advocating a more metric assessment, my point is that similarity and difference can be measured and compared, which would allow us to avoid lapsing into a "topological" (socially distorted) view of sex difference. A recent study called *SizeUSA*, which includes more than 240 anthropometric measurements of 10,000 men and women, provides an opportunity to compare bodies metrically. I focus here on the chest, waist and hip measurements reported by Zernike (2004). What this data reveals – if one is looking for it – is that the mean measurements for men and women of comparable age and race categories are virtually identical. (See Table 9)

For instance, in the Black 18-25 category, men measured 41 inches in the chest, 34 inches in the waist, and 41 inches in the hips, whereas women measured 40 inches in the chest (called "bust," for no reason save to emphasize sex difference), 33 inches in the waist and 43 inches in the hips. In the 36-45 age category, the chest and waist measurements for Black men and women were exactly the same (43 inch chest and 37 inch waist). Looking at all race and age categories, the largest difference is four inches, which occurs in four out of 36 reported measurements. A three inch difference, the next

largest, also occurs just four times. On the other hand, there are eight measurements overall that are *exactly* the same for men and women. There are also eight additional measures that differ by only one inch. So out of 36 total measurements reported in the *Times*, 16 were within one inch for men and women. It is also worth pointing out that in the context of a 31-inch measurement (which is the smallest measurement reported), even the largest difference, four inches, represents just a 13% percent sex difference (meaning that the measurements are 87% the same). Using the most frequent difference, two inches, which occurred in 11 measurements, the percentage of commonality is increased to 94%.

	Chest	Bust	Hips	Hips	Waist	Waist
	(men)	(women)	(men)	(women)	(men)	(women)
Black						
18 to 25	41	40	41	43	34	33
36 to 45	43	43	42	46	37	37
56 to 65	43	44	42	46	39	39
White						
18 to 25	41	38	41	41	35	32
36 to 45	44	41	42	43	38	34
56 to 65	44	42	42	44	40	36
Hispanic						
18 to 25	41	39	40	41	35	33
36 to 45	44	43	42	44	38	36
56 to 65	44	44	44	44	38	38
Other						
18 to 25	41	38	40	40	34	31
36 to 45	42	41	41	43	37	35
56 to 65	43	42	41	43	38	36

TABLE 9: SIZEUSA BODY MEASUREMENTS (mean, in inches)

Source: *SIZEUSA* (data reproduced with the permission of TC2) (NYT source:

http://www.nytimes.com/2004/03/01/national/01SIZE.html?ei=5007&en=53ff6ded884c073f&ex=1393563 600&partner=USERLAND&pagewanted=all&position=)

In addition to the numerical comparisons provided by these body measurements, the *SizeUSA* data can provide some interesting comparisons of overall body shape. Not only are men and women about the same size, in other words, they are also shaped more similarly than is commonly assumed: "30 percent [of women] are 'straight,' meaning they had little perceptible waist" (Zernike 2004: A1). Challenging the assumption that men have little difference between waist and hip measurements, whereas women are "curvy," SizeUSA found that many women share the "straight" shape with men. The buttocks are also commonly understood as a marker of sex difference. However, SizeUSA found evidence of considerable similarity there as well. Not only do some men have what they refer to as a "prominent seat," but there is significant variation among different racial categories, indicating that the category "male" is far from uniform (and highlighting the interaction of sex and race cues). "Eleven percent of men over all had a 'prominent seat,' but that ranged from 24 percent among black men to 9 percent among whites, 8 percent among Hispanics, and 6 percent among 'others'" (Zernike 2004: A18). All in all, based on this study, male and female bodies are quite similar in overall size and shape, and the differences that do appear are much more suggestive of a continuum than two discrete physical categories.

While my primary argument is that there is a continuum between maleness and femaleness on the surface of the body, the continuum that exists inside of human bodies is even stronger. The interior of the human body is another place where the social practices that normally increase the salience of sex differences are automatically bracketed, and the tissues, bones, fluids and other bodily substances inside "male" and "female" bodies are mostly indistinguishable. As Annemarie Mol has argued, inside the body, sameness is everywhere. Angiograms, for example, do not reveal sex differences (Mol 2002: 148). With the exception of gonads, in fact, some of the available evidence suggests that no organs are sex specific. According to Thomas Starzl, a transplant surgeon, organ transplants regularly take place across sexes.¹ In fact, as Renee Fox explains, what makes transplants take – not be rejected – is that the donor organ cells spread throughout the body of the recipient (Fox 2003: 237). These donor cells, to reiterate, are often of unknown sex. Based on these descriptions, "male" and "female" hearts, lungs, kidneys, livers, bone marrow, and blood do not exist; these organs and other bodily substances are essentially interchangeable between males and females, and a "match" for transplants and transfusions has nothing to do with sex, but with other more *biologically* important factors. In other words, sex is simply not an important variable at the level of the cell or the organ.

For a visual illustration of this point, see Figure 13, a photograph of human fat cells, which are identical between males and females. Underscoring the irrelevance of sex, the caption does not even indicate whether this image is from a male or a female body. Note also that the individual fat cells can differ in shape, size, and texture. These differences, which occur *within* rather than across the sex categories, are examples of variations that do not make a difference, illustrating the way that we mentally inflate the importance of some forms of biological difference while ignoring others.

FIGURE 13: HUMAN FAT CELLS



Source: Alers-Hankey and Chisholm (2004), p. 17

One might object that because the inside of the body is not available to us in everyday sensory perception, it offers an "unfair" or "misleading" portrait of the information we have to work with in our perceptions of physical sameness and difference. Put another way, this objection suggests that, by necessity, the inside of the body is "irrelevant" in sex attribution; even if the inside of the body were entirely sexless, because it is hidden from us, it plays no role in how we "see" male and female bodies. However, if seriously considered, the realization that bodies are essentially the same inside can change how we see the relationship of similarity to difference in our visual perceptions of the surface of bodies, in keeping with the idea that visual perception is always shaped by our beliefs and expectations. For instance, if we realized that the interior of the abdominal cavity looked like the photograph in Figure 14, would it influence our sense of the biological self-evidence of sex differences? Figures 15 and 16 further illustrate the idea that, beneath the skin, human bodies are mostly identical. Neither the gamma camera scan of the knees in Figure 15 nor the x-ray of the hands in Figure 16 indicate whether the person is a male or a female, as this anatomy is the same in all humans. I could have substituted an image of almost any cell, tissue, or organ in the body (with the possible exception of the genitals and the gonads) with essentially the same effect.

FIGURE 14: THE INTERIOR OF THE ABDOMINAL CAVITY



Source: McMinn et al. 1986, image 142

- A) Right ureter, crossed by the gonadal vesselsB) Descending part of the duodenum
- C) Inferior vena cava

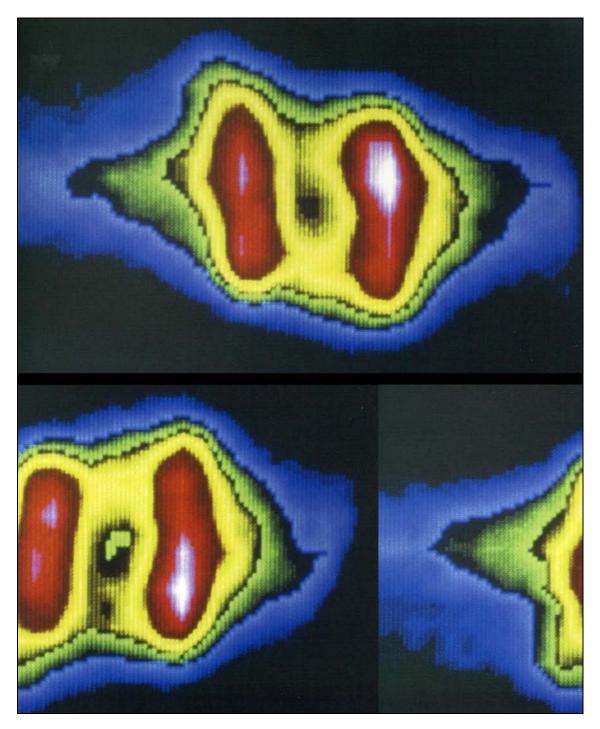


FIGURE 15: HUMAN KNEES (GAMMA CAMERA SCAN)

Source: Alers-Hankey and Chisholm (2004), p. 94

FIGURE 16: BONES OF THE HUMAN HAND (X-RAY)



Source: Alers-Hankey and Chisholm (2004), p. 95

Drawing Textbooks: Sameness despite Polarization

Thus far I have only discussed examples in which polarizing practices are automatically excluded, making sex similarities much easier to see. But it is even possible to find substantial sex similarities when the social norms of display that exaggerate sex differences are in effect, underscoring the point that our sense of the "obviousness" of sex is at least as much a product of our mental practices of selective attention as it is a reflection of what is actually displayed. For example, when read explicitly for sex similarities, books on drawing the human body, which commonly incorporate normative assumptions about sex differences (i.e., that females always have long hair, that males are more muscular than females, or that females have longer eyelashes than males), also contain evidence of significant underlying anatomical commonality between the sexes. I think it is fair to say that the goal of most "realistic" figure drawings is to be recognized as "realistic" depictions of either the male or female body; in most cases, the artist's objective is for the drawing to "read" clearly as male or female. The point here is that the images of male and female bodies contained in these books, even as they appear realistic (and that realism is typically supported by the use of skeletons, etc., to lend an air of scientificity), are stylized: pre-filtered for us through our cultural norms and expectations. Precisely because these books are "pre-polarized," they provide a conservative picture of the similarities between male and female bodies; yet they suggest that a surprising number of body parts are not sex-specific.

Further, figure drawing artists are studied experts on the human form. Like the transgender respondents, they have an unusually high level of awareness of the details of

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human bodies – including both sex similarities and sex differences. Considering the expertise of the artists who produce them, I want to highlight three kinds of evidence for sex similarities presented in these books: The section and chapter headings, the authors' verbal descriptions of how to draw particular body parts, and the sample illustrations they provide.

The sections and subsections of these texts are usually introduced by headings stating what they address, for example "Drawing the Ear." Sometimes it is clear from the heading that the author believes the body part in question is sex-specific; for instance, "Drawing the Female Pelvis." Other times, as in the example of "Drawing the Ear," no sex specificity is indicated. The following list includes just some of these sex-neutral headings I collected from three books: *How to Draw Manga Bodies and Anatomy* (The Society for the Study of Manga Techniques), *Drawing the Head & Figure* (Jack Hamm), and *Draw Real People!* (Lee Hammond).

The Human Skeleton (Society for the Study of Manga Techniques 1996: 14) Various Mouth Shapes (Society for the Study of Manga Techniques 1996: 28) Various Ear Shapes (Society for the Study of Manga Techniques 1996: 29) Various Eye Shapes (Society for the Study of Manga Techniques: 26) Various Nose Shapes (Society for the Study of Manga Techniques: 27) Construction of the Neck and Shoulders (Society for the Study of Manga Techniques: 30) **Basic Construction of the Arm** (Society for the Study of Manga Techniques: 51) **Construction of the Hand** (Society for the Study of Manga Techniques: 82) Hand Variations (Society for the Study of Manga Techniques: 84) Head Construction – The Double Circle (Hamm 1963: 2) **The Eye – Step by Step** (Hamm 1963: 7) Drawing the Ear (Hamm 1963: 16) The Nose from Various Angles (Hamm 1963: 15) The Back of the Human Figure (Hamm 1963: 62) Proportions of the Human Figure (Hamm 1963: 39) The Bones and Muscles of the Arm (Hamm 1963: 74) Types of Knees (Hamm 1963: 97)

Eyebrows and Lashes (Hammond 1996: 37) Putting the Ears Where They Belong (Hammond 1996: 42) Drawing the Open Mouth Step-by-Step (Hammond 1996: 32)

Of course, the lessons following any of these seemingly sex-neutral headings could contain information about sex differences, and in some cases the authors did comment on what differentiates male and female bodies. For example: "Sometimes men's lips are very light in color" (Hammond 1996: 31); "Most artists prefer a male figure 8 heads high. Sometimes a petite female drawing as small as 6 heads high is desired" (Hamm 1963: 39); or "There is more likely to be a curve between the mouth and nose of the female than the male" (Hamm, p. 29).

At the same time, however, these authors also make many statements indicative of a fundamental structural resemblance between male and female bodies. For example, Jack Hamm highlights the similarity between male and female heads when he writes, "After one has studied and practiced the opening sequence on the female head, he can employ the same essential approaches in drawing the male head" (Hamm, p. 34). He also speaks in terms of "average" heads, rather than average male or female heads: "The average head is approximately 5 eyes wide" (Hamm, p. 4). In a similar vein, Lee Hammond makes the following comments on the universal shape of the human nose: "The Nose is really like three balls hooked together, with one attached to each side" (Hammond, p. 28). Both these authors also discuss ears in sex-neutral terms, for example:

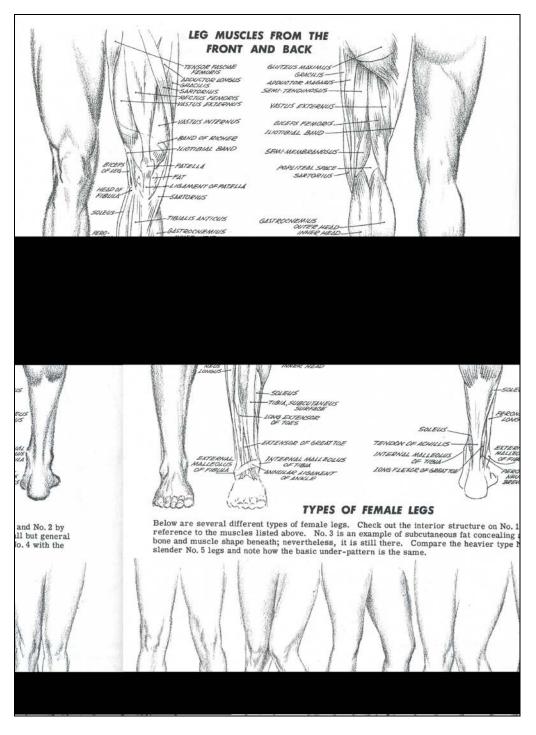
"The top of the ear is directly across from the bottom of the eyebrow. The bottom of the ear is directly across from the bottom of the nose. When seen from the side, the ear is about in the middle, between the back of the head and the front of the eyes." (Hammond, 41)

"The ears are as long as the distance from the top of the eyes to the bottom of the nose." (Hamm, 4)

Hammond even specifically denies the sex-specificity of facial features overall when she writes that "people are pretty similar as far as facial features go. Even though we are all different and have different looks about us, the basic details of our eyes, nose and mouth are very much alike" (Hammond, 49). While all the quotations I have presented to this point deal with the head, comparable statements were made about almost every other area of the body.

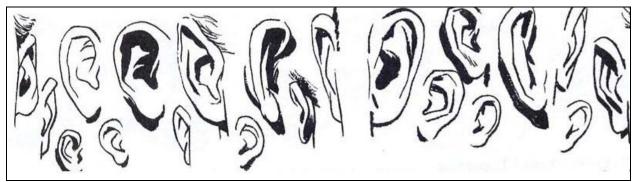
While Hamm does include a discussion of "the female leg" (Hamm, 92), in which he describes several differences in shape between male and female legs, he only depicts the female leg in high heels! He includes a series of illustrations entitled "Types of Female Legs," but every single "type" of female leg he depicts is wearing high heels (see Figure 17). Hamm himself can even be interpreted as implying that many of the sex differences he observes in legs are attributable to high heels in the following comment: "In drawing women's 'flats' [...] the basic rules are quite similar to those used in blocking in men's footwear" (Hamm, p. 104). In light of this, the sex differences in legs that he discusses seem to have little to do with the body proper.

FIGURE 17: "TYPES OF FEMALE LEGS" (Hamm, p. 94)



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These images of "female" legs notwithstanding, a great many of the sample illustrations accompanying the descriptions of how to draw particular body parts suggest that male and female bodies are much more similar than different. For example, Hamm includes the following image of varieties of ears (see Figure 18). The text accompanying this image does not mention whether they are "male" or "female" ears. Rather, it refers to "numerous possibilities" and urges the reader to "observe the essentials of the ear's form" (p. 16). The image that follows from Hammond's text similarly makes no reference to sex when describing how to draw eyebrows and eyelashes (see Figure 19). FIGURE 18: "EXAMPLES OF EARS DONE WITH PEN OR BRUSH USING INK" (Hamm, p. 16)



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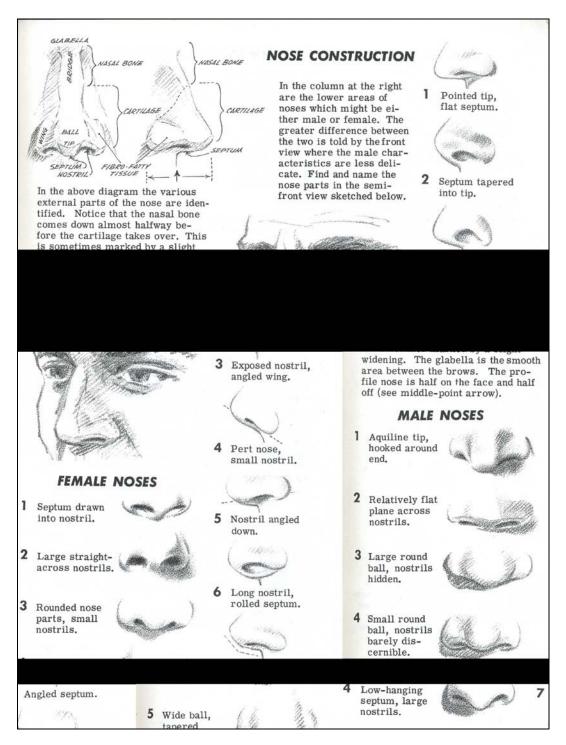
FIGURE 19: "EYEBROWS AND LASHES" (Hammond, p. 37)

EYEBROWS AND LASHES Eyebrows can be large or small, thick Start to apply little hairs. Look at the The line on the left looks hard and straight. The line on the right is softer or thin. Just draw the overall shape direction they are growing in the picture and apply your pencil lines in that and curved. It was drawn with a quick first. stroke. Flick your wrist and the line will direction. become thinner on the end. shill and the second Aff(A To soften it a bit, take your kneaded Continue to draw hairs until they start Add hair strokes again, until it gets as eraser, put it into a point, and with the to fill in, and then take your tortillion dark as you want it. same quick strokes, lift some light hairs and blend the whole thing out. out. It is this finishing touch that really helps make it look real. All the second These lines work. They are curved and This is better, but the lines still look Never just fill in the eyebrow with heavy dark pencil lines. tapered at the ends, more like hair harsh and too straight. really is. 11/1 This is the way eyelash lines should be Eyelashes grow in clumps like this. Eyelashes should not be drawn with drawn, but eyelashes don't grow in sin-Watch which direction they curve hard lines either. These lines are much gle lines like this. too hard and straight. This is what lower lashes should look Don't ever draw a line all around the eye with lower lashes like this. like. They come off the bottom of the lower lid thickness and are shorter than

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In some cases, even when the author explicitly claims to be presenting visual examples of sex differences, the sex-specificity does not come across clearly in the decontextualized images of particular body parts. For example, Hamm presents a series of images under the heading "Female Noses" and another series under the heading "Male Noses" (see Figure 20), but the differences are not actually very obvious. Further underscoring this point, he himself goes on to present a third series of images that, in his words, "might be either male or female," confirming that the sex differences are far from categorical (see the right-most column of images in Figure 20).

FIGURE 20: "MALE NOSES" vs. "FEMALE NOSES" (Hamm, p. 13)



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To sum up, when read specifically seeking out the similarities between male and female bodies, drawing books suggest that, from head to toe, human bodies are very much alike – certainly more similar than different. Perhaps, however, this evidence is not totally convincing; these are not, after all, *real* bodies. As I mentioned earlier, however, my view is that, if anything, drawing texts present a *conservative* portrait of the similarities between male and female bodies. In this sense, the evidence for sex sameness that can be found in them should be all the more convincing. Further, particularly when combined with the body measurements and photographs of the body's interior I presented earlier, both of which *do* deal with real bodies, these books can help establish the existence of significant underlying commonalities between male and female bodies even when polarizing norms are in effect (as they clearly are here). As such, they are particularly effective in problematizing the presumption that the self-evidence of sex differences is something we read off of bodies – as opposed to a mental construct we use to interpret bodies – since they demonstrate that even polarized bodies are largely the same.

Genitals, Gonads, and Genes

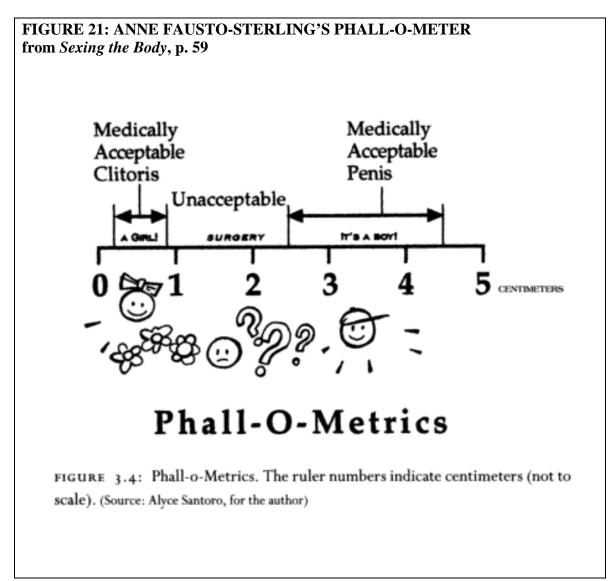
In a final effort to capture the normally disattended similarities between male and female bodies, I want to specifically consider what for many people constitutes the "hard case" of sex difference: the genitals, chromosomes, and reproductive organs. Even scholars who explicitly challenge assumptions about the pervasiveness of biological sex differences often single these out as the only true, and truly dichotomous, sex differences. One example of such an account is the following, which identifies chromosomes and genitals as the only "real" difference between male and female bodies:

So far as I am aware, the only sex differences that don't overlap substantially (to the point that differences among members of one sex are much greater than the difference between the averages of each sex) are whether one has XX or XY chromosome configurations, vulvas or penises. Plot these out, and I'm sure you will get a beautiful dumbbell distribution, with a big cluster of females at one end and a big cluster of males at the other end, and a scattering of a few anomalous cases in between. (Eller 2003: 113)

My argument does not require committing to the idea that males and females do not differ *at all* – even genitally, gonadally, or chromosomally. In fact, I am advocating proportional attention to similarities *and* differences. However, I *do* think that the notion that human genitals (and genes) are a clear dichotomy that is more different than similar can (and ought to) be challenged.

One logical starting point for a critical assessment of the claim that genitals and gonads are fundamentally different is embryonic bisexuality.² As one of my intersex respondents described it to me, "Every fetus starts out as female. [...] A penis is only an enlarged clitoris. If labia continue to grow and then fuse they become scrotum." Viewed in light of my respondent's description, Eller's claim above that "the only sex differences that don't overlap substantially [...] are whether one has XX or XY chromosome configurations, vulvas or penises" suffers from a polarized way of thinking about penises and clitorises, and scrotums and vaginal lips, which have as many similarities as differences and start out biologically undifferentiated (and the same could be said of ovaries and testes). When thinking about genital differences, then, it is worth remembering that they *could* be measured on a single scale, and seen as variations on a

single category, rather than as two categories. And this view might even be more strictly biologically correct, given embryonic bisexuality. This view is part of what is captured by Anne Fausto-Sterling's "phall-o-meter" (see Figure 21), which measures penises and clitorises on the same ruler.



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Further, regarding chromosomes, keep in mind that XX and XY are 50% the same, and the egg and the sperm actually have the same sex chromosomes every time both contribute an "X" to make a female (Cealy Harrison and Hood-Williams 2002: 120). Sarah Richardson offers a much more scientifically precise version of the same fundamental argument in her critique of recent accounts claiming significant genetic variation between males and females.³

Sex differences in the genome are very, very small: of 20,000 to 30,000 genes, marked sex differences are evident in perhaps half a dozen genes on the X and Y chromosome, and, it is hypothesized, a smattering of differently expressed genes across the autosomes. Researchers have doggedly searched for sex-based gene expression differences in dozens of tissues in the human body, including the brain, yielding limited, inconsistent results, and no strong candidate genes for sex differences (Delongchamp et al. 2005, Nguyen and Disteche, 2006, Rinn & Snyder, 2005, Talebizadeh et al., 2006). In DNA sequence and structure, sex differences are localized to the X and Y chromosomes. Males and females share 99.9 percent sequence identity on the 22 autosome pairs and the X, and the handful of genes on the Y are highly specific to male testes development. Thinking of males and females as having different genomes exaggerates the amount of difference between them, giving the impression that there are systematic and even law-like differences distributed across the genomes of males and females, and playing into a traditional gender-ideological view of sex differences. (Richardson, Forthcoming: 8-9)

The essential point is this: Males and females are much more genetically similar than

different. Whatever the exact proportion of genetic difference to similarity, even if sex

differences are greater than previously thought, we are still talking about a difference of

less than two percent, though Richardson argues that two percent is a significant

overestimate (Richardson, Forthcoming: 6-7).

In this chapter I have presented just some of the possible evidence for sex

sameness that we normally do not notice, or that we perceive but do not "count," when

seeing "male" and "female" bodies. In truth, I have only scratched the surface of the "perceptual residue" of dominant conceptions of sex – all the similarities that must be disattended in order to unproblematically see bodies as sex-dimorphic. Although not comprehensive, what I have tried to demonstrate by inverting the usual perceptual norms, leaving aside evidence of biological sex differences and actively seeking out information about the body's human commonality, is simply how differently we might see bodies if we filtered them another way.

As I described in Chapter 4, something similar to the singular view of human bodies I have been highlighting in this chapter was actually the dominant view of sex from the Greeks until the eighteenth century (Laqueur 1990). This "one-sex" model posited that there is only one type of body; males and females have all the same reproductive organs, but in the female they are located inside the body, rather than outside. While this view fits well with embryonic bisexuality, in practice the "one-sex" model was solidly androcentric. The "one" body was explicitly a male body, and females were viewed as "unfinished" – not fully developed – males. However, taking a more neutral view, and reconceiving the one-sex model in terms of the human – of which male and female are two minor variations – it may be possible to generate a productive new understanding of the body. In the final section of the chapter, I explore the potential benefits of revisiting some version of a one-sex model (but without the androcentric bias) as an analytic strategy.

Sex Sameness as a Rhetorical Strategy

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Feminists have debated the intellectual and political utility of the concept of androgyny since at least the 1970s. In these debates, "androgyny" was typically used to connote a lack of social and psychological (though not bodily) differentiation between the sexes.⁴ As Alison Jaggar (1983, 87) put it, "Androgynous people would remain biologically male or female but, socially and psychologically, they would no longer be masculine and feminine."⁵ For the most part, the concept of androgyny has fallen out of favor. Some feminists came to view advocating a mixture of "masculinity" and "femininity" for everyone (and thus implicitly avowing masculinity as legitimate) as an insufficiently politicized goal (Jaggar 1983: 87-88). Others argued that androgyny failed to leave gender behind (e.g. Raymond 1975: 61-64; Stimpson 1974: 242), or that, given the cultural context of male dominance, androgyny was likely to always lapse into androcentrism (Raymond 1975, 61-64).⁶

Despite these critiques, I find it useful to revisit – and expand, and strengthen – the concept of sex sameness. When I use the terms "androgyny" and "sex sameness," however, my intended meaning goes beyond the scope of most of these earlier uses to include *physiological* androgyny. Both Monique Wittig and Andrea Dworkin have similarly advocated the traditional feminist ideal of androgyny and extended it to the elimination of the sex distinction itself (Jaggar 1983, 100). For instance, Wittig argues that:

Sex is taken as an "immediate given," "a sensible given," "physical features," belonging to a natural order. But what we believe to be a physical and direct perception is only a sophisticated and mythic construction, an "imaginary formation," which reinterprets physical features (in themselves as neutral as any others but marked by the social system) through the network of relationships in which they are perceived. (Wittig 1981, 48)⁷

The reinterpretation of physical features Wittig describes is precisely what I have tried to capture here. Part of my motivation for revisiting the idea of physical commonality between males and females is that the existing statements of sex sameness have not succeeded in shifting perceptions of bodies, and presumptions of self-evident sex differences retain a grip on our thinking. Ideas about sex differences, as we have seen, are culturally pervasive and recur consistently in science and popular culture, including the research on genetic sex differences discussed above, as well as the recent explosion of studies on sex differences in the brain (e.g. Brizendine 2006; Baron-Cohen 2003).

Even if these claims about sex differences are strictly correct, however, they can and should be challenged based on their disproportionate emphasis on small sex differences to the exclusion of attention to the much larger similarities between males and females. When studies emphasize statistical differences in the size of a particular region of the brain, for example, it is important to consider what is "filtered out" of these descriptions of the brain: namely, that these are usually proportionately small differences amid much greater similarity (in size, appearance, structure, and function). A more proportionate, valid portrait of sex differences in the brain would not allow for titles such as "The Essential Difference" (Baron-Cohen) and "The Female Brain" (Brizendine). *If* such differences can be established, it is only *parts* of the brain that are sex differentiated, not the brain itself, and we should strive to maintain those differences in their proper proportion to sex similarities in our minds. As I have argued throughout, the most powerful feature of the filter metaphor is that it specifically directs attention to these normally disattended similarities, effectively challenging taken-for-granted assumptions about sex differences and encouraging more proportionate conceptions of the relationship

between male and female bodies.

Notes to Chapter 5

⁴ See: Millett 1973: 366-367; Bazin and Freeman 1974; and Ferguson 1977. Sandra Bem's well-known Sex Role Inventory (1974) is another example of a similar conceptualization of androgyny. Bem classifies people as having one of four gender-role orientations (masculine, feminine, androgynous, undifferentiated). The androgynous individual is a female or male who has a high degree of both feminine and masculine traits.

⁷ See also Dworkin 1974: 183.

¹ As quoted in Fox 2003: 237.

² For one account, see de Beauvoir [1952] 1975: 10, 14-16; see also, Fausto-Sterling 2000: 49-50; Money and Ehrhardt 1972.

³ Richardson's critique is primarily directed at Carrel and Willard's (2005) article in Nature claiming that genetic differences between men and women are significantly greater than previously thought, and the subsequent reporting of these findings in *Newsweek, The Los Angeles Times*, and *The New York Times*, which claimed that men and women differ almost as much as humans differ from chimpanzees (Guterl 2005) and that males and females are essentially the equivalent of two different species (Dowd 2005).

⁵ See Heilbrun ([1964] 1993, xii) for an explicit statement that her use of androgyny should not be confused with physiological androgyny.

⁶ Such critiques of androcentric formulations were one of the important motors for sexual difference feminism, for instance the argument that difference ought to be the basis for equality, not sameness (Lorber 1994: 52-53; Tavris 1992). However, I maintain it is possible and useful to revisit notions of sex sameness and quite deliberately disentangle them from androcentric meanings and assumptions, rather than retreating and focusing on sex differences.

CHAPTER 6

EXCESS, CONTINUA, AND THE FLEXIBLE MIND

Generally speaking, we can think of sex difference as a "social fact" performing "sociomental control" (Zerubavel 1991: 51 and 1997: 17; see also, Bruner 1958: 94). As Durkheim ([1895] 1982: 2) describes social facts, we are unaware of their constraints unless we actively try to resist them. Likewise, it is only once we try to imagine seeing bodies in other, different categories that we recognize how strongly the sex difference filter constrains our imagination. As we have seen, the optical filters governing our visual perceptions are a powerful force: They make certain observations "obvious" to us and others "impossible" to imagine. My efforts in Chapters 4 and 5 to expose some of the sex similarities obscured by our normative ways of perceiving male and female bodies notwithstanding, the truth is that we have little sense of what human bodies would look like to us if we were somehow to step outside the filter of binary sex difference and into another optical style. But it is certain that, seen through a different filter, different parts of the body would come into visual relief as "relevant" and other parts would recede into the "irrelevant" background, making us effectively blind to them.

When confronting something as profoundly reified as sex difference, it can be very effective to identify *how* social construction works on a cognitive and perceptual level to create this sense of self-evidence. This has been the focus of my analysis for the last several chapters in presenting the socio-cognitive process of filtration and the conceptual system of filter analysis. I argued that, although the power dynamics that create the prevailing norms regarding sex differences may take the form of discursive power (Foucault 1978), in which dominant discourses – which no one controls, but which discipline all – synchronize and shape our perceptions (and our bodies) through ideas about normality, filter analysis can make us more aware of them and help us to identify how they work by highlighting practices of normative attention and disattention. Perceiving sex requires that we anticipate, selectively seek out and note sex differences. What filter analysis suggests is that, if we expected to see something else, for instance sex similarity, we would selectively perceive the androgynous features of bodies and sex difference might be as difficult for us to perceive as unsexed bodies are under our current sexpectations. We have been learning since birth not to see more than two sexes, but thinking about perception in terms of filtration may help cultivate the mental flexibility necessary to see more of the complexity and multiplicity of bodies.

Emphasizing Excess

The most universally applicable insight of filter analysis is that empirical reality is always richer and more complex than what we perceive and thus experience. I have been exploring this disattended complexity in the case of sex attribution, arguing that, when understood as a process of filtration, seeing male and female bodies is the result of a socially organized process of selective disattention of sex similarities. Another way of saying this is that when we see people *as* male or female we are blind to the rest of the human body. A number of scholars have previously made the broader point that bodies in general are always excessive of the social categories through which we perceive and signify them. Elizabeth Grosz, for instance, argues that the body is always incomplete, open, and undetermined, exceeding all of the discourses through which it is understood (Grosz 1994: xi). Margaret Shildrick (1997) likewise highlights the ways that corporeality is inherently "leaky" and uncontainable.¹ Not only sex, then, but any categorical perception or experience of the body is based on the exclusion of noncategorical details.

Joan Fujimura's work on the production of knowledge about genetic sex differences explicitly deals with this idea of bodily excess – which she evocatively calls "awkward surplus" – and the way it is filtered out during scientists' interpretive process. In her words: "researchers decided to ignore data that contradicted their initial assumptions. This study refers to such ignored data as an 'awkward surplus'" (Fujimura 2006: 51). Fujimura's approach, like mine, is to specifically attend to those details that are normally filtered out (Fujimura 2006: 51).

When we focus on the ways it seeps out of categories and interpretations, the body can become a powerful tool for social constructionist analysis. In Fujimura's words, "The concept of awkward surplus provides science studies with a way of talking about materiality that does not deny human mediation but also acknowledges material agency" (Fujimura 2006: 52). While my main objective has been to explore how the metaphor of a filter and the concept of bodily excess can help advance our thinking about the social construction of the body by highlighting the ways the body can "talk back" through spaces of excess, the generic concept of excessiveness and the analytical system of filter analysis also have much broader applicability.

For example, taking the idea of "awkward surplus" beyond the body, Fujimura argues that by adopting the perspectives of social science, gender studies, and the transgender and intersex social movements, one "literally can see differently when examining the work of geneticists and other scientists in the production of the science of sex" (Fujimura 2006: 52), and that "new signals read through old frames are not seen" (Fujimura 2006: 69). In other words, the distinct filters of particular academic disciplines and social movements bring different aspects of a given subject matter into relief. Edmund Leach actually begins the first chapter of *Culture and Communication* with a similar observation about the "filters" of social anthropologists: "All social anthropologists take as their subject matter the *variety* of human culture and society, and they all assume that their task is not only to describe what the varieties are but to explain why they exist" (Leach 1976: 3). If the subject matter of social anthropology is specifically the *differences* between cultures, this suggests that social anthropologists see their subject matter through a disciplinary filter that makes cultural commonalities irrelevant.

Thinking even more broadly than academic disciplines, one could describe categorization in general as a process of filtering out non-categorical "excess" information. As George Lakoff and Mark Johnson (1986: 163) explain:

A categorization is a natural way of identifying a *kind* of object or experience by highlighting certain properties, downplaying others, and hiding still others. [...] To highlight certain properties is necessarily to downplay or hide others, which is what happens whenever we categorize something. Focusing on one set of properties shifts our attention away from others. When we give everyday

descriptions, for example, we are using categorizations to focus on certain properties that fit our purposes. Every description will highlight, downplay, and hide.

What these processes of hiding and exclusion indicate is that categorical perceptions and experiences – which are arguably *all* perceptions – are significantly impoverished and limited in comparison with empirical reality. In a sense, categorization *is* filtration, based as it is on highlighting some features and ignoring others.

Further, some concept of excessiveness underlies a number of different theoretical positions, including phenomenology and deconstructionism. Maurice Merleau-Ponty ([1945] 1962: 186), for example, writes that perception is "communicating with a world which is richer than what we know of it." Compare this to what Mark Taylor (2004: A29) identifies as "the guiding insight of deconstruction," which is that "every structure – be it literary, psychological, social, economic, political or religious – that organizes our experience is constituted and maintained through acts of exclusion. In the process of creating something, something else inevitably gets left out." One of the most useful features of filter analysis is that it draws our analytical attention to this world of excluded properties.

The defining question of filter analysis is, "What is being filtered out?" Answering this question requires one to identify at least some of the features that were previously disattended. A concrete example can be seen in Leach's discussion of brides and widows. In the Christian European tradition, brides are veiled and dressed in white and widows are veiled and dressed in black. We normally "filter out" this similarity, which obscures the fact that becoming a bride and a widow are part of the same system: one is entering a marriage and one is leaving it (Leach 1976: 27). The two customs are logically related, but we normally disattend their commonality.

This disattended "perceptual residue" consists of all the features or details that would – if we did not exclude them – support alternate categorizations and meanings. As such, the perceptual residue actually contains the raw sensory data for the construction of different social worlds. I understand the concept of a "social world," following Alfred Schutz, as the intersubjective meanings and processes of interpretation that are sociology's fundamental object of analysis (Schutz [1932] 1967: 9-11). Schutz further argues that an effective sociological analysis of meaning requires "reinterpretation" and "rearrangement of the meaning-structure" to clarify the researcher's understanding of people's behavior and perceptions (p. 10). This is precisely what filter analysis facilitates when it directs attention to the complexity and richness that is missing from any given filtered, categorical perception.

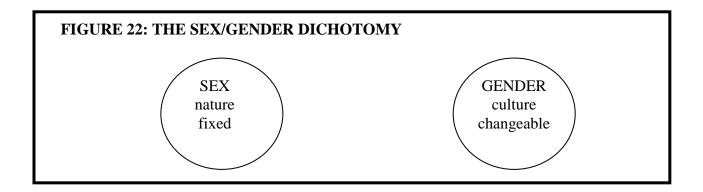
Like Betty Edwards in *Drawing on the Right Side of the Brain*, filter analysis encourages us to focus on the unmarked "negative space" *between* the distinct "forms" we are normally taught to see. Interestingly, Edwards describes this as a shift from seeing with the verbal, logical "left brain" to a different way of processing that is more intuitive and spatial ("right brain") (p. vii), which she calls a "release from stereotypic expression" (p. 20). I have similarly argued that part of what constrains our perceptions of bodies is language and categories, and that we should try to become more aware of the overall spatial proportion of sex dimorphism to human similarity. One of the anticipated results of learning to perceive the "negative spaces" of the body is, indeed, a "release from stereotypic expression." Another way to conceptualize the negative space between categories is to use the metaphor of a continuum. In the case of sex attribution, this negative space consists of all those elements of bodies that are similar between males and females. Accordingly, one might say that what filter analysis helps identify is the normally unseen *continuum* between male and female bodies. More broadly, the metaphor of a continuum is a useful way to think about the connective space between concepts normally assumed to be binary oppositions. It captures the way that categorical distinctions must by definition exclude all details which are not categorical. In other words, categorical distinctions exclude details that fall *between* social categories. As an illustration, in the next section I use the metaphor of a continuum to highlight the connective space between the concepts of "sex" and "gender."

The Sex/Gender Continuum

The sex/gender distinction is one of the implicit targets of this research because it supports assumptions about the naturalness of sex differences. While this conceptual distinction was a vital intervention, allowing feminists to make the critical argument that while biological differences (sex) might be inevitable, social differences and inequality (gender) are socially constructed and thus potentially changeable,² it is organized around the idea that sex (but not gender) is a fixed natural binary, a self-evident fact. Here I propose that one conceptual alternative to the sex/gender distinction that better accounts for the negative space of that distinction – the interaction of culture and biology in

creating both sex and gender – is a continuum. Graphically speaking, when understood as a dichotomy, sex and gender are completely separate entities that can be represented, as in Figure 22, as two different circles. All that we classify as "sex" is contained in the left circle and all that we classify as "gender" is contained in the right circle. There is nothing that is both sex and gender.





Along with those scholars writing in this area before me, I maintain that this clean separation of sex from gender is ultimately not viable. Any given expression or act of gender is experienced and performed in a body, and the body is "disciplined," or shaped, by gender (for example through years of socialization into gendered social norms of bodily demeanor and grooming). In addition, our sex is a cultural phenomenon, rather than a purely biological category. Any experience we have of sex, whether our own or another person's, is shaped by social norms and expectations. As we have seen, the "social fact" (Durkheim [1895] 1982) of natural, binary sex difference organizes our perceptions – telling us what is relevant and what we can ignore – as well as structuring our norms of grooming, adornment and bodily demeanor so as to artificially polarize naturally similar human bodies.

Reconceptualizing sex and gender in light of the filter metaphor draws attention to the figurative "perceptual residue" or "excess" of the sex/gender distinction, the overlap and intersection between the two concepts that we must ignore in order to understand them as we normally do. In the image of a SexGender³ continuum, represented in Figure 23, the biological and cultural aspects located at opposite ends of the continuum are "ideal types" (Weber [1925] 1978), never realized as such, but always including at least some proportion of the other. The arrows are meant to indicate that the poles of the continuum are never actually reached. As such, the binary opposition has ceased to exist; all that exists is the conceptual space between the two concepts.

FIGURE 23: SEXGENDER AS A CONTINUUM

PHYSICAL←-----→CULTURAL

Most directly relevant for my analysis, the notion of a SexGender continuum suggests that it is not possible to distinguish what is materially true from what is culturally true about sex. There is no sex without gender, as Suzanne Kessler and Wendy McKenna so presciently argued in 1978: "the element of social construction is primary in all aspects of being male or female" (p. 7). In the same vein, Butler (2004: 186) has described sexual difference as

the site where a question concerning the relation of the biological to the cultural is posed and reposed, where it must and can be posed, but where it cannot, strictly speaking, be answered. [...] [S]exual difference has psychic, somatic and social dimensions that are never quite collapsible into one another but are not for that reason ultimately distinct.

By recasting both sex and gender as socially constructed, what the SexGender continuum so effectively communicates is that "our understanding of what is natural about gender is itself a social and cultural formulation" (Gerson 2005: 179).

While up to this point I have only addressed the implications of reimagining the sex/gender distinction as a continuum, it bears mentioning that very similar questions come up in the sociology of the body more broadly: Where are the boundaries of social construction? Is there a point beyond which culture does not penetrate? What does it mean to think about an outside to social construction? My argument is that filter analysis provides a method to access the continuum between nature and culture and to conceptualize the cognitive processes by which this continuum – the complex compound of biology and culture Butler describes – is simplified and organized into the categorical distinctions we perceive and thus experience.

Cognitive Flexibility

When attempting to access the "perceptual residue" or the "unseen middle" of a continuum via filter analysis, however, it is important to recognize that the aim is a critique of dominant discourses, rather than access to "the Real." In the context of the sociology of the body, for instance, filter analysis is most useful as a device to identify bodily excess: those features or details of bodies which do not perfectly fit the available social categories. The idea of bodily excess is not intended as a way to access an *extra*-social body, however, but as a strategy to critique the naturalness of social categories. This approach echoes Michel Foucault's (1978: 157) argument that the hegemonic concept of sexuality cannot be resisted through sex (a categorical construction borne of the dominant discourse), but only through "bodies and pleasures." Foucault's focus on bodies and pleasures is not a recourse to an extra-discursive body, but a strategy to reveal and challenge currently dominant discourses on sex and sexuality. Filter analysis is likewise imagined as a tool to access alternate perceptions and experiences of the body that contest dominant categories and ground social constructionism.

I have made a point of emphasizing that filter analysis cannot provide access to extra-social reality because I recognize that filters and continua, like all metaphors, constrain our thinking in some ways, creating new blind spots while clearing up earlier ones. In Humberto Maturana and Francisco Varela's (1987: 242) words, we inevitably "generate cognitive "blind spots" that can be cleared only through generating new blind spots in another domain." There is no escape from metaphorical perception (Lakoff and Johnson 1980: 239). While new metaphors change our blind spots, and as such can challenge previously taken-for-granted perceptions, they should not be understood to reveal "real" or "prediscursive" reality. However, in light of this, one final advantage of filter analysis must be emphasized: these epistemological insights are built into its conceptual structure. The epistemological standpoint that defines filter analysis suggests that every perception contains "perceptual residue" – blind spots, so to speak – and thus that all facts, ideas, and perceptions ought to be understood from the outset to be challengeable and ultimately falsifiable.

Even so, metaphor development is a critical intellectual project – at least in so far as we use metaphors as a tool to proliferate cognitive and perceptual diversity, rather than a tool to reveal "Reality." Developing alternate metaphors is a fantastic opportunity to enrich our perceptions and cultivate "flexible mindedness" (Zerubavel 1991: 120-122; 1997: 57). Each new metaphor that enters the conceptual system shifts perceptions of reality. As Lakoff and Johnson (1980: 145) describe it,

new metaphors have the power to create a new reality. [...] If a new metaphor enters the conceptual system that we base our actions on, it will alter that conceptual system and the perceptions and actions that the system gives rise to. Much cultural change arises from the introduction of new metaphorical concepts and the loss of old ones.

Through the intellectual project of cultivating new metaphors, then, it is possible to encourage the perception of ambiguity and multiple realities, the acknowledgement of which can promote mental flexibility. Such mental flexibility is, as Zerubavel (1997: 10-11) argues, the best way to avoid the "epistemological pitfall of attributing objectivity to that which is only intersubjective." The more different ways of perceiving something we can generate, in other words, the less likely we are to make the mistaken assumption that any one way is the "real" or "correct" way. In this project I have relied on the metaphor of a filter to identify and illustrate the blind spots of one particular view of human bodies – sex difference – by offering a different interpretation, a different arrangement of relevance and irrelevance, which is sex sameness. As opposed to adopting a different but equally rigid mindset, which would lead me to declare that sex sameness is, in fact, the correct view of the human body, I would like to argue for a "flexible-minded" approach, and insist on the idea that there are multiple potential interpretations of the similarities and differences among human bodies. Given this dynamic potential, I must acknowledge that reversing the sex difference filter and emphasizing sameness is an *alternate* interpretation, and one we never normally see because it is contrary to our social expectations and categories. It is not the definitive interpretation, however. A flexible-minded view reminds us that entities need never have only one fixed meaning or appearance – even material, bodily entities.

While sex sameness is surely not the singular "truth" about bodies any more than sex difference is, using filter analysis to access some of the "perceptual residue" of sex attribution and establish the continuum between male and female bodies demonstrates that we *could* see "male" and "female" bodies as the same – and thus functions to dislodge the hegemonic belief that sex difference is "self-evident" and "undeniable." In other words, introducing these new metaphors can help us to think critically about the dominant discourses that assume and proliferate the idea that sex difference is an obvious and purely biological truth about bodies. Speaking more generically, regardless of the specific content of our perceptions, by definition, the flexible mind is an open mind. It embraces complexity, acknowledges ambiguity, and questions oversimplification. For instance, applying the insights of mental flexibility to race, Zerubavel has highlighted the political importance of avoiding simpleminded, rigid categorizations in an editorial about then-candidate Barack Obama's March 18th 2008 speech on race in America.

One of the most remarkable things about Obama's Philadelphia address was the tremendous respect he paid to our intelligence by bringing nuance and complexity – something we sorely miss – into American politics. We have become used to simplification through either exaggerated contrast or explicit partisanship. Yet Obama chose to juxtapose rather than contrast black anger and white resentment, and refused to disown either his former black pastor or his own white grandmother despite the racist discourse they occasionally embraced. In so doing he asks us to grapple with the complexity of race in America. Rather than seeing the world in black and white, this "son of a black man from Kenya and a white woman from Kansas" opts for various shades of gray. (Zerubavel 2008)

Zerubavel goes on to examine the ways that President Obama embodies the complexities

of racial categorization, specifically the norms of disattention involved in seeing him as

"black" even though he – like so many other "black" people – has white ancestors.

The way we trace our descent essentially involves certain conventions of paying attention to some things and ignoring or denying others. Racial designations work this way. They presuppose particular patterns of genealogical denial where some of our ancestors are remembered while others are forgotten. It helps to be reminded of this denial by someone whose actual parents embodied the genealogical complexity often underlying "racial" identity. After all, viewing Obama as "black" requires ignoring the fact that one of his parents was "white."

When extracted from the context of race, Zerubavel's comments highlight the broad political agenda promoted by mental flexibility, which brings the focus away from identity categories to the socio-cognitive practices through which distinctions get created and oversimplified, and by extension to the complexities that are too often "filtered out" of political discourse. Arlene Stein has similarly argued for more attention to complexity in our understanding of sexual identity and identity politics (Stein 2010: 10), and her discussion makes explicit the connection between acknowledging complexity and attending to the *specificity* of individual experiences and identifications. Highlighting this relationship between specificity, complexity, and categorical excessiveness, Shane Phelen writes that "specificity mandates conscious location of the self [...] and gestures to that in each of us which is irreducible to categories" (1994: 11). The complexities of President Obama's origin story, for instance, cannot be captured except through understanding the specific configuration of his genealogy. There is no identity *category* that can represent the specificity of his racial lineage.

The impulse to take apart identity categories and blur group boundaries through attention to complexity and specificity connects the cognitive sociological perspective I have been describing with other intellectual movements in feminist theory and post-structuralist philosophy, such as queer theory. One of queer theory's principle theoretical moves is to problematize sexual and gender categories, and identities in general (Stein and Plummer 1994: 181-182). Joshua Gamson has written about the implications of queer theory's critique of identity categories for social movements: "If identities are indeed much more unstable, fluid, and constructed than movements have tended to assume [...] what happens to identity-based social movements such as gay and lesbian rights?" (1995: 391). By questioning categories like "white," "black," "lesbian," "gay," "male," and "female" and examining the complexities they obscure, cognitive sociology also indirectly raises questions about the social movements that are organized by these categories. Certainly my argument that sex similarities are proportionately much more dominant than sex differences begs the question of whether we should continue to

organize for "women's rights," for instance, which seems to require and naturalize precisely the distinction I have tried to bring into question.

Rather than eliminating feminism as a social movement, however, what I would really like to advocate is a subtle redirection of its focus, which I might summarize as follows: Since biological sex differences remain the basis for most "folk theories" of inequality, what is most intellectually and politically pressing is to demonstrate that these differences are empirically quite small, but are made significantly larger – physically, cognitively, and emotionally – through social processes. In order to diminish inequality, then, feminists must intervene in these processes that make sex differences seem more substantial than they are.

One way we might make this intervention is to conduct research that shifts sex attribution from automatic to deliberate cognition. One of my key findings in Chapter 4 was that blind sex attribution is slower and more deliberate, and as a result of this temporal difference, blind people have to contend with more ambiguity and complexity. Their rigid-minded assumptions about the obviousness of sex differences (which they acquire in the same manner as sighted people, by being socialized in a context of relentlessly emphasized sex differences), are frequently in tension with these deliberate – and deliberative – processes of sex attribution. Sighted sex attribution, by contrast, is automatic, which is another word for "without conscious thought." Like the blind respondents, sighted people might benefit from slowing down at least occasionally and confronting the ambiguity and complexity that is erased through automatic sex attribution.

I am basing my thinking about the distinction between automatic and deliberate cognition on Paul DiMaggio's (1997) work summarizing cognitive psychological

research relevant to the sociology of culture, where automatic cognition is defined as routine, everyday cognition that "relies heavily and uncritically upon culturally available schemata – knowledge structures that represent objects or events and provide default assumptions about their characteristics, relationships, and entailments under conditions of incomplete information" (DiMaggio 1997: 269). Deliberate cognition, by contrast, is a slower, more critical, reflexive form of thought (p. 271), which, while highly temporally inefficient, could be of great use in increasing awareness of the cognitive distortions underlying sex attribution.

The psychological research suggests that there are at least three conditions that can induce deliberate cognition: Attention, Motivation, and Schema Failure (DiMaggio 1997: 271-272). In other words, when their attention is drawn to a problem, when inconsistencies disrupt a schema's unproblematic functioning, or when they are dissatisfied with the status quo, people can switch from automatic to deliberate cognition. As an analytical device, filter analysis facilitates some of these same conditions, and thus may be a useful tool for promoting deliberate cognition about sex differences. The filter metaphor is explicitly conceived as a tool to draw attention to the anomalous information that is ignored in automatic cognition. By bringing this inconsistent evidence to the fore of our attention, filter analysis further demonstrates that our operative schemas cannot account for all of the available information, creating a kind of "schema failure." Finally, in highlighting all of the complexities that are normally disattended, filter analysis definitely stirs up disaffection with the oversimplifications of automatic sex attribution. Given this, at least analytically, perhaps the filter metaphor can actually help encourage more deliberative modes of cognition that address the specificities of the bodies we

perceive, making us mindful of the simplification involved in categorization, and the blind spots we create when we avoid confronting complexity.

In the most general terms, the sociological value of the filter metaphor is that it helps capture the complications and "things unseen" of everyday life, rendering them visible and therefore available for analysis. Further, filter analysis unsettles the taken-forgranted epistemology of sight by clarifying the relationship between what is seen and what is known. Whether that takes the form of challenging presumptions about the selfevidence of sex by bringing attention to the normally unacknowledged similarities between male and female bodies, highlighting the negatives spaces of the conceptual distinction between sex and gender, foregrounding the complexities of biology and biography that are eclipsed by racial categories, or assembling the "irrelevant" data overlooked in scientific research for a detailed sociological analysis, the filter metaphor is a powerful analytical tool to take apart and examine the construction of self-evident social realities.

Notes to Chapter 6

¹ See also, Howson 2005: 117; Hale 1998: 115; Shilling 2003: 10.

² See, for instance, Ortner 1974; Rubin 1975. See also, Fausto-Sterling 2000: 3-4.

³ I use the term "SexGender" here to evoke both the original distinction between the terms "sex" and "gender" as well as the refusal of their separation.

APPENDIX – METHODOLOGICAL NOTES

Early in my Master's coursework I became interested in how the body has been conceptualized in sociology and gender studies. Both fields seemed to be struggling with how to integrate the fleshy materiality of the body with their defining commitments to ideas like the social construction of gender and reality more broadly. Several years later I took Eviatar Zerubavel's course on cognitive sociology and it became instantly clear to me that the family of concepts he presented – in particular attention and disattention, polarization, lumping and splitting, and topological perception – provided an incredibly productive way to think about the social construction of the body that had not yet entered the ongoing discussion in either gender studies or the sociology of the body. As Wayne Brekhus has pointed out, cognitive sociology is translatable across nearly any subfield of sociological inquiry (Brekhus 2007: 454). What I have tried to do in this dissertation is to bring the insights of cognitive sociology to bear on the body, specifically the visual perception of differences between "male" and "female" bodies.

I mention the intellectual trajectory of the project because, for me, this theoretical argument that brings together cognitive sociology, the sociology of the body, and gender studies came first, and my ideas about what form of sociological data might empirically illustrate my claims came later. Distinct from more traditional "data-driven" sociological research methods, this sequencing is typical of the methodology of formal cognitive sociology, which Zerubavel calls "social pattern analysis," in which researchers usually "start collecting their data only after having committed themselves to a particular focus of

scholarly attention. After all, establishing that focus determines what data they actually get to collect" (Zerubavel 2007: 9-10; see also, Zerubavel 1980: 30). In other words, in this approach, the researcher firsts develops a set of "sensitizing" concepts, which "suggest directions along which to look" and provide a "general sense of relevance and guidance in approaching empirical instances" (Blumer 1954: 7; see also, Zerubavel 1980: 31). Essentially conducting a form of theoretical sampling (Glaser and Strauss 1967), they decide "on analytic grounds what data to collect" (Strauss 1987: 38).

In trying to capture the process of seeing sex differences, I faced a methodological challenge shared by anyone who studies the taken-for-granted processes that inform social life: That is, how to study something that is largely automatic and subconscious, and that most people believe is totally self-evident. One of the defining features of the "analytical field research" (Zerubavel 1980: 25) described above is that it often brings together substantively different groups, contexts, or levels of analysis to look for underlying social patterns: "It is the search for cross-contextual similarity among seemingly dissimilar phenomena that so distinctly characterizes the formal sociological imagination" (Zerubavel 2007: 6). The analytical field researcher thus often lumps together groups that might otherwise be regarded as too different to be related. Indeed, in any other context, blind people and transgender people would probably seem to have little in common. In fact, I imagine my blind respondents would be surprised to find themselves in the same study with transgender people - and vice-versa. It is only by disregarding their obvious differences that the decision to bring these two groups together to analyze sex attribution can be understood.

Guided by the comparative methodological approach of social pattern analysis, my eventual solution to the epistemological difficulty of studying sex attribution was to look for "outsiders" – people who either do not participate in sex attribution or do it very differently – and "experts" – people who are unusually self-conscious and deliberate about sex attribution. I chose to interview blind people because they literally cannot see sex, and as such their narratives provide access to a perceptual experience of sexed bodies that is totally different in sensory content from the typical sighted experience, reflecting rarely foregrounded non-visual modes of perceiving bodies. By highlighting their alternate perceptual reality of bodies, I sought to understand the extent to which the prevailing understanding of sex is specifically sex *seen* as opposed to sex *sensed* more broadly.

I chose to interview transgender people as experts on sex attribution who view the body in light of the possibility of transitioning between sexes. As a result, they are deeply aware of the underlying similarities between male and female bodies as well as their most recalcitrant differences. They offer an account of sexed bodies that is similar in its sensory content to the dominant perceptual experience (in that it is visual), but with a heightened awareness of sex cues that non-transgender people take for granted, and a unique point of view that brings some of the normally unseen similarities between male and female bodies into the foreground.

I use the term "transgender" as an umbrella term that encompasses transsexuals, cross-dressers, and anyone else who self-identifies as transgender or whose gender identity does not correspond normatively with his or her birth sex. In the interviews I

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asked all of my respondents to explain their understanding of the term transgender and whether they identified as transgender. This definition broadly reflects their responses. Under this very expansive definition, "transgender" can also include intersexuals – and I did interview several intersexuals who responded to my advertisements – but this remains a matter of debate in both intersex and transgender communities. I use the term "blind" because, on the whole, my respondents use the term rather than other labels such as "visually impaired." In total, I interviewed 41 transgender people and 27 blind people.

Given their unique positions vis-à-vis sex attribution, one might question the extent to which insights from transgender and blind people can help us to understand the social construction of sex *in general*. In other words, these two groups are – in different ways – substantially different from the average person. Richard Williams has written about how to approach theorizing from "extreme" cases, and his position is that we must assume that the findings obtained from such samples can provide insight into how people in similar circumstances generally behave. To use his example, we must embrace the idea that "the study of particular African Americans can provide information about humans who are not African Americans" (1995: 545). Brekhus has called this approach "universalizing from the marked," which involves looking for "what is generic in those categories that are generally treated only as group-specific" (Brekhus 2000: 100). It is in this spirit that I chose to study blind people and transgender people. I did not choose to study these groups because they can tell me something unique about blind people or transgender people. I studied them because I think they can tell me something about us all.

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In addition to comparing two very different populations, I further diversified my evidence – and thereby hopefully increased my argument's generalizability (Zerubavel 2007: 4) – by bringing in several additional, and equally eclectic, forms of data, including anthropometric data, figure drawing books, and photographs from anatomy textbooks. Throughout the analysis, I also interweave other snippets of popular culture, such as cartoons, works of art, and advertisements.

My specific focus on socio-optical construction dictated not only what kind of data I chose to include, but what details I considered relevant within that data. With any data, what we get out of it depends a great deal on what questions we put to it. It depends on which texts and passages we turn to for guidance in interpreting it, which ideas we think are important, and why. This is surely the case here. There is no doubt that my theoretical commitments have shaped my interpretation and presentation of my respondents' narratives. This is not to say that I did not try to fairly represent their beliefs and experiences, or that I did not allow the things they said that I found surprising to shift and complicate my initial argument. The point is that this project did not begin from a particular interest in either blind or transgender people, and my goal is not to characterize either group's experience. Rather, I am exploring a broader socio-cognitive process, and I only use what my respondents have said in so far as it helps illustrate the normative cognitive and perceptual aspects of sex attribution.

In restricting my analytical focus in this way, I have undoubtedly ignored many other interesting aspects of my respondents' narratives. However, I do not view this analytic selectivity as a limitation. While the aim of more data-driven approaches is to represent one's empirical data in all its detail, the only way to actually notice formal patterns is to confine one's attention to only certain aspects of actual situations (Zerubavel 2007: 10; see also, Zerubavel 1980: 29). In this light, deliberately viewing one's data selectively can be a methodological *virtue* – "a necessary precondition for staying analytically focused" (Zerubavel 1997: 10; see also, Zerubavel 1980: 28, 30). Brekhus describes this approach as "thick analysis" as opposed to "thick description": "Thus rather than developing a thick and deep empirical description of a narrow slice of social life, s/he is interested in an analytically deep analysis" (Brekhus 2007: 463). It is in this spirit that I provide relatively "thin" descriptions of the details of my respondents' lives, using them explicitly to reveal the analytic principles being studied – to provide a grounded means of conceptualizing the perceptual construction of sexed bodies *in general*.

My approach is also informed by questions about the limitations of the evidence of experience. In her well-known critique of the uncritical use of first-hand accounts of experience as a transparent reflection of "reality" in historical scholarship, Joan Scott argued that it is always necessary to "attend to the historical processes that, through discourse, position subjects and *produce* their experiences" (Scott 1991: 779, emphasis added). This means "insisting on the discursive nature of 'experience' and on the politics of its construction. Experience is at once always already an interpretation and something that needs to be interpreted" (797). Elizabeth Grosz makes the same point when she states that "it is clear that experience cannot be taken as an unproblematic given, a position through which one can judge knowledges, for experience is of course implicated in and produced by various knowledges and social practices" (Grosz 1991: 94). This critical view of the evidence of experience raises questions about methodological approaches in which there is very little theoretical intervention on the part of the researcher – such as thick description, or some applications of grounded theory. The virtue of such approaches is a deep, nuanced account of people's beliefs and experiences, but the trade-off is that one risks uncritically reproducing hegemonic discourses. To avoid this, researchers need to do more than create a record of people's experience. We must analytically intervene from a theoretically informed position if we are to look beyond people's experiences to the social forces that *create* their experiences. For this reason, I did not take my respondents' accounts strictly at face-value all the time, but viewed them as the products of (and therefore a productive site to mine for) broader cultural norms about sex and sex attribution.

To recruit my participants, I depended mostly on advertisements I posted in online forums and mailed to local and national blind and transgender organizations. The blind organizations included the National Foundation for the Blind, the New Jersey Foundation for the Blind, the Commission for the Blind and Visually Impaired, Lighthouse International, and the Commission for the Blind and Visually Handicapped. The transgender organizations included the Manhattan Lesbian, Gay, Bisexual & Transgender Community Center, Renaissance New Jersey, Monmouth Ocean Transgender, New Jersey TG Support Group, and Long Island Transgendered Expressions (LITE). I also requested referrals from each respondent at the time of his or her interview, and on several occasions I was able to generate a string of two or three contacts in this manner. And in one case I interviewed a small concentration of participants affiliated with one particular organization, a cross-dressing club in New York. They invited me to come to a group meeting where I met about ten members, seven of whom agreed to be interviewed.

In the end, the twenty-seven blind people I interviewed were located in sixteen different states within the United States plus one person each from Guam and Kosovo. Due to this geographic dispersion, almost all of the interviews took the form of taperecorded phone sessions or exchanges over email or Internet chat. I had initially planned to conduct all of my interviews either in-person, or, when geographic distance precluded meeting face-to-face with a respondent, over the telephone. It therefore surprised me when over half of my blind respondents requested to be interviewed online rather than over the phone, but I learned very quickly that with the help of screen readers and voice recognition software, many blind people are avid computer users. I did not observe any significant differences in content between the interviews I conducted online and those I conducted in-person or over the telephone. However, it was interesting from the standpoint of a researcher studying visual sex attribution to be unable to attribute the sex of my respondents. When they did not offer this information, I had to ask them outright whether they were male or female. The same thing was true of their age and race. Not surprisingly, given my focus, I never completed an interview without ultimately making a determination about the respondent's sex. However, in a few cases I did forget to ask for someone's age or race, which is why this information is occasionally not provided. (I am missing the age for two blind respondents and two transgender respondents, and the race for three blind respondents and five transgender respondents.)

The sample of blind people ranges in age from approximately nineteen to sixtyone, with about half over thirty and half under thirty. Though the sample is very evenly divided in terms of sex, with thirteen males and fourteen females, only three participants are people of color. Just over half of my respondents were born blind or lost their vision within their first year of life. An additional three respondents lost their vision between ages one and ten. Five went blind between age ten and age sixteen.

My sample of forty-one transgender people includes twenty-seven transsexuals (whether pre-operative, post-operative, or non-operative), seven people who prefer the term "transgender," four self-identified cross-dressers, and three intersexuals. The vast majority of the transgender respondents are male-to-female (MTF); only five are femaleto-male (FTM). They are located in twelve different states, but in this case the sample was more heavily concentrated in New York and New Jersey. As a result, twenty-one of the interviews took place in person. Nine of the remaining interviews took place over the phone, and the remaining eleven interviews took place over email or Internet chat. The respondents range in age from approximately nineteen to seventy-one, however in this case only 17% were under 30, compared with about half of the blind respondents. As with my blind respondents, here again the sample is very racially homogenous; only two of my transgender respondents are people of color (one was Asian, one Native American). (See Table 10)

TABLE 10: SAMPLE CHARACTERISTICS

Sample Characteristic	Blind Sample	Transgender Sample
Total number of respondents	27	41
Age range	19-61 ¹	19-71 ²
Race	88% white ³	94% white ⁴
Geographic location	16 U.S. states 2 non-U.S.	12 U.S. states

¹ Excludes missing data, N=2 ³ Excludes missing data, N=3

² Excludes missing data, N=2 ⁴ Excludes missing data, N=5

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The research took the form of semi-structured life-history interviews, which ranged in length from thirty minutes to approximately three hours. While I had a number of different questions in mind based on my interest in the socio-cognitive and perceptual processes behind sex attribution, I also encouraged the respondents to direct the discussion in order to learn what was most salient to them about bodily sex and sex attribution. As a result, many of the interviews covered a huge variety of topics, and in my analysis I have bracketed and set aside all information that does not relate to bodies and sex attribution.

Some of the questions I arrived at the interviews planning to ask the blind respondents were:

What is the first thing you notice about people?

How do you tell if someone is male or female?

Have you ever assigned someone to the wrong sex category?

Do you think that you would be able to feel (identify by touch) the difference between a male arm and a female arm? (*I often used this question several times, substituting different body parts for "arm"*)

Some of the questions I planned to ask the transgender respondents were:

What was the first thing you changed about your appearance?

Is there any part of your body that has not changed at all?

What do you think is the single most powerful thing you/one can change in order to read successfully as the other sex?

Thinking about your "old" body and your "new" body, what body parts did you have to de-emphasize? What do you have to emphasize?

Once the respondents told me how they identified (e.g. transsexual, cross-dresser, etc.), I adjusted these questions to be appropriate to their experience. For example, I would probably not ask a cross-dresser about his or her "old" and "new" body, because s/he may not have made any physical changes (although many MTF cross-dressers do wax their eyebrows and sometimes their legs, and some even get electrolysis to eliminate their facial hair). I tried to listen carefully to my respondents' self-descriptions and adjust my questions accordingly.

I used the qualitative data analysis software package Atlas.ti to thematically code and organize the interviews. The codes were generated both inductively and deductively. I had certain terms in mind at the outset, but I also noted themes that emerged as I was transcribing and reading the transcriptions. For instance, I knew based on my prior conceptual work that I was going to look for the following topics in the transgender narratives: selective attention, polarization, relevance, irrelevance, sameness, expectations, and evidence of expert knowledge. Additional themes that emerged inductively in the data included: pre-transition androgyny, transdar, the notion that it is easy to pass, and genital similarities. Some of the themes that emerged as I was analyzing the interviews with blind people included: a default position of obviousness, the idea of sex without polarization, the temporality of sex attribution, and the contrast between sex and race attribution.

In addition to the interview questions, I asked most of the transgender respondents I met in person and a few of those I interviewed electronically to fill out a survey (see Figure 24) designed to rank the significance of different body parts. In the end, nineteen of my transgender respondents participated in the survey portion of the interview. I used the resulting data to compute some very simple quantitative measures such as mean and median scores.

FIGURE 24: SURVEY INSTRUMENT, TRANSGENDER RESPONDENTS

Indicate whether you have altered each body part and how important you feel it is for passing on a scale of 1-10. Please add any other body parts you feel I should have included in the extra space provided.

Body Part	Have you altered?	<i>Importance for passing, 1-10</i> (10=high, 1=low)
Hair		
Lips		
Forehead		
Chest		
Elbows		
Buttocks		
Knees		
Ankles		
Eyebrows		
Chin		
Neck		
Abdomen		
Lower arms		
Genitals		
Calves		
Feet		
Ears		
Cheeks		
Shoulders		
Upper arms		
Hands		
Thighs		
Shins		

Like all studies, this one has limitations. One important question is whether I am capturing what people say and believe about sex attribution or what they actually do – the cognitive and perceptual process. This is an unavoidable challenge of trying to analyze cognitive processes, since we largely have to infer what happens in the mind from what passes through to consciousness. There is a difference between accounts of a process and the process itself; the accounts are interesting and important, but they are not necessarily interchangeable. What people believe is involved in a process is often a reflection of cultural stories about what is relevant and how these distinctions *should* be made. Therefore, it may be that what I have presented is these cultural stories about sex and sex attribution. This is valuable information in and of itself, but it remains a question whether it tells us what people actually do. This disjuncture may also have been increased by the way I structured some of the interview questions, particularly those questions that had to do with whether particular parts of the body are sex-dimorphic or not. This isolated consideration of individual body parts may not be reflective of how most of the respondents actually determine people's sex in practice. Nonetheless, it generated a lot of interesting material on the non-dichotomous body that might not otherwise have come out.

Another question is whether I am addressing the body proper, or just our perceptions of that fleshy materiality. This is a valid distinction to make for the purposes of analytic clarity, but I think it is fair to say that there is no other way we access bodies except through some form of sensory perception. As Wolfgang Kohler (1929: 27) put it, "I shall never be able to make a direct statement about a physical event *as such*." Our only contact with bodies is through what he calls direct experience, i.e. perception (see also, Howson 2005: 2). This is also David Armstrong's point, drawing on Michel Foucault, in the quotation with which I opened the introduction: "The body is what it is perceived to be; it could be otherwise if perception were different" (Armstrong 1987: 66). In light of this, an analysis of how the body is perceived through the senses may be the only analysis of the body's materiality that is possible.

It is also important to mention several potentially limiting features of my samples. The biggest concern about my sample of transgender respondents is that it is so heavily skewed toward male-to-female (MTF) transgender people. When I became aware of it, I began to mention this trend as part of the interview, asking my respondents for their opinions on why so few FTMs had contacted me. Several people suggested to me that it is generally easier for FTMs to fully transition – "go stealth," as some of them put it – and that once they are living successfully as their sex of transition for a time they might not be interested in (or feel safe) discussing their experience as transgender.

While I cannot be sure that this is the reason so few FTM transgender people volunteered for my study, it raises another factor that may bias my (and every other) sample of transgender people: The transgender identity is often not a permanent one. When their transition is complete, many transpeople would prefer that no one know that they ever identified as transgender. The result is that my sample does not include the experiences of those who have abandoned this identity label. By necessity, it only includes the voices of those who, in varying degrees, are currently "out" as transpeople. One other potentially distorting factor is that a number of my transgender respondents view themselves as "leaders" or "experts" on trans identity. The respondents I have in mind are activists who run support groups, interface with politicians, or just routinely make themselves available to reporters, teachers, and researchers interested in learning about transgender identity. Having "experts" as informants has both advantages and disadvantages. One major disadvantage is that they typically have developed a series of "talking points" and pre-scripted answers. Since they have a tendency to revert to a script, these respondents sometimes seemed less willing to respond authentically to questions or to answer the exact questions posed. At the same time, people who are leaders in the transgender community also make excellent informants for some of the same reasons: they have thought a lot about transgender identity, are practiced at articulating their views, and have a level of comfort with themselves that can allow them to be wonderfully self-reflective and candid.

Even beyond this group of "expert" respondents, however, the vast majority of the transgender people I spoke with seemed very comfortable being interviewed, and some made comments about the potential value of social research. This may reflect the fact that I was interviewing a self-selected group of transgender people who had agreed to speak with a researcher. Overall, though, the respondents seemed to view the interview as a positive experience, and even as an opportunity to dispel some of the misinformation they perceive as circulating about trans people in the media and the popular imagination. In this vein, there were three points my respondents made over and over, which they obviously felt were important for the general public to understand about being transgender. The first is a saying that a great many of the respondents used: "Gender is

between the ears, not between the legs." I think their point is simply to explain how it is possible to be biologically male, for instance, but to be mentally and emotionally female. But this saying also relates to a second "message" the respondents seemed to want to be sure was communicated, which is that being transgender and attraction/sexuality are independent of one another. In other words, being transgender is not the same as being gay, nor does changing one's gender necessarily change the direction of one's attraction (although it can). As one respondent explained it to me, the transgender world has basically the same distribution of heterosexuals, homosexuals, and bisexuals as the nontransgender world. The final point the respondents often emphasized in this context is that being transgender is not a choice. When considered in relation to the idea that "gender is between the ears," what this implies is that what is in the mind (gender) is not freely chosen, and in fact is more difficult to change than the body's sex. This idea interconnects in an interesting way with my argument that the apriori mental category of gender plays an enormous role in shaping our experience of the body's sex and reality more broadly.

Some of the blind respondents seemed far more skeptical of the value of researching blindness, particularly when studies emphasize the ways blind people are different.

I think maybe blindness is researched too much. And I'll tell you why: Blindness is merely a loss of sight. Any other meanings we ascribe to blindness are probably cultural or limiting. For example, I'm going to go skydiving in about a month if the weather permits [...] and in September I'm going to go deer hunting. [...] Again, we limit ourselves as blind people. We're part of society also. [...] It's a very simple thing and with the right training we can be average joe out there in society. [...] People ascribe a lot to blindness that simply isn't there. [...] We just can't see. And everything else [...] we're somewhere in the middle. (White male, 56, blind since birth)

Blind people can be kind of wary of studies because it makes us feel like guinea pigs and people will come up with the outrageous ideas that say we're so different from everyone else. But I didn't feel that way at all with you. (White female, 30, began losing vision at age 12)

While my blind respondents are also a self-selected group of people willing to speak with

a researcher, it is clear that at least some of them agreed to speak with me in spite of

profound reservations about the value of such studies.

These questions about whether research on blindness limits assimilation grow out of larger debates about assimilation and difference in disability rights discourse. One respondent highlighted this connection, framing his comments more broadly in relation to people with disabilities:

I don't think it rude or offensive inherently to ask what it's like to be blind, retarded, polio survivor, quadriplegic, and on and on. However, after 40 years of the "educate the masses and they'll like us more and life will be better," either we aint doin very successful educating, or the masses aint learning so good. Sooo... it is not very productive for folks to try to share their experience and often this just reinforces the able-bodied negative attitudes. In closing, there are a great many nuances in each person's life that affect their attitude, capabilities, limitations, beliefs, aspirations, experiences, and self-image, beyond the precise disability. (White male, 54, legally blind since birth, totally blind since mid-30s)

When it seemed necessary and appropriate, I responded to these kinds of comments by assuring my respondents that I am at least as interested in the ways that they are similar to sighted people as I am in their differences. This seemed to allay some of their anxieties, and my impression is that they usually felt more positive about the study by the end of the interview.

Aside from it being a self-selected group, the biggest potential limitation of my sample of blind people is that it includes only five people who became blind over the age of ten, and no one who lost his or her sight later than age sixteen. Well over half of my sample was born blind or became blind during the first year of life. While I initially anticipated that I would find interesting differences between those respondents who never had vision or lost their vision at a very early age (and thus were never exposed to visual sex differences) and those who were sighted into late childhood or adulthood, I did not observe significant systematic differences in their descriptions of how they attribute sex. Even so, this question merits further investigation with a larger sample of people who became blind later in life.

Taken as a whole, while the samples are definitely not representative of all transgender and blind people, I do not believe that my respondents are particularly unique. In any case, the potential limitations of my samples do not pose a significant analytical problem for me, as my primary goal is to explore a broader cognitive and perceptual process as opposed to characterizing blind or transgender people as a group, a task for which any concerns about the representativeness of my samples are highly relevant. Further, the analysis is meant to be provocative, rather than complete or representative in the strict methodological sense of the term. My explicit goal is to problematize the seeming perceptual "obviousness" of sex; to rearrange the taken-forgranted cognitive and perceptual map of the body, and to bring the non-dichotomous body that is normally backgrounded into the foreground. I do not claim that this reorganized map of the body is necessarily a more valid representation of sex than perceptions that foreground sex differences, just that it is equally valid, but much less often acknowledged. The point is not that male and female bodies are either similar or different, but that we could see them either way, depending on what we focus on and what we ignore.

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