INFORMATION TO USERS

This manuscript has been reproduced from the microfilm master. UMI films the text directly from the original or copy submitted. Thus, some thesis and dissertation copies are in typewriter face, while others may be from any type of computer printer.

The quality of this reproduction is dependent upon the quality of the copy submitted. Broken or indistinct print, colored or poor quality illustrations and photographs, print bleedthrough, substandard margins, and improper alignment can adversely affect reproduction.

In the unlikely event that the author did not send UMI a complete manuscript and there are missing pages, these will be noted. Also, if unauthorized copyright material had to be removed, a note will indicate the deletion.

Oversize materials (e.g., maps, drawings, charts) are reproduced by sectioning the original, beginning at the upper left-hand corner and continuing from left to right in equal sections with small overlaps.

Photographs included in the original manuscript have been reproduced xerographically in this copy. Higher quality 6" x 9" black and white photographic prints are available for any photographs or illustrations appearing in this copy for an additional charge. Contact UMI directly to order.

Bell & Howell Information and Learning
300 North Zeeb Road, Ann Arbor, MI 48106-1346 USA

UMI®
800-521-0600
THE ONTOLOGY OF SEX: A POSTFOUNDATIONAL REALIST REPLY TO CONSTRUCTIVIST AND POSTSTRUCTURALIST FEMINISM

by

Carrie Lee Hull

A thesis submitted in conformity with the requirements for the degree of Doctor of Philosophy
Graduate Department of Political Science
University of Toronto

© Copyright by Carrie Lee Hull 1998
The author has granted a non-exclusive licence allowing the National Library of Canada to reproduce, loan, distribute or sell copies of this thesis in microform, paper or electronic formats.

The author retains ownership of the copyright in this thesis. Neither the thesis nor substantial extracts from it may be printed or otherwise reproduced without the author’s permission.

L’auteur a accordé une licence non exclusive permettant à la Bibliothèque nationale du Canada de reproduire, prêter, distribuer ou vendre des copies de cette thèse sous la forme de microfiche/film, de reproduction sur papier ou sur format électronique.

L’auteur conserve la propriété du droit d’auteur qui protège cette thèse. Ni la thèse ni des extraits substantiels de celle-ci ne doivent être imprimés ou autrement reproduits sans son autorisation.

0-612-41442-6
ABSTRACT

THE ONTOLOGY OF SEX: A POSTFOUNDATIONAL REALIST REPLY TO CONSTRUCTIVIST AND POSTSTRUCTURALIST FEMINISM

Carrie Lee Hull

Doctor of Philosophy 1998
Department of Political Science
University of Toronto

This dissertation combines themes in twentieth century philosophy with feminist theory and politics. Its primary focus is the recent "deconstruction" of the sex categories, as exemplified in the writings of Judith Butler, on the one hand, and Suzanne Kessler and Wendy McKenna, on the other. This deconstruction is reflected in the philosophical argument that beliefs about the naturalness of biological sex are the effect of cultural preconceptions and norms rather than true knowledge of the world, and the political argument that feminism must now focus its efforts on challenging the principle that biological sex is a material fact. In other words, it has been alleged that since all knowledge of the world is mediated by language and culture, biological sex is impossible to distinguish from the impact of social gender. The dissertation first connects this feminist theory to the nominalist and relativist tradition in philosophy, and contends that this tradition is further linked to the age old philosophical quest for absolute foundations. Demonstrating that such foundations cannot be secured, nominalism and relativism—and the feminism they underpin—conclude that objectivity is impossible. The dissertation argues that there are alternative responses to foundationalism,
however. Philosophies contending that objective, albeit less than logically certain, knowledge is attainable are advocated. Theodor Adorno’s materialism, contemporary realism, biology, and phenomenology are used to develop a notion of tentative, approximate truth. Using the framework provided by these philosophies, the dissertation then argues the following in response to poststructuralist and constructivist feminism: (1) There are natural sex categories with permeable, but nonetheless real, boundaries between them; (2) The perceivable form of the sexed body both presupposes and grounds—in a non-teleological, non-deterministic, fashion—some of the communication between and behaviours connecting sexed beings; and, (3) Language referring to sex has the potential to tell us something true about our world, not just something conditioned by our culture. The overarching thesis linking these arguments is that it is philosophically correct and politically advisable to maintain a distinction, albeit attenuated, between sex and gender.
ACKNOWLEDGMENTS

Many thanks to my supervisor and friend Ed Andrew, for his tolerance, wit, and generosity of both time and spirit. Thanks also to my committee members, Gad Horowitz and Jenny Nedelsky. Fellow theorists Michelle Baert and Alice Ormiston provided vital intellectual and moral support. The Social Sciences and Humanities Research Council of Canada funded the better part of my research. Finally, thanks to my family for tolerating the many stresses of the endless dissertation process.
CONTENTS

Abstract ii
Acknowledgments iv

Introduction 1
Chapter Outline 4
Historical Overview 8

Part I Deconstructing the Categories

Chapter 1 Continental and Analytic Antifoundationalism: Goodman, Quine and Foucault 27

Nelson Goodman 27
The New Riddle of Induction 29
Philosophical Implications 32
W. V. O. Quine 39
Radical Translation 43
Linguistic Behaviourism 46
Michel Foucault 54
Philosophies 55
Nominalism and Relativism 55
Behaviourism and Empiricism 60
Histories 64
Classification and Discipline 64
Sex and Sexuality 70
Conclusion 78

Chapter 2 Poststructuralist and Constructivist Feminism: Judith Butler, Suzanne Kessler, and Wendy McKenna 80

The Mediation and Construction of Reality 83
Butler’s Philosophical Premises 83
Kessler and McKenna’s Philosophical Premises 96
Nominalism and Contingent Foundations 106
Butler’s Nominalism 106
Kessler and McKenna’s Nominalism 112
Agency and Social Change 116
Butler’s Politics 116
Kessler and McKenna’s Politics 129
Part II Reconstructing the Categories

Chapter 3
Adorno and Negative Dialectics

The Two Faces of Certainty: Idealist Foundationalism and Postmetaphysical Antifoundationalism 135
Idealism 135
The Contemporary Postmetaphysical Scene 146
The Primacy of the Material, or Negative Dialectics 150
Applying Negative Dialectics 153
Between Foundationalism and Anti-Foundationalism 156
The Material Subject 163
Negative Dialectics as a Critique of Nominalism and Liberalism 166
Negative Dialectics as a Critique of Positivism and Behaviourism 170
The Natural Sciences 173
The Social Sciences 174
Conclusion 181

Chapter 4
Contemporary Realism 183

Realism and Materialism 184
Natural Knowledge 186
Laws and Exceptions; Constructions and Constraints 192
The Constructivist and Poststructuralist Position 192
A Realist Alternative, Part 1 194
Poststructuralist Rejoinder 200
A Realist Alternative, Part 2 201
Explanation, Categories, and Classes 212
The Constructivist and Poststructuralist Position 212
Problems with the Poststructuralist Position 213
Distinguishing Between Natural and Cultural Kinds 213
Perceiving Similarity and/or Difference 215
A Realist Alternative, Part 3 223
Physical Kinds 224
Biological Kinds 228
Implications for Feminist Theory 236
Chapter 5
Structure and the Evolution of Sexual Form and Meaning

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>A Quinean Refresher</td>
<td>239</td>
</tr>
<tr>
<td>A Postfoundational Law of Non-Contradiction</td>
<td>245</td>
</tr>
<tr>
<td>Substances and Properties</td>
<td>246</td>
</tr>
<tr>
<td>Sex as a Structured Natural Property</td>
<td>253</td>
</tr>
<tr>
<td>Form and Meaning</td>
<td>256</td>
</tr>
<tr>
<td>Evolutionary Footnote</td>
<td>257</td>
</tr>
<tr>
<td>Meaning and the Evolution of Human Form</td>
<td>260</td>
</tr>
<tr>
<td>The Moody Animation of Form</td>
<td>267</td>
</tr>
<tr>
<td>Portmann's Unique Hypothesis</td>
<td>275</td>
</tr>
<tr>
<td>Sexual Form</td>
<td>277</td>
</tr>
<tr>
<td>Sexual Mood and Behaviour</td>
<td>282</td>
</tr>
<tr>
<td>Meaning and Language</td>
<td>288</td>
</tr>
<tr>
<td>Counting Bees, or a Realist Theory of Language</td>
<td>289</td>
</tr>
<tr>
<td>Acquisition</td>
<td>293</td>
</tr>
<tr>
<td>Our Sense of Sense</td>
<td>297</td>
</tr>
<tr>
<td>The Work of Language</td>
<td>306</td>
</tr>
</tbody>
</table>

Conclusion

Appendix: The Evaluation of Competing Theories 317
Works Cited 322
This dissertation combines themes in twentieth century philosophy with feminist theory and politics. My primary interest lies in an exploration and critique of the recent "deconstruction" of the sex categories. As I will demonstrate, this deconstruction is reflected in the philosophical argument that beliefs about the naturalness of biological sex are the effect of cultural preconceptions and norms rather than true knowledge of the world, and the political argument that feminism must now focus its efforts on challenging the principle that biological sex is a material fact. In other words, it has been alleged that since all knowledge of the world is mediated by language and culture, biological sex is impossible to distinguish from the impact of social gender. Therefore, the argument continues, sex is, in effect, gender, and feminism must question its traditional acceptance of the sex-equals-nature/gender-equals-culture distinction. I will argue the following in response to this feminist development: (1) There are natural sex categories with permeable, but nonetheless real, boundaries between them; (2) The perceivable form of the sexed body both presupposes and grounds—in a non-teleological, non-deterministic, fashion—at least some of the communication between and behaviours connecting similarly and dissimilarly sexed beings; and, (3) Language referring to sex has the potential to tell us something true about our world, not just something conditioned by our culture. My overarching thesis linking these three arguments is that it is philosophically correct and politically advisable to maintain a distinction, albeit attenuated, between sex and gender.
My research is guided by the belief that philosophical clarification is an essential step in political and social theorizing. Contemporary feminist theory is, furthermore, couched in a larger intellectual debate between what are loosely called foundationalism and anti-foundationalism. A full exposition of the philosophies implicated in feminist theory will be beneficial to feminism. Briefly, to set the stage, I argue that philosophers through the ages have often sought to ground knowledge in the certainty typical of mathematical or logical proofs. The resulting first principles, be they Platonic, Cartesian or utilitarian, have then been used to defend philosophical systems and political platforms. A feminist manifestation of foundationalism is the contention that women can and should be united into a political movement around their shared biological sex. Following the collapse of positivism in this century, however, the conviction that there is any sure foundation for either philosophy or politics has been discredited. As

1. I must note that one of the central figures in my work, Judith Butler, has stressed that such a clarification is not a necessary precursor to political engagement. She writes, "I would suggest that a fundamental mistake is made when we think that we must sort out philosophically or epistemologically our 'grounds' before we can talk stock of the world politically or engage in its affairs actively..." I certainly agree that one can take part in political life without having a fully articulated philosophical position. However, to the extent that Butler writes for the most part about philosophy, I find her comment somewhat misrepresentative of her own overall efforts. See Butler, "For A Careful Reading," in Seyla Benhabib et al., Feminist Contentions (New York: Routledge, 1995), 128-29.

2. Several thinkers have made this allegation of a connection between mathematical certainty and philosophy. As I will stress throughout my dissertation, I am primarily influenced by Theodor Adorno's work on this front. However, noted biologist Ernst Mayr makes a similar charge, arguing that the effect of the bond between logic or mathematics and knowledge has been to privilege physics over all other sciences. See Ernst Mayr, Toward a New Philosophy of Biology (Cambridge, Massachusetts: The Belknap Press, 1988), 9. Finally, Louis Fleischhacker provides a compelling formulation of a similar argument in his Beyond Structure (Frankfurt am Main: Peter Lang, 1995). In this book, (p. 11) Fleischhacker helpfully defines mathematics as, "the reduction of qualitative phenomena to measurable quantities and structures." The New Shorter OED offers a similar but lengthier definition: "the abstract deductive science of space, number, quantity, and arrangement, including geometry, arithmetic, algebra, etc." Logic, on the other hand, in the sense in which I wish to employ the term, refers to what the OED calls, "the systematic use of symbolic techniques and mathematical methods to determine the forms of valid deductive argument." When I refer to mathematics and logic, it will be in these specific senses.
I stated above, antifoundational feminism picked up on this turn of events by rejecting the notion that a biological commonality links women and distinguishes them from men. Efforts to reconceptualize feminist politics have followed. The first part of my dissertation will detail the theoretical developments leading up to and encompassing this strand of feminism.

There are responses to foundationalism other than relativism, however, and ways of redeeming aspects of the philosophical tradition. In fact, I suggest—along with Theodor Adorno—that foundationalism and relativism are intimately connected. The quest for absolutely certain knowledge quite naturally results in periodic philosophical disillusionment, with negative implications for advocates of social change. What is required, I suggest in a slight twist of Adorno's work, is the establishment of more modest goals for knowledge. The stipulation that knowledge be absolutely certain in order to be accorded any validity must be dropped. More precisely, it must be acknowledged that different realms of knowledge require different standards of truth. Thus, whereas a high degree of certainty might be appropriate in astronomy or mathematical physics, I contend that the same standard may be out of place in the study of biological organisms, on one hand, or social structures, on the other.

The second component of my dissertation is, therefore, inspired by Adorno's criticism of the drive for certainty and its consequent, the rejection of the possibility of objective knowledge. In light of Adorno's intervention, I will analyze options to both foundationalism and relativism, and I will reconstruct sex and gender using these options as a framework. I will show how Adorno's negative dialectics and varieties of twentieth century realism engage in a useful struggle with notions of tentative, approximate truth. I will also address biological and phenomenological accounts of the body, in
particular the argument that the body is endowed with natural potentials and limitations that structure, without predetermining, the nature of social life. These philosophies are united in their influence by twentieth century antifoundationalist trends, yet they retain a concept of objective truth. I will demonstrate how they provide interesting insight into issues of sex and gender for these reasons.

**Chapter Outline**

This brief overview accomplished, I will now provide a more detailed breakdown of the structure of my dissertation. As indicated, the work is divided into two parts. Part I, "Deconstructing the Categories," contains two chapters, and will analyze the nominalist, relativist, and behaviourist response to foundationalism. Chapter One will furnish what I consider to be the philosophical framework for the deconstruction of the sex categories. I will first summarize developments in the analytic or Anglo-American school of philosophy, employing the writings of W. V. O. Quine and Nelson Goodman.³ It is my contention that Goodman provides one of the clearest articulations of nominalism, a philosophy that I will maintain is central to the deconstruction of biological sex. Quine, on the other hand, supplies detailed expositions of two theses that are essential (as I will also assert) to the feminist deconstructive project. Firstly, Quine argues that observation is always relative to a background theory. Secondly, he maintains that individuals learn language strictly by mimicking the behaviour of their elders. Chapter One concludes with my analysis of the "French reaction" to foundationalism, focusing on one thinker, Michel Foucault. It is my belief that Foucault provides an interesting synthesis of the ideas of Goodman and

---

³ Although I could just as easily have selected Kuhn or any number of other individuals, Goodman and Quine provide exceptionally clear articulations of some of the dominant philosophical trends of this century.
Quine, a synthesis that makes my bridge between analytic philosophy and contemporary feminism much easier to comprehend. It is furthermore the case that Foucault is one of the prime instigators of the thesis deconstructing the sex categories.

In the second chapter of Part I, I will discuss the feminist rebuttal to foundationalist philosophy. I will provide a detailed analysis of this turn in feminism through the works of Judith Butler on the one hand, and Suzanne Kessler and Wendy McKenna on the other. Butler develops a specifically feminist appropriation of Foucault, while Kessler and McKenna make sociological and anthropological use of Anglo-American philosophy. Yet the identical conclusion rejecting any real or theoretical distinction between biological sex and social gender is the result in both cases. In what I argue is a variation of Goodman's nominalism and Quine's relativism, sex is equated with gender, and both are reduced to one interpretation of the world amongst many. Furthermore, I maintain that Butler, Kessler, and McKenna adapt Quinean behaviourism in their allegation that sex identity and sexuality are acquired strictly through an individual's mimicry of established social norms.

Part II of my dissertation, "Reconstructing the Categories," contains the combined critical/reconstructive part of my research. It consists of three chapters united by the principle that, pertaining to the study of biological sex, the best response to philosophical foundationalism and antifoundationalism is the establishment of more modest goals for knowledge. The first chapter of Part II presents Theodor Adorno's philosophy, as reflected in several essays and his major philosophical work, Negative Dialectics. Adorno first demonstrates (as I noted above) the links between foundationalism and antifoundationalism, arguing that these two metaphilosophies intersect and ultimately collapse on the basis of their own premises. Adorno clearly
articulates how contemporary forms of nominalism, relativism, and behaviourism (philosophies that I argue influence the thinkers in Part I) have a common origin in the intersection of foundationalism and anti-foundationalism. Adorno then develops a minimalist yet unapologetic materialism in opposition to the thesis and antithesis represented by these superficially opposing schools of thought. Interestingly enough, however, Adorno is very close to poststructuralist and constructivist arguments on a number of counts. But Adorno's materialism permits him, in my view, to retain the grounds necessary to engage in meaningful social critique, as he insists that it is possible for our knowledge to attain varying degrees of objective truth.

Chapter Four fleshes out the initial position staked by Adorno, as I supplement his highly abstract materialism with a source seldom tapped in feminist or political theory: realism as inspired by Aristotle but modernized by contemporary British and American philosophers. I will engage the writings of Richard Miller, Richard Boyd, Ruth Millikan, Rom Harré, and Roy Bhaskar to criticize the Goodman-inspired nominalist strand of antifoundationalism, primarily as it is manifested in the feminist works of Butler, Kessler and McKenna. Although diverse in its interests and goals, realism is unified by the principle that natural laws connect superficially isolated empirical properties and events. However, unlike realists of earlier centuries, today's realists do not seek an absolute a priori foundation for these laws. Rather, knowledge is grounded in our historical experience of the world, particularly as this knowledge is espoused in the theories of natural and social science. I will argue, using this realism, that there is a "law" of sex, producing bodies that are—for the most part, but not always—either male or female.
Chapter Five, the final chapter, replies to what I allege are the Quinean components of poststructuralist and constructivist feminism. If a single principle can be said to unite this chapter of my dissertation, it is that to be relative is not necessarily to be derivative of culture. Some relationships, I will argue, are ontological. I use the writings of Ruth Millikan, firstly, to demonstrate that the relativity of male to female is a relativity structured in nature (shades of Aristotle again), and not simply a relativity constructed in language or discourse. I will assert on more than one occasion that the desire to avoid the charge of foundationalism or essentialism—represented in behaviourist reluctance to hypothesize the existence of natural drives or kinds—results in a fundamental misunderstanding of biological organisms and laws. Employing the work of biologist Adolph Portmann, I will then contend that the perceivable form of the body has evolved in a fashion such that an "observer" is assumed, and that male and female bodies in particular have evolved hand in glove. Sexual interest or drive, I will contend, cannot just be an artifact of culturally imposed standards as a consequence of this record of natural history embedded in each one of us. I will alternatively be arguing that the sexed body is naturally meaningful. If my thesis is left as such, there is little difference between it and positions adopted by cultural conservatives. However, the addition of the concepts of mood and consciousness, as in the writings of Portmann, Eugene Gendlin, and Maxine Sheets-Johnstone, allows for the possibility of non-reflexive responses to sexed bodies. This thesis reintroduces a depth to the body, and as such it runs counter to the contemporary doctrine—espoused by Quine, Butler, Kessler and McKenna—that responses to the body are learned in a strictly behaviouristic fashion. At the same time, my argument resists the absolutist claim that there is one and only one natural sexuality, because I maintain that human
beings are variable, and furthermore have the capacity to learn rather than simply respond reflexively, on the one hand, or be conditioned, on the other.

Chapter Five concludes with the argument that language originates in pre-linguistic categories (or genetically encoded capacities to note similarities and differences in the environment) shared by all human beings. The connection of the word "girl" to certain bodies and "boy" to other bodies is not, therefore, merely the effect of cultural authority, as feminist deconstruction has argued. Millikan, Sheets-Johnstone, and Gendlin contend instead that meaningful words have a felt sense that maps onto objects in our environments. Given the salience of sex to evolved organisms, I will argue that there is more than a chance that sexed bodies would compel the evolution of a felt sense (to which we do, contra Quine, have access), and ultimately, words. Thus, the relativity of words to other words cannot be used to divorce language from the world, because language is rooted in this prelinguistic sense. A brief conclusion will then draw my dissertation to a close.

**Historical Overview**

Before I begin my dissertation with an analysis of the twentieth century rejoinders to the search for foundational truth, it will be helpful to provide a compact history of the tradition that is the source of this rebellion. Culminating in twentieth century positivism, I argue that philosophers have been attracted to foundationalism, primarily, the belief that all knowledge must have an irrefutable first principle. Without such a principle, it is feared, explanation must lead either to an infinite regress (whereby each concept is explained through the introduction of another concept, ad infinitum), or circularity (whereby one’s initial premises are explained in terms of a result of one’s overall inquiry). The certainty furnished by mathematics and formal
logic has therefore proved hard to resist, as philosophers have attempted to replicate the results of these pursuits in other areas of inquiry.

Two consequences have followed. Firstly, formal properties like quantity have been abstracted from empirical evidence in an effort to perfect the study of nature. John Ziman, a physicist, describes the process from the perspective of his science:

Given the messy, chaotic world of everyday things, the physicist applies his peculiar methods to distill out the mathematically consensible essences. He extracts algebraically simple quantities, such as mass and spatial extent. He deliberately breaks things into 'elementary' parts, of greater simplicity: the organism is divided into cells; each cell is analysed into its chemical molecules; each molecule is broken into its constituent atoms . . . and so on. At each stage the invariance and indistinguishability of the elementary parts increases, so that the possibilities of a mathematical description of their properties and phenomena become wider and more inclusive.⁴

This methodological strategy in all likelihood tells us something fundamental about nature, and has undoubtedly played a profound role in many important scientific discoveries. However, the second consequence of the drive to attain certainty is that empirical knowledge not easily amenable to such an analysis has been diminished through both subtle and overt criticism. In the following overview I will provide examples of this formalist tendency in philosophy. While by no means intended as a dismissal of the individuals highlighted (nor even as representative of each thinker's oeuvre) my summary should demonstrate the tenacity with which the mathematical conception of the world has been held. I now turn to a history of philosophy viewed through these lenses.

As is customary in discussions of this sort, I will start with Classical Greece. Pythagoras (b. 571 BC?) and the Pythagoreans were among the earliest

advocates of a mathematical approach to the world. If Aristotle's accounts are accurate, the Pythagoreans hypothesized that the nature or essence of being was number. The physical body was thought to be inferior to the soul, and the study of mathematics was advocated as an appropriate method of spiritual purification. Aristotle further contends that the Pythagoreans examined the empirical world for analogies to number, with ten planets hypothesized in accordance with the base ten system. Later Pythagoreans supposedly associated unity and limit with good, and plurality and limitlessness with evil. Irrational numbers, legend has it, were thus a source of consternation. Although these sources provide indirect and inconclusive evidence, the Pythagoreans apparently equated numerical certainty with truth and the good, and are responsible for embryonic efforts to evaluate the material realm according to this standard.

Heraclitus' argument that the material realm is one of flux and transience, leading to a rejection of the evidence of the senses, had an enormous influence on Greek thought. For example, because night inevitably changes

8. The famous "Table of Opposites," allegedly of Pythagorean origin, is cited by Aristotle in *Metaphysics* §968a22:

<table>
<thead>
<tr>
<th>Limit</th>
<th>Unlimited</th>
</tr>
</thead>
<tbody>
<tr>
<td>Odd</td>
<td>Even</td>
</tr>
<tr>
<td>One</td>
<td>Plurality</td>
</tr>
<tr>
<td>Right</td>
<td>Left</td>
</tr>
<tr>
<td>Male</td>
<td>Female</td>
</tr>
<tr>
<td>Rest</td>
<td>Movement</td>
</tr>
<tr>
<td>Straight</td>
<td>Curved</td>
</tr>
<tr>
<td>Light</td>
<td>Darkness</td>
</tr>
<tr>
<td>Good</td>
<td>Evil</td>
</tr>
<tr>
<td>Square</td>
<td>Oblong</td>
</tr>
</tbody>
</table>

9. The Heraclitan fragment, "As they step into the same rivers, different and different waters
into day, Parmenides asserted that it was impossible to make any logically non-contradictory statements about the physical world.\textsuperscript{10} The sensual realm was therefore deemed unworthy of study, because only certain and eternal principles could be reflective of knowledge. There is, according to Parmenides, but one true existent and object of knowledge: ungenerated, imperishable and changeless Being.\textsuperscript{11} Because Being is apprehensible only through the reasoning faculty, Parmenides' conclusion was that knowledge is limited to that which is logically certain and divorced from the material world.

Plato (b. 428 BC) attempted to reclaim the possibility of empirical knowledge by uniting form and matter. Nonetheless, his philosophical system revolves around a fundamental hierarchy between the two realms.\textsuperscript{12} According to Plato, abstract qualities are capable of a perfection eluding the fluctuating sensual realm. True knowledge therefore pertains only to the rational apprehension of unchanging and eternal forms or ideas--entities resembling Pythagorean number and Parmenidean Being--existing apart from the material world. Number in fact provided an approximation to this world of pure ideas. Plato advised the study of calculation because it drew the soul "upward," away from the material world of "visible or tangible bodies."\textsuperscript{13} The analysis of geometry in the Republic further illustrates this argument.\textsuperscript{14} No actually existing triangle can be used to demonstrate proofs such as the

flow," was and is widely interpreted as a declaration that sensual knowledge is to be distrusted. T. M. Robinson, ed., *Heraclitus: Fragments* (Toronto, University of Toronto Press, 1987), 17. See also Aristotle, *Metaphysics*, §987a31-35.
\textsuperscript{11} Ibid., 12-18.
\textsuperscript{12} For just one example, see *Phaedo* §79a5-80b5.
\textsuperscript{14} Ibid., §510c-511d.
Pythagorean Theorem, because it will always fall short of the perfect qualities of the abstract triangle. Plato's solution is to demand that geometry restrict itself to nonsensible forms. Deductive methods can then be applied, and knowledge is attainable. Even though actually existing triangles "participate" in the Idea of the triangle, (in the same way that the entire sensual world shares in the Forms), the belief that superior knowledge is certain knowledge remains a dominant theme in Plato's work.

There is evidence that the equation of knowledge with numerical certainty carried over from philosophy into the early days of natural science. Roger Bacon (b. 1220), the medieval scientist, was impressed by the infallibility of geometric proofs. He revived the ancient tradition by declaring that "Of [the great sciences] the gate and key is mathematics."  

15 Bacon believed that all of nature operated according to similarly demonstrable laws. It followed that "[I]f in other sciences we should arrive at certainty without doubt and truth without error, it behooves us to place the foundations of knowledge in mathematics..."  

16 Although Galileo (b. 1564) rejected the teleological principles of his Scholastic and Ancient predecessors, he echoes Bacon's

---

16. Ibid., 124.
sentiments almost exactly:

The book [of the universe] cannot be understood unless one first learns to comprehend the alphabet in which it is composed. It is written in the language of mathematics, and its characters are triangles, circles, and other geometrical figures, without which it is humanly impossible to understand a single word of it.¹⁷

Identifying scientific proofs with mathematical proofs, Galileo further asserted, "[T]he deliberations of nature are perfect . . . arguments concerning [it] are either correct and true or else incorrect and false."¹⁸ The operations of the physical world could thus be deduced from first principles such as Galileo's law of inertia. Although Galileo and even Bacon conducted experiments to determine whether their mathematical formulations accurately reflected reality, the conflation of knowledge and certainty shows at least some signs of influencing the founders of natural science.

Descartes (b. 1596) independently arrived at a position similar to that of his contemporary Galileo. He expressed dismay that no "loftier superstructure" had as yet been erected on the solid foundation of mathematics, since,

The long chains of simple and easy reasonings, by means of which geometers are accustomed to reach the conclusions of their most difficult demonstrations, had led me to imagine that all things, to the knowledge of which man is competent, are mutually connected in the same way.¹⁹

Descartes made the erection of this knowledge superstructure his goal, setting out to explain the phenomena of nature solely by reference to qualities like motion, size and shape. These formal properties were discovered

---

independently of experience and, as such, were immune to error. Perceptual knowledge was, on the other hand, "frequently fallacious." Descartes even admonishes his readers, in their shared "search for the direct road towards truth," to ignore fields less certain than arithmetic and geometry.

Hume (b. 1711) presents an interesting case from the perspective of my research. Since I will make frequent references to his philosophy throughout, the following synopsis is quite crucial. Hume accepted Descartes' skepticism regarding the relationship between sensual knowledge and the true properties of the world. Hume, however, abandoned the quest to verify empirical knowledge through the application of formal methods. Reacting to the scientific certainty sought by his peers, Hume writes,

[T]he only objects of the abstract sciences or of demonstration are quantity and number, and . . . all attempts to extend this more perfect species of knowledge beyond these bounds are mere sophistry and illusion. . . . All other enquiries of men regard only matter of fact and existence; and these are evidently incapable of demonstration.

Hume is arguing that it is impossible to demonstrate, in the tradition of the logical proofs of the "abstract" sciences, that our empirical experience of the world reflects the true operations of that world. "That the sun will not rise to-morrow is no less intelligible a proposition, and implies no more contradiction," asserts Hume in his famous example, "than the affirmation, that it will rise." In other words, because our empirical knowledge is not as

---

21. Ibid.
22. David Hume, An Enquiry Concerning Human Understanding, ed. Anthony Flew (LaSalle, Illinois: Open Court, 1988), 193-194. Hume by no means believes that the world is unstructured or chaotic, however. In fact, he emphatically states that "there be no such thing as Chance in the world. . . . "(98). The shortcomings of empirical knowledge reflect the failure of the sensual apparatus, not the chaotic nature of the world.
23. Ibid., 71 [emphasis in original].
certain as a deduction—because there is nothing logically contradictory about the sun rising today and not rising tomorrow—we must down grade the status of our contention about the sun. We must give up attributing to it the notion of truth, or calling it a law of nature. The task left for science, according to Hume, is to express the input of the senses as rigourously as possible given this inherent and permanent uncertainty.24

I maintain that Hume reintroduces logic at this juncture, however, in his argument that the workings of the mind, unlike the workings of the external world, can be deductively ascertained and reduced to a handful of principles.25 According to Hume, mental processes consist solely of "compounding, transposing, augmenting, or diminishing the materials afforded us by the senses. . . ."26 A "golden mountain" is therefore simply the mental summation of the sensations corresponding to "golden" and "mountain."27 In the same vein, Hume proposed that the self is merely the sum total of all of these sensations, in his famous words, it is a "bundle of perceptions."28 Of greater significance yet is Hume's redefinition of the concept of causation in light of this argument.29 He addresses what has come to be called "the problem of induction," asking how predictions can be formulated given that future occurrences of events can be gauged neither from experience nor through logical deduction. How can we guarantee that laws as we have experienced them to the present will continue into the future?30

24. Ibid., 60.
25. Ibid., 60-62.
26. Ibid., 64.
27. Ibid.
30. Ibid., 101-118.
Hume's solution was to posit that, just as "golden mountain" is the mental conjunction of the separate sensations "golden" and "mountain," we make predictions on the basis of the observation of "constant conjunctions" of past events.\textsuperscript{31} We are naturally predisposed, Hume continues, to make these connections.\textsuperscript{32} However, we cannot infer from this sense in our brains that the connection also exists in the world. A law, then, refers to nothing other than the repeated instantiation of some outcome that tends to this fostering of a mental custom or habit.\textsuperscript{33} Hume writes,

We say, for instance, that the vibration of this string is the cause of this particular sound. But what do we mean by that affirmation? We either mean that this vibration is followed by this sound, and that upon the appearance of one the mind anticipates the senses, and forms immediately an idea of the other. We may consider the relation of cause and effect in either of these two lights; but beyond these, we have no idea of it.\textsuperscript{34}

The increased incidence of the "pluck + sound" conjunction leads to greater support for the mental idea that there is a permanent link between the two events. However, this mental connection provides no guarantee of the existence of a force connecting plucking and sound; the mental connection or relationship is not of a logically necessary nature. Hume is arguing that there are no laws of nature, at least from the perspective of our knowledge.\textsuperscript{35} The same must be said for the concepts force, power and energy.\textsuperscript{36} Each rests on the hypothesization of unseen entities and relationships, as well as induction into the future, both logically indefensible and empirically unverifiable maneuvers.

\textsuperscript{31} Ibid., 33, 73, 86.
\textsuperscript{32} Ibid., 86.
\textsuperscript{33} Ibid.
\textsuperscript{34} Ibid., 116.
\textsuperscript{35} See n22 above.
\textsuperscript{36} Ibid., 116.
I therefore contend that Hume has upheld the belief that knowledge must be logically certifiable even in the face of his ultimate skepticism. He has argued that it is illegitimate to refer to the operation of natural laws outside of the constant conjunction of isolated empirical events, because we can neither predict nor logically derive the future. Because we cannot logically verify the nature of the connection between events, we can only conclude that such a causal connection does not exist. Any claim about the existence of entities like causal powers or forces requires the forbidden induction from existing empirical experience to unknowable future events or unobservable connections. I will elaborate upon these arguments over the course of the dissertation as they reappear in the writings of various twentieth century philosophers.

Auguste Comte (b. 1798), the father of sociology, made a rigorous attempt to apply the methods of mathematics to the study of human beings. Like Galileo and Roger Bacon, he asserted, "It is only through mathematics that we can thoroughly understand what true science is." In a sense, Comte set out to produce an antimetaphysical version of Aristotle's *Metaphysics*. The new first philosophy, the *philosophie positif*, would study the "generalities of the different sciences" and subject them to "one unique method." Comte's method was that of abstract mathematics, his first principle the belief that all phenomena were controlled by immutable laws. He even planned to create an algebra that would replace the alphabet and serve as the language of his

---

38. Ibid., xlviii.
39. Ibid., 75.
new philosophy.\textsuperscript{40} In this future world,

Mathematics might enable us to dispense with all direct observation, by empowering us to deduce from the smallest possible number of immediate data the largest possible amount of results.\textsuperscript{41}

Since knowledge was far from complete, Comte cautioned that these deductions could not yet be conducted. This aporia was reflective of a human shortcoming, however; the problem did not lie with the method of mathematics, nor in its application to empirical matters.\textsuperscript{42}

I will close this overview and introduction with a discussion of the ideas of the Vienna Circle, or the "logical positivists" as they are more commonly called. The Vienna Circle was the name attached to a group of Austrian intellectuals active collectively in the 1920s and 1930s, and individually long afterwards. The most famous founding members were Moritz Schlick, Rudolf Carnap and Otto Neurath. A. J. Ayer joined at a later date, while Carl Hempel and Ernest Nagel maintained sympathetic unofficial links. Karl Popper, although vehemently resisting the label "positivist," worked with several of the collective's members and shared some of their key ideas. Logical positivism is important from my perspective because it represents the epitome of the historical tendency to equate knowledge with mathematical certainty. The failure of the movement also marks a turning point in twentieth century philosophy. Several positivists ultimately became influential figures in antifoundational philosophy, providing an illustration for my claim (via Adorno) that the effort to ground knowledge in logical or mathematical certainty is closely tied to various forms of relativism.

\textsuperscript{41} Lenzer, \textit{Auguste Comte and Positivism}, 105-106.
Although not unanimous in their views, the logical positivists were motivated by a desire to purge philosophy of metaphysics. Two central principles governed the group's writings. One was essentially Humean: "there is knowledge only from experience, which rests on what is immediately given." The other reflects a preoccupation with the logical analysis of science, still rooted in the Humean project, but updated with the twentieth century advances of Russell and Wittgenstein. Both premises find expression in a 1929 manifesto:

[T]he scientific world conception is marked by application of a certain method, namely logical analysis. The aim of scientific effort is to reach the goal, unified science, by applying logical analysis to the empirical material. Since the meaning of every statement of science must be statable by reduction to a statement about the given, likewise the meaning of any concept, whatever branch of science it may belong to, must be statable by step-wise reduction to other concepts, down to the concepts of the lowest level which refer directly to the given. Parameters were thus set for distinguishing the "immediately given" or properly scientific, from the metaphysical. The latter was said to consist of statements that could not be validated by observation, for example, the realist premise "there is a world beyond my observations." According to the positivists, this claim was neither true nor false, but rather meaningless. Meaningful and hence scientific statements such as "It is raining" were at least potentially verifiable by observation.

---

44. Ibid.
45. Or for that matter, the idealist premise "there is no world beyond my observations."
According to the positivists, even this last observation is layered with obfuscating metaphysical garments, as the "it is" conjures up the notion of a hidden power or a force transcending the event of rain. The logical positivists thus sought to strip potentially testable statements down to their atomic components. Debate raged over whether this "protocol" language was ultimately rooted in individual sense experience, or in some sort of neutral world structure complemented in various ways by different individual perceptions. It was ultimately decided that the concepts of mathematical physics most closely reflected the empirical "given," and that all scientific observations should ultimately be translatable into this language. This doctrine has come to be known as physicalism.

A Comtean algebra, a "neutral system of formulae, . . . a symbolism freed from the slag of historical languages," was accordingly developed to refer to this physical reality. The empirical observation "It is raining" then becomes Ou(r), for Outside(rain). Through the logical operations of negation and conjunction with other variables, this symbol could be manipulated into various physical predictions, explanations and hypotheses. Echoing Hume, a scientific law would represent nothing but the logical summation of hundreds or thousands or millions of these simple statements. Concepts or theories were, in the reverse case, reducible to the empirical observations

---


49. See Ayer, ed., *Logical Positivism* for coverage of the movement's theoretical debates.


50. Hahn, Neurath, and Carnap, "The Scientific Conception," 306. Lest the connection to Comte be downplayed, it was even suggested that children be educated to speak in this clear and precise fashion. See Neurath, "Protocol Sentences," in Ayer, *Logical Positivism*, 201.


provided by science. The positivists thus endorsed Hume's contention that actuality equals reality, or that there is nothing in operation in the world other than what we observe empirically. More precisely, there is nothing we can sensibly say about the operation of any unobservable forces or structures of nature transcending conjunctions of events.

But what does it actually mean to subject a scientific theory to logical testing? Carl Hempel described the goal:

[It ought to be possible . . . to set up purely formal criteria of confirmation in a manner similar to that in which deductive logic provides purely formal criteria for the validity of inductive inference.]

In simpler language, an observation such as Ou(r) would confirm a law if the former could be logically deduced from the latter in the same way that Socrates' mortality is deduced from the mortality of all human beings, or in the fashion that geometrical proofs are formulated.

Hempel's famous example of what has come to be known as the "deductive-nomological model" of hypothesis testing provides a more detailed clarification. General laws are hypothesized indicating that water freezes at 0° Celsius and that its pressure, if enclosed, increases as temperatures fall. On a night when the temperature dropped below freezing, a car with a tightly sealed radiator is left on the street. From the combined effect of the laws and these background facts, it can be concluded that the radiator will be cracked by morning. The implication drawn by advocates of the deductive method is that this cracking is logically determined by properly established laws. "Whenever and wherever conditions of a specified kind . . .

occur," Hempel generalizes, "then so will, always and without exception, certain conditions of another kind. . . ."55

The adoption of the deductive method of hypothesis testing suggests a strict protocol for science. For the purposes of this dissertation, the methodological rules can be reduced to two. Firstly, Hempel stipulated that scientific explanation necessitates the determination of general laws, the "always and without exception" occurrences of the above example. In fact, Hempel argued that anything falling short of this standard was but a "pseudo-explanation," or a "vague claim."56 Classical mechanics, with its "physical theories of deterministic character," once again provides the paradigm for all of science.57 Hempel secondly proclaimed that explanation and prediction were symmetrical exercises.58 Any worthy explanation, be it physical, biological or historical, must be able to predict a future event given similar initial conditions, and vice versa. Darwin's theory should consequently predict future species development and extinction, if the initial conditions and laws were fully disclosed.59 Several of the positivists endorsed this extreme view; hence Otto Neurath's bold statement, "there will be no more talk of 'different kinds of causality.'"60 The belief that there is one level of analysis—the empirical event, accurately reflected in the laws of physics—predominates. I will show how these principles show up again and again in the writings of Quine, Goodman, Foucault, Butler, Kessler and McKenna.

58. Ibid., 364-370.
59. Ibid., 369-370.
Karl Popper disagreed with the leveling of the distinction between the natural and social sciences.⁶¹ He also argued that scientific theories could be falsified, but never conclusively verified, a thesis I will contend occasionally informs the writings of contemporary feminism.⁶² Popper nonetheless maintained that scientists should study events, "which can be regularly reproduced by anyone who carries out the appropriate experiment. . . ."⁶³ This stipulation implies that the world operates according to deterministic laws, a belief to which Popper technically confesses:

One sometimes hears it said that the movements of the planets obey strict laws, whilst the fall of a die is . . . subject to chance. In my view . . . [i]n throwing dice, what we lack is, clearly, sufficient knowledge of initial conditions.⁶⁴

His celebrated anti-dogmatism aside, Popper is bound to this positivist belief that logical certainty is the goal of science.⁶⁵

A few words about the fate of positivism are in order. Despite the success of the deductive-nomological method, the slippery nature of empirical laws and observation statements ultimately led to the downfall of the movement.

---

⁶² Karl Popper, The Logic of Scientific Discovery, 2nd. Eng. ed. (London: Hutchinson, 1982), 27-70. Because of the problem of induction as formulated by Hume, Popper accepts that we can never conclusively prove that a certain theory is true. The sun may not rise tomorrow. However, according to Popper, through experimentation we can demonstrate that certain theories are false in the present; there is no need to make predictions about the future in these cases because we already have experience that contradicts the hypothesized theory.
⁶³ Ibid., 45.
⁶⁴ Ibid., 86. Oddly enough, Popper makes this claim quite confidently, but is then quick to acknowledge that it is incapable of being empirically tested.
⁶⁵ None of the above comments should be taken to mean that positivism requires the perfect fulfillment of a hypothesis for it to be considered a law. In his Logic of Scientific Discovery, 86, Popper cautioned that "a few stray basic statements contradicting a theory will hardly induce us to reject it as falsified." Most of the positivists agreed with this position. Hempel, in "Aspects of Scientific Explanation," 378-83, incorporated probabilistic laws into his method, contending that the events of a coin toss, or the likelihood of curing a case of strep throat with penicillin, were of a different nature than the bursting of a radiator. These events were nonetheless to occur in a "high percentage of cases," and, more importantly, positivistic science was to be governed by the search for absolutely general laws.
In the end, no one could produce the magical formula positivism was driven to seek: logically conclusive means of determining observation sentences, and correspondingly, logically conclusive means of distinguishing a genuine empirical law. It was ultimately concluded that the comparison of an observation statement and a supposed empirical fact could only ever be a logical relationship between two statements, not a connection between the statement and the world, or even a statement and a mediated *perception* of the world.66 Hempel had always promoted this position, and it finally gained acceptance by the other positivists:

The system of protocol statements which we call true . . . may only be characterized by the historical fact, that it is the system which is actually adopted by mankind, . . . and the "true" statements in general may be characterized as those which are sufficiently supported by that system of actually adopted protocol statements.67

The quest for logical certainty ended for many, then, with the belief that all knowledge was ultimately conventional, and that true statements were simply those that cohered within the system of all statements.68 This transition also marks a precursor to the philosophies I will outline in Chapters One and Two, flourishing as they do on the thesis that truth is relative to language.

I have now brought the intellectual location of my dissertation into sharper relief. The equation of knowledge and logic has traditionally led to one of two basic arguments. Many of the Ancients contended that empirical

---

knowledge was inferior to the metaphysical knowledge of Being, ideas, and number. The study of the material world was correspondingly denigrated, or at least ranked below that of purely philosophical study. The Moderns, in turn, while taking up various positions on the realism/skepticism scale, subjected the empirical sciences to the methods of mathematics and logic. With the collapse of the positivist project, I will show that the contemporary response to both of these positions is that neither metaphysics nor science—even of a radically empiricist sort—represents knowledge in the sense conceived by the philosophical tradition. As suggested above, I maintain along with Adorno (as I will argue with more detail in Chapter Three) that the quest for absolute foundations leads quite naturally to the belief that without certainty, there can be no objective knowledge whatsoever. The failure to link logic and science successfully has resulted in Hempel's rejection of the belief that objective empirical knowledge is possible at all, a thesis that will be detailed in the first two chapters of the dissertation.

The alternative solution I will propose in the remaining chapters of my dissertation is the attenuation of the connection between knowledge and mathematics or logic, the acceptance of approximate truth claims, and the introduction of distinctions between different types of knowledge permitting accordingly different standards of truth. The originality of my research lies in the connections I have drawn between contemporary analytic philosophy and poststructuralist/constructivist feminism, and in my combined application of Adorno's materialism, contemporary realism, and phenomenology to the arena of biological sex. The work of Butler and Kessler and McKenna, striking in its similarities, has never before been compared in any sustained fashion. Kessler and McKenna have been by and large ignored in what I would term the philosophical bias of contemporary theory. Works couched
in the language of philosophy are typically favoured over works employing anthropological studies or psychological and biological research. Contemporary feminists occasionally make passing reference to Adorno, but the similarity between his work and that of the more popular poststructuralists (including Judith Butler) has not been fully explored, nor have his ideas been applied to the issue of the sex categories. Finally, there is a sharp divide between those studying continental philosophy and those studying analytic philosophy. Feminist theory, like much of contemporary theory, is far more likely to be influenced by the former, and the issue of the sex categories has not been systematically addressed from the perspective of the latter as far as I am aware.

Because I am employing work that is seldom read outside the specific circles from which it emerges, I have been able to formulate a unique and productive slant on the issue of biological sex. My work will provide an alternative to those wary of absolutist arguments, yet not entirely persuaded by poststructuralism and constructivism. Finally, although my work specifically pertains to the deconstruction of the sex categories, it is my contention that the philosophical ground I cover can provide insight into other subject matters, as the debates between foundationalism and antifoundationalism have permeated many fields.

---

69. Feminists associated with critical theory tend to be most familiar with the work of Theodor Adorno. Drucilla Cornell makes sustained use of Adorno in her ethical philosophy, Iris Marion Young employs Adorno's critique of the "logic of identity," and Seyla Benhabib sprinkles references to Adorno throughout her work. However, I am unaware of any attempts to apply Adorno's ideas to the specific issue of the categories of sex. Finally, although I believe Butler has read Adorno's writings, there are no direct references to his work in Gender Trouble or Bodies that Matter, or in her newer books The Psychic Life of Power or Excitable Speech.

70. Exceptions to this general division are Charles Taylor and Richard Rorty.

Chapter 1

CONTINENTAL AND ANALYTIC ANTIFOUNDATIONALISM: GOODMAN, QUINE AND FOUCAULT

This chapter will discuss the ideas of several twentieth century philosophers, with the goal of clarifying the arguments of the poststructuralist and constructivist feminists that are the true focal point of this dissertation. I have chosen small but important segments of the works of Nelson Goodman and W. V. O. Quine alongside larger chunks of Michel Foucault's writings to this end. Although Goodman and Quine are rarely linked to feminist theory, and seldom if ever to politics, their ideas implicitly support the feminist positions I will detail in Chapter Two. Foucault, on the other hand, has a well-documented connection to recent feminist theory. The chapter will cover first Goodman, then Quine, and finally Foucault. For the present, I will simply be presenting the respective ideas as fairly and clearly as possible. The analytical component of my research begins in Part II.

Nelson Goodman

Nelson Goodman operates within the Anglo-American tradition of philosophy. His major writings contribute to the scholarship surrounding Hume's "problem of induction." Hume's problem, to repeat, revolved around the formulation of predictions. "The original difficulty about induction," Goodman now concurs, "arose from the recognition that anything may follow upon anything."¹ Hume's solution was to posit that

humans are psychologically predisposed to make predictions on the basis of the "constant conjunctions" of empirical events. The mind habituates itself to regularities, and individuals project into the future the occurrences of the past. I showed that the positivists essentially agreed with Hume's formulation of the problem, and attempted to express theories summarizing these constant conjunctions in rigorously logical terms. Hume warned, and the positivists concurred, that this methodological safeguard still provided no guarantee that events would continue as they had up to the present time. Therefore, it is impossible to certify empirical knowledge—particularly the notion that there are laws of nature—and claims extending beyond actual experience are to be disallowed. All the same, events that follow one another with great frequency lead to the expectation that they will occur again in the future, and this expectation forms the foundation of science.

While Goodman agrees that induction poses a problem, he finds Hume's solution unsatisfactory. As many have argued, providing the reasons for a belief does not establish the truth of the belief. "To trace origins," Goodman notes, "is not to establish validity." In this specific case, psychology (the workings of the mind) cannot be equated with epistemology (a theory of knowledge). Goodman's contribution to the debate is his claim that verification of a hypothesis cannot simply consist of its repeated instantiation (the tabulation of the number of instances) and the corresponding establishment of a mental expectation. He contends that there are "constant conjunctions" for which no psychological habits or hypotheses are formulated. If this situation is indeed the case, Hume's argument that our experience of constant conjunctions provides the foundation for science must

\[2\] Ibid., 64.
be discredited. Goodman elaborates a philosophy based on this allegation, as the following section will disclose.

The New Riddle of Induction

Goodman illustrates his argument with an example of a quality that does in fact "exist," yet is not projected in any theories. This predicate is the "grueness" of emeralds. I will first present the example in Goodman's own minimalist and formal language, and then provide an explanation in simpler terms. Following is Goodman's description of the problem:

Suppose that all emeralds examined before a certain time $t$ are green. At time $t$, then, our observations support the hypothesis that all emeralds are green; and this is in accord with our definition of confirmation. . . . Now let me introduce another predicate less familiar than "green". It is the predicate "grue" and it applies to all things examined before $t$ just in case they are green but to other things just in case they are blue. Then at time $t$ we have, for each evidence statement asserting that a given emerald is green, a parallel evidence statement asserting that the emerald is grue. . . . Thus according to our definition, the prediction that all emeralds subsequently examined will be green and the prediction that all will be grue are alike confirmed by evidence statements describing the same observations.\(^3\)

Here is my interpretation of the riddle. The first part describes the procedure implicitly followed by those believing that emeralds are green. The observation that there are no known blue, red, or yellow emeralds is believed to justify the prediction that all future emeralds will be green, too. There are several possible interpretations of the next portion of the riddle, turning on Goodman's ambiguous phrase "to other things just in case they are blue."

Grue emeralds seem to be those that are either (1) green before $t$, but blue afterward; or (2) blue before and after $t$, but as of yet unexamined (for example, still under the earth). The existence of some emeralds that were green before

\(^3\) Ibid., 74-75.
and after \( t \) would not affect the grue hypothesis as long as other emeralds either changed colour, or were discovered to have been blue all along.

Goodman then goes on to say that the greenness and grueness of emeralds are equally confirmed by the data if Hume's method of counting up positive instances is followed. The belief that unexamined emeralds are blue (or that examined ones will turn blue) is just as supported by the current evidence that all emeralds are green as is the hypothesis that emeralds will always be green. Both beliefs depend on the outcome of unknowable future events, the induction prohibited by Hume. As in Hume's original formulation of the problem, reference to underlying causal forces or laws transcending the instances of particular green emeralds is forbidden because of the illogical nature of this induction. For empiricism, even Goodman's brand, laws are only their empirical instantiation. To date, accordingly, there are just as many instances of grue emeralds as green emeralds. Goodman summarizes,

> When the time comes, the hypothesis that all emeralds are green may prove to be false, and the hypothesis that all are grue prove to be true. We have no guarantees.\(^4\)

Yet we have no concept of grue emeralds. Therefore, according to Goodman, Hume's argument that the establishment of a mental habit justifies our predictions is disproved.

Goodman acknowledges the perversity of his example. However, he warns, the fact that no one presently believes that emeralds are grue does not mean that no one could believe it. We can easily make a machine that would apply the label "grue" correctly.\(^5\) Once again, I assert that the logically possible is upheld as the test of true science. Furthermore, Goodman continues, all hypotheses about events after a certain time are equally

---

\(^4\) Ibid., 98.

supported by present instantiation, not just the peculiar grue hypothesis. If there are no grue-believers, there are examples from history in which different predicates have been formulated on the basis of the same supposedly objective evidence, or when long-standing theories were destroyed by new discoveries. Where some see nature as uniform, others see it as unpredictable, for example. I suggest that another illustration would be the dramatic change in beliefs initiated by the Copernican revolution, as Thomas Kuhn asserted in the process of developing an argument comparable to Goodman's. The shift from geocentrism to heliocentrism resulted not from a change in the "real" world, but from a change in paradigm or theoretical framework. The world became a different place as a consequence of this change. A shift from a green to a grue emerald world would entail the same process. I conclude that Goodman's fabrication of an absurd example is therefore intended to draw attention to what he contends are the ordinary, yet similarly fabricated cases filling our daily lives. Foucault, Butler, Kessler and McKenna will contend that the existence of competing beliefs about the nature of biological sex provide one such real-world instance of the grue puzzle, as I will soon illustrate.

Goodman therefore resolves that Hume's problem of induction must be rephrased to form the new "riddle" of induction: what is the difference between a valid and an invalid prediction? Goodman's "answer" is appropriate for a riddle. He does not provide a solution in the traditional sense. It is merely suggested that the problem be viewed in a new and perhaps unexpected light: Goodman argues that there is no justification for

---

our preference for green emeralds, because this preference cannot be
grounded in any true picture of the world. The belief that emeralds will stay
green is simply a better entrenched hypothesis than the belief that they will
change colour. In other words, we think of emeralds as "green" because we
have always used "green" to describe them. Goodman clarifies,

... I submit that the judgment of projectability has derived from
the habitual projection, rather than the habitual projection from
the judgment of projectability. The reason why only the right
predicates happen so luckily to have become well entrenched is
just that the well entrenched predicates have thereby become the
right ones. 9

"Habit," Goodman invokes Hempel, "must be recognized as an integral
ingredient of truth." 10 Our predictions of the future greenness of emeralds
are successful because we have learned to divide the world into bits that
include green emeralds. Successive generations will label emeralds green as
they observe their elders do so. 11 Again, it is possible that other cultures could
think of emeralds in terms of their potential to change colour in the future.

Goodman's solution to the problem of induction, therefore, is that there is no
induction, except as it is entrenched in the belief systems of a culture.

Philosophical Implications

Because the problem of induction is essentially a synecdoche for the
problem of knowledge in general, Goodman extrapolates from the example of
emeralds to philosophical pronouncements on ontology and epistemology.12

9. Ibid., 98.
11. Goodman himself does not make this point, but I believe it follows from his argument. My
comment relates to a theme picked up on by Quine which I will elaborate in the next section.
12. In so doing, Goodman further departs from Hume. Although Hume contended that our
knowledge of the world could not be logically verified, he did not raise the ontological issues
that Goodman discusses in the following paragraph. If anything, Hume believed that the
world was controlled by immutable laws, albeit ones we could not know with certainty, as I
asserted in my Introduction at n22.
He first and foremost advocates nominalism, the philosophical principle that grants existence only to individual entities. The following elaboration of the nominalist philosophy is central to my dissertation, and I will refer to it time and again.

Nominalism traditionally opposes itself to Platonism, the belief in the existence of abstract properties held in common by material objects. In an early article published with Quine (from which Quine later distanced himself), Goodman proclaims:

We do not believe in abstract entities. No one supposes that abstract entities—classes, relations, properties, etc.—exist in space-time; but we mean more than this, we renounce them altogether.13

Following is an example I adapted from this essay. One can state that "Fido is a dog," because concrete objects like dog are appropriate values in a sentence. However, it is not permissible to say that "dogs are a zoological species," because species are abstract objects, and as such have no meaning. According to Goodman and other nominalists, there is no logically rigourous way to define an abstraction like species, law, or potential, because no two things have exactly the same configuration of atoms or even general properties.14 At the same time, Goodman continues, "[E]very two things have some property in common."15 These two premises together mean that objects can be gathered into numerous different groups based on different sets of similarities. However, none of the selected commonalities will exist in the same sense as do the individual members of the group. What is more important, it becomes impossible to give one commonality any greater basis

in the natural order than any other commonality. The riddle of induction is therefore based on the notion that there is no abstract quality called greenness (or grueness) that uniquely and determinately unites emeralds.

Goodman's nominalism does not entail that green is literally nothing, nor that classificatory schema come from nowhere. Goodman is stating that it is entirely reasonable to group rocks into a green group. However, since similarities are "relative, variable, [and] culture-dependent," the qualities chosen as representative of any collection of objects will vary from culture to culture. "Goodman's riddle goes hand in hand," Ian Hacking summarizes, "with his lifelong repugnance to the very idea of similarity as a raw material of thought or logic." I maintain that Goodman's nominalism is therefore based on a clear application of the categories of logic to empirical knowledge. The existence of one exception to a rule (such as one grue emerald), or more importantly, its mere possibility, negates the rule. From this perspective, the empirical world—full of variability in the form of actual and potential exceptions to rules—is not governed by the laws of logic and is therefore not governed by laws.

Goodman also freely professes to radical relativism. Just as green and grue are different ways of seeing emeralds, Goodman believes that all of our experiences of the world are filtered through one or more "frames" or "versions," as he calls them. These perspectives are not categories in the Kantian sense, as they cannot be "attributed to anything inevitable or immutable in the nature of human cognition." Goodman therefore

16. Ibid., 438.
18. Goodman, Ways of Worldmaking, 94.
abandons Kant's dream of salvaging the unique veracity of science. Indeed, science is no more or less true than art according to Goodman.\textsuperscript{20} Truth instead lies within whatever linguistic framework we happen to be using to describe the world.\textsuperscript{21} Again calling to mind Hempel and the collapse of logical positivism, Goodman avows,

\begin{quote}
Truth cannot be defined or tested by agreement with 'the world'; for not only do truths differ for different worlds but the nature of agreement between a version and a world apart from it is notoriously nebulous.\textsuperscript{22}
\end{quote}

Goodman refers, in the latter part of the passage, to the positivists' eventual conclusion that there can be no logical reduction of language to the empirical world. Meanings "vanish" because language cannot be translated into sense experience, but only to another language.\textsuperscript{23} Truth is analogously a relationship between statements, not between statements and the world. The implications of this relativism are dramatic. "Far from being a solemn and severe master," Goodman concludes, "[truth] is a docile and obedient servant."\textsuperscript{24}

Goodman has, however, attached several limitations to his relativism. The first is imposed by his concept of "entrenchment." A false version of the world is one which a specific culture has not chosen to use. It is proper to say that emeralds are not grue from the perspective of a green emerald world. This thesis seems to imply that an individual within a green emerald culture nonetheless seeing grue emeralds would be in error. Falsity, just as truth, is defined from within a version of the world. Nominalism is the second restriction on relativism. Any way of seeing the world which posits the

\begin{itemize}
\item \textsuperscript{20} Goodman, \textit{Ways of Worldmaking}, 19.
\item \textsuperscript{21} Goodman, "Notes on the Well-Made World," 35.
\item \textsuperscript{22} Goodman, \textit{Ways of Worldmaking}, 17.
\item \textsuperscript{23} Ibid., 93.
\item \textsuperscript{24} Ibid., 18.
\end{itemize}
ontological existence of abstract properties is false, because, while many kinds and types of individuals exist, general categories definitely do not exist. Because of his willingness to "take anything whatever as an individual,"25 I allege that the restrictions on Goodman's relativism are not that substantial in practice. He states that it is impossible to speak of a reality underlying all the various perspectives, or even to imagine that there is such a single reality. All we have are the perspectives, each true from some standpoint.26 In this pronouncement, Goodman acknowledges his indebtedness to Parmenides. But, according to Goodman, even Parmenides was over-confident about the type of affirmative statements one could make about the world,

Parmenides ran into this trouble long ago: because truths conflict we cannot describe the world. Even when he said "It is" he went too far. "It is" gives way to "They are"; and "They are" to "none is". Monism, pluralism, nihilism coalesce.27

Goodman's philosophy is still, therefore (even in his own words), "radically" relativistic.

In order to illustrate the truly radical nature of Goodman's relativism, I will close this section with another of his examples. The illustration pertains to stars and constellations, and is perhaps easier to envisage than grue emeralds. Goodman states the obvious point that stars can be collected into any number of constellations. He then makes the surprising declaration that the stars themselves possess no innate integrity. "[A]s we thus make constellations by picking out and putting together certain stars rather than others," he proclaims, "so we make stars by drawing certain boundaries rather than

25. Ibid., 94-95.
26. Ibid., 3.
27. Goodman, "Notes on the Well-Made World," 32. Note the connection between Goodman's reluctance to use the phase, "It is, " and the positivist translation of "It is raining, " into "Outside(rain). " 
than others." If the stars appear to exist prior to all human attempts at conceptualization, that is only from the viewpoint of a certain version of the world. It is logically possible that there could be another version of the world in which stellar facticity were not the case. Although a version of the world in which stars exist is permissible in light of Goodman's nominalism, another world in which, say, the blackness of space between the stars is emphasized is also allowable. "The world" shifts between competing categorizations of constellations, or even a collection of spaces between the punctuation marks of rocks and stars. Goodman describes the resultant ontology as "irrealist," which he defines in the following passage,

Irrealism does not hold that everything or even anything is irreal, but sees the world melting into versions and versions making worlds, finds ontology evanescent and asks after what makes a version right and a world well-made.

Since "the world" does not exist as a unifying ontology, there are no means to adjudicate between competing versions of it. The best a philosopher can do is to advocate "judicious vacillation" between various nominalist ontologies. Hence, for Goodman, "[W]e are monists, pluralists, or nihilists not quite as the wind blows but as befits the context." The label "constructivism" has come to be associated with this philosophical principle that the world changes along with our versions of it.

Thus, Goodman endorses Hume's contention that past predictive success provides neither experiential nor logical guarantee of future predictive success. He breaks with Hume when the latter argues that the problem of induction can be solved through our innate sense of connections between the

---

28. Ibid., 34.
29. Ibid.
30. Ibid., 36n9.
31. Ibid., 32.
32. Ibid.
present instantiations of various hypotheses. Instantiation neither logically nor empirically distinguishes between various theories, as Goodman's grue riddle is intended to demonstrate. But even though Goodman discards Hume's efforts to ground science, I conclude that he has remained indebted to the belief that true science would have to be logically certain science. "We have no guarantees," Goodman asserted. Since efforts at providing this guarantee have to date failed, Goodman's conclusion is a radical relativism he calls irrealism. The empirical observation that we have never observed an emerald changing from green to blue is no proof that emeralds are green. More to the point, the incidence (potential or actual) of a single exception to a law would negate the existence of that law. All categorizations on the basis of laws transcending individual entities are, therefore, equally justifiable/unjustifiable. My introductory contention that logic and mathematical certainty still hold philosophy in its grip, even in the face—or perhaps because—of radical relativism, is supported in this sense. Goodman is still bound to the rules of traditional epistemological projects even though he rejects their conclusions.

But it is the implications of Goodman's philosophy for the feminist project that are central to my dissertation. It is my contention that Goodman's irrealist nominalism furnishes a vital component of the philosophical foundation of constructivist (and, its related moniker, poststructuralist) feminism. As I indicated above, grue is a fictitious example, yet Goodman alleges that it is representative of all "real" classificatory schema. Goodman's irrealist nominalism, according to which philosophy must vacillate between various world views, is a prototype for the recent argument that the biological classification of bodies into sexes is the effect of a specific cultural belief

---

33. See n4 above.
system, and has no greater foundation in reality than any other possible classification. I will analyze this contention in Chapter Two.

**W. V. O. Quine**

Like Goodman, W. V. O. Quine works in the analytic tradition and addresses central issues surrounding the problem of induction. Taking a slightly different approach than Goodman, Quine reintroduces a modified version of Hume's mental habits to solve the puzzle. He alleges that humans are predisposed to formulate connections in their environment:

A standard of similarity is in some sense innate. . . . A response to a red circle, if it is rewarded, will be elicited again by a pink ellipse more readily than by a blue triangle. Without some such prior spacing of qualities, we could never acquire a habit; all stimuli would be equally alike and equally different. . . . Needed as they are for all learning, these distinctive spacings cannot themselves all be learned; some must be innate.\(^{34}\)

"[A] sense of similarity or of kinds," Quine continues, "is fundamental to learning in the widest sense—to language learning, to induction, to expectation."\(^{35}\) Quine cautions, in other words, that we could not entrench the greenness of emeralds without the pre-existing capacity to note a similarity in colour, nor without the sensory response provoked by the colour. Without such a capacity, everything would appear different from everything else. However, as Goodman asserted, a psychology cannot be translated into an epistemology. We cannot conclude that our sense of similarity reflects the real operations of the world. A reformulation of the problem of induction thus remains for Quine: why does our internal world


\(^{35}\) Ibid., 129.
appear to match the external world on so many occasions? In other words, why does our sense that certain things are similar seem to provide us with some guidance in navigating the world?

Quine does not follow Goodman’s lead by attributing the success of our predictions entirely to entrenchment. Thus, he does not suggest that we literally make the world in the process of categorizing it. The ability to gauge the environment, according to Quine, must be the result of the developments of evolution. "If people's innate spacing of qualities is a gene-linked trait," writes Quine, "then the spacing that has made for the most successful inductions will have tended to predominate through natural selection." The implication is that it is a more successful evolutionary strategy to categorize emeralds according to their greenness as opposed to their grueness. Quine appropriates Darwin to explain scientifically the psychological habit originally hypothesized by Hume. Because humans are of common origin, Quine argues that it follows that our inner "spacing of qualities" would be similar. Despite this affirmative statement about the connection between cognitive categories and the external world, Quine perhaps surprisingly remains a relativist. Although he relies on a variety of arguments to make his case, each is rooted in the contention that it is the correlation between our innate sense of similarity, on one hand, and objects, on the other, that is of most pressing need of explanation for any theory of knowledge. The central

36. Ibid., 127.
37. Ibid., 126.
38. It should be noted that Goodman has allowed for the possibility that humans might possess this innate capacity to note similarities. However, because similarities are everywhere, and because psychology cannot be translated into an ontology, our capacity need not reflect the world. See Goodman, "Replies to Comments," in Goodman, Problems and Projects, 409.
39. It is important to acknowledge that Quine is making these arguments with the doctrines of logical positivism as his target. The positivist argument (outlined in my Introduction) that scientific observation statements could be firmly connected to sense experience, and then to things in the world, is in the process of being challenged by Quine.
philosophical problem, Quine contends, is that of reference, the relationship between mental concepts (and ultimately, language), and things in the world.

Firstly, Quine emphasizes the role that "happy accidents" play in the evolutionary development of human beings. It is highly unlikely, he contends, that our innate categories—a chance evolutionary outcome—would yield a true picture of the world.\(^{40}\) As further proof of this allegation, Quine notes with Goodman that our hardwired capacity to note similarity holds up to neither logical nor mathematical scrutiny. Similarity, Quine writes, is typically supervened by other concepts as a science matures.\(^{41}\) Even if humans are genetically predisposed to note a commonality between green objects, and even if two green rocks have more in common than one green and one blue rock, colour plays little role in more rigorous physical theories.\(^{42}\) Classes or categories of objects based on qualities like colour are therefore merely "convenient conceptual scheme[s]" for organizing our world.\(^{43}\) Quine synthesizes these two arguments in the following passage:

To trust induction as a way of access to the truths of nature . . . is to suppose . . . that our quality space matches that of the cosmos. The brute irrationality of our sense of similarity, its irrelevance to anything in logic and mathematics, offers little reason to expect that this sense is somehow in tune with the world—a world which, unlike language, we never made.\(^{44}\)

Quine thereby continues the philosophical tradition of equating truth with absolute certainty, particularly as this thesis was promoted by the logical positivists.\(^{45}\) Even though he asserts that there is a natural explanation for


\(^{41}\) Quine, "Natural Kinds," in Quine, Ontological Relativity, 121.

\(^{42}\) Ibid., 127-128.


\(^{44}\) Quine, "Natural Kinds," 125.

some of the simple categorizations we make, he quickly adopts an ontological relativism not unlike that proposed by Goodman, or Hempel with the fall of logical positivism.

More importantly, although Quine endorses the empiricist tenet that "whatever evidence there is for science is sensory evidence," he maintains that this input is infinitesimal compared to the vast theoretical output derived from it. In other words, we have a lot of theory given the scant nature of our raw material. The language of these theories, Quine continues, is of an irreducibly different order than sensory stimuli. The word "Ouch," for example, is a fairly immediate and standard response to painful stimulus situations, with analogies across cultures. But in more complex scenarios, "[T]he verbal network of an articulate theory [intervenes] to link the stimulus with the response." The majority of words are less primal than "ouch," and are thus caught up in intricate linguistic systems. Amongst words at a great remove from their empirical input, Quine maintains, there is virtually nothing fixing their meaning. Such words refer to the empirical world only in the context of linguistic relationships. Even our innate capacity to note similarity requires language in order to bring it into accord with other individuals' observations. In other words, Quine is arguing that simple similarities are always expressed in language or theory, and are accordingly relativized.

---

47. Quine, Word and Object, 11.
48. Quine invokes his famous thesis debunking the distinction between analytic and synthetic statements to make this argument. Words like "ouch" maintain an observable connection to the empirical world. Abstract concepts, on the other hand, are more dependent on dictionary-defined linkages between concepts. These concepts are glued together, not by a priori rules of logic, as the positivists and Hume argued, but by convention. See Quine, "Two Dogmas of Empiricism."
A vast number of theories can thus account for most sets of data, as concepts are translated one into another with great rapidity. Evolution, for example, is just a theory. This surprising statement renders Quine's prior explanation of our capacity to note similarities circular, as the explanation is true only relative to this background theory. Quine freely admits to this circularity.\(^4^9\) Even the belief in the existence of objects must count as relative, given this consideration. Quine asserts,

For my part I do, qua lay physicist, believe in physical objects and not in Homer's gods; and I consider it a scientific error to believe otherwise. But in point of epistemological footing the physical objects and the gods differ only in degree and not in kind. Both sorts of entities enter our conception only as cultural posits.\(^5^0\)

Quine justifies his belief in physical objects much as he explains our ability to note similarities: A belief in objects is "efficacious" in managing the "flux of experience."\(^5^1\) The theory is, all the same, not a true reflection of the world because it entails the linguistic leap from sensory input. The theory is not a \textit{pragmatically} true theory, either, because it is possible that another theory could work equally well in the same situation, and because the "truth" of the theory is still defined contextually, from within a language.\(^5^2\)

\textit{Radical Translation}

Quine clarifies his objection to realism and foundationalism with an example of a stranger's hypothetical visit to a culture with no prior outside contact.\(^5^3\) A member of the culture points to a rabbit and says "gavagai." Because of the shared "internal spacing" permitting human beings to note

\(^4^9\) Quine, "Natural Kinds," 126-27.
\(^5^1\) Quine, "Two Dogmas of Empiricism," 44.
\(^5^2\) Quine, \textit{Word and Object}, 23.
\(^5^3\) See Ibid., and Quine, "Ontological Relativity," 34.
patterns in their environment, the stranger can learn to say "gavagai" when a rabbit appears. However, because of the myriad ways of abstracting from a stimulus (or even a genetically programmed category) to a concept or a theory, Quine insists that the stranger cannot guarantee that the word "gavagai" refers to the rabbit, the rabbit's leg, or even an insect typically found on rabbits. Even if the visitor stays long enough to become a fluent speaker of the native language, there will be no means of securing the referent of the word "gavagai." The only commonality between the stranger and the foreign culture is the approximate set of stimuli (not necessarily the rabbit, but the sensations it invokes) coinciding with the utterance of the word.

If questions such as "what is a gavagai?" are broached in an effort to solve the translation problem, Quine now declares, they will still be met with failure. As suggested above, the question as to whether gavagai refers to rabbits or rabbit haunches is meaningful only within a language in which these words are semantically connected to other terms. Even if one were to point to the precise part of the rabbit to which gavagai refers, Quine continues, this pointing would not serve to fix the meaning of gavagai in an abstract or absolute sense. Therefore, the word gavagai refers to an indeterminate object, and is couched in a linguistic backdrop. There are no "rabbits" outside of some such system, or as Quine remarks, "[T]here is no fact of the matter."54

In summary, Quine asserts that ontological questions cannot be answered definitively, and cannot be used to secure reference and meaning. An infinite

---

recess is the only result, as the following passage is designed to illustrate:

A question of the form "What is a G?" can be answered only by recourse to a further term: "An F is a G." The answer makes only relative sense: sense relative to the uncritical acceptance of "G." 55

"We cannot know what something is," paraphrases Quine, "without knowing how it is marked off from other things." 56 As a G is only knowable in terms of an F, any single observation is always couched within a particular theory, language and/or culture. 57 There are, accordingly, no theory-neutral observations to which reference can be made in order to arbitrate between competing belief systems and languages. Even in cases in which individuals or cultures appear to be referring to the same object, Quine maintains, there are no means by which this identity can be guaranteed. In general, theories cannot be proved or disproved because reference is indeterminate. 58

For these combined reasons, Quine believes he has defeated realism and foundationalist empiricism, particularly the early positivists' attempt to create a language that would refer precisely to sensory input or the empirical world. Quine has resurrected Hume's notion of habit only to challenge his forebear's

---

55. Ibid.
56. Ibid., 54.
57. For example, a rabbit is a mammal in our classificatory system, and any explanations of rabbithood will invoke some discussion of mammals, which will in turn invoke some discussion of evolution, and so on. Each of these contextualizations takes place in words, words which, according to Quine, immediately imbricate culture into the supposedly objective understanding of rabbithood. It is entirely possible that rabbits could be grouped under a different classificatory system, in a different language, differences that would result in a different understanding of rabbithood. Quine has thus defended his relativism by arguing that all claims of objective knowledge rest ultimately on an infinite regress as opposed to an absolutely certain first principle. As I noted earlier, Quine thwarts the infinite regress problem by settling for circularity instead, arguing that he believes such-and-such because natural science indicates that such-and-such is the case. Since neither infinite regress nor circularity can provide knowledge with an absolute foundation, Quine maintains that relativism is our only option.
58. It is because proof and disproof are equally relative that Quine distanced himself from his earlier nominalist position (see n13 above). While it is unlikely, according to Quine, that our sense of similarity is reflective of real world laws, we all the same must possess this sense. However, Quine will not make any absolute pronouncements as to the existence of natural categories, even this innate sense of similarity.
thesis (later revived by the positivists) that sense impressions can be logically manipulated into scientific theories without any resultant mutation of the content of the original data.\(^\text{59}\) Quine stresses that language is virtually a system unto itself. The originating empirical input of science is so drastically distorted as it is translated into words and theories that it no longer makes sense to speak of the Humean "golden mountain" as a logical summation of the sensations "gold" and "mountain." The whole network of a language comes between those sensations and the articulated observation. Different individuals make different connections between senses and words, and may even be referring to different external events. Although sense evidence is the sole evidence for science, it is not foundational; it cannot guarantee the veracity of any scientific statement. Quine summarizes,

\[W]\text{e have no reason to suppose that man's surface irritations even unto eternity admit of any one systematization that is scientifically better or simpler than all possible others. It seems likelier . . . that countless alternative theories would be tied for first place. Scientific method is the way to truth, but it affords even in principle no unique definition of truth.}

"We . . . discover the extent," writes Barry Stroud in a synthesis of Quine, "to which all of science is man's free creation."\(^\text{60}\) Many sciences become possible, as Quine advocates ontological relativism.

**Linguistic Behaviourism**

Just as Goodman suggested that grue was representative of the problem of induction in general, Quine now asserts that gavagai is but an extreme

---

\(^{59}\) As I presented in my Introduction, Hume spoke, for example, of a "golden mountain" as the logical summation of stimuli pertaining to "golden" and "mountain," and of the "constant conjunctions" of sense experiences resulting in the hypothesizations of laws. The positivists similarly aspired to manipulate empirical data with logical precision, thereby guaranteeing the veracity of theories.

instance of an omnipresent condition. "On deeper reflection," Quine states, "radical translation begins at home."\textsuperscript{61} Although the problem of reference to the objective world still persists, a different implication follows from within a single culture. It is a commonplace that two individuals speaking a different language will never fully "get" one another's meaning. Quine contends that even from within a single language, meaning can never be shared. More dramatically, Quine concludes that there is no "meaning" to be shared in the first place, or at least no meaning to which we can have access. Although individuals in a culture can accurately learn which word to use in response to which approximate stimulus situation, it is impossible to trace this word to an unobservable and common mental state or sense. Even if we share certain primitive, innate conceptual capacities (the aforementioned capacity to note similarities, for example), Quine insists, "Conceptualization on any considerable scale is inseparable from language. . . ."\textsuperscript{62} In other words, it makes no sense to refer to pre-linguistic capacities as the source of our language, because these capacities are for all intents and purposes overridden by language. And, as in the above cross-cultural scenario, the introduction of language marks the introduction of relativity. The only measure of a word's "meaning" is therefore the identical response of individuals to a specific stimulation. Even though individuals can be trained by their culture to use the same term in the same situation, every person will have a different

\textsuperscript{61} Quine, "Ontological Relativity," 46.
\textsuperscript{62} Quine, \textit{Word and Object}, 3.
mental dictionary with which they connect terms. Quine warrants,

Beneath the uniformity that unites us in communication there is a chaotic personal diversity of connections, and, for each of us, the connections continue to evolve. No two of us learn our language alike, nor, in a sense, does any finish learning it while he lives.  

If we talk alike, then, Quine insists that this is simply because "society coached us alike in a pattern of verbal response to externally observable cues."  

It is not because we possess a shared understanding of an event, a thing, or a feeling.

The implication of this doctrine is quite radical, because it suggests that all communication is rooted, not in any shared and innate capacity to note similarities and differences, but in behavioural homology. We simply say the same words in response to the same (roughly) things. We learn to say "mommy" because this word is repeated in front of us in her presence. Our agreement with others that mommy is indeed mommy is reflective only of the observation that each of us utters the same word. Verbal agreement is, accordingly, superficial; it is not reflective of any shared sense or evolved understanding of things that might possess natural significance for us. Since Quine has already argued that reference to events in the external world is always relative to a language and culture, the implication follows that, given a different cultural/linguistic backdrop, we could be conditioned to respond in virtually any way to virtually any thing. Unless we are born into a culture in which mommy has a label, for example, there is nothing innate that would drive a child to vocalize something in her direction.  

Quine does not refrain

---

63. Ibid., 13.
65. Ibid., 7.
66. As noted in the preceding paragraph, Quine is arguing that even if there were such an innate significance to mommy, the introduction of language means that we cannot access this innate
from drawing this conclusion: "[T]here are no meanings, nor likenesses nor distinctions of meaning, beyond what are implicit in people's dispositions to overt behavior." It cannot be said that our word "mommy" is connected to any shared sense of who/what mommy is; we have only the evidence of our using the same word in the face of the same empirical stimuli. Quine labels his position "linguistic behaviourism."

I maintain that there is an interesting kinship between this analysis and the behaviourism promoted by individuals such as John B. Watson and B. F. Skinner, indicating that Quine's adoption of the label is neither coincidental nor halfhearted. A brief discussion of the connection between Quine and proponents of that doctrine is in order. Quine and Skinner taught together at Harvard for many years. Apparently, however, Quine's introduction to behaviourism dates to his reading of the work of Watson while in college. I will refer to Watson's groundbreaking article, "Psychology as the Behaviorist Views It," his book Behaviorism, and Skinner's Science and Human Behavior, in order to provide a brief overview of behaviourism. These texts will also prove useful in my pending analysis of constructivist and poststructuralist feminism.

Primarily, behaviourism rejects the notion that one should look inside an organism, whether to instincts, desires, emotions or capacities, for an explanation of its actions. Watson writes, "[P]sychology must discard all reference to consciousness." Reference should only be made to readily observable behaviour. There are three reasons for this restriction. Inner

sense. Therefore, as I have stated, for all intents and purposes, any innate sense we have of things is overridden by language.

processes, firstly, are inaccessible to others, and a scientific methodology requires that facts be observable. Watson demands of the behaviorist psychologist that "His sole object is to gather facts about behavior—verify his data—subject them both to logic and to mathematics (the tools of every scientist)." I assert that evidence of the link between behaviourism and logical positivism is evident in this passage, as is the desire to make psychology properly scientific in the reductivist, physicalist understanding of the term. Secondly, behaviourists argue, explanation in terms of inner variables adds nothing that could not be learned from an examination of more readily observable evidence. Skinner explains as follows:

The practice of looking inside the organism for an explanation of behavior has tended to obscure the variables which are immediately available for a scientific analysis. These variables lie outside the organism, in its immediate environment and in its environmental history.

For example, to say that "she behaved in this way because she was anxious," adds nothing in the way of scientific explanation. Skinner asserts that we still need to be informed as to the cause of the anxiety. These external conditions will then substitute for the statement, "she is anxious."

Finally, and most importantly, reference to inner processes is scorned because they are, ultimately, nothing but our external behaviour. Writes Skinner, "Our 'perception' of the world—our 'knowledge' of it—is our behavior with respect to the world." Similarly, Watson argues that there are no "centrally initiated responses;" all transformation or change in an

---

72. Recall that I defined physicalism in my Introduction as the belief that all sciences can be reduced to the language and laws of mathematical physics.
74. Ibid., 35.
75. Ibid., 140.
organism is a result of conditioning.76 If a situation of full knowledge prevails, it follows that "given the response the stimuli can be predicted; given the stimuli the response can be predicted."77 In a passage that particularly resonates with Foucault's upcoming deconstruction of the subject, Skinner defines the self as a "device for representing a functionally unified system of responses."78 Watson in particular championed the view that even the concept of instinct was to be abandoned in favour of the less metaphysical term "drive." The former, according to Watson, relied on a notion of stable inwardness and was completely unverifiable experimentally. The latter, however, did not require the abstraction to inwardness, and was subject to manipulation by an experimenter.79 Skinner wrote that hunger pangs do not predictably lead to the consumption of food, and as such, could not be said to act as a stimulus of behaviour.80 Quine seemingly adopts this radical position in his contention that all meaning is nothing but observable behaviours. Quine, too, permits no reference to consciousness or subjectivity or even possibly shared instincts.

It is not surprising to find that Skinner's theory of language learning also resembles that delineated by Quine. According to behaviourists, we learn language strictly through observing the behaviour of others. Skinner writes, for example, "The verbal response 'red' is established . . . by a community which reinforces the response when it is made in the presence of red stimuli and not otherwise."81 The response "my tooth aches," a reference to an internal event, can follow one of two slightly different paths. The first is that

76 Watson, "Psychology as the Behaviorist Views It," 174.
77 Ibid., 167.
78 Skinner, Science and Human Behavior, 285 [emphasis in original].
80 Skinner, Science and Human Behavior, 144-146.
81 Ibid., 258-59.
the tooth ache may correspond to publicly observed events, such as an exclamtion like "ouch" and the holding of one's jaw. A child will, in this case, be told that she or he has a tooth ache when these behaviours are exhibited. The second is that public behaviour may be used to describe an inward event through processes of metaphorical transfer. Skinner claims that, in this way, terms used to refer to emotions are always "borrowed" from descriptions of external events. 

"When the man in the street says that someone is afraid or angry or in love," clarifies Skinner, "he is generally talking about predispositions to act in certain ways." Laurence Smith, a recent commentator on behaviourism, summarizes Skinner's position as follows,

For Skinner, what is traditionally spoken of as the "meaning" or "reference" of a term was to be found only in its actual use. . . . [T]here could be no relation of correspondence between a term and its referent, much less between a mentalistic "idea" and some object that it stands for. . . . An 'operational definition' then, in Skinner's view, would consist of an empirical description of the conditions under which a term is used. . . .

I argue that this passage could be easily tailored to fit Quine's philosophy, as Quine has insisted that language is a conditioned capacity, and that meaning exists only as a formal homology of spoken words. A word for Quine, as for Skinner, means nothing more than "the conditions under which [it] is used." These connections between Quine and central figures in behaviourist psychology will become important when I draw similar analogies between poststructuralist and constructivist feminism and behaviourism.

Although there are many similarities between Quine and Goodman, I conclude that the former emphasizes the inevitable gap between

---

82. Ibid., 259.
83. Ibid., 162.
thought/theory/language and the "real world," while the latter focussed on the illegitimacy of induction from empirical events to natural categories and kinds. For Quine, the issue is, "How could we possibly know?" whereas for Goodman it was, "Although all of our knowledge is relative, we do know that there are no natural kinds." Quine has insisted (along with Goodman, the logical positivists, and a substantial portion of the philosophical tradition) that science must be absolutely certain. Believing that he has demonstrated the "hopelessness of grounding natural science upon immediate experience in any firmly logical way," Quine promotes a relativist philosophy. From his position within the background theories of Western science, Quine will endorse certain hypotheses; however, he is careful to caution that these theories are not true in any objective sense.

With these theories, I argue that Quine furnishes the second and third tenets of the philosophy underpinning poststructuralist and constructivist feminism. Quine's ontological relativity, on the one hand, declares that there are no theory-neutral observations. Feminists have argued that there is no raw biological data to which we can refer in order to arbitrate between competing cultural theories of sex. As gavagai is relative to a language and culture, sex is similarly relative. Quine's linguistic behaviourism, on the other hand, inspires the contemporary feminist argument that we learn to label bodies "girls" and "boys" (and similarly, to act like girls and boys) strictly as a result of culture-wide conditioning processes. Before I turn to these feminist developments, I will demonstrate the ways in which Michel Foucault's philosophy clearly relies on the earlier work of individuals like Goodman and Quine. The discussion of Foucault—a more obvious forerunner of poststructuralist and constructivist feminism—in light of

---

55 Quine, "Epistemology Naturalized," 74.
Goodman and Quine will clarify the connections I wish to draw between poststructuralist/constructivist feminism and the nominalist, relativist and behaviourist philosophical trends of this century.

_**Michel Foucault**_

It is difficult to place Foucault's theories in any one particular niche. As a historian, his philosophical commentary is often implicit. He does not address the "problem of induction" in any extended formal manner. He does not pronounce, "I am a nominalist," or "categories of things do not exist." Secondly, as an "archaeologist" or "genealogist," Foucault analyzes the relationship between certain discursive regimes (or loosely, scholarly disciplines) and the objects around which they cohere. He formulates no normative judgments of the resultant systems. When he expresses an evaluative statement, it is typically from the perspective of one of these discursive systems, and not an expression of his personal beliefs. Foucault exhibits more interest in the effects that these systems have on their supposed object of study than in an evaluation of the merits or truth of any specific discourse. Finally, a conscious political decision makes him reluctant to formulate programmatic statements. Foucault is on record stating that the philosophical consistency represented in the adoption of a political program

---

86. The closest Foucault comes to acknowledging that he is a nominalist is in _History of Sexuality_, Volume I, where he says, "One needs to be nominalistic, no doubt. . ." See Michel Foucault, _The History of Sexuality_, trans. Robert Hurley, Volume I (New York: Vintage Books, 1990), 93.
or ideology is a requirement of a police state:

I am no doubt not the only one who writes in order to have no face. Do not ask who I am and do not ask me to remain the same: leave it to our bureaucrats and our police to see that our papers are in order.87

Later in his career, Foucault reaffirmed this willful vacillation, saying of his work that "there does not exist a theoretical background which is continuous and systematic."88

Therefore, it is necessary to infer Foucault's position from consideration of the bulk of his work. I maintain that The Order of Things makes a substantial philosophical intervention, while commentary throughout Foucault's life contributes to the development of a rough set of beliefs. I will argue that he has adopted a variety of nominalism and relativism comparable to that expressed by Goodman and Quine. My method of exegesis will follow that pursued in the preceding sections. I will provide a general overview of Foucault's loose collection of philosophical convictions, and then clarify his position through the use of examples. I now turn to a discussion of Foucault's philosophy.

Philosophies

Nominalism and Relativism. Throughout his career, Foucault expressed the belief that there is no unmediated access to "the real" or "nature," a belief I already elaborated from the perspectives of Quine and Goodman. According to each of these thinkers, our knowledge of the world is not true in the sense of providing an accurate representation of the operations of the world. In the early pages of The Order of Things, Foucault makes his position quite explicit.

88. Michel Foucault, Remarks on Marx: Conversations with Duccio Trombadori, trans. R. James Goldstein and James Cascaito (New York: Semiotext(e), 1991), 38.
Employing his characteristic method, he begins the text with a passage that is crafted to sound either absurd or barbaric to contemporary ears. In this instance, he refers to a book by Jorge Luis Borges, in which the author iterates types of animals in a Chinese Encyclopedia. Amongst others, the varieties include: tame, embalmed, sucking pigs, sirens, fabulous, frenzied, and, drawn with a very fine camelhair brush. Foucault asks how we can guarantee that any of our classifications are more authentic, less bizarre, or less barbaric:

When we establish a considered classification, when we say that a cat and a dog resemble each other less than two greyhounds do, even if both are tame or embalmed, even if both are frenzied . . . what is the ground on which we are able to establish the validity of this classification with complete certainty? . . . What is this coherence—which, as is immediately apparent, is neither determined by an a priori and necessary concatenation, nor imposed on us by immediately perceptible contents? For it is not a question of linking consequences, but of grouping and isolating, of analysing, of matching and pigeon-holing concrete contents. . . .

Foucault is arguing that classification systems are arbitrary because they are specific to a language or culture. Classification systems, therefore, cannot provide true knowledge of the world.

A more detailed analysis of this passage is warranted. It is interesting to note that Foucault has already summoned the ideal of "complete certainty" as the standard of knowledge. In his allegation that connections between individuals in a category are neither immediately perceptible nor a priori necessary, he has invoked Hume's defense of skepticism. Foucault has also employed the related Goodman/Quine thesis, indicating that similarity is a logically suspect category of analysis. His use of the word "concrete" in reference to the raw ingredients of a category suggests that it is only through

---

90. See my discussion of Hume in my Introduction.
abstraction that fundamentally different things become similar. In their particularity, things are dissimilar; only when viewed through the lens of a specific language or culture do things become similar. I assert that the existence of competing classifications, several of which *The Order of Things* proceeds to analyse, is offered as proof that no single system can claim to refer directly to the natural world. Foucault’s tactic is comparable to that employed by Goodman in his grue story. The argument that Foucault will consistently employ throughout his career—that classificatory systems are culturally constructed—rests on this nominalist premise that similarity is everywhere and hence nowhere, and that similarity is an imprecise category of analysis because it can always be defined in more than one way.91

Foucault offers a second justification for his relativist argument. He describes a victim of aphasia, the loss of speech stemming from brain injury or disease.92 The aphasic, according to Foucault, no longer has the ability to group items into classes recognizable to others. The individual will collect apparently unrelated objects only to disperse them anxiously, forming new piles. I maintain that Foucault is implying that the diseased individual is free of the various ordering systems imposed by a culture. Aphasia, for Foucault, does not raise the possibility that an injured brain might lose its Quinean (and hence evolved) capacity to note similarities. Aphasia instead serves to demonstrate the link between language, culture, and categorization. The aphasic, along with the Chinese encyclopedia, demonstrate the possibility of alternative classificatory systems. The two examples, Foucault writes, lead us to experience a "loss of what is 'common' to place and name."93

---

93. Ibid., xix.
Commonality, therefore, cannot be said to exist in nature, apart from our classificatory systems. Classifications that are supposedly natural are, according to Foucault, derivative of language and culture. Foucault declares quite bluntly,

[A]n eye not consciously prepared might well group together certain similar figures and distinguish between others on the basis of such and such a difference: in fact, there is no similitude and no distinction, even for the wholly untrained perception, that is not the result of a precise operation and of the application of a preliminary criterion.\(^{94}\)

For everyone but the aphasic, the perceiving eye is already 'encoded.'\(^{95}\) Classification is therefore the superimposition of a cultural order upon a nature that has no inherent (or at least discernible) meaning or structure. Although we believe we are uncovering a pre-existing structure, we are in effect putting the like qualities into place. Knowledge is perspective, as Foucault later explicitly avows.\(^{96}\)

As in the case of Goodman, Foucault's thesis that nature has no innate order apart from our various classificatory systems is not to be read as an idealist denial of the existence of the world. Foucault refers repeatedly to the "wild profusion of existing things,"\(^{97}\) the "confused, undefined, faceless, and, as it were, indifferent background of differences,"\(^{98}\) and, "bodies, organs, somatic localizations, functions, anatomo-physiological systems, sensations, and pleasures."\(^{99}\) Therefore, Foucault grants that there are things in the world. True to his contention that the only order is one imposed by language

---

\(^{94}\) Ibid., xx.
\(^{95}\) Ibid., xxi.
\(^{97}\) Foucault, *The Order of Things*, xv.
\(^{98}\) Ibid., xxiv
and culture, however, Foucault will not ascribe any innate qualities or 'truths' to these individual entities. He is critical of eighteenth-century nominalist scientists who claimed to be getting closer to the essence of their objects through the isolation of more and more unique qualities. For this reason, I argue that Foucault is a nominalist in the relativist tradition of Goodman. Foucault asserts that classificatory systems are relative to language and culture, as did traditional nominalists, but he will not ascribe "truth" to particular entities either, as is the case with contemporary nominalists like Goodman.

Therefore, according to Foucault, truth is a relationship between statements in a specific historical period, not a relationship between words and things, even the single things of traditional nominalism. Foucault insists that it is not the case that "the truth of the object determines the truth of the discourse." No science can get around this basic fact:

[R]ather than asking of science to what extent its history has approached the truth (or has impeded access to it), wouldn't it rather be necessary to recognize that the truth consists of a certain relationship that discourse or knowledge has with itself?

Hempel spoke of the conventional nature of knowledge, while Quine and Goodman threw doubt on the possibility of reducing language to the empirical input of the senses. Foucault similarly challenges the belief that we can equate the order of language with the order of things. The general philosophical conclusion in each of these instances is that the meaning or truth of things cannot be secured in the discourse of a science, because "truth"
is embedded in the cultural order of language, between words and yet more words.

**Behaviourism and Empiricism.** In the project perhaps most closely associated with what is called poststructuralism, Foucault also refuses to grant ontological or real status to the traditional subject or "I" of knowledge. There are, accordingly, no Kantian structures or phenomenological experiences in which a sense of self can be grounded. "What is given in experience and what renders experience possible," proclaims Foucault, "correspond to one another in an endless oscillation."¹⁰³ In our knowledge claims, there is no way to distinguish between what is in the world ("the given"), and what is added by our own thought processes, perceptual capacities, and discursive peculiarities ("what renders experience possible"). Foucault has just argued that "the given" is always already mediated, or that the truths we believe exist in the world are truths that we ourselves impose. Now he is contending that "what renders experience possible," the "I" of identity, is impossible to distinguish from its experiences.

In other instances, however, Foucault makes a much stronger argument, banning abstraction from specific events to any notion of an inner essence or self. Here, Foucault chooses to employ the language of exteriority, surface and

¹⁰³ Foucault, *The Order of Things*, 336.
constant change in reference to the body and to the self,

The body is the inscribed surface of events (traced by language and dissolved by ideas), the locus of a dissociated self (adopting the illusion of a substantial unity), and a volume in perpetual disintegration.\textsuperscript{104}

Foucault technically makes little recourse even to the word "individual," at one point indicating a preference for analyses in terms of "sub-individuals."\textsuperscript{105} I suggest that this reticence stems from the fact that the word "individual" conjures up images of the traditional self-constituting, unitary subject. On this front, I further suggest, Foucault demonstrates a potential philosophical kinship with Quine's linguistic behaviorism, and, in turn, Watson's and Skinner's doctrines. The self, according to this last passage from Foucault, is housed in a body that is effectively a blackboard—easily inscribed, perhaps with more difficulty erased—for the monadic events of the external world. Foucault's tentative ban on reference to psychic inwardness extends to biological inwardness as well. He is adamant that there are no aspects of human biology—either desires, instincts, or physiological laws—that could constitute a trans-historical or trans-cultural point of similarity. In particular, Foucault is critical of attempts to posit Aristotelian and hence innate natural tendencies or potentials of any sort. There are not even similarities across individuals in the same culture and era. "Nothing in man—not even his body," Foucault asserts, "is sufficiently stable to serve as the basis for self-recognition or for understanding other men."\textsuperscript{106}

I maintain that Foucault has here again invoked the nominalist contention that, in order for a category to provide a true measure of the

\textsuperscript{104} Foucault, "Nietzsche, Genealogy, History," 83.
\textsuperscript{105} Michel Foucault, "The Confession of the Flesh," in Michel Foucault, \emph{Power/Knowledge: Selected Interviews and Other Writings, 1972-1977}, ed. Colin Gordon (New York: Pantheon, 1990), 208.
\textsuperscript{106} Foucault, "Nietzsche, Genealogy, History," 87-88.
world, it would have to be "stable." So firm is Foucault's conviction that it seems to rule out in advance any empirical study of a Quinean capacity to note similarities, for example. Although my argument will take the remainder of the chapter to build convincingly, Foucault's philosophy thus far supports the behaviourist argument that there is nothing innate in human beings that could give a shared understanding to desires or instincts. Similarly, Foucault's nominalism, at least as it has been displayed up to this point, entails that any knowledge claims about the external world will always be relativized to language and culture. To repeat, truth for Foucault is a relationship between words and words, not words and things. Therefore, I assert that the behaviourist strand in twentieth century thought continues to prohibit the securing of meaning internally, just as the relativist trend prohibits its securing externally. In both cases, distinctions between empirical events and underlying forces are consistently disallowed; what "exists" are only isolated, concrete particularities, about which it is no longer possible to make any true statements.

Nevertheless, Foucault appears to exempt a certain approach to natural science from the criticisms he has just levelled. On several occasions, he appeals to a type of empiricism and implies that it is a valid means of scientific pursuit. The common denominator in Foucault's invocations is the assertion that the observation of correlations of events is a more objective (or perhaps merely, along with Goodman, a less objectionable) methodology than the creation of typologies. In the passage from The Order of Things cited earlier, Foucault distinguished between science that groups and classifies, and science that "link[s] consequences." Analogously, in The Archaeology of Knowledge, Foucault speaks of the transformation of Natural History into

biology. The former was concerned with the "classification of beings," while the latter addressed "specific correlations of different organisms." Because similar statements appear throughout Foucault's texts, as will be shown below, I contend that Foucault is endorsing a variety of empiricism. Like Hume and Quine, Foucault rejects the notion that our sense of a connection between events or things can translate into a truth about the world. Like Hume, Foucault advocates a science that simply "links consequences." But as with Quine and Goodman, Foucault rejects the Humean notion that the senses can provide a foundation for our science, because for these twentieth century philosophers, language always intervenes between empirical input and theoretical output. Therefore, I do not think it can be said that Foucault rejects science out of hand. Rather, Foucault, like Quine and Goodman, encourage a twentieth-century brand of empiricism, one careful to avoid typologies of being, on the one hand, and ascriptions of truth, on the other.

Foucault's references to the so-called "hard" sciences are scant, however. He expends most of his intellectual effort on delineating the consequences of his nominalism for the "soft" sciences. The human and social sciences must confine their analyses to specific historical periods and cultural milieux. They must speak in terms of individual entities and resist the hypothesization of transhistorical laws. Since the body is a "surface," these genealogies, as Foucault calls them, must refuse the notion that there exist any inner forces rendering possible certain behavioural and physical consequences and prohibiting others. Scholarship must instead explore the ways in which bodies are undergoing constant transformation as a result of the operation of various cultural/discursive pressures. "What is needed," Foucault

---

to make [the body] visible through an analysis in which the biological and the historical are not consecutive to one another. . . . but are bound together in an increasingly complex fashion in accordance with the development of the modern technologies of power that take life as their objective. 109

I assert that much of Foucault's work is an attempt to fulfill this programme.

In order to demonstrate the application of Foucault's philosophical tenets to the human sciences, I will analyze several texts. In the process my arguments will be made clearer, particularly those connecting Foucault to nominalism and behaviourism. *Madness and Civilization*, a case study of the theories, practices, and institutions revolving around mental illness at the time of the introduction of the asylum, and *Discipline and Punish*, an analysis of crime and the historical transition from public torture to prison incarceration, will be discussed simultaneously. I will follow this discussion with a more detailed reading of the first volume of *The History of Sexuality*.

**Histories**

**Classification and Discipline.** In *Madness and Civilization*, Foucault portrays mental illness as a genuine phenomenon, albeit one transcending all efforts to conceptualize or define it. Madness is, according to Foucault, a limit experience, a "lightning flash"110 taking place "beyond" the dialectic of reason and philosophy.111 These pronouncements are some of the more determinate statements Foucault makes in his lifetime.112 Even at this early stage of his career, however, he is careful to permit no further definition of madness.

---

111. Ibid., 285.
According to Foucault, madness cannot be described and sorted into categories; it has "no secret" waiting to be discovered.113 "All that is present," Foucault maintains, "is the most internal, and at the same time the most savagely free, of forces."114 Foucault describes how psychiatry nonetheless attempted to classify mental illness, and to discover the essential qualities in a person's soul or body that result in the various types of mad behaviour. The imposition of a schema onto the anarchic experience of madness went hand in hand with the rise of the asylum, Foucault contends, as the souls of the mentally ill could be better studied and classified from within the walls of an institution.

But, according to Foucault, specific conditions like bipolarity or hysteria did not exist outside of these theories, practices, and institutions of psychiatry,

If mania, if melancholia henceforth assumed the aspects our science knows them by, it is not because in the course of centuries we have learned to "open our eyes" to real symptoms; it is not because we have purified our perception to the point of transparency; it is because in the experience of madness, these concepts were organized around certain qualitative themes that lent them their unity, gave them their significant coherence, made them finally perceptible.115

In other words, psychiatry shaped our perception and thought of the mentally ill such that the existence of these persons as a "type" came to be taken for granted. As in the case of the ontological "differences" between animals painted with a camel-hair brush, on the one hand, and cats, on the other, Foucault argues that discourse constructs the reality of hysteria and the hysteric. The categories of psychiatry are cultural constructions.

114. Ibid.
115. Ibid., 130
The basic form of this argument is repeated in *Discipline and Punish*. In this text, Foucault acknowledges that there is a diverse range of acts committed which are against the law. These acts are crimes, from the perspective of the law as it has been defined, and in these individual manifestations, crime is real. Once again, Foucault is not suggesting that *nothing* exists or is real. What he challenges is the ascription of individuals into categories on the basis of these singular events. Foucault contrasts the criminal justice system before and after the rise of incarceration. In the old regime of public punishment prior to the establishment of the prison, a primary goal of the interrogation of a suspect was the determination of guilt. The questions asked were, therefore, factually based, such as, "Has the act been established and is it punishable," and "who committed it." Punishment was not designed to reform the individual.

Foucault contends that this was no longer the case once the transition to imprisonment was under way, circa the second half of the eighteenth century. Modern criminology, like psychiatry, tries to explain illegal behaviour in terms of an inner drive or tendency. The commission of a crime therefore came to signify the presence of a mental or emotional defect. The mind or soul of the lawbreaker accordingly became of interest to the courts, and the individual was increasingly identified with this inner "criminal" motivation. Now, the relevant interrogations related to underlying motivations: "How can we assign the causal process that produced [the crime]. . . . Where did it originate in the author himself?" Sentences therefore took into consideration the means by which a person was

---

117. Ibid.
118. Ibid.
most likely to be reformed and not merely punished. Within a very short space of time, the prison—as an institution charged with the joint goals of reform and punishment—became the dominant institution of the law, and criminology was born. Foucault concludes that as with the "lunatic," the "criminal" was the creation of this vast industry growing up around crime. The hunt for motives produced the "criminal" mind.

Unlike Goodman and Quine, Foucault offers a political analysis of the reasons for the cultural belief in the "truth" of classificatory systems or essences. In other words, Foucault tries to explain why certain categorizations of individuals might prove beneficial to specific social orders, whereas Goodman and Quine keep their analysis at the level of philosophy. Foucault writes that asylums do not improve the lot of the mentally ill, and it is widely acknowledged that prisons do not reduce crime. In fact, most studies show that imprisoned individuals are more likely to become the repeat offenders that jail was supposed to eliminate. Yet, penal reform is consistently limited to two possibilities: the liberal refrain that the prison system is "insufficiently corrective," or the conservative cry that prison does not punish severely enough in its over-emphasis on correction. Foucault implies that no one ever advocates the obvious, the abolition of the prison

119. Ibid., 115-117.
120. Foucault, Madness and Civilization, 223-230.
121. Foucault, Discipline and Punish, 264.
122. Ibid., 268.
(or the asylum). This allegation leads him to argue the following:

For the observation that prison fails to eliminate crime, one should perhaps substitute the hypothesis that prison has succeeded extremely well in producing delinquency, a specific type, a politically or economically less dangerous—and, on occasion, usable—form of illegality.  

Prisons are preserved not because they reduce crime, but because they incarcerate a portion of the population that might otherwise challenge the system more directly than through the tangential disruptive cycle of local delinquency. Recidivism keeps people in petty crime; the lost potential of an anarchic body could, alternatively, challenge the structure of the society. Additionally, as argued above, prisons and asylums allow for the highly efficient gathering of facts. These institutions have become laboratories for the observation, training, and behavioural modification of individuals, and serve to discipline the population at large through the provision of an example of "deviant" behaviour.  

Foucault pursues this last thesis, arguing that institutionalization is the model for social control throughout society. In schools, military barracks, factories and hospitals, conformity is fostered by mechanisms similar to those developed in prisons and asylums. The anarchic, disorderly strivings of the body are tamed as children are boarded in schools, and workers are compelled to work away from the home in factories. Foucault argues that the human sciences owe their birth to such environments, and may therefore have a stake in their perpetuation. Without all of the data provided by the institutional surveillance of individuals, psychiatry, criminology, and other

123. Ibid., 277.
124. Ibid., 125-26.
125. Ibid., 141-42.
126. Ibid.
human sciences would have difficulty thriving. Knowledge is in this fashion explicitly linked with power. While political motivations were not necessarily the factors behind the origin of the asylum and the prison, Foucault suggests that they may explain the lasting hold that these institutions have had on the collective imagination.

Although Foucault is reluctant to make overt declarations of political strategy, this last thesis makes possible the argument that the relaxing of disciplinary forces throughout society could lead to greater individual freedom. If this is one of Foucault's goals, he does not believe it is best accomplished through traditional attacks on overarching structures like the state, capital, or patriarchy. Discipline and Punish and Madness and Civilization instead draw attention to Foucault's advocacy of "local" politics, for example, actions against prisons with the goal of their eventual abolition. Such a strategy does not rule out the possibility of larger-scale social change, however. Foucault indicated above that the state itself (and other global structures like the economy) depends on the surveillance, incarceration, and general subduing of unruly individuals. Perhaps the strongest claim that Foucault makes in this vein is as follows: "should any part of [the] universal gaze chance to slacken, the collapse of the State itself would be imminent." A political movement aimed at overthrowing the prison, or some other institution, could thus impede the functioning of the state.

---

127. Ibid., 226-227. This important point will be elaborated in greater detail in my discussion of The History of Sexuality.
129. Foucault, "Questions on Geography," in Foucault, Power/Knowledge, 72.
Sex and Sexuality. I now turn to a reading of *The History of Sexuality*, Volume One, a touchstone for numerous contemporary feminist and gay/lesbian theorists. In this text, Foucault continues to employ the methodology of his earlier writings, arguing that a post-Enlightenment tendency to characterize human behaviour as either normal or deviant has resulted in new forms of social control and created the individual's sense of subjectivity. He now elaborates on the consequences of the classification of sexual behaviour. Foucault offers the example of Jouy, a French farmhand in the mid-nineteenth century. Jouy allegedly encouraged little girls in his village to touch his genitals. When his activities were discovered, Jouy was examined by the legal and medical establishment and eventually hospitalized for the rest of his life. Foucault writes,

> So it was that our society—and it was doubtless the first in history to take such measures—assembled around these timeless gestures, these barely furtive pleasures between simple-minded adults and alert children, a whole machinery for speechifying, analyzing, and investigating.¹³⁰

Jouy was identified as a pedophile. Two things are important here. Firstly, as in *Discipline and Punish* and *Madness and Civilization*, Foucault is arguing that human sexual behaviour was more random and variable prior to our culture's attempts to analyze it. Sexual life consisted of a plethora of actions, rather than a handful of discrete "types" such as heterosexual, homosexual or pedophile. The fixing of sexual kinds by our society thus represents an artificial collection of activities into neat categories, an imposition of classificatory boxes onto what Foucault earlier called "the wild profusion of existing things," and what in this specific instance he calls "scattered

sexualities,"131 "conducts, sensations and pleasures,"132 or "bodies and pleasures."133 Before the creation of the various categories, the implication is that people would have "deviated" at one time or another without a specific behaviour turning into their defining essence.

Secondly, Foucault is contending that sexual categorization had the effect of fostering the behaviour it allegedly simply demarcated. In a society increasingly seeking to define individuals as stable, consistent subjects or identities, the introduction of sexual categories cemented one practice into the essence of the person engaging in it. Individuals became rigidly associated with a single form of sexual expression. Foucault writes, for example, that the homosexual "became a personage . . . in addition to being a type of life."134 Whereas the sodomite was a "temporary aberration," the homosexual was now a "species."135 Similarly, Jouy was perceived to be a "pedophile." Women, Foucault continues, were unique in that they were now assumed to be absolutely permeated by their sexual "nature."136 There is nothing about the female human that is not permeated by her sex.

As Quine adopted a behaviourist stance and rejected the notion of an inner self existing apart from and before an individual's entrance into the world of language, Foucault now rejects the notion that "sex" is a central component of that fictitious inner self. The main thesis of History of Sexuality is the important argument (with which I will, nonetheless, ultimately disagree) that there is no innate sexuality or sex potentially driving the individual to engage

---

131. Ibid., 48.
132. Ibid., 154
133. Ibid.
134. Ibid., 43.
135. Ibid.
136. Ibid., 105.
in various behaviour. Sex, writes Foucault, is "an ideal point made necessary by the deployment of sexuality and its operation." A culturally-specific way of analyzing individuals leads to the belief that there is an internal force organizing sexual behaviour. Foucault contends that with the creation of categories of perverse behaviour, "sex" was wrongly thought to pertain to an "interlacing of function and instinct." Foucault elaborates in a famous passage,

[T]he notion of "sex" made it possible to group together, in an artificial unity, anatomical elements, biological functions, conducts, sensations, and pleasures, and it enabled one to make use of this fictitious unity as a causal principle, an omnipresent meaning, a secret to be discovered everywhere.

The binary man/woman is, apparently, just as much a construct as heterosexual/homosexual or deviant/normal. According to Foucault, there is no "essence" of sexual identity—for example, like womanhood and manhood, or bisexuality, heterosexuality, and homosexuality—unifying an individual's sense of self.

Foucault has thus subjected the belief that there is something called "sex" to precisely the same deconstruction he provided of crime and mental illness. Following behaviourism, I assert that he has consistently rejected analysis in terms of inner forces, tendencies, or instincts, favouring instead the language of the single observable event or act. In the case of both the "normal" and the "deviant" individual, Foucault insists, behaviour and a sense of self and purpose are fostered through the creation of discursive typologies and social norms. As with Goodman and Quine, this thesis does

137. Ibid., 155.
138. Ibid., 154.
139. Ibid.
140. In Part II of my dissertation, I will analyze the constructivist and poststructuralist thesis equating all forms of categorization. I will argue that distinctions can and should be made between social constructions and natural kinds.
not entail the rejection of the existence of the individual act or event. Foucault is not suggesting that categorizations of behaviour grow out of thin air; their seed is the cultural emphasis on some aspect of genuine human activity. However, for Foucault, Quine, and Goodman, no classification of events or individuals (or even delineation of a single event or individual) can make a claim to be an accurate or true measure of reality.

Because of this principle that sex and sexuality are the effects of discursive practices, Foucault makes no appeals to the "liberation" of either from society's strictures. He is therefore somewhat critical of gay rights movements, because of what he sees as their exclusive emphasis on sexuality.

Feminism, according to Foucault, is not bound to the idea of a natural, immutable sex or sexuality, and thus escapes similar censure. At the same time, Foucault has indicated that a more diffuse sexual practice might be preferable to the current regime of sex. In his condemnation of the institutionalization of Jouy, Foucault suggested that our culture was the first to dwell on an individual's sexual behavior. Perhaps more so than in any of Foucault's analyses, this reference to a time prior to our own comes with a partial endorsement. Foucault seems to be saying that prior to Jouy's era, sexual behaviour was less disciplined, and, ergo, freer.

My interpretation receives support from Volume II of The History of Sexuality, where Foucault relates the sexual ethic of the ancient Greeks. According to Foucault, limits on sexual behaviour in that era were self-imposed and referred only to the quantity of pleasure in which the individual indulged. Jumping back to Volume I, Foucault makes the following

142. Ibid., 219-220.
entreaty,

It is the agency of sex that we must break away from, if we aim--through a tactical reversal of the various mechanisms of sexuality—to counter the grips of power with the claims of bodies, pleasures, and knowledges, in their multiplicity and their possibility of resistance. The rallying point for the counterattack against the deployment of sexuality ought not to be sex-desire, but bodies and pleasures.144

Foucault is apparently endorsing this notion of a personal pleasure morality, one in which "sex" would not play a unifying role. Consistent with his nominalism and anti-essentialism, Foucault is calling for an individual (albeit sans the Enlightenment notion of the individual) aesthetics of pleasure. Personally imposed limits on the amount of pleasure in which one engages are less confining than any sex-based collective politics sanctioning types of activity and prohibiting others.

As with the discussion of Foucault's advocacy of "local" strategies, his emphasis on personal transformation need not preclude the possibility of broader social change. I argue that there are two interpretations of Foucault's analysis in this regard. On the one hand, there are passages from Foucault's own writings in which he seems to divorce his individual aesthetics from

politics. Foucault comments to this end:

For centuries we have been convinced that between our ethics, our personal ethics, our everyday life, and the great political and social and economic structures, there were analytic relations, and that we couldn't change anything, for instance, in our sex life or our family life, without ruining our economy, our democracy, and so on. I think we have to get rid of this idea of an analytical or necessary link between ethics and other social or economic or political structures.145

An "aesthetics of pleasure" could thus have as its goal simply the improvement of its practitioner's life. I assert that a nominalist philosophy resisting all classificatory schemes produces, from this perspective, an individualistic "politics," if indeed it can still be called that. On the other hand, if this strategy of personal transformation is connected to Foucault's earlier writings on the prison and the asylum, another reading is made available. Foucault contended above that a challenge to the bodily docility engendered by the prison and asylum could lead to the collapse of these institutions, and perhaps even the state. Applying this thesis to the issue of sex and sexuality, it is possible that an aesthetics of pleasure could lead to the overthrow of the sex and sexuality systems. The suggestion is that the sex/sexuality regime depends in a fundamental way on the self-monitoring and self-regulation of individuals within that system. If individuals can shatter their disciplined moulds, it is possible that sexism and heterosexism could no longer function. If people no longer look, think, or act like men and women, the argument runs, how could women continue to be oppressed? I will discuss the full feminist exploration of this argument in Chapter Two.

I continue that a yet more radical possibility must be considered. Foucault may be avowing that there are no causal structures in nature producing the

145 Foucault, "Afterword: On the Genealogy of Ethics," in Dreyfus and Rabinow, Michel Foucault: Beyond Structuralism and Hermeneutics, 236.
chromosomal and hormonal regularities we call "men" and "women." This contention would mark not only the uncoupling of biology and behaviour, but also, more dramatically, genetic structure (genotype, in this case, XX and XY chromosomes) and anatomy (phenotype, in this case, genitalia, breasts, and secondary sex traits). This interpretation of History of Sexuality stems from my earlier analysis of Foucault's nominalist rejection of all classificatory science. If there are no certain means by which we can justify our classifications of cats and dogs, the same logic can be applied to the binary categories men and women. Goodman and Quine demonstrated that similarity of any sort was a logically imprecise category, and Foucault has shown clear signs of adhering to this nominalist credo. If this deconstruction of sexual biology is indeed Foucault's intent, "sex" would be meaningless as a label at anything other than the individual level, or perhaps even at the sub-individual level of the single act. Furthermore, Foucault has indicated that nothing but "bodies and pleasures" exists, ontologically speaking. Because Foucault has clearly stated that all categorizations of individuals are groundless, I contend that this radical deconstruction of sex is a logical conclusion of his philosophy.

Despite this rejection of all sexual categorization, Foucault has expressed an openness to a certain kind of science of the body. This openness reinforces my earlier argument that Foucault may exclude non-truth ascribing empiricism from the sweep of his criticisms of the study of human beings. Thus, The History of Sexuality provides a clear picture of the distinction

---

between the science of physiology and theories of human sexuality,

When we compare [the] discourses on human sexuality with what was known at the time about the physiology of animal and plant reproduction, we are struck by the incongruity. Their feeble content from the standpoint of elementary rationality, not to mention scientificity, earns them a place apart in the history of knowledge. . . . It is as if a fundamental resistance blocked the development of a rationally formed discourse concerning human sex, its correlations, and its effects. . . .

Foucault appears to be making room for a physiology of human reproduction, based on the "rational" observation of "correlations" and "effects." He is perhaps recognizing that at some level, reproduction has more immediate connections to nature than do madness or criminality. He is suggesting that a science of sex based on observable sequences of physical events, as opposed to invisible spirits, essences, laws, or tendencies transcending events, would be permissible. This argument is phrased distinctly in the language of Humean empiricism, as I discussed in my Introduction, modernized with twentieth century relativism. An aversion to reference to invisible essences or hidden causes—like sex or sexuality—is typical of the Humean tradition, even if that tradition errs, in the eyes of contemporary empiricists, when it makes attributions of truth to its results. Thus, Foucault makes allowances for a classificatory science in which one studies, for example, not the differences in behavior between men and women, but perhaps the effects of different combinations of hormones on behaviour, or the role of specific anatomical parts in reproduction. Although I fail to see how this sort of classification would be any different (philosophically speaking) than a classification based on sex, what Foucault rejects, again, is the notion that there is a core organizing force called "sex" transversing the various ingredients of bodies and behaviours.

147. Ibid., 54-55.
In conclusion, I maintain that the analyses in *Madness and Civilization*, *Discipline and Punish*, and *History of Sexuality* are broadly consistent with the nominalist relativism and behaviourism I outlined in my philosophical overview of Foucault's writings. Crime, insanity, and sex "exist" only as they are made manifest in a variety of individual behaviours. There are no innate instincts of any sort. All categorizations of individuals are effectively the creation of the human sciences, possessing a reality only within the discursive context of a specific historical period. I maintain, therefore, that Foucault has adopted a combination of Goodmanesque nominalism and Quinean behaviourism in his distinctive brand of poststructuralism.

**Conclusion**

Foucault, Quine and Goodman concur that there can be no direct reference to a singular extra-discursive reality. As Hempel and the logical positivists ultimately argued, truth for the philosophers I have presented in this chapter is a relationship between statements, not between statements and the world. Goodman and Foucault are quite explicitly nominalist, maintaining that the different ways of categorizing individual entities (even of deciding the boundaries of the individual entities), are ultimately rooted in the peculiarities of language and culture. Neither Foucault nor Goodman deny the existence of the singular event. They are adamant, however, that no particular classification of events can lay a greater claim on truth or reality than can any other classification. Similarly, Quine and Foucault concur that knowledge cannot be unified through reference to any inner notion of experience or selfhood, even instincts. These entities, too, are merely the effect of linguistic and cultural relationships.

This still-burgeoning literature, coalescing into what has come to be called either constructivism or poststructuralism, forms a distinct antithesis to the
thesis provided by the foundational philosophy outlined in the introduction of this dissertation. However, I maintain that Goodman, Foucault and Quine surely link up in fundamental ways with the traditional philosophical projects. The quest for absolute knowledge met with failure. The anti-foundationalist philosophical trend outlined in this chapter is accordingly marked by the belief that science is relative and truth constructed. Despite this seeming relationship of opposition, I hope I have at least raised the possibility that movement and counter-movement are united by a belief that knowledge must be logically certain before it can rightfully claim to be true. The philosophers in Chapter One have repeatedly denied that any sense of similarity we might experience can be defended in logical terms. Even when the language of logic is not employed, these philosophers maintain that the presentation of competing classificatory schemes (even imaginary ones) is proof that none are representative of the world in any objective way. In formulating this analysis, I hope to open the space for a more modest natural and social science, a science that encompasses feminism. Before I start my own reconstructive project, however, I will engage in an interpretation of poststructuralist and constructivist feminism, an offspring of the philosophies discussed in this chapter. An understanding of Goodman and Quine clarified Foucault's philosophy; the synthesis of these three thinkers will in turn illuminate the ideas of contemporary feminism.
Chapter 2

POSTSTRUCTURALIST AND CONSTRUCTIVIST FEMINISM: JUDITH BUTLER, SUZANNE KESSLER, AND WENDY MCKENNA

It has recently been argued that the feminism of the 1960's and 70's was motivated by the creed that gender was the societal deployment and perversion of biological sex. Simone de Beauvoir's dictum, "one is not born, but rather becomes a woman," combined with her belief that the sexed body is nonetheless a biological given, is taken to exemplify a project for which gender was malleable, while sex was immutable. This feminist position is linked with the larger project of philosophical foundationalism that is now in disrepute, as I demonstrated in Chapter One. Judith Butler, on the one hand, and Suzanne Kessler and Wendy McKenna on the other, are representative of contemporary challenges to this alleged feminist orthodoxy and good examples of feminist anti-foundationalism. Influenced by French deconstruction, and Foucault's analysis of sex and sexuality in particular, Judith Butler argues that biological sex itself is a social construction, that

[T]he construal of 'sex' [is not] . . . a bodily given on which the construct of gender is artificially imposed, but [is] a cultural norm which governs the materialization of bodies.¹

There are, accordingly, no "natural" women outside of or before gender/culture waiting to be liberated by feminism. Alternatively situated in the American aftermath of the foundational project, I assert that Kessler and McKenna demonstrate clear links to the likes of Quine and Goodman. Despite this differing background, Kessler and McKenna come to Butler's

conclusion (albeit ten years earlier): "a world of two 'sexes' is a result of the socially shared, taken-for-granted methods which members [of a culture] use to construct reality."²

This core thesis, coming from two quarters, circulates through much of current feminist theory. "There are, not one or two sexes, but . . . as many sexes as there are individuals," writes Monique Wittig.³ Ruth Hubbard similarly speaks of the "rainbow" or "continuum" of biological sex.⁴ Bernice Hausman asserts, "[T]here can be no true sex if no single 'kind of sex' (chromosomal, gonadal, hormonal, among others) can be invoked infallibly as the final indicator of sex identity."⁵ Citing two sources, Will Roscoe makes the allegation, "What constitutes anatomical sex . . . has been shown by scholars in several fields to be as much a social construction as what has come

to be termed gender." Finally, Martine Rothblatt asks rhetorically,

If we were to separate people because different kinds of chromosomes create different kinds of reproductive capabilities, how could we account for the legitimacy of biologically or intentionally infertile persons? Wittig and Rothblatt defend their positions by arguing that biological sex categories, just like class and race categories, are the effect of power relationships in society. Roscoe contends (as will Kessler and McKenna) that the existence of berdache--individuals in Native American cultures assuming the societal roles of the opposite sex--proves that biological sex is as constructed as gender. Hubbard's thesis is rooted in the premise that nature is no more "immune from change" than is culture. Wittig, Rothblatt, and Hubbard therefore favour the levelling of the distinction between gender and sex. Hausman, on the other hand, wants to preserve some notion of the material reality of the individual body. However, in order to challenge the rigid male/female binary of our culture, I maintain that she has invoked the logical standard of infallibility, and endorsed the nominalist ban on reference to causal forces transcending individual events.

Given the relatively wide acceptance with which these arguments have been greeted (at least in scholarly circles), I believe that it is important to subject them to a rigorous philosophical analysis. I will therefore focus on

---

6. Will Roscoe, "How to Become a Berdache," in Gilbert Herdt, ed., Third Sex, Third Gender: Beyond Sexual Dimorphism in Culture and History (New York: Zone Books, 1994), 345. One of the sources Roscoe cites is Butler's Gender Trouble; the other is historian Tom Lacquer's Making Sex: Body and Gender from the Greeks to Freud (Cambridge, MA: Harvard University Press, 1990). I would argue that neither of these books provides an adequate basis from which to make Roscoe's broad claim.


Butler, Kessler, and McKenna's version of constructivism and poststructuralism in order to illustrate the ways in which Continental and Anglo-analytic antifoundationalism have intersected in a novel and compelling—but, from my perspective, ultimately unsatisfactory—way in contemporary feminism. Regarding Butler, I will rely most heavily on *Bodies That Matter*, as this is the mature statement of her ideas. I will periodically refer to *Gender Trouble* and several other essays. Kessler and McKenna, on the other hand, together produced one book in the late 1970s, *Gender*, and Kessler has published one other article connected to this earlier work. As in Chapter One, I will provide a summary of the main arguments and implications of these writings, reserving my criticism until Part II of the dissertation. In each sub-section, I will first discuss Butler's theories, followed by those of Kessler and McKenna.

*The Mediation and Construction of Reality*

**Butler's Philosophical Premises**

The first level of Judith Butler's argument deconstructing sex is the contention that there can be no access to matter prior to its conceptualization in thought and language. For example, Butler asks rhetorically, "Can language simply refer to materiality, or is language also the very condition under which materiality may be said to appear?"\(^\text{10}\) This premise indicates that thought categories cannot simply reflect the "real world," that language shapes our very thought processes and in effect stands between the world and our discernment of it. Our concepts bring matter into a social world always already filled with meaning. I note that this argument is a familiar one, as it

---

recollects the irrealism of Goodman, the ontological relativity of Quine, and Foucault's discussion of the "already 'encoded' eye" of perception.¹¹ Butler now reiterates that "materiality [is] that which is bound up with signification from the start."¹²

Butler's unique contribution to the literature is her rigorous extension of this thesis to the issue of biological sex, in her argument that sex cannot be taken as an objective, given fact.¹³ She draws attention to the act of sexing a baby at the moment of birth on the basis of its observed genitalia.¹⁴ We see the baby through the mediating categories of sex affixed to the penis or vagina, and infer that there is something in nature called girlhood or boyhood. Butler maintains that the process of 'sexing' continues for the entire life span:

[T]hat 'girling' of the girl does not end there, on the contrary, that founding interpellation is reiterated by various authorities and throughout various intervals of time to reenforce or contest this naturalized effect. The naming is at once the setting of a boundary, and also the repeated inculcation of a norm.¹⁵

As I indicated in the introduction to this chapter, Butler suggests that a considerable chunk of feminism since the time of Beauvoir has accepted the distinction between sex and gender, and taken the naturalness of the former for granted.¹⁶ Butler, on the contrary, argues that men and women cannot be

¹¹ Michel Foucault, The Order of Things, xxi.
¹² Butler, Bodies, 30.
¹³ Foucault certainly initiated the process in The History of Sexuality, Volume I, but I agree that Butler provides a more detailed exploration.
¹⁴ Butler, Bodies, 7. In fact, it seems likely that sex is attributed on the basis of the presence of a penis, or lack thereof, as the vagina is not examined at birth. See Kessler and McKenna, Gender, 58.
¹⁵ Butler, Bodies, 8.
¹⁶ Judith Butler, while acknowledging her indebtedness to Beauvoir, occasionally refers to her as an archetypal modernist and hence foundationalist feminist. For example, Butler writes "[I]ndeed, for Beauvoir, sex is immutably factic, but gender acquired, and whereas sex cannot be
said to exist outside of these sex categories and that there is no definitive way to ground sex in any kind of material reality. Literally echoing Foucault, she proclaims that "'sex' is an ideal construct . . . not a simple fact or static condition of the body . . . " Therefore, the genitals to which we attach significance have meaning only insofar as humans create it. While Butler is not insinuating that the words penis, vagina, and the like, literally refer to nothing, she is maintaining (along with Goodman, Quine, and Foucault) that we cannot defend the cultural meaning of these terms on the basis of any objective access to nature.

Not only is perception of the material realm always mediated via language or thought, not only is all conceptualization an interpretation, Butler also contends that these interpretive mediations result in the partial formation or construction of the world. She writes: "To claim that discourse is formative . . . is to claim that there is no reference to a pure body which is not at the same time a further formation of that body." Therefore, the act of "girling" is an imposition of a cultural form on the baby, readying her for a lifetime of changed—or so she thought—gender is the variable cultural construction of sex . . . ." See Butler, Gender Trouble (New York: Routledge, 1990), 111. Also see Bodies That Matter, 4.

While it may be fair to generalize Beauvoir's argument in this fashion, it should be noted that there are exceptions in her work. The early pages of The Second Sex raise the possibility that procreation could be asexual, or that bodies could be hermaphroditic. Beauvoir writes,

[W]e can regard the phenomenon of reproduction as founded in the very nature of being. But we must stop there. The perpetuation of the species does not necessitate sexual differentiation. True enough, this differentiation is characteristic of existents to such an extent that it belongs in any realistic definition of existence. But it nevertheless remains true that both a mind without a body and an immortal man are strictly inconceivable, whereas we can imagine a parthenogenetic or hermaphroditic society.


18. Butler, Bodies, 10.
similar directives. Butler repeats that sex is a Foucauldian "ideal." And like Foucault in his discussion of the criminal or the homosexual (and Goodman in his analysis of the creation of stars and gems), Butler adds that certain ideal categorizations have the power to foster a specific sexual "reality." The highly regulated cultural practice of sex therefore "produces the bodies it governs." Following is a longer, clarifying passage,

"The regulatory norms of 'sex' work in a performative fashion to constitute the materiality of bodies and, more specifically, to materialize the body's sex, to materialize sexual difference. . . ."

Butler's conclusion is that "girl" and "boy" are performative concepts, as individuals gradually become (albeit in a never-ending process) the sex they are christened at birth.

Two caveats to Butler's central thesis are necessary. Butler, firstly, does not mean to suggest that language has world-making power on its own. She occasionally accuses Foucault of this "discursive monism" or "linguisticism." Discourse, Butler counters, always requires the material realm. Discourse does not create the world ex nihilo. Following is her
difficult elaboration of this principle:

If language is not opposed to materiality, neither can materiality be summarily collapsed into an identity with language. On the one hand, the process of signification is always material; signs work by appearing (visibly, aurally), and appearing through material means, although what appears only signifies by virtue of those non-phenomenal relations, i.e., relations of differentiation, that tacitly structure and propel signification itself. Relations . . . institute and require relata, terms, phenomenal signifiers.25

The example of the little girl should again illuminate. Butler's main point appears to be that, even at the level of more-or-less (but never entirely) raw data, the girl's sex traits only mean something because of their relationship to the boy's sex traits. Vagina means girl because penis means boy, and vice versa. This relationship is immaterial, or non-phenomenal as Butler states above, yet it establishes meaning. If everyone had a vagina, she intimates, people would not be divided into categories on the basis of its possession or lack. The ideas "boy" and "girl" are in turn connected to all of the various things it means to be a boy or a girl in our world, defined in words, yet having real effects and requiring phenomena to signify anything at all.

I am not convinced that this analysis is entirely lacking in Foucault. He certainly acknowledges the reality of individual behaviours and events, as I demonstrated in Chapter One. I maintain that these particularities provide the connection to materiality that Butler is calling for in the above paragraph. If a more explicit investigation of the relationships between signifier and signified, or behaviour and language, is lacking in Foucault, I suggest that

25. Ibid., 68. Note Butler's careful use of language: relations "institute and require" relata. She does not want to attribute any sort of priority to either the material or the ideal. I think it is also important to note that Butler doesn't explicitly state that the relata are objects in the sense ordinarily conceived. They may be just words.
Quine's work on the subject suffices to fill in the gaps. Quine contended that sensory input is necessary to the development of any language, knowledge or science. Like Butler, however, Quine emphasizes the intricacies of the linguistic and cultural frameworks that will grow out of this input, to the point that the precise nature of the input is impossible to determine. Quine wrote, "we cannot know what something is without knowing how it is marked off from other things," a statement that I believe Butler would endorse for its combined recognition of words and objects.

The second caveat Butler applies to her constructivism is her insistence, despite the occasional rhetorical flourish to the contrary, that not all discourse is equally constitutive of reality. Rather, effective discourses must

---

27. For an example of this rhetorical tendency, see the above passage where Butler states that "there is no reference to a pure body that is not at the same time a further formation of that body," at n18.
have some type of social power supporting them. Butler writes,

[Performativity] does not mean that any action is possible on the basis of a discursive effect. . . . Hence, the reading of "performativity" as willful and arbitrary choice misses the point that the historicity of discourse and, in particular, the historicity of norms . . . constitute the power of discourse to enact what it names. 28

Performativity, or the power of discourse to constitute its objects, "is not a singular 'act.'" 29 A specific instance of "girling" is successful because it is embedded in a naturalized, but nonetheless historical, social norm that is reiterated time and again. One obviously cannot say, "I am an aardvark," and expect this to have an impact on her/his body, nor can an individual simply will away sexual inequality with a few strategic utterances. I suggest that the analogy of common law creation is helpful. Judicial decisions are effective because they carry the weight of precedent reaching far back into time. While one can attribute agency to the judge in the pronouncement of a sentence, the notion of "intent" must certainly be qualified by this fact of social embeddedness and the resultant lack of precise origin to the law. Butler cautions that discourse becomes powerful only when it "cites the conventions of authority" in like fashion. 30 Careful historical analysis will reveal the techniques of an effective discourse. 31

This recognition of power and culture brings Butler's work further into line with the philosophical tendencies of this century. Foucault analyzed "discursive regimes," or the professional literature, institutions, and practices

29. Ibid., 12.
30. Ibid., 13.
31. This raises the question: with careful political work, could I become an aardvark? I will answer an emphatic "no." I will discuss the issue of the structured nature of reality in greater detail throughout the dissertation.
coalescing around particular objects of study. Goodman spoke of the entrenchment of conceptual systems in cultures, appealing to the idea of lengthy practices of imprecise origin. Quine, too, refers to the accepted linguistic customs of a culture as the "source" of certain conceptualizations of the world. I suggest that it is unlikely that there are any philosophers who would omit this cultural factor from their analyses, and I am not sure that Butler has any major philosophical figures in mind when she makes this clarification.

Butler incorporates one last caveat into her thesis, in a further attempt to distinguish herself from Foucault. As I demonstrated earlier, she accused Foucault of linguisticism. Now she charges that Foucault ignores the impact of social marginalization in the constitution of categories and identities. Abjection or marginalization, according to Butler, entails that some individuals will "resist materialization."32 The creation of any category requires that there be some way of distinguishing its contents from its surroundings. Some individuals will inevitably not "fit" a particular description. Depending on the social significance of the category and the varying power relations in a society, Butler asserts that the elements that do not fit will be marginalized as ineffable, or even ignored as non-existent.

---

32. Butler, Bodies., 35.
Butler elaborates,

[T]he point has never been that 'everything is discursively constructed'; that point, when and where it is made, belongs to a kind of discursive monism or linguisticism that refuses the constitutive force of exclusion, erasure, violent foreclosure, abjection and its disruptive return within the very terms of discursive legitimacy.33

Butler is arguing that some individuals will be excluded from accepted social categories, and that they will suffer from the effects of this exclusion. Butler emphatically insists that this abjection cannot be attributed to either language or matter; rather, it is best expressed as a "resistance" to materialization, as the following example will detail.

Returning to the issue of "sexing" provided above, girls are frequently denigrated in relation to boys. Babies who are not readily classifiable as either sex throw a wrench into the sex system, however.34 Butler stresses that their birth in all likelihood silences the delivery room. In our world, according to Butler, it is not possible to be anything unless you can be classified according to sex. The "it's a girl/boy" literally brings the baby into personhood.35 Butler's proposition is that an ambiguous baby is not constituted in precisely the same fashion as are "real" girls and boys. This baby, and later, adult, is instead marked by abjection and difference, or its inability to be a perfect girl or boy.36 The baby of indeterminate sex is culturally confusing, and will live the effects of this otherness.

33. Ibid., 8.
34. See Butler's criticism of Foucault's "happy" reading of the life of Herculine Barbin in Gender Trouble, 93-106.
35. Butler, Bodies, 7. Certainly the original point is Foucault's; see History of Sexuality, Volume I, 155-56.
36. Butler, Gender Trouble, 105.
Butler refuses to attribute an extra-discursive status to these "resistant" babies or any other marginalized figures, however. Such an allowance would be tantamount to declaring that some individuals do indeed have access to an unmediated naturalness. Because the issue of resistance and marginality is central to my analysis of Butler, I will engage in a lengthy philosophical analysis of her allegations. My analysis will be helpful in Chapter Three, when Adorno addresses the same intellectual debate.

I propose that Butler's discussion of marginality bears resemblance to the Hegelian critique of Kant's thing-in-itself (although it is certainly connected to twentieth century psychoanalysis as well, a digression that truly extends beyond the limits of my dissertation). According to Kant, humans perceive via a combination of empirical experience and the *a priori* forms of understanding. Our knowledge will be limited by these forms and the information available to the senses. Kant does not think that sensual knowledge is the only type of knowledge of the world. However, he does believe that it is impossible for humans to learn anything about what lies beyond the limit of sensory input. Kant postulates that there are indeed unknown essences, things-in-themselves, lying beyond the boundaries or

---

limits of human knowledge. He writes,

What we call outward objects are nothing else but mere representations of our sensibility, whose form is space, but whose real correlate, the thing in itself, is not known by means of these representations, nor ever can be, but respecting which, in experience, no inquiry is ever made.

Similarly, Kant continues, we will never know the "origin and source of our faculty of sensibility," because we have to use that faculty to know anything at all.

Hegel replied to Kant that the mere mention of a limit to knowledge marks an attempt to say something about which you have previously insisted you can know nothing. "If we take a closer look at what a limit implies," he writes, "we see it involving a contradiction in itself." Hegel asserts that there is no absolute other of knowledge because we can only conceive of that otherness in relation to thought and language. Hegel expands,

We cannot therefore regard the limit as only external to being which is then and there. It rather goes through and through the whole of such existence.

The alleged "thing-in-itself" thus influences our understanding of what we do know, and neither can really be said to exist apart from the other.

Butler, like Hegel, asserts that the mention of a limit and a beyond to knowledge is contradictory. "To posit a materiality outside of language," she writes, "is still to posit that materiality, and the materiality so posited will

---

38. Ibid., 47, 58.
39. Ibid., 47.
40. Ibid., 200. Although Kant discusses the thing-in-itself several times in his writings, Transcendental Analytic, Book II, Chapter III of the First Critique, and the immediately following Appendix (the origin of my citation) are good sources.
42. Ibid.
retain that positing as its constitutive condition.\textsuperscript{43} The fact that a line can be drawn implies that \textit{something} must be known about what lies on its far side, even if it is just that "they" are not like "us," or that our sensory faculty allows us to perceive things. Butler reiterates Hegel's argument,

There is an 'outside' to what is constructed by discourse, but this is not an absolute "outside," an ontological thereness that exceeds or counters the boundaries of discourse; as a constituting "outside," it is that which can only be thought--when it can--in relation to that discourse, at and as its most tenuous borders.\textsuperscript{44}

Therefore, the setting of a limit, or a foundation, automatically puts some things on the other side of that limit. More importantly for Butler's purposes, the positing of a limit is an undeniably political act. As Butler has argued thus far, through saying what a woman is in relation to a man, those who do not fit either category will be abject, other. Stating that the categories boy and girl are prior to culture sets a base-line or a limit for the effects of culture. No matter what we do, we are implying that we can't get past that boundary, we can't change the reality of boys and girls. Yet, we are simultaneously saying that this very nature, girlhood and boyhood, is what exists beyond culture or the social. This is a logical flaw according to Butler and Hegel, and Butler concludes that there is nothing affirmative we can say about the outsides of culture and language. (In my analysis of Adorno in Chapter Three, I will show that Hegel's solution to the problem is not the solution Butler has advocated.)

Butler now applies this framework to the issue of an innate sexuality. She refers to Monique Wittig's work in order to criticize the notion that there can

\textsuperscript{43} Butler, \textit{Bodies}, 67-68.
\textsuperscript{44} Ibid., 8.
be any extra-cultural source of resistance to society's norms. Wittig claims that lesbians escape the categories of sex and sexuality and are hence no longer women.\textsuperscript{45} The implication is that the marginality of lesbians provides a privileged vantage point for social criticism. Butler counters that abject individuals are simply constituted in a different way: "lesbian sexuality is no more and no less constructed than other modes of sexuality."\textsuperscript{46} Butler notes that other psychoanalytically-inclined theorists claim that there is a bisexuality prior to culture providing the foundation for an emancipatory "return" to polymorphous perversity. I will let a longer passage regarding this libidinal "truth" clarify Butler's response:

The bisexuality that is said to be "outside" the Symbolic\textsuperscript{47} and that serves as the locus of subversion is, in fact, a construction within the terms of that constitutive discourse, the construction of an "outside" that is nevertheless fully "inside," not a possibility beyond culture, but a concrete cultural possibility that is refused and redescribed as impossible. . . . The "unthinkable" is thus fully within culture, but fully excluded from dominant culture.\textsuperscript{48}

The "other" to any particular category, even at the pre-linguistic level, is therefore still constructed, albeit in a slightly different way. In conclusion, Butler differentiates her position, on the one hand, from Foucault's alleged linguisticism whereby all individuals are constituted in exactly the same way by discourse, and on the other hand, with the help of Hegel, from those

\begin{footnotesize}
\begin{tabular}{l}
\textsuperscript{45} Butler, \textit{Gender Trouble}, 111-128.  \\
\textsuperscript{46} Ibid., 124.  \\
\textsuperscript{47} Butler is using the Lacanian notion of the Symbolic, which she defines as: "[T]he normative dimension of the constitution of the sexed subject within language. It consists in a series of demands, taboos, sanctions, injunctions, prohibitions, impossible idealizations, and threats--performative speech acts, as it were, that wield the power to produce or materialize subjugating effects." See Butler, \textit{Bodies}, 106.  \\
\textsuperscript{48} Butler, \textit{Gender Trouble}, 77.  \\
\end{tabular}
\end{footnotesize}
theorists who contend that any individuals, or any biological instinct, could somehow inhabit an extra-cultural position.

*Kessler and McKenna’s Philosophical Premises*

A parallel universe can be found in Suzanne Kessler and Wendy McKenna’s book *Gender*, written in 1978, yet largely ignored in feminist circles then and now.49 (I stress here that Kessler and McKenna use the word "sex" only when referring to the reproductive act itself.50) Kessler and McKenna are, properly speaking, psychologists with an interest in anthropology and biology. They indicate that their research is indebted to the work of anthropologist Harold Garfinkel. However, many disciplines reflect the developments of twentieth century philosophy, just as these disciplines influence philosophy in return. It is not surprising, therefore, that Kessler and McKenna begin *Gender* with the declaration that the belief in a world existing independently of thought has no greater claims to validity than any other belief.51 Once this ontological conviction is questioned, "[T]he constancy and independent existence of objects disappears, and we are left only with *particular concrete situations.*"52 Kessler and McKenna go on to

---

49. Butler refers to Kessler and McKenna’s work once in her writings. See *Gender Trouble*, 151n8. A recent article by Mary Hawkesworth draws attention to Kessler and McKenna’s groundbreaking book. See "Confounding Gender," *Signs* 22 (1997), 649-685, as well as Kessler and McKenna’s brief reply following that piece.
51. Ibid., 4.
52. Ibid., 5 [emphasis added].
draw the following philosophical conclusion:

Ultimately, there is no way to determine the truth of theoretical formulations. Theories are ways of seeing the world and once one accepts the paradigm of a theoretical orientation, events become interpreted in light of that orientation.53

Kessler and McKenna continue that biological science, a cornerstone of the belief systems of the Western world, is but one of "an infinite number of ways of seeing the world."54 Our biological facts are no truer, therefore, "in any absolute sense" than another culture's faith in a deity.55

I assert that this point of departure intimately links Kessler and McKenna to Butler, and in turn, to Quine, Goodman and Foucault. Kessler and McKenna have, in the space of a few short passages, questioned the independent existence of objects, invoked the spectre of nominalism in their reference to "particular concrete situations," and even paid homage to the title of one of Goodman's books with the contention that theories are "ways of seeing the world."56 The contention that biology and theology are equally justifiable appears to be a direct reference to Quine's declaration that a belief in objects and a belief in gods "differ only in degree and not in kind."57 Quine and Goodman's choice of words reflects their contention that ontology is relative to a cultural backdrop, and truth to a linguistic relationship, as I demonstrated in Chapter One. I assert that these arguments are clearly in the process of being promulgated by Kessler and McKenna.

53. Ibid., 101.
54. Ibid., 42.
55. Ibid., 162.
56. The book in question is Ways of Worldmaking. Although published in 1978, the ideas it contained were circulating in various articles published prior to that time.
57. Quine, "Two Dogmas of Empiricism," 44.
Kessler and McKenna then combine these currents in twentieth century philosophy with anthropological studies to demonstrate the possibility of thinking about sex and gender differently. "A cross-cultural comparison," they observe, "can show that it is possible to construct the world in many ways." In other words, Kessler and McKenna now attempt to demonstrate that the world is effectively constructed or constituted by various conceptualizations, an allegation earlier made by Butler, Foucault, and Goodman. The discovery that there are members of other cultures who are neither male nor female in the sense that our culture would immediately understand is used by Kessler and McKenna to debunk the notion that sex refers to any natural facts.

To this end, berdache are individuals in certain North American aboriginal populations who seemingly lived as members of the opposite sex. Kessler and McKenna review the literature on the topic, furnishing several examples. Most berdache were males who became females. A son might reject traditional male chores and demonstrate an interest in female ones, and accordingly be raised as a daughter. Alternatively, there are cases of females becoming males, as a family with several daughters but no sons might "decide to make [a] child a son." In all likelihood, write Kessler and McKenna, the berdache were biologically normal. In some societies, the individual would be given a high-status ceremonial role; in other societies the individuals were tolerated but of low status; yet others ridiculed or

---

59. Ibid., 25. Kessler and McKenna note that berdache-like people have been located in many parts of the world.
60. Ibid., 21-29.
61. Ibid., 21.
62. Ibid., 26.
scorned the berdache. Some cultures believed that the berdache were selected by a god, others that the individual in question chose the role, others that there was an underlying natural disturbance. Finally, some berdache were exclusively what we would call homosexual, others bisexual or heterosexual. There is, therefore, considerable variability in the phenomenon. However, in all cases, it appears that berdache assumed the tasks traditionally performed by the opposite sex, or special tasks outside the typical division of labour between men and women. In other words, societies in which berdache appear are societies in which there are fairly strict divisions of labour, even if gender-specific tasks are accorded equal prestige.

Kessler and McKenna assert that the traditional interpretation of the berdache studies is that the various individuals are merely "treated like" the opposite sex. Kessler and McKenna instead contend that for their cultures, the berdache quite literally "became" the opposite sex, or perhaps even a third sex, through the assumption of different gender roles. Because genital anomalies were not necessarily, or even typically involved, it is suggested that these aboriginal populations made sex attributions on a non-biological

---

63. Ibid., 26, 29.
64. Ibid., 30.
65. Ibid., 28.
66. Ibid., 38.
67. Ibid., 23-29.
68. Will Roscoe, in overall support of Kessler and McKenna's constructivist agenda, notes that in cases where men and women shared tasks, areas in which one could excel and achieve status were highly gender specific. Roscoe asserts that their are three minimal conditions for the existence of berdache in nonindustrial societies: (1) division of labour and prestige system organized along gender lines; (2) belief system in which anatomical sex is believed to be fluid, or in which gender is not believed to be determined by sex; (3) various historical events and individuals motivated to create an alternative gender identity. Although the economic variable is not determinant, it plays a major role in the development of berdache identities. See Roscoe, "How to Become a Berdache," 366-372.
69. Kessler and McKenna, Gender, 28.

basis. Kessler and McKenna contend that in some cultures, therefore, the criteria for determining sex was "the role one performed," rather than the genitals with which one was born.\textsuperscript{70} The observation raises the possibility of a different way to see the divisions of sex that our culture takes as given. Kessler and McKenna declare,

For other groups to share our everyday reasons (i.e., biology) for attributing gender it would be necessary for them to share our construction of the world. It is this construction that results in our seeing our way as right, not any absolute standard.\textsuperscript{71} Kessler and McKenna conclude that gender role and genitalia are "equally real signs" of sex; more dramatically, that "gender is, in the first place, a social fact."\textsuperscript{72}

In further support of the notion that sex is a construction, attention is brought back to our own culture. Kessler and McKenna observe that men and women overlap on all biological indicators of sex.\textsuperscript{73} Exceptions to each variable supposedly dividing the sexes (chromosomes, gonads, hormones) are cited.\textsuperscript{74} An example of an infant with ambiguous genitalia is also broached. Such a baby might initially be called a boy. Chromosome tests could lead to a reconsideration of this status, with the child ultimately being called a girl.

\textsuperscript{70} Ibid., 38.
\textsuperscript{71} Ibid., 40.
\textsuperscript{72} Ibid., 39. Recall that, for Kessler and McKenna, the word "gender" is used for all discussions of sex and gender. Furthermore, Roscoe's analysis of the berdache (see n68 above) is not quite as absolute as Kessler and McKenna's, although he concurs that the berdache are best thought of as third and fourth genders. He writes of berdache cultures that "Social learning and personal experiences . . . were considered just as important in defining individual social identity as anatomy." See Roscoe, "How to Become a Berdache," 370.
\textsuperscript{73} Kessler and McKenna, \textit{Gender}, 146.
\textsuperscript{74} See Ibid., Chapter 3, entire, pp. 42-80. The realm of biological science will be discussed in greater detail in the following section on nominalism.
Yet, Kessler and McKenna note, the genitalia remain the same throughout: "[W]hat was originally seen as an empty scrotum might later be seen as always having been misformed labia."75 In her 1990 Signs essay, Kessler adds that cultural factors such as "correct" penis length or vaginal capacity often outweigh chromosomal information in the assignment of such babies to a sex category.76

Finally, Kessler and McKenna discuss the ways in which transgendered individuals can present themselves as a sex other than the one they were assigned at birth. Gender attributions in daily life are typically made without the observation of genitals, and often without any background information about the person in question. Transsexuals can therefore "do" gender, meaning that they can construct a sexed reality for themselves and others encountering them.77 As long as the transsexual or transgendered individual provides a few initial clues, confusing or even contradictory information garnered later—including details about "inappropriate" genitalia—will be interpreted to match the initial attribution.78 For Kessler and McKenna, the reluctance of individuals to challenge their first impressions is an indication that gender has as much to do with the observer as it does the performer.79 "It is our method of applying information which maintains our gender," Kessler and McKenna write, "not some intrinsic quality of our gender, itself."80 I conclude that for Kessler and McKenna, gender is attained through the

75. Ibid., 8.
77. Kessler and McKenna, Gender, 114.
78. Ibid., 17, 130, 136-37, 154-55.
79. Ibid., 136-137.
80. Ibid., 161.
observation and repetition of "information." Gender (I must repeat that this includes biological sex for Kessler and McKenna) is therefore an "accomplishment" or the meeting of an externally-set standard, rather than an essence or fulfillment of an internally-driven programme.

Each of the above cases is used to defend Kessler and McKenna's allegation that sex categorizations are relative to, and effectively constructed by, cultural mores. Biology and a sense of gender identity follow culture in the process of sex attribution, rather than vice versa. As Butler contrasted her position to Beauvoir's, Kessler and McKenna distinguish their approach from that of another feminist noteworthy, Gayle Rubin. It is claimed that Rubin's work is "grounded in, and takes for granted . . . the objective reality of two biological 'sexes.'" 81 Kessler and McKenna, alternatively, state that,

> Biological, psychological, and social differences do not lead to our seeing two genders. Our seeing of two genders leads to the 'discovery' of biological, psychological, and social differences. In essence we are proposing a paradigm change in the way gender is viewed, a shift to seeing gender attribution as primary and gender as a practical accomplishment. 82

I propose that the berdache and the transgendered individual serve as feminist equivalents of Goodman's grue emeralds, demonstrating for Kessler and McKenna that it is possible to collect individual entities into any number of equally valid classes or types. It is even possible, as Goodman suggested in his discussion of the creation of stars, to "decide" the form that individual human bodies will assume. In this feminist case, although I will eventually disagree with the conclusions drawn, the examples are genuine and perhaps

---

82. Kessler and McKenna, Gender, 163.
all the more powerful for that reason. The apparent unnaturalness of the
berdache and the transsexual forces a reconsideration of what our culture
considers natural. "It is by studying how exceptions are accommodated,"
Kessler and McKenna assert, "that we can best understand the nonexceptional
cases." Kessler and McKenna therefore extrapolate from their examples to
argue that gender is an achievement or accomplishment for all individuals.

It is important to note that Kessler and McKenna's "constructivist"
contentions are qualified. Like Butler, they are not arguing for the non-
existence of biological sexual attributes. Unlike Butler, however, Kessler and
McKenna are fairly explicit in their concessions to the real or the natural.
They grant that sexual reproduction and the selection process accompanying
it necessitate some signs of difference on the part of sperm and egg carriers.
The basis for exempting the concepts "sperm and egg carriers" from their
overarching constructivist philosophy is not provided, however. Kessler and
McKenna simply state,

Why not assert that "sperm carriers" and "egg carriers" are as
much of a construction as "male" or "female"? We all have to
make a decision to take something for granted, to stop
somewhere; otherwise it would be impossible to get out of bed in
the morning.84

I suggest that this calls to mind Hume’s famous pronouncement that the
philosophical skeptic will, ultimately, leave a room by its door rather than its
window, knowing that a fall would undoubtedly cause injury.85 Kessler and
McKenna immediately counter this positive ascription of sex differences with

83. Ibid., 23.
84. Ibid., 169n8.
the claim that "what has to be dimorphic is not obvious." They continue that although the facticity of biology has a place in the realm of reproduction, it need not implicate everyone, or even, among those who choose to reproduce, implicate them at all times in their life.

There is a second limitation to Kessler and McKenna's constructivism. Like Butler, Foucault, and Goodman, Kessler and McKenna insist that constructive practices are cultural practices, not isolated individual acts or utterances. In a footnote outlining their overall methodological approach, Kessler and McKenna provide the following clarification:

Our use of the terms "construction" and "social construction" reflects our theoretical position that the sense of an objective world is accomplished by persons engaged in concrete day-to-day activities. This accomplishment or construction is social because those engaged in the activity are members; that is, they share a common method for producing the sense of objective facts like gender.

The most telling illustration of the role of culture recounts a small study Kessler and McKenna themselves conducted. Individuals were presented with drawings of people featuring various combinations of sex traits. For example, one figure might have had long hair, broad hips, and a penis, while another might have had short hair, breasts and a penis. The subjects in the study were asked whether the figures were male or female.

Several interesting observations unfolded. Firstly, more male attributions were made than female, even though the study was careful to represent equally specific gender cues. Secondly, there was no single trait that

---

86. Kessler and McKenna, Gender, 46.
87. Ibid., 19n4.
88. Ibid., 145-46.
89. Ibid., 149. Kessler and McKenna note that this tendency to label individuals "male" with a greater frequency than female has been recorded in other studies.
automatically caused respondents to make a female attribution. Evidence of a penis was always reason enough to make a male attribution, while a masculine figure without a penis was often still judged male. When participants were informed that a figure had a vagina, on the other hand, as long as there were any signs of maleness, the vagina would not necessarily lead to a female attribution. "To be male is to 'have' something," Kessler and McKenna conclude, "and to be female is to 'not have' it." Kessler and McKenna's study, therefore, provides a clear example of the possibility that biological sex attributes are significant only in the context of specific cultural and linguistic relationships. The relationship in this instance is one of presence and absence, a binary clearly bound up with a plethora of other social beliefs and practices circulating around men and women. As Kessler and McKenna quip, "Penises do not exist in isolation."

In conclusion, the feminisms of Butler, on the one hand, and Kessler and McKenna, on the other, are united in the philosophical principle that there is no direct access to reality. Biological sex is, consequently, not a "given." Linguistic and cultural practices construct the feeling of naturalness attached to sex. However, Kessler and McKenna's constructivism—like that of Butler, Foucault, and Goodman—cannot be interpreted as the position that any act or utterance will have the effect of fostering a reality. I now turn to a discussion of whether this constructivist and poststructuralist feminism can be clarified in terms of an underlying nominalist ontology of the sort promoted by Foucault and Goodman.

90. Ibid., 153.
91. Ibid., Gender, 154.
Nominalism and Contingent Foundations

I suggest that it is possible that nominalism, the philosophy discussed in relationship to Goodman and Foucault, grounds the feminism just explored. In order to evaluate this thesis, I will address Butler, Kessler, and McKenna's specific discussions of the biological science of sex. I believe that it is in this realm that their affiliation with nominalism is most clearly revealed.

Butler's Nominalism

In *Gender Trouble*, Judith Butler utilizes a genetic study to defend her thesis that the supposedly secure indicators of maleness and femaleness (in this specific instance, chromosomes) are far from definitive classificatory tools. The research in question analyzed a sample of people including XX (generally female) individuals with testes who were therefore labelled "male," and XY (generally male) individuals without testes who were called "female."  The study sought and allegedly found a DNA pattern that would supersede the accepted chromosomal determinant of male and female to become the fail-safe indicator of sex. Those with the configuration in question would be male, and those without, female. Apparently, however, the so-called male factor was also located on the X chromosome of several females. This finding, for Butler, provides evidence of the questionable status of biological sex. Butler offers as further proof of her thesis an unreferenced statistic that ten percent of the population have chromosomal

---

92. This supports the earlier argument, made by Butler, Kessler, and McKenna, that maleness is signified by the presence of something (here, a penis), whereas femaleness is signified by a lack.


94. Butler here refers to a feminist critique of this study, see Anne Fausto-Sterling, "Life in the XY Corral," *Women's Studies International Forum* 12:3 (1989), 319-331.
patterns falling outside the XX-female/XY-male categories, or secondary sex traits that do not match their chromosomal code.\textsuperscript{95} She concludes the discussion in \textit{Gender Trouble} by declaring that there is no single, determinate indicator of sex.\textsuperscript{96} In \textit{Bodies That Matter}, this position is reaffirmed. "The concept of 'sex' is itself troubled terrain," Butler writes, "formed through a series of contestations over what ought to be decisive criterion for distinguishing between the two sexes."\textsuperscript{97} I suggest that Butler is implying that because there is no single trait that \textit{all} males or all females share, sex is a suspect category.

I argue that this marks the first, but not the last, indication that Butler is upholding a scientific standard of absolute certainty. When this goal is inevitably proved impossible to attain, Butler--like Foucault, Quine, and Goodman before her in their own illustrations--concludes that the biological sex binary is a construction. Although Butler has not rejected out of hand the notion of \textit{some} natural similarity uniting individuals into groups, she is apparently endorsing the nominalist premise that such a similarity could not operate with logical definitiveness. Since the similarity is not absolute, I suggest, Butler concludes that there cannot be a causal law of sex dividing

\textsuperscript{95} I am not sure where Butler gets this figure. The study she is criticizing does not cite any abnormality statistics. Kessler and McKenna cite two studies indicating that 15 out of 5000 births involve an abnormality of the gender chromosomes, which is a .3 percentage. See \textit{Gender}, 78 n8. In her 1990 piece, Kessler added, "it is impossible to get accurate statistics on the frequency of intersexuality," since chromosomal abnormalities are registered, but not the precise incidence of genital ambiguity. However, one physician she interviewed indicated that an obstetrician might see only two cases of intersexuality in twenty years. See Kessler, "The Medical Construction of Gender," 4. Bernice L. Hausman refers to sources indicating that while four percent was once promulgated as the overall figure for genital and chromosomal ambiguity, it is now thought to be somewhere between .5 and 2 percent. See Hausman, \textit{Changing Sex}, 204. It would seem that Butler's figure of ten percent is an overestimate.

\textsuperscript{96} Butler, \textit{Gender Trouble}, 109-110.

\textsuperscript{97} Butler, \textit{Bodies}, 5.
bodies into two categories. Butler entertains several alternative formulations of sex. The observation that there is no absolute determinant of sex might simply entail, on the one hand, that there are exceptions to the two-sex model, or that there are three or more sexes. The truly nominalist conclusion, promoted by Goodman and Foucault, would be that all classifications are constructions, and that there are only individuals (and that even the delineation of an individual is relative to a language and culture). In the case at hand, this would mean that every individual possesses a unique sex. Butler indicates that this nominalism reflects Monique Wittig's position (although surely it is also a possible reading of Foucault's *History of Sexuality*, as demonstrated in Chapter One).

But Butler herself merely points out that if sex were individualized in this fashion, it could no longer operate as any sort of descriptive generalization. In other words, sex would become meaningless. This is not to say that Butler rules out this option; she is simply drawing attention to what she regards as its logical implication. More to the point, she does not endorse the position, either. Instead, she suggests that even the notion of the individual body,

---

99. Ibid., 118. Butler refers to the passage cited earlier, "For us there are, not one or two sexes, but many . . . as many sexes as there are individuals." See n3 above.
sexed or otherwise, is a metaphysical remnant:

Is there a "physical" body prior to the perceptually perceived body? An impossible question to decide. Not only is the gathering of attributes under the category of sex suspect, but so is the very discrimination of the "features" themselves. That penis, vagina, breasts, and so forth, are named sexual parts is both a restriction of the erogenous body to those parts and a fragmentation of the body as a whole. Indeed, the "unity" imposed upon the body by the category of sex is a "disunity," a fragmentation and compartmentalization, and a reduction of erotogeneity.\(^{100}\)

Butler also writes disparagingly of Foucault's positive references to "bodies and pleasures" and criticizes this apparent ontologization.\(^{101}\) The hypothesization of a body is foundationalist, Butler is arguing, as was the declaration that humans are innately bisexual, or that lesbians are not defined by the sexual norms of a society. According to Butler, each case represents a claim to know what lies outside of culture and language, and is such an untenable speculation.

However, at one point in Gender Trouble, Butler retreats to a more conventional feminist assertion, arguing,

\[N\]ot that valid and demonstrable claims cannot be made about sex-determination, but rather that cultural assumptions regarding the relative status of men and women and the binary relation of gender itself frame and focus the research into sex-determination.\(^{102}\)

Here she seems to be stating that a valid science of sex is indeed possible, but that cultural preconceptions about gender will influence it. I doubt that any feminist would challenge this proposition. Similarly, in Bodies That Matter,

---

\(^{100}\) Butler, Gender Trouble, 114.

\(^{101}\) Butler, Bodies, 33.

\(^{102}\) Butler, Gender Trouble, 109 [my emphasis].
Butler writes that it must be possible to "concede" the reality of biology, anatomy, and the like. In the same breath, she adds, "But the undeniability of these 'materialities' in no way implies what it means to affirm them..." I note that these statements complicate the proceedings somewhat. It appears that Butler does not want to negate the relevance of the scientific study of bodies and sex. It also appears that she is ultimately neither advocating nor ruling out any of the above theoretical positions.

In fact, this seems to be the point of Butler's exercise: neither to condemn nor condone, in any absolute sense, efforts to find a material basis for the sex categories. Temporary bodily truths can be affirmed (although Butler does not engage in any such affirmation), but these should never be fixed into permanent categories. We cannot, she is arguing, state with definitiveness that there are bodies and pleasures, or an innate bisexuality, but nor can we reject the possibilities out of hand. From this perspective, one should encourage and heed scientific studies of sex and the body, while acknowledging the social constitution of knowledge, and remaining wary of attempts to cement human nature. The most that Butler will absolutely say about matter, and therefore the body, is that it is "a demand in and for language, a 'that which' which prompts and occasions, . . . [and] calls to be explained." This "demand" has a history and is therefore subject to differing interpretations and constructions. Any tentative truth about the body (or anything else) makes sense only through its social conceptualization

---

103 Butler, Bodies, 66-67.
104 Despite her theoretical modesty on this occasion, Butler has more than once argued that there is no innate sexuality. See n48 above, and my forthcoming discussion of agency in this chapter.
105 Butler, Bodies, 67.
and in relation to other materialities. Even the integrity of an internal organ is relational, discursive, and historical.

In *Bodies That Matter*, Butler contends that this philosophy she is advocating escapes the traps of both idealism and materialism. In the essay "Contingent Foundations," she further avows that her principles cannot be traced to any traditional philosophical position. She claims that her feminism is neither foundationalist nor antifoundationalist, accordingly:

>[T]he point is not to do away with foundations, or even to champion a position that goes under the name of antifoundationalism. Both of those positions belong together as different versions of foundationalism and the skeptical problematic it engenders.  

Butler is suggesting that foundationalism and antifoundationalism are two sides of the same coin, because each metaphilosophy ultimately claims to prove something (that there either is or is not objective knowledge). This assertion resembles my Introductory argument that the drive to ground knowledge in the absolute certainty of foundationalism can only result in failure and lead to skepticism. Butler is concurring that each of these philosophies results in the formulation of untenable absolutes.

Yet I do not think Butler can definitively state that her project, as presented, is so different from the relativism she claims to reject. In particular, Butler's "contingent foundations" explicitly calls to my mind Goodman's "judicious vacillations" between competing world views. As Butler both encourages and rejects the experimental results of science,

---

106. Ibid., 12.
108. As I indicated in my Introduction, I claim no authorship for this argument.
Goodman indicated that even the stars are but one way of seeing the world, a world that continuously "melt[s] into versions." The task of philosophy, Goodman declared, was to alternate between the various versions of the world. "We are monists, pluralists, or nihilists," he wrote, "not quite as the wind blows but as befits the context." Butler has now written that we can make tentative affirmative statements, but we can never grant them any objective truth. She has repeatedly rejected the claim that any statement about what lies beyond culture can be defended objectively, in particular, she denounces all efforts to posit any sort of natural sex or sexuality.

I maintain that Butler's philosophy can be connected to Goodman's nominalist ontology and relativist epistemology, and which he in turn attributes to Parmenides. Goodman explicitly calls his project radically relativistic. I contend that Butler should similarly concede the relativism inherent in her position, or explain precisely how her philosophy differs from Goodman's, or from that of other individuals openly avowing their relativism on the basis of similar principles. Butler has not provided the means by which tentative affirmative statements can be formulated, or the means by which competing affirmative statements can be evaluated. Without such an effort at conceptual clarification, I assert that Butler is stalled at the thesis that all knowledge is equally mediated and equally defensible/indefensible.

**Kessler and McKenna's Nominalism**

I now turn to an exploration of the proximity of Kessler and McKenna's philosophy to nominalism, again via an exploration of their discussion of the

---

110. Ibid., 36n9.
111. Ibid., 32.
biology of sex. In a passage cited early in the chapter, Kessler and McKenna remarked that, outside of discursive constructions of the world, "we are left only with particular concrete situations." I suggested at the time that this statement provided a possible link between Kessler and McKenna's gender theories and philosophical nominalism. Other elements of Gender support my initial contention. For example, Kessler and McKenna repeatedly insist that there is no single biological fact "always and without exception" true of only one gender.\textsuperscript{112} They additionally maintain that

> No amount of descriptive information we could give you about 
> [a] person would allow you to attribute gender with absolute certainty.\textsuperscript{113}

Kessler and McKenna observe that every individual has a unique—because slightly different—mix of each of the sex hormones (androgen, estrogen, and progesterone), further breaking the link between bodies and binary logic.\textsuperscript{114} They propose, in a suggestion reminiscent of Foucault's advocacy of strict empiricism, that scientific studies correlating hormone levels and behaviour could be conducted \textit{without} the superimposition of the sex categories.\textsuperscript{115} Kessler and McKenna also note that not all sperm-producers are men, and cite the example of male-to-female transsexuals socially presenting as women yet possessing male sex traits.\textsuperscript{116} Similarly, they remind that "not every human being can reproduce, nor does every human being who carries reproductive cells want to reproduce."\textsuperscript{117} It is finally declared that new

\textsuperscript{112} Kessler and McKenna, \textit{Gender}, 1.
\textsuperscript{113} Ibid., 17, [emphasis added].
\textsuperscript{114} Ibid., 74.
\textsuperscript{115} Ibid., 72.
\textsuperscript{116} Ibid., 2.
\textsuperscript{117} Ibid., 165.
reproductive technologies might one day open radically different reproductive possibilities.\textsuperscript{118}

I maintain that Kessler and McKenna are insinuating that categories must be determinate in order for them to be in any way representative of reality, and that this is the signature tenet of nominalism. Since it is a simple matter to furnish exceptions to the alleged laws of sex, the conclusion is, once again, that the biological category "sex" is a construction. At one point, Kessler and McKenna explicitly state that "Scientists construct [sexual] dimorphism where there is continuity."\textsuperscript{119} They compare sex to race, intimating that both are equally the effect of the superimposition of an arbitrary category upon individuals.\textsuperscript{120} Furthermore, in their anthropological example, they allege that each berdache effectively created a unique sex, with the community then treating the individual in accordance with their idiosyncratic personality traits.\textsuperscript{121} Kessler and McKenna attempt to apply this individualistic ethos to the dilemma of biological gender attribution in our culture. They argue that the only guarantee of an individual's sex is a direct question to that effect. They have placed everyone in the position of defining their own sex.\textsuperscript{122} Sex so defined even from the perspective of the individual is, ultimately, culturally constructed. Thus, I assert that Kessler and McKenna have demonstrated clear signs of adopting Goodman and Foucault's relativistic nominalism. Categories are not representative of reality because exceptions

\textsuperscript{118} Ibid., 46.
\textsuperscript{119} Ibid., 163.
\textsuperscript{120} Ibid., 164.
\textsuperscript{121} Ibid., 29.
\textsuperscript{122} Ibid., 9.
to rules can easily be located. Individually defined "realities" are the closest we can come to truth, and these realities are always culturally constructed.

But as with Butler, nominalism is not the end of the story for Kessler and McKenna. Kessler and McKenna caution that "[W]e are not arguing for or against biological contributions to gender differences or similarities." As noted above, they also concede that a distinction between egg-carriers and sperm-carriers is necessary to species' propagation at some minimal level. An acknowledgment of similarity, or at least its possibility, is tantamount to a rejection of nominalism. As I argued in Chapter One, it was for this reason that Quine distanced himself from nominalism. He realized that he had to work with some notion of innate similarity (albeit one with no "truth" attached to it). This concession of possible similarity complicates Kessler and McKenna's position, just as it did Butler's. However, in their philosophical decision to equivocate, I suggest that Kessler and McKenna have displayed the "judicious vacillation" between worldviews (more specifically, between different categorizations of individuals) advocated by Goodman and adapted by Foucault.

I therefore continue to hold my above conclusion that Kessler and McKenna have more or less adopted the relativist nominalism of Goodman and Foucault. Again, Kessler and McKenna have repeatedly argued that the existence of single or occasional exceptions to hypothesized similarities, and the existence of competing cross-cultural classifications systems, demonstrates that no single definition of a similarity can claim greater objectivity than any other. I have also argued that Butler displays the same philosophical

---

123. Ibid., 75 [emphasis in original].
predilection. On the issue of reproduction, a point differentiating Kessler and McKenna from their peers, they are perhaps more compatible with Quine. Butler, as indicated above, will not make any absolute statements about anything, including the status of sperm and egg carriers. Quine's relativist empiricism attempts to leave room for the natural sciences, particularly in his recognition of the innate human capacity to note similarities. However, he is careful to insist, as are Kessler and McKenna, that science is all the same a construction. This difference between Butler and Kessler and McKenna is in the end, therefore, quite trivial, as Butler could easily say "yes, of course some difference between sperm and egg carriers are necessary to reproduction."\textsuperscript{124}

This completes my analysis of the philosophies underpinning the works of Butler, Kessler and McKenna. I now turn to a discussion of their respective political theories. The contention that sex is a construction and that there is no "outside" of culture has implications for the understanding of agency and theories of social change. Indeed, Butler, Kessler and McKenna claim to be providing a rationale for the repudiation, or at least a drastic rethinking, of traditional strategies of feminism and sexuality movements, as I shall now demonstrate.

\textit{Agency and Social Change}

\textit{Butler’s Politics}

There is no doubt that Butler is reticent when it comes to outlining her political platform. I believe that several goals can all the same be gleaned from her work. Firstly, if Foucault nearly rules out the possibility of agency

\textsuperscript{124}. In an interview with the journal \textit{Radical Philosophy}, Butler almost—but not quite—concedes as much. See, "Gender as Performance: An Interview with Judith Butler" \textit{Radical Philosophy}, 67 (1994), 32-39.
when he ascribes a monolithic power to discourse, in Butler's eyes, Wittig and others over-estimate the utopian potential of alternative forms of sexuality when they contend that these practices are extra-cultural. Drawing on her earlier discussion of abjection, Butler instead locates agency in the relation or limit between a category and its margins. She contended earlier that the creation of a category necessitates the making of a distinction between members of that class and all other bodies (or between culture and nature, or any other discursive system and its outsides). According to Butler, agency therefore lies not in some body or identity outside of or before power, but in the possibility for change implicit in this establishment of a category or the setting of a limit. She now expands,

The paradox of subjectivation . . . is precisely that the subject who would resist such norms is itself enabled, if not produced, by such norms. Although this constitutive constraint does not foreclose the possibility of agency, it does locate agency as a reiterative or rearticulatory practice, immanent to power, and not a relation of external opposition to power.125

For example, the individual who resists the norms of heterosexuality via homosexual or bisexual practice is indeed rebelling, but this rebellion is defined in terms of heterosexuality. There is no natural homosexual force or drive upon which the individual draws, there is nothing "external" to the operations of culture. There is only the possibility for behaving differently raised through the observed example of other behaviour. In other words, the establishment of the category "normal sex" introduces the possibility of "abnormal sex." Butler is asserting that homosexuality and bisexuality would

125 Butler, Bodies That Matter, 15.
be literally meaningless without this connection to their socially superior cousin.

Butler continues that the identity and social status of "normal" individuals are similarly dependent on the relationship between a category and its margins.\textsuperscript{126} Even though the "abnormal" individuals are rejected by their culture, they provide a continual challenge to the "normal" individuals as reminders of a different way to be and think. Thus, the existence of a sexually ambiguous baby or adult threatens the supposedly solid ground of the "real" boys and girls, or the "true" heterosexuals, of the world.\textsuperscript{127} Writes Butler,

\begin{quote}
[T]his disavowed abjection . . . threaten[s] to expose the self-grounding presumptions of the sexed subject, grounded as that subject is in a repudiation whose consequences it cannot fully control.\textsuperscript{128}
\end{quote}

We believe that our sex is an expression of a fundamental inner truth, yet it turns out that it depends on a \textit{relationship}, the rejection of those individuals unlike ourselves. In other words, our "sex" depends on a non-phenomenal\textsuperscript{129} connection to other sexes and sexualities, not on a natural drive external to culture. For Butler, the naturalness of the category woman is, as a consequence, questioned when a "natural" man convincingly presents himself as a woman. As Kessler and McKenna also stressed in their study, and as Foucault hinted in \textit{History of Sexuality}, one person's confusing status could force others to rethink the sex and sexuality previously taken for

\begin{flushleft}
\textsuperscript{126} Ibid., 3 (one example among many).
\textsuperscript{127} Several studies show that people do indeed become very uncomfortable when they meet someone who cannot readily be classified as "man" or "woman." See Candace West and Don Zimmerman, "Doing Gender," \textit{Gender and Society} 18 (1987), 125-151.
\textsuperscript{128} Butler, \textit{Bodies}, 3.
\textsuperscript{129} Ibid., 68. See the earlier discussion of non-phenomenal relations surrounding the text referring to n25.
\end{flushleft}
granted as natural. If sex can be contrived or performed, what could be so essential about it? Furthermore, if sex ambiguity became widespread, the implication is that the norms of gender and sexuality would loosen their hold on all individuals. Butler's theory elaborates upon what was only hinted at by Foucault in Chapter One. She is suggesting, in other words, that the discourse of gender needs the foundational support of "naturally" sexed bodies. Challenging the idea of naturalness, and with it, all philosophical foundationalism, could therefore have the effect of undercutting the entire system of gender inequality.

Butler continues that even the limits of socially approved identities function as the basis for agency and change. A performance of womanhood, for example, is a "citation" of the norms of womanhood (as I suggested earlier, as the passing of a juridical sentence is the citation of received law). The ongoing repetition of all such norms entails the inevitability that "real" girls and boys and "perfect" heterosexuals will fail to live up to the requirements of these ideals. Each citation or performance, Butler writes, "will be at once an interpretation of the norm and an occasion to expose the norm itself as a privileged interpretation." The copy will deviate from the original, in effect. If every performance involves a variation—however slight—it can highlight the fact of the inauthenticity of the norm, and reveal that the

130. Ibid., 4, 10, 23, 125 (for situations in which Butler makes this hypothesis).
131. I am referring to my suggestion in Chapter One that Foucault's philosophy introduces the argument that the de-disciplining of individual bodies could pose a threat to overarching structures. In History of Sexuality, Foucault implied that an aesthetics of pleasure in which individuals challenged the classificatory norms of sex and sexuality (as opposed to a politics of sexual liberation) could lead to the collapse of sexism and heterosexism.
norms themselves are ultimately cultural interpretations. Without a secure origin, no identity is stable. Butler summarizes,

identifications are never simply or definitively made or achieved, they are insistently constituted, contested, and negotiated.\textsuperscript{133}

This argument provides a window for social change, and offers a possible explanation for the slow evolution of culture over time. Butler is asserting that although our sense of self is dependent on our interpretation of and nonphenomenal relation to the identity of others, in mimicry and reaction there is inevitable, gradual, mutation.

Because of Butler's insistence that the sexed subject's materiality is always within culture, her political openings are emphatically not those provided by a voluntarist subject. Sex is not assumed in the way that one picks out clothes. In other words, the ways in which we become our gender are many and complex, and difficult to comprehend fully. Sensitive to criticisms that she anticipates the massive de-sexing of individuals in the wake of her writings, Butler clarifies her position:

Sexuality cannot be summarily made or unmade, and it would be a mistake to associate 'constructivism' with 'the freedom of a subject to form her/his sexuality as s/he pleases.'\textsuperscript{134}

Furthermore, she recognizes that gender parody may not be a strategy adequate to the displacement of the dominant norms of sex. Gender parody also puts the heretical performer at the risk of violence or even death.\textsuperscript{135} Thus, it is no easy matter to dissimulate one's sex or sexuality. However, de-sexing is a theoretical possibility, for to be constituted is not to be determined,

\textsuperscript{133} Ibid., 76 (emphasis in original).
\textsuperscript{134} Ibid., 94.
\textsuperscript{135} Ibid., 125, 133.
Because constitution is a never-ending process depending on the citation, and hence variation, of social norms, the opportunity for change does exist. Butler consistently maintains, however, that any resultant variations in identity will always be thoroughly social, as the choices available to individuals are meaningful only in relationship to items already inscribed on the cultural menu.

Implicit in the above paragraphs, and indeed the gist of Butler's entire analysis to this point, is the thesis that there are no natural women outside of or before gender waiting to be liberated by feminism. Just as the lesbian or bisexual is constituted, so are women in general. Butler suggests, therefore, that it may be counter-productive to the agendas of feminism and other social movements to make ontological claims regarding the distinctness and priority of any body or identity, including that of women. If women are discursively constituted in relation to men, defending a movement on the basis of "women's rights" further fixes an identity that is the effect of a hierarchical discourse. Furthermore, if the establishment of any category necessitates the creation of an abject realm, all statements on the behalf of "women" will entail the marginalization of some individuals. Butler writes:

[T]here is some risk that in making the articulation of a subject-position into the political task, some of the strategies of abjection wielded through and by hegemonic subject-positions have come to structure and contain the articulatory struggles of those in subordinate or erased positionalities.\(^{137}\)

In other words, a supposedly liberatory movement can duplicate the patterns of the dominant culture in establishing the feminist identity. I suggest that a

\(^{136}\) Butler, Gender Trouble, 143; Bodies, 10.

\(^{137}\) Butler, Bodies, 112.
well-known example has been the exclusion of minority women from the hegemonic projects of white, middle-class feminists.

Correspondingly, Butler continues, if individuals are constituted by a variety of discourses, the foundation of a movement on the basis of a single identity is a limitation of potential for all involved. She writes,

To prescribe an exclusive identification for a multiply constituted subject . . . is to enforce a reduction and a paralysis. . .

This dilemma does not spell the end of emancipatory movements, however, and Butler denies that all categories are equally exclusionary and limiting. It may on occasion be desirable to refer to some sort of collective subject grounded in a category, even that of sex. In fact, it is necessary to use such categories if one is to gain political recognition within our current system. "It is clear that in order to set political goals," acknowledges Butler, "it is necessary to assert normative judgments."

However, Butler does not offer any such normative judgments, nor does she furnish the means by which some could be made. She simply asserts that the resulting 'judgments' must remain indeterminate and tentative, even as they employ such established monikers as "women" or "lesbians." Butler hopes that in the process, we can begin conceiving of ourselves in a way that would not absolutely exclude whatever it is that is allegedly "other" than us. New political identities would no longer entail fixedness or stasis along with the corresponding rejection of difference or otherness. In philosophical

---

138. Ibid., 116.
139. Ibid., 207.
140. Ibid., 114, 123.
terms, Butler advocates a "reworking of that logic of non-contradiction by which one identification is always and only purchased at the expense of another." This goal effectively marks the political adaptation of Butler's "contingent foundationalism" or nominalist/irrealist ontology disclosed earlier. Although few details are presented, Butler suggests that this new way of thinking and being can perhaps be initiated through,

[T]racing the ways in which identification is implicated in what it excludes, and . . . follow[ing] the lines of that implication for the map of future community that it might yield.¹⁴³ Heterosexuals could, in other words, see that the belief in their "naturalness" literally requires the existence of the "unnatural" alternatives, homosexuality and bisexuality. Men would see that masculinity entails the abnegation of the feminine, and femininity, too, the rejection of certain possibilities. All could recognize the limitations inherent in a static identification, and awaken to the liberatory possibility of a more diffuse sense of self.

Despite these political statements, Butler warns, "I invest no ultimate political hope in the possibility of avowing identifications that have conventionally been disavowed."¹⁴⁴ At the least, feminist and gay equality movements should not unquestioningly advocate the rights of women, homosexuals, or bisexuals. Consistent with her "contingent foundationalism," Butler has observed the political dangers of attributing content to truth, on the one hand, and refusing to name it, on the other. Even though she places most emphasis on the risks of the first sin, that of commission, she does concede that it is necessary to affix tentative content to

¹⁴² Butler, Bodies, 118.
¹⁴³ Ibid., 119.
¹⁴⁴ Ibid., 115.
the real or the material in order to forge political movements. However, as I have hinted to this point, I maintain that nothing in her philosophy as she has presented it provides Butler with the means of making a tentative normative statement. Whether Butler can maintain both her philosophy and her politics will be discussed in the remainder of this dissertation, as will the issue of whether her refutation of Beauvoirian feminism has been successful. I will close my analysis of Butler with a discussion of the possible connection between her political strategy and behaviourism.

In Chapter One I drew attention to Quine's pronouncement that "we talk alike for no other reason than that society coached us alike in a pattern of verbal responses and externally observable cues." Verbal agreement is not, according to Quine, indicative of an underlying mutual understanding between two people. The empirical fact that two individuals from different cultures can learn to say "gavagai" when confronted by the same general stimulus pattern does not ensure that the word refers to the same object, nor that their respective mental images and internal dictionaries correspond in any way. If we share biological material like concepts or feelings (as coded genetically), their evidence is inaccessible to us. We have only the evidence provided by behaviour. I have linked this philosophy with behaviourism in general. Skinner formulated the general consequence of such a philosophy as follows: "[O]ur perception of the world—our 'knowledge' of it—is our behavior with respect to the world." The self, Skinner adds, is merely the conglomeration of all these behaviours, "a device for representing a

---

functionally unified system of responses." Quine quite explicitly adopts Skinner's (and Watson's) behaviourism, and I suggested earlier that Foucault's deconstruction of the subject and rejection of the inward experiences of phenomenology or even common biological properties demonstrate a like ancestry.

Despite the use of a completely different language, I maintain that there are also similarities between Butler's "gender performativity" and Skinner, Watson, and Quine's behaviourism. Sexual identity, in Butler's analysis, is the effect of behaviour, behaviour that I have earlier argued consists (from Butler's perspective) either of the iteration of cultural norms, or a reaction to those same norms. "The materiality of sex," Butler declares, "is constructed through a ritualized repetition of norms." She clarifies,

There is no gender identity behind the expressions of gender; that identity is performatively constituted by the very "expressions" that are said to be its results.

"[T]he subject, the speaking 'I,'" Butler continues, "is formed by virtue of having gone through such a process of assuming a sex." I maintain that the placing of quotes around 'expressions' and 'I' is further indication of Butler's thesis that behaviour, at least in its sexual aspects, is never the expression of an inner, extra-cultural (even in part) force or instinct. Seyla Benhabib levels a similar accusation against Butler, writing that Butler invokes tenets of behaviourist philosophy by promoting a theory of identity in which "we are no more than the sum total of gendered expressions we perform." Butler's

---

147 Ibid., 285.
148 Butler, Bodies That Matter, x.
149 Butler, Gender Trouble, 25.
150 Butler, Bodies That Matter, 3.
151 Seyla Benhabib, "Feminism and Postmodernism," in Benhabib et al., Feminist Contentions
theory of sexual identity, Benhabib argues, is that it consists of the sum of sexual behaviours. As I suggested above, I have argued that this thesis was first elaborated by Foucault, and that it is indebted to behaviourism's doctrine that subjectivity—including biological drives and tendencies—is the effect of behaviour.152

Butler has explicitly and adamantly rejected this allegation of behaviourism. Because the performativity of gender is an ongoing process, as I described above, she maintains that the constituted identity to which she refers is never fully determined.153 She intimates that this qualification distances her position from behaviourism.154 Butler also stresses that her work pertains only to the issue of innate sexual drives, not all drives.155 However, I assert that nothing in her work suggests that she would be willing to entertain any speculations about natural instincts, or at least to attribute more objectivity to one theory about such instincts over another. Furthermore, she stressed above that the only thing that can be said about the material or natural body is that it is a "demand in and for language."156

Butler now goes on to defend a theory of agency that she thinks further distinguishes her position from behaviourism. Her conception of agency, she grants, does not draw on the pre-existence of a subject or "doer behind the deed."157 She persists that this does not eradicate agency, however. As I have

\[\text{(New York: Routledge, 1995), 21.}\]

152. See Chapter One, in my discussion of Foucault's *History of Sexuality*. I would also like to add that Butler's position on gender identity invokes the memory of Hume, as Hume forbade induction to laws or natural categories, and instead advocated the summing up of empirical events. For a brief discussion of Hume in this context, see my Introduction.

153. For example, see Butler, "For a Careful Reading," 135; and *Bodies That Matter*, 2.

154. Ibid.


157. Butler, "For a Careful Reading," 133-135. The original term "doer" is from Nietzsche, it
stressed throughout this chapter, Butler has argued that the capacity for intention or agency is located in either the individual's inexact mimicry of norms, or the reaction made possible by non-phenomenal relationships between two or more norms (the easiest example being the relationship between heterosexuality and homosexuality). Thus, every single woman will perform a slightly different version of womanhood, as an example of the first variant of agency. In the second case, a gay woman's actions are constituted as a reaction to the sanctioned norms of heterosexuality. Following is Butler's further elaboration of this position:

To be constituted by language is to be produced within a given network of power/discourse which is open to resignification, redeployment, subversive citation from within, and interruption and inadvertent convergences with other such networks. "Agency" is to be found precisely at such junctures where discourse is renewed.158

Again, Butler is asserting that agency "exists," but that it is always firmly located within a language and culture.

I do not think Butler's refutation gets at the heart of the contention that it is the rejection of instincts, natural capacities, and the like, that is the hallmark of behaviourism. Butler has consistently maintained one of two things: (1) we have no means of knowing whether there are any innate sexual drives or what their force might be, because language mediates all of our knowledge; or (2) there are no inner sexual desires or drives, because they are either overridden by cultural forces, or because these drives simply do not exist.159 She has now articulated a theory of agency in which reference to

appears in Butler's writings for the first time in Gender Trouble, 25.
158 Butler, "For a Careful Reading," 135.
159 In her recent public lecture at the University of Toronto, Butler also took the path of rejecting the existence of innate sexual drives. She said of Freud's hypothesization of an innate
spontaneous instincts pre-existing culture or language is to be forbidden. Agency, as I just summarized, is a cultural "rearticulation," not an expression of innate tendencies, urges, or potentials. Agency is either inexact mimicry or reaction. In the first case, I assert that the human capacity for self-direction is technically no different from a machine's accidental generation of microscopically different copies of an original document; variation is just something that "happens." In the second case, I continue, the new or the spontaneous is reduced to a reaction. Although identity can change, and the sexual "doer" or agent still exists, the agent is in all cases but "an effect of historically sedimented linguistic conventions." The doer does not, in any sense of the word for Butler, pre-exist his or her deeds. I maintain that such a philosophy is at the heart of the radically physicalist, anti-innatzist doctrine of behaviourism, as I demonstrated in Chapter One.

In conclusion, Butler's statement that she maintains a notion of agency does not refute the charge of behaviourism. She has quite explicitly rejected appeals to instincts or forces transcending culture. I recognize that much of feminism rests on a similar proposition, insisting as it does that "feminine" behaviour is not the result of innate qualities or capacities, but rather social forces. Surely, this insistence is one of feminism's greatest contributions to the understanding of sexual inequality. However, it is only recently that all reference to internal processes or extra-cultural forces, including sexual ones,
has been challenged, and it is this prohibition that is the distinguishing feature of Butler's feminism.

*Kessler and McKenna's Politics*

I will now conclude the chapter with a discussion of Kessler and McKenna's political pronouncements. Once again, Kessler and McKenna work within a framework of psychology, biology, and anthropology. They are nonetheless explicit (albeit extremely succinct) in their statement of political goals. The brevity of my comments is a reflection of the brevity of their analysis. Kessler and McKenna believe that they have demonstrated the possibility of thinking about the "reality" of sex in new ways. In other cultures, they have shown that individuals can and do live as a third (or fourth, and so on) sex. In our own culture, through the example of transsexuals, they claim to have demonstrated that everyone's sex is similarly an accomplishment. Kessler and McKenna declared above, "it is our method of applying information that maintains our gender, not some intrinsic quality of our gender, itself," an explicit disavowal of the possibility that any natural inwardness could influence our actions. In a move comparable to one taken by Butler, I argue that Kessler and McKenna thus locate agency and the potential for social change in the contrast between one social construction and another. Because Kessler and McKenna have insisted that it is impossible to defend one construction of the world over another in terms of truth or nature, such contrasts are the only way we have of ascertaining that there are other ways of doing things. We "apply" culturally constructed standards, we do not express "intrinsic qualities."

---

162. Ibid., 161.
Furthermore, Kessler and McKenna illustrate how children are conditioned into the belief that individuals are a certain biological sex. At age three, they write, a child accepts that it is a certain sex. By age five or six, as the child develops an overall understanding of property conservation, he/she also develops a fairly stable sense of the sex of others. Kessler and McKenna quickly assert,

We take this to be the point when the child begins to share adult rules for gender construction and reality construction.\(^{163}\)

We learn to say "girl" and "boy," Kessler and McKenna are arguing, because this is the way we have been conditioned, not because these words correspond to any innate understanding we might share with our adult teachers about the natural salience of sex. I contend that this thesis invokes Quine, Foucault, Skinner, and Watson's behaviourist ban on reference to internal processes in favour of the study of observable behaviour, as did Butler's similar maneuver.

I maintain that Kessler and McKenna's argument about agency, although it is minimal, is intended to do nothing less than reverse the direction of feminism. Because the belief in the existence of two sexes is the result, and not the cause, of cultural preconceptions, Kessler and McKenna assert that it is mistaken for feminism to fight for the eradication of social inequality (or

\(^{163}\) Ibid., 102.
gender) alone. They expand,

Because accepting the facticity of two genders (or sexes; the former includes the latter) means accepting the assumptions which ground the gender attribution process, a "simple" elimination of gender role will not change what it means to be female or male. . . . In the process of attributing "male" or "female," dichotomous physical differences are constructed, and once a physical dichotomy has been constructed it is almost impossible to eliminate sociological and psychological dichotomies.  

In other words, if the apparent naturalness of sex is not thoroughly challenged, it will be impossible for feminism to achieve its goal of equality for women. Kessler and McKenna continue that it is therefore mistaken to hail scientific research demonstrating that there are no sex differences along a particular biological variable, as long as the study presumes from the start that there are two sexes.  

Foucault made a related allegation in Chapter One. In other words, the acceptance of the reality of a biological sex binary is the acceptance of the reality of cultural gender inequality. The very fact that the female body is viewed in terms of its lack of male parts will continue to prop up an androcentric society. "Where there are dichotomies," write Kessler and McKenna, "it is difficult to avoid evaluating one in relation to the other."  

Kessler and McKenna then build on what I have argued is their philosophy of nominalist relativism to develop the following political strategy. It is proposed that individuals could assume the mantle of "egg carrier" and "sperm carrier" if and when desired (assuming that the biological preconditions were fulfilled). "Except for those times," however, "there need be no differentiation among people on any of the dichotomies which gender

---

164. Ibid., 164.  
165. Ibid., 75.  
166. Ibid., 164.
implies." The categories of sex would thus be relegated to the arena of reproductive necessity. Individuals would no longer identify with an inner notion of sex or gender, as there would be no permanent categorizations based around these presuppositions. Although Kessler and McKenna make few explicit statements to this effect, it is implied that this confinement of sex would liberate individuals from its performative demands. Released from the necessity of having to "do" gender, individuals would be free to assume other identities. All identities are performative, but according to Kessler and McKenna, "[G]ender is one of the few human characteristics that are constructed as totally invariable from birth." Therefore, virtually any other performance would be less restrictive and more malleable than gender.

I assert that this stance bears obvious resemblance to Butler's contention (and Foucault's intimation) that the sexed body buttresses the system of gender inequality. The construction of a new belief system about bodies is consequently the only thing that could lead to the creation of a new system of human relations. Because gender is so central to everything in our culture, Kessler and McKenna conclude, "The possibilities for real societal transformations would be unlimited if the naturalness of gender could be questioned." Consistent with their belief that ways of seeing the world are culturally constructed, Kessler and McKenna acknowledge the difficulties inherent in their political proposal, just as Butler warned that her politics

---

167. Ibid., 166.
168. Ibid., 25.
169. Ibid.
were not voluntaristic. Kessler and McKenna write,

It would be naive to assume that any statement of alternatives could, by fiat, change the way members view reality. We do not expect that there will develop a whole new social construction of gender in everyday life. What we are arguing is that the world we have now is no more or less "real" than any alternative.\(^{170}\)

All the same, Kessler and McKenna conclude that they have illuminated the theoretical possibility of thinking about sex in "exciting alternative" ways.

My discussion of the constructivist and poststructuralist reaction to foundationalism is now complete. I have demonstrated the ways in which the writings of Butler, Kessler, and McKenna intersect on numerous levels with the nominalism, relativism, and behaviourism of Goodman, Quine and Foucault. In the process, I have clarified the arguments and implications of contemporary feminism. I now turn to the second component of my dissertation, a rebuttal to this contemporary feminism, and the rebuilding of an alternative theory of sex and gender.

\(^{170}\) Ibid., 166.
Part II
RECONSTRUCTING THE CATEGORIES

Chapter 3
ADORNO AND NEGATIVE DIALECTICS

Theodor Adorno is the first philosopher to be analyzed in this reconstructive component of my dissertation. Adorno furnishes an interesting synthesis of the ideas I have discussed to this point. A member of the Frankfurt School, Adorno is clearly influenced by twentieth century anti-foundationalism and the general distrust of the Enlightenment project arising after the events of World War II. However, he attempts to strike a balance between the traditional knowledge projects of philosophy and these more recent intellectual developments. As I indicated in my Introduction, Adorno provides a powerful analysis of the connection between foundationalism and antifoundationalism, and urges philosophy to move past this impasse. Adorno, furthermore, is an avowed materialist, and this distinguishes his philosophy from that of the trends of much of this century. This materialism will form the building blocks for the rest of the dissertation.

In the following, I will rely primarily on Adorno's major philosophical work, Negative Dialectics, with occasional references to Against Epistemology and the essay, "Subject and Object." The first part of the chapter will address Adorno's criticism of both foundationalism (primarily in its idealist variations) and contemporary anti-foundationalism. In the process, Adorno will demonstrate that the two seemingly opposed philosophies are connected
by the belief that true knowledge is logically certain knowledge, and are hence
doomed to the same consequences for the study of the world. The second part
of the chapter will consist of my elaboration of Adorno's philosophical
alternative to these positions, introducing his "negative dialectics" and the
doctrine of the primacy of the material. In the third section, I will apply
Adorno's philosophy to conceptual debates raised in Chapters One and Two
of the dissertation. I will engage poststructuralist and constructivist
feminism throughout.

The Two Faces of Certainty: Idealist Foundationalism and Postmetaphysical
Antifoundationalism

Idealism

As I have indicated is the case with all of the philosophers discussed in this
dissertation, Adorno's œuvre rests on the contention that knowledge of the
world is mediated by the subject and its language. According to Adorno, only
the most primitive of materialisms and realisms make the fundamental error
of assuming immediate access to the real. In fact, Adorno writes, "That the
object is not identical, that it is a matter of transmission, is trivial." I assert
that Adorno provides a more specific explanation as to why this mediacy
must be the case than did the thinkers in Part I. Adorno argues, along with
Kant and Hegel (as I discussed in reference to Butler's notion of abjection and
marginality), that it would be impossible to think in any other way. There is
no way of thinking except through concepts or definitions. Without
concepts, we would be unable to distinguish one moment or entity from the
next. Human experience would lack continuity and we would live a mental

---

1. Theodor Adorno, Negative Dialectics (New York: Continuum, 1992), 120.
2. Ibid., 11.
life like the night in which all cows were black, as the famous passage from Hegel's *Phenomenology* suggests. According to Adorno, the inevitability of conceptual thought therefore entails two consequences. Firstly, "Of a particular, nothing can be predicated without definition and thus without universality." Secondly, "[T]o aggregate what is alike is necessarily to segregate it from what is different." Conception, according to Adorno, requires both abstraction from the particular and the separation of one thing from another. These necessities entail that knowledge of the world will always be mediated.

Adorno similarly agrees with the idealist—and as I have demonstrated, poststructuralist and constructivist—thesis that language can *shape* our understanding of reality as a result. Following is a passage from Adorno that could have been uttered by virtually any of the thinkers presented in the first two chapters of the dissertation:

In idealism, the highly formal identity principle had, due to its formalization, an affirmative substance. This is innocently brought to light by terminology, when simple predicative sentences are called "affirmative." The copula says: It is so, not otherwise.

Because of the necessary structure of thought, a concept has the potential to be absolutized. In other words, we come to believe that the world exists as we describe it. I maintain that Adorno's "It is so," has obvious parallels to the "It's a Girl!" pronouncements of Butler, Kessler and McKenna, the grue/green worlds of Nelson Goodman, and the "painted with a fine camel

---

3. Ibid., 15.
4. Ibid., 328.
5. Ibid., 43.
6. Ibid., 147.
hair brush" animals populating Foucault's analysis. Adorno frequently addresses the violence that such affirmative (or performative, constitutive, and worldmaking, in the language of poststructuralism and constructivism) utterances inflict, speaking in terms of the categorized object as conquered and suffering. On its own, Adorno indicates, a concept cannot make concessions to change, difference, or particularity, and as a result, these variables in world affairs may be overlooked.

Adorno is clearly saying something more, however, and it is here that his thought departs from the main currents of idealist and twentieth century philosophy. While language has within itself the potential to be absolutized, Adorno proclaims that it is only a specific world view that literally equates the universals of thought with objective reality. He traces the origins of this "identity thinking" to the historic connection, "ever since Plato amalgamated both the Eleatic and the Heraclitean tradition with that of the Pythagoreans," between philosophy and logic or mathematics. He proposes the argument to which I alluded in the Introduction of this dissertation. Referring to the philosophical tradition as a "metaphysics of numbers," Adorno suggests that philosophy has consistently attempted to impose a strict thought order upon

---

7. Adorno (Negative Dialectics, 309) writes of the legal realm, for example, that it is dominated by definitions or universalizing concepts, and correspondingly, a failure to understand difference:

In law the formal principle of equivalence becomes the norm; everyone is treated alike. An equality in which differences perish secretly serves to promote inequality. . . . The total legal realm is one of definitions. Its systematic forbids the admission of anything that eludes their closed circle.

Law, in its reliance on the formal equality of all individuals, must overlook evidence of difference and inequality. In so doing, it ultimately fosters greater inequality.

the world, based on the idea of a number series with its emphasis on the one or the first. As the number series renders "the Many" a simple multiple of the unitary One, Adorno continues, philosophy attempts to incorporate material difference and multiplicity into an all-encompassing first principle of thought. Furthermore, the desire to determine the origin of knowledge has resulted in the diminishment or neglect of whatever is perceived to be subsequent to that origin. "That nothing can be true except the First," Adorno summarizes, "is a topos of the entire Western tradition." Anything that cannot be identified with the original or the first is, therefore, denigrated as derivative.

Adorno submits that the relationship between logical certainty and knowledge was consummated in the eighteenth and nineteenth century idealism of Kant and Hegel. He subjects this idealism to sharp criticism, albeit with frequent reminders of its lasting contributions to philosophy. For example, as already alluded to above, idealism entrenched the important premise that knowledge of the world is mediated by the subject. Analogously, we are indebted to Hegel in particular for the thesis that the very thought process of the subject links him or her to other individuals. "By using the pronoun 'my,'" Adorno paraphrases the famous argument, "the speaker of the moment presupposes the linguistic generality he would deny by the primacy of his particularization." This last premise provides a profound challenge to liberalism or any other individualist philosophy, as Adorno

---

9. Ibid., 10.
11. Adorno, Negative Dialectics, 126.
summarizes in the following:

The most enduring result of Hegelian logic is that the individual is not flatly for himself. In himself, he is his otherness and linked with others. The significance of these two arguments cannot be downplayed, and will always lurk in the background of Adorno's philosophy.

Despite the import of idealism, Adorno argues that the connection between logic and philosophy ultimately led Kant and Hegel to make two fatal errors. It is a consequence of thought that distinctions be made between one object and another, as Adorno stated above, and as I discussed in relation to Butler in Chapter Two. The erection of thought boundaries between entities is therefore something of an inevitability. Adorno asserts that idealism's faith in logical certainty, however, results in the conviction that limits between entities are absolute and impermeable. Otherness, from this vantage point, can only be contemplated in absolute terms. For idealism, difference becomes an antagonism to be overcome, since all things are measured against the identical and hence non-contradictory categories of logic. For Kant, multiplicity and unity exist as in-themselves from the beginning, flat positivities with no inherent relationship between them. Hegel, as indicated here and in Chapter Two, introduced the notion of the interrelationship of all concepts and entities from the very start, including those of unity and multiplicity. However, Adorno contends that the logical underpinnings of Hegel's dialectic tempted Hegel to describe the antithesis

---

12. Ibid., 161.
13. Ibid., 26-27, 142, 193.
stage in terms of absolute contradiction and otherness. Such is the first error of idealism according to Adorno.

The flip side to the erection of rigid boundaries between entities is the dialectical synthesis. Adorno contends that idealism eventually emphasized the universalizing function of thought at the expense of the multiplicity and difference of the phenomenal world. Although Kant posited the existence of an unknowable thing-in-itself, according to Adorno his system privileges the formal categories of the identifying subject at the expense of the multiplicity of the phenomenal world. Hegel resolves his own system, again, by overlooking his initial premise that subject and object are interrelated. From Adorno's perspective, the synthesis of Hegelian dialectics is therefore the conclusion that absolute knowledge is possible, or that thought can ultimately mirror its object perfectly. Signs of particularity and difference are erased and synthesized by the universal categories of the absolute subject, or the "I," as it is called. The fact that the object must be mediated by thought categories is "exploited," according to Adorno, and transformed into the premise that objectivity is as described by the subject.15 Absolute knowledge, furthermore, implies absolute self-knowledge, too. Adorno charges that the subject of idealism is believed to be fully self-constituting and hence self-aware, on the one hand, and other-constituting and in possession of total objective knowledge, on the other.

Following is a difficult passage that I will use to recapitulate Adorno's

---

15. Ibid., 119.
argument to this point,

As long as criticism [Kantian or Hegelian idealism] sticks abstractly to the rules of logic, objective contradiction would be merely a pretentious way to put the fact that our subjective conceptual mechanism will inevitably claim truth for its judgment about the specific entity it judges, whereas this entity does coincide with the judgment only insofar as it is pre-formed in the definition of the concepts by the apophantic need.16

I interpret this quotation in the following fashion. Because idealism adheres strictly to the canons of logic, Adorno insists, it is postulated that a statement about an entity must describe it absolutely. In logic, the rule is "a=a." Analogously, an idealism governed by logic can denote a relationship of difference in only one way, as an absolute contradiction, "a b." Since the goal of logic is certainty, such difference cannot be tolerated, and idealism posits that it will be negated. The negation or overcoming of a difference (also a negation) follows the rules of mathematics and must yield a positivity, "(-a) x (-b)=+c."

According to Adorno, this concept of "positivity" has several connotations in Hegel's writings. Above all, it refers to an entity having real, empirical existence in itself. Hegel concludes that the positive result of the dialectic is the absolute subject and its thought, no longer mediated by an object. This positivity marks the erasure of difference and the halting of the processes of change, a maneuver sharply criticized by Adorno. "To equate the negation of negation with positivity is the quintessence of identification," Adorno maintains, "[and] the formal principle in its purest form."17 In other words,

16. Ibid., 151-52.
17. Ibid., 158.
the synthesis of the dialectic in absolute knowledge is the hallmark of the historic linkage between formal logic and philosophy; it is thought in thrall to mathematics. Finally, the close of Adorno's passage links the ultimate stage of idealism's dialectic to the desire to know God negatively. Through the negation of what God is not, it is believed that positive knowledge of God is attained.

Adorno alleges that the success of the idealist project has had several political consequences. Idealism, he declares, is linked with none other than nominalism and its political incantation, liberalism, and then ultimately to positivism and its political counterpart, behaviourism. Traditional nominalism, as I discussed in Chapter One, posits the ontological primacy of the individual, providing the philosophical foundations for a liberal politics. Positivism, it will be recalled from my Introduction, rebelled against the attribution of hidden causes or connections between entities. I suggest along with Adorno that this prohibition is connected to behaviourism (Adorno refers to the doctrine as determinism) and its allegation that references to inner forces such as agency and will are unscientific and to be avoided at all costs. The behaviourist individual is entirely constituted by external events. The end result of prioritizing the individual as opposed to the collective, and appearances (observable behaviour) as opposed to essences (internal processes), is, Adorno argues, a subjectivism or relativism equating all opinions.

But how can nominalism, positivism, and behaviourism, so apparently at odds with the original goals of idealism, be the children of Kant's and Hegel's

---

18. In negative theology, God is known only through statements of what He is not.
systems? I will attempt to clarify Adorno's allegation. Firstly, as established, the synthesis stage of the idealist dialectic attributes all constitutive power to the subject. The original idealist premise that thought is universal and hence collective is overthrown in the conclusion that the individual subject is an in-itself existing in a more fundamental way than the object. Since the objective world includes the presence of other individuals, Adorno maintains that the idealist subject is effectively denying its linkage to society. Idealism, therefore, comes full circle from a profound critique of nominalism to an endorsement of its defining principle. The collective nature of the subject disappears, and the individual is rendered primary. The atomized individual at the core of liberalism can then take its cues from this rejection of universality and abstraction.19

Secondly, I continue, as a long term result of idealism, Adorno alleged that the conviction that the world is tailor-made to the subject's specifications results in the disappearance of the distinction between appearance and essence, and with it the notion of causality. If individual thought is believed to be constitutive, subjective appearance is equated with objective reality; there will be nothing internal or external against which to measure the brute-albeit constructed—facts of the way things are now. Reference to underlying essences in the objective world, be these unknown natural causes or laws, will be forbidden or rejected as irrelevant, as was the case with the positivists of my Introduction and the nominalists of Chapter One.20 All that is left are isolated data points, in the case of the positivists and behaviourists,

19. Adorno is not implying that idealism precedes liberalism. It is rather the case that a liberal political ideology can justify its existence using a nominalist philosophy.
20. See the historical overview in my Introduction.
mathematical formulae enabling us to predict the actions of living creatures. Talk of inner forces such as meaning, instinct, desire, or even need will be similarly prohibited, because the subject is reduced to the sum of its isolated, empirical actions, as was the case with the behaviourism I presented in Chapter One and Two.

This erasure of the difference between appearance and essence therefore marks the link of idealism with positivism and its sister philosophy, behaviourism. The political cost is significant. Adorno elaborates,

The theoretical leveling of essence and appearance will be paralleled by subjective losses. Along with their faculty of suffering and happiness, the knowers lose the primary capacity to separate essentials and unessentials, without anyone really knowing what is cause and what is effect. . . . Positivism becomes ideology in eliminating first the objective category of essence and then, consistently, the concern with essentials.21

The subject's potency—and with it, the possibility for self and collective transformation—will therefore stagnate once idealism's world-generating project is completed. "The more autocratically the I rises above entity," observes Adorno, "the greater its imperceptible objectification and ironic retraction of its constitutive role."22 The I becomes reified and thinglike when we attribute to it all constitutive powers. It loses its connection to the world and to others, ultimately disappearing as a vital force, as in the behaviourist credo that individuals are determined by their observable actions.23 It is but a small step, Adorno cautions, to the contemporary

---

22. Ibid., 177.
23. For the moment, I am simply noting that Adorno formulates an interesting connection between idealism and behaviourism. I will provide a more complete analysis in Chapter Five.
antifoundationalist assertion that the subject is a "disposable ornament,"\textsuperscript{24} and the contention that knowledge of the external world is relative to language.\textsuperscript{25} I maintain that this is indeed the predicament for the philosophers I discussed in Part I. They have argued that language and culture are constitutive, seemingly granting great power to human agents. However, they have then alleged that the "subject," too, is the effect of discourse, and limited our agency to rearticulations of existing discursive regimes.

In conclusion, Adorno asserts that idealism's great strength became its weakness. The doctrine originally positing the creative force of human ideas has led to the conclusion that, once the world is made in the subject's image, the world cannot be in any other way. Adorno summarizes the dual nature of idealism:

\begin{quote}
Idealism was the first to make clear that the reality in which men live is not unvarying and independent of them. . . . Ideology, however, is idealism which merely humanizes reality.\textsuperscript{26}
\end{quote}

I conclude, therefore, that the collective subject of idealism turns into the individual subject of liberalism turns into the rat of behaviourism. On the flip side of the coin, the holistic world view of idealism turns into the atomized event of nominalism turns into the arithmetic variable of positivism. I suggest that it would come as no surprise to Adorno that arguments alluding to the end of history have recently arisen.

\textsuperscript{24} Adorno, \textit{Negative Dialectics}, 79.
\textsuperscript{25} Ibid., 36.
\textsuperscript{26} Adorno, \textit{Against Epistemology}, 28.
The Contemporary Postmetaphysical Scene

Adorno acknowledges that post-foundational philosophy is interested in precisely those issues overlooked by Kant and Hegel: nonconceptuality, individuality, and particularity.\(^7\) It is interesting to note that Adorno's comment is still an accurate description of today's intellectual scene, despite its being more than thirty years old. As I demonstrated in Part I of the dissertation, contemporary philosophers are interested in the ways in which different cultures and eras develop unique and seemingly opposed belief systems. Feminist theory in particular is breaking down the universal categories of the Beauvoirian project, such as "woman" and "sex," and focusing on the multiple, transitory, and derivative nature of identity. However, I suggest that Adorno would contend that this postfoundational philosophy is committing some of the same totalizing errors as did idealism. Although he does not refer to any contemporary anti-foundationalists by name, (and although he obviously died before Butler, Kessler, and McKenna's time) I believe it is possible to apply some of his above comments to the philosophies expounded in Part I.

Nelson Goodman, for example, comes closest to divorcing language from the objective world in his declaration that we think emeralds are green because this greenness has been habitually projected. Because Goodman does not address any instances in which the objective world fails to match its linguistic and cultural description, there is, seemingly, a perfect accord between subject and object. Goodman's relativist nominalism leads to the conclusion that a star is as much of an entity as is the space between it and

\(^7\) Adorno, *Negative Dialectics*, 8.
another star. Nothing in the "world" has any innate claims to significance outside of a specific language or culture. Foucault also ascribes an otherworldly quality to language, particularly in his more emphatic declarations that truth is a relationship between statements in a discourse. However, his careful histories permit a more attentive description of distinct entities, and perhaps even demonstrate a willingness to ascribe an empirical facticity—which is not the same as truth—to some of them.28 Quine maintains a connection between language and objectivity through the glue of sensation. His insistence, however, that the web of language ultimately reduces all theories to an identically relative status means that language rapidly escapes its empirical origins. For Quine, truth is also a correspondence between articulated statements. Truth is denied to the particularity of individual persons or entities. The end result of Quine's empiricism is, therefore, quite consciously similar to the relativism of Goodman and Foucault.

I argue that Adorno would undoubtedly accuse Butler, Kessler and McKenna of succumbing to the same philosophical temptations. Kessler and McKenna, like Goodman, impute an otherworldly origin and status to language. They do express considerable interest in individual entities that do not "fit" the description supplied by a dominant social category (in their case, the biological sex categories). But the explanation for the lack of fit cannot refer to objective particularity if Kessler and McKenna choose to maintain a consistent constructivism. Thus, the sex category attributions of individual transsexuals or berdache are grounded in culturally-constructed "subjective" choice, rather than objective particularity.29 Butler, on the other hand, is

28. Adorno has a specific criticism of empirical facticity, to be revealed later in the chapter.
29. In Chapter Two, Kessler and McKenna argued that berdache were treated by their
careful to assert that language is connected to the material world. Like Quine, however, her unremitting focus on the mediated nature of knowledge leads her to the conclusion that thought's relation to the material can be no further analyzed. Butler refers to the body only as a "demand," permitting no substantial definition. As I argued in Chapter Two, in cases where bodies do not seem to fit neatly into socially accepted categories like girl or boy or heterosexual, Butler ascribes the lack of fit to a resistance to materialization. She is not insinuating that the abject individual is actually immaterial. But neither is she willing to grant such entities an integrity or particularity of their own. Following Foucault, any particular attribute is the effect of another discursive regime, or a non-phenomenal relationship between two or more such systems.

I maintain that Adorno would consequently argue that this antifoundationalist reduction of objectivity to language—or an impenetrable relation between materiality and discourse—leads to the same neglect of the particular as did the idealist decision to speak on its behalf. Although difference and nonconceptuality are allegedly of primary concern, nothing is allowed to be said about them in poststructuralism and constructivism. It is still the case that "nothing particular is true," as Adorno quips. For this reason, I conclude, Adorno would contend that the philosophy I outlined in Part I is under the spell of the very mathematics and logic that felled idealism. The thesis that truth is purely relative because knowledge is mediated relies on a continued allegiance to the belief that "objective" truth must be logically

communities not as a particular gender, but as suited the berdache's individual characteristics. They also argued that the only way to make a definitive attribution of a transsexual's sex is to ask the person explicitly.

certain truth. I have argued along with Adorno that it is the upholding of this equation of truth and absolute knowledge that leads to the opposite extreme of relativism. Once it is demonstrated that certainty is denied to us, the only available conclusion, from the perspective of certainty, is that there is no truth whatsoever.

The end result of either foundationalism or postfoundationalism is, ironically, more or less the same. When philosophy was identified with logic, the particular was ignored because it could not be accommodated in universal categories. With the link between logic and knowledge superficially severed as it is in poststructuralism and constructivism, the particular is ignored because it is believed that nothing can be said about it. Adorno argues, therefore, that idealist foundationalism links up in this interesting fashion with postmetaphysical antifoundationalism, and I have extended this criticism to cover the philosophies of the first part of my dissertation. My earlier findings of a concinnity between contemporary philosophy and nominalism, positivism, and behaviourism are supported by Adorno's allegation that idealism lies at the origin of this development.

Finally, despite the fact that Adorno levels the same charges against foundationalism and anti-foundationalism, he saves his harshest comments
for the latter:

Compared with the systems, the opposition seems trivial. Systems elaborate things; they interpret the world while the others really keep protesting only that it can't be done.\textsuperscript{31}

While systematicity erases otherness in an effort to account for everything, asystematicity, in refusing to make affirmative pronouncements, explains nothing. I maintain that this criticism is valid in the case of constructivism and poststructuralism. We have given up the project of absolute knowledge; however, in its place, a philosophy afraid to say anything at all has been installed. Throughout the remainder of the chapter, I will demonstrate how Adorno attempts to move past this impasse by negotiating ground between foundationalism and anti-foundationalism, between explaining everything and explaining nothing, and between logical certainties and relativist aporias.

\textit{The Primacy of the Material, or Negative Dialectics}

I have established that Adorno concurs with the bulk of the past two hundred years of philosophy in its pronouncement that knowledge of the object is mediated. I will now show how he shifts gears to chastise philosophy for its unrelenting focus on this principle. For Adorno, the fact that knowledge is mediated has a more fundamental consequence. This consequence is the imbrication of knowledge and language in the object. "[Thought's] indirectness must always refer to some transmitted thing," Adorno avows, "without which there would be no indirectness."\textsuperscript{32} More bluntly, Adorno warrants, "Thinking is tied to entities."\textsuperscript{33} Beyond the

\textsuperscript{31} Ibid., 20.
\textsuperscript{32} Ibid., 171.
\textsuperscript{33} Ibid., 103. For Adorno, entity or object does not have to mean "existent," it is identity thinking that has forced reality to be that which is flatly material. Therefore, according to
suitable object world. Furthermore, according to Adorno, thinking becomes phenomenal as soon as there is a thought. See Negative Dialectics, 80.

34. Ibid., 135.
35. Ibid., 12.
36. Of course, Adorno argues that even logic is of the world, and not a purely analytical system.
37. See “Subject and Object,” entire, for the employment of the phrase “the primacy of the material,” and Negative Dialectics, 183-186, for the phrase “preponderance.”
38. Adorno, Negative Dialectics, 12.
fate through its insertion into a negative dialectics.\textsuperscript{39} Hegel's positive dialectics initially proclaimed the interrelationship between subject and object. This principle is retained by Adorno. As discussed above, however, Hegel brought his system to a halt with the ultimate identification of subject and object under the reign of pure thing-like thought. Adorno's negative dialectics renounces the reduction of either of the poles of dialectical thought to the other. He describes his alternative in a momentarily simple language,

The name of dialectics says no more . . . than that objects do not go into their concepts without leaving a remainder, that they come to contradict the traditional norm of adequacy.\textsuperscript{40}

The modifier "negative" emphasizes Adorno's contention that the lack of fit between a concept and an object cannot be erased to forge the positivity and in-itselfness of pure objectivity (or, reciprocally, pure subjectivity). The negative thus signifies the permanent inability of thought to arrive at a final definition of an object or an absolute first principle. The object cannot be fully illuminated by its concept, because the former will always possess qualities in excess of those universalized into the concept. The object is "nonidentical" to thought in Adorno's terminology, a word he selects to clarify his criticism of idealism. Logical certainty disappears, therefore, when "the basic character of every general concept dissolves in the face of distinct entity."\textsuperscript{41} The concept is always inadequate.

The condition of negativity or inadequacy, however, does not mean that categories or concepts are relative to language. "[T]he fact that indirectness is universal," cautions Adorno, "does not entitle us to reduce all things between

\textsuperscript{39} Ibid., 183-86.
\textsuperscript{40} Ibid., 5.
\textsuperscript{41} Ibid., 136.
heaven and earth to its level. . ."42 Rather, all concepts, including the most abstract, are intertwined and embedded in a whole, a whole that can in turn be described in terms of its interrelated parts. Adorno thus reinscribes the concept of truth in the world, as opposed to the linguistic concept of truth advocated by the philosophers of Part I. Because of the mediated primacy of the material, Adorno states that truth is neither an absolute fact nor a notion entirely divorced from the objective world. As a consequence, knowledge is not purely subjective. A conception of truth as a relationship between language and the world, therefore, is still relevant if an appropriate dialectical modesty is maintained:

Epistemology is true as long as it accounts for the impossibility of its own beginning and lets itself be driven at every stage by its inadequacy to the things themselves.43

The truth of negative dialectics comes, not from its positing of absolute origins or absolute truths, but from its attention to the material things themselves, things that can be described, but never fully. I suggest that as Adorno presents it, this concept of truth is still deliberately ambiguous. The realist philosophies I will present in Chapter Four and Five will clarify by providing an evolutionary explanation for Adorno's post-foundational truth.

*Applying Negative Dialectics*

What corrective force can negative dialectics offer to the theories I articulated in Part I? I propose the following application. None of those sophisticated philosophies posited the existence of a detached and constituting subject in any idealist sense of the word. However, Adorno would say that, even given this recognition that there is no self-constituting

---

42. Ibid., 171.
subject, poststructuralism and constructivism make the Hegelian error of asserting that the object itself is nothing but what discourse claims it to be. The statement "It's a girl!" (or the analogous, "it's grue") merely creates the concept of girlhood (or grueness) in Adorno's opinion. It is an idealist fallacy to assume that the sexing of the baby at birth and throughout life constitutes the material objectivity of the baby. This is not to say that Adorno denies that such pronouncements have an effect. Calling the baby a girl may make her act, think, and feel like a girl; indeed, her personhood may very well be inconceivable without her girleness. However, if girls and boys think and behave solely in the fashion in which society dictates, Adorno asserts that this is because idealism has led to the belief that the categories of thought and language constitute, and hence accurately measure, reality.44

Adorno would therefore warn, and I would concur, that the baby girl or boy (and even the grue or green emerald) is always something other than what we have labelled her or him (or it) because of the negative fact that the object exceeds language. Quine's blanket declaration that theory exponentially surpasses its sensuous input from the empirical world would be immediately countered by Adorno. Negative dialectics affirms that it is the object that exceeds and drives theory. Therefore, all meaningful thought, even highly theoretical thought, is immersed in the material world, not affixed to it from above. (This principle of the embedded nature of thought will be central for the rest of my work.) For the same reason, Adorno would undoubtedly criticize Butler's assertion that objects or individuals lurking at the margins of a discourse are not fully "materialized," and her consequent

44. It is important to remind that Adorno believes that material conditions in contemporary society favour idealist philosophies.
refusal to grant them a unique objectivity. Adorno would perhaps ask, "What is it precisely that does not fit into the discursive category girl or boy (or heterosexual)?" Even if the answer is, "everything that cannot be classified as girl or boy," that is all the same an objective something. While Butler says that this inarticulate "something" is only constituted in its relationship to other discursive categories, Adorno would counter that the abject outside maintains a distinctness owing to its unique objectivity, its inescapable particularity. I fully endorse this analysis.

On the other hand, I trust that Adorno would emphatically agree with Butler, Kessler and McKenna that girls and boys are falsely perceived as absolutely discrete entities, and with Foucault in his analogous discussions of the connection between deviancy and normalcy. I concur that poststructuralism and constructivism have provided invaluable analyses of the interrelationship of entities through language. The old rules of logic constructed the entrenched definitions of girlhood and boyhood: just as a b, girl boy. Poststructuralism and constructivism, therefore, provide an insightful challenge to the logical rule that difference must equal absolute difference. However, Adorno's insistence on the material embeddedness of language entails that there is at least a potential for objective truth in definitions of girlhood or boyhood, or any other conceptual binary. The mere fact of interrelatedness cannot be used to prevent an analysis of a category from pushing beyond this long acknowledged contention, as I will elaborate in Chapter Five. Although nothing exists outside of relatedness for Adorno, this relatedness is contextualized in the negative yet material whole, and truth is located within that context.
Between Foundationalism and Anti-Foundationalism

But can anything more be said about the biological sex categories, or objectivity in general, other than that some statements might be true in relationship to the whole? Adorno further invokes the memory of Kant and Hegel to distinguish more emphatically his theories from those of idealists, and in the process, constructivists and poststructuralists. Adorno notes that Hegel and other post-Kantian idealists criticized their predecessor for arguing that the "thing-in-itself" was on the other side of knowledge and could therefore not be described. I argued in Chapter Two that Butler adopts this criticism of the notion of an absolute limit. Hegel's alternative was, as I discussed above, to grant full knowledge to the absolute subject, discarding the unknowable thing-in-itself. Butler's solution (along with Foucault, Kessler and McKenna, and Goodman) was to avoid saying anything about the other side of the limit of knowledge, resulting in the dilemma Adorno outlined pertaining to the silence of contemporary philosophy. Adorno's entire project is obviously critical of the Hegelian tenet that thought can one day equal its object. Thus, Now I will show how Adorno distances himself from constructivism and poststructuralism's solution as well.

Adorno now praises Kant's anti-positivist insistence that there are some things we cannot know. For Adorno and Kant, however, this does not mean

---

45. Adorno, Negative Dialectics, 283.
that those things do not possess a set of unique attributes. Adorno writes,

A convenient rebuke to the concept of intelligibility is that mentioning unknown causes of phenomena positively, even in extreme abstraction, is forbidden. . . . [But] [w]hat survives in Kant, in the alleged mistake of his apologetic for the thing-in-itself . . . is the memory of the element which balks at that logic: the memory of nonidentity.46

I insist that Butler, Foucault, Kessler and McKenna, and Goodman have repeatedly invoked this "convenient rebuke" in their reluctance to say anything affirmative. Nonetheless, Adorno does not simply embrace the unknown "thing-in-itself." Kant, according to Adorno, accepts as permanent and fixed the bounds between subjective knowledge and the thing-in-itself.47 This rigidity stems from the fact that Kant was not in possession of Hegel's conception of the interconnection of all entities. Adorno's uniqueness comes in taking this Hegelian concept of interconnection, and emphasizing that it is the gap between thought and its object that potentially drives the former to a further, more subtle, approximation of the latter. Because Adorno argues that thought is dependent on the material, he can write that "My thought is driven by its own inevitable insufficiency, by my guilt of what I am thinking."48 The fissure between thought and its object is thus the space for critical maneuvering. At the same time, the fissure marks the recognition that there will always be something other and more than thought.

To summarize, Hegel asserted that the subject will ultimately know reality in the synthesis of absolute knowledge. It is accordingly meaningless to refer to an extra-conceptual realm. Kant declared that thought can only operate

---

46. Ibid., 290.
47. Ibid., 382.
48. Ibid., 5.
within a frontier of knowledge bounded by the thing-in-itself. Adorno warrants that there will always be something unknown, but cautions that this limit between subject and object cannot be permanently fixed. Neither can it ever be abolished, yielding absolute knowledge. Room for transformation and greater knowledge lies in the awareness that concepts are less than, but immersed in, their objects. This quest for knowledge will be endless, but it is no longer directionless, as the signposts will be provided by the object itself.

With this maneuver, Adorno once and for all rejects the contemporary contention that because the object is only known in thought, nothing true can be said about it. He is sharply critical of twentieth century philosophers, beginning with Heidegger, who posit concepts that are never given further content because of this erroneous prohibition. The mistake of the past was to attempt a full Hegelian definition of the object. The mistake of today, already alluded to above, is neo-Kantian, the evasion of definition. The philosophers I presented in Part I avoid being pinned down by stating that discourse immediately prescribes an object within the bounds of culture. The formulation of any affirmative statement marks a step outside the constraints of understanding, and accordingly, the commission of a logical error.

The following passage from Adorno is tooled to Heidegger's notion of Being, but I insist that it is equally relevant for the philosophies discussed in Chapters One and Two. "That Being is neither a fact nor a concept exempts it from criticism," Adorno charges, "[w]hatever a critic would pick on can be dismissed as a misconception." Adorno stresses that there is absolutely nothing that does not consist of entities on one side, and concepts on the

---

49. Ibid., 76.
other. As stated above, meaningful thought always incorporates an element of objectivity, and it is impossible to think without the employment of concepts. To insist otherwise is to engage in obfuscation, Adorno warns, an obfuscation that is unfortunately mistaken for sagacity:

The very meagerness of what all this leaves is coined into an advantage... [E]ach substantive deficiency, each absence of a cognition, will be revalued into a sign of profundity. Involuntary abstractness is presented as a voluntary vow... as if the emptiness of the concept... were the fruit of original monastic chastity, not of conditioning by cogitative aporias.\(^5^1\)

Adorno might suggest that something of this monastic chastity lingers in poststructuralism and constructivism. The vague "demands" of the body postulated by Butler, Foucault's nebulous "pleasures," and the near emptiness of Kessler and McKenna's biological sex categories, demonstrate some signs of this reluctance to engage in conceptual definition. I maintain that it is almost as though theorists are trying to absolve themselves of the sins of the twentieth century, or the errors of feminism's past. By saying nothing, theory can be accused of oppressing no one. A philosophy uncontaminated by content can float, guilt-free, above the sinning material world of commitment and definition.

Therefore, Adorno counters that all concepts (even highly abstract notions like Being) must meet with some form of objective definition. Adorno is not satisfied with proclaiming that the object is merely a demand for conceptualization, or any other sort of ineffable emptiness that cannot be

\(^{50}\) Ibid., 104.

\(^{51}\) Ibid., 76.
further put into words. Following is one of the keys to Adorno's materialism,

[The] primacy of the object can be discussed legitimately only when that primacy . . . is somehow definable, when it is more than the Kantian thing-in-itself as the unknown cause of the phenomenon.\(^52\)

Just because the object cannot be defined absolutely does not mean that it cannot be defined at all. It simply means that the object must not be rigidly identified with a single term.\(^53\) Definitions must be attempted, or it will be impossible to evaluate a concept critically. Indeed, Adorno cautions, if a concept cannot be defined at all through some reference to objectivity, the conclusion must be drawn that it is empty, a purely logical construct.\(^54\)

Adorno offers the notion of a conceptual "constellation" as an alternative to the logically certain categories of Hegel's idealism, on the one hand, and the emptiness of Kant's thing-in-itself on the other.\(^55\) A constellation "make[s] progressive qualitative distinctions between things."\(^56\) The model for the constellation is the structure of language itself. In Adorno's hands, language is not merely a system of signs, as should be adequately clear by this stage. Language is instead the means by which the relationships between an object and other objects can be brought into clearer focus. "Definition alone," writes Adorno, "brings a phenomenon beyond itself."\(^57\) Only through attempts at attributing content to an object can the ways in which it is

---

\(^{52}\) Adorno, "Subject and Object," 503.
\(^{53}\) Adorno, Negative Dialectics, 186.
\(^{54}\) Ibid., 84.
\(^{55}\) Ibid., 162-166. Adorno incorporates ideas from Walter Benjamin and Max Weber in the process of developing his notion of the constellation.
\(^{56}\) Ibid., 184.
\(^{57}\) Ibid., 115.
different from or similar to other objects be delineated. The particularity of objects (and subjects) will be preserved if there is no "negation of the negation" of the signs of difference into a unifying ultimate concept. Overarching classificatory schemes will still be indispensable; Adorno will not abandon the use of universal categories. These universals will, however, be supplemented with an array of particular definitions, suited to each particular entity. "The constellation illuminates the specific side of the object," concludes Adorno, "the side which to a classifying procedure is either a matter of indifference or a burden." In this sense, I conclude, proper attention is finally devoted to the particular.

I realize that the "solution" of the constellation of concepts proffers no quick answer to philosophical and political problems. For this reason, some might find it disappointing. Others, myself included, might find it exhilarating to be told that a nuanced language can and must be used to grasp some of the truths of the objective world. For example, the notion of a conceptual constellation could be applied to the issue of the biological sex categories. The categories "girl" and "boy" should still be employed, Adorno would argue. He might assert that at a certain level of abstraction from the material realm, such categories make applicable universal claims. There are things we can specifically say that most of those described as "girls" have in common, and similarly, "boys." Such universalizations would be prone to both error (they are not infallible) and the obfuscation of particularity (they are, after all, abstractions). However, categories are not irredeemably subjective for these reasons, because as Adorno has consistently argued,

---

89. Ibid., 162.
subjectivity (including thought and language) emerges from objectivity; language is not divorced from the world.

Furthermore, because Adorno maintains the notion of the dialectical interrelationship of all entities, other universal categories referring to the properties shared by the sexes should be employed. The material commonality between the sexes has been typically underplayed or ignored in the natural and social sciences, thus the notion of the interrelationship of concepts and entities could assist on this front. Finally, each particular person is composed of characteristics not exhausted by the categories of biological sex. It is to these unique traits that the conceptual constellation will devote itself. The particularity of each individual will never be fully captured, but nor will it be completely obscured, either. None of these definitions will be absolutely final, because all categories, even universal ones, have the potential for transformation in the future. Adorno is contending that we have no other means at our disposal for discussing or debating the issue of biological sex, or anything else for that matter, than through the supposition of entities on one side, and concepts on the other.59 I concur that a failure to elaborate definitions results in the stasis of philosophy as well as feminist and political critique.

I suggest that the combined premises of negative dialectics have implications for the larger philosophical and political battles of Part I in addition to those just proffered for the debates on biological sex. In the third section of this chapter, I will apply Adorno’s negative dialectics to the issue of

59. See the discussion about the inevitable nature of thought at the beginning of Section I of this chapter.
the relationship between nominalism and liberalism, on the one hand, and positivism and behaviourism, on the other.

*The Material Subject*

Adorno now uses his materialism to synthesize empiricist and idealist conceptions of the subject. In the process of this synthesis, Adorno transforms both subjectivity (the notion of something purely mental) and objectivity (the notion of something purely physical). As stated above, Adorno accepts the idealist contention that the subject's identity is dependent on thought, and that thought implies the existence of other thinking individuals. "In himself, he is his otherness and linked with others," as Adorno eloquently paraphrased this important philosophical principle. Empiricism, on the other hand, focussed on the strictly sensory nature of the link between the lone individual and the world (as I discussed in my Introduction). The empirical self was, in Hume's words, a "bundle of perceptions." Adorno reconciles these arguments in his contention that the subject is both (1) dependent on the material realm; and (2) dependent on the existence of other thinking individuals.

Firstly, Adorno's negative dialectics entails that the individual's sense of self is rooted in the physical body and its sensations. Adorno believes that his thesis operates as a corrective to Kant's a priori transcendental subject, stripped as it was of a connection to the body and any experience of the empirical world.\(^60\) It is also a rejoinder to Hegel, as the interweaving of subjectivity and objectivity was abandoned in the synthetic stage of his dialectic, when it was alleged that thought was in itself constitutive.

---

\(^{60}\) See Kant, *Critique of Pure Reason*, 25-6.
Adorno's thesis is, finally, a challenge to poststructuralists and constructivists who argue that the subject does not exist in an objective sense because it is merely the effect of a variety of discourses. According to Adorno, the subject is connected to objectivity through the materiality of the body and the materiality of language. In negative dialectics, "The somatic moment as the not purely cognitive part of cognition is irreducible and thus the subjective claim collapses."61 It is no longer possible, therefore, to attribute the contents of thought purely to an immaterial subject.

Nor is it possible, Adorno continues, to discard the subject with the allegation that the constitutive role of language precedes that of the individual's thought. The subject's materiality means that it is embedded in the always changing objective world, and is hence inevitably influenced by that world. "Even the 'I' of personal history is constantly turning into another," Adorno states, demonstrating his combined affinity with and opposition to poststructuralism.62 The mediation of the subject and language

---

62. Ibid., 154.
by objectivity is in fact more primary than the mediation of the object,

Not even as an idea can we conceive a subject that is not an object; but we can conceive an object that is not a subject. To be an object also is part of the meaning of subjectivity; but it is not equally part of the meaning of objectivity to be a subject.  

In other words, there is no abstract I detached from the world of entities. It is conceivable, however, that there are entities divorced from the world of subjectivity.

But the objectivity that Adorno salvages on behalf of the subject in the second part of his critique is not the in-itself physical sensation of empiricism. The "fact" of sensation, Adorno suggests, is mediated in two ways. Firstly, as Kant and Hegel replied to Hume, sensation is always conceptualized. It is an objectivity mediated by the abstractions of thought. "[E]very universal principle of a first, even that of facticity in radical empiricism," Adorno expounds, "contains abstraction within it." There is no raw somatic moment any more than there is a purely cognitive moment, because sensation is an abstraction of experience.

Secondly, because of the negative fact of interrelatedness, sensation is imbricated in the objective world. The sensation of pleasure is, for example, connected to the sensation of pain. Adorno alleges that the one would be meaningless without the other. The transformation of pain will accordingly result in the transformation of pleasure. All physicality is a part of the larger evolving world. No object, including that of physical sensation, is a reified

---

63. Ibid., 183.
64. Adorno, Against Epistemology, 7.
65. Adorno, Negative Dialectics, 185.
thing sealed off from other entities. The "mere" physicality of an individual's sensation therefore provides a fundamental linkage to other individuals. Adorno maintains that this sensation cannot be granted its traditional ontological and epistemological primacy, however, because these connections to other objects and individuals are involved at some level. At the same time, the objectivity of subjectivity cannot be denied. My analysis in Chapter Four and Five will supplement this admittedly scant discussion of the nature of the material relationship between entities.

**Negative Dialectics as a Critique of Nominalism and Liberalism**

I maintain that the premise that the individual is both subjectively and objectively connected to other individuals has implications for nominalism, a doctrine Adorno has connected to empiricism and ultimately to liberalism. Because similarity is logically indefensible, I have shown that nominalists declare that the universals with which thought needs to operate are not to be granted status in reality. The results of abstraction cannot be existents; there are, accordingly, no natural kinds or laws of nature. Traditional nominalism declared that the only true existents were particular entities. Many twentieth century nominalists (Goodman and for the most part, Foucault, Butler, and Kessler and McKenna) indicate that it is only through thought and universals that individuals have access to even these particular objects. For these latter-day nominalists, therefore, thought categories constitute the properties perceived in the particular object. All the same, I have argued that there is a continued tendency to privilege the individual components of a thought

---

66. Ibid., 193-94.
category, even though affirmative statements about these particulars are not formulated.

Adorno maintains a dialectical posture towards both historical and contemporary nominalism. He, accordingly, endorses the nominalist criticism of the notion that abstraction refers to absolute and positive properties; laws and categories, he agrees, are not rigid in-themselves. Adorno concedes that in this sense, nominalism can be a valuable opponent of absolutist ontologies. I agree that this is a valid contribution of poststructuralism and constructivism: to shake up absolute categories. But Adorno asserts, and I agree, that the opposed premise that only individual entities can be granted objective (and in contemporary nominalism, mediated) existence must also be challenged. To defend his position, Adorno reveals an inconsistency in the key arguments of nominalism. Nominalism, he states, first demonstrates the means by which abstraction (or today, cultural entrenchment) constitutes its objects. But at the same time, nominalism must deny the reality of thought (or culture/society) if it is to be consistent in its ban on abstraction. The result, Adorno declares, is a doctrine ascribing constitutive powers to a non-existent. "[Nominalism] quickly denies the reality of the species," he writes, "[and] proclaims individual as the true Being." Thus, nominalism contends that culture creates notions like grue and girl, but asserts that only individual entities are real (or, again, in today's nominalism, "realer" than categories like laws and kinds).

---

67. Ibid., 181.
68. Adorno, "Subject and Object," 511.
69. Ibid.
70. Ibid.
Adorno uses his negative synthesis of empiricism and idealism to illuminate the flaws in this argument. He agrees with Goodman, Foucault, and Butler, contra traditional nominalism, that the existence of the individual and his or her thought processes requires a conception of universality just as much as does any other component of thought. "If the individual is a socially transmitted phenomenon," writes Adorno, "so is his form of theoretical epistemological reflection." The conception of an individual entity is, therefore, no more or less mediated by thought than is the conception of a category like grue or girl. This assertion reflects Adorno's acceptance of the old idealist premise positing the interpenetration of subjectivity and objectivity from the very beginning. The thought of an individual requires the same mental processes—abstraction and differentiation—as does the thought of a category.

However, Adorno is in sharp disagreement with nominalism, both traditional and contemporary, on another front. The doctrine categorically denies the materiality of categories and kinds, even as it ascribes constitutive powers to thought. Because of Adorno's materialist reinsertion of thought into the objective world, he insists that abstraction be granted reality. Thought is neither a thing-in-itself (as nominalism correctly cautions), but nor is it a purely subjective realm detached from the world of entities. I would add that the fact that attempts at defining similarity, for example, can be made is evidence that there is real content to a concept, although each case presents a new "reality test." Furthermore, each instance of real similarity is dependent on a material whole that incorporates the objective and the ideal

---

existence of other individuals. Adorno's negative dialectics strives to intertwine thought and entity, individual and society, and re-embed them in this material whole. All components of the negative whole are thereby granted a mediated objectivity. Adorno combines these tenets to level a succinct philosophical and political criticism at nominalism: "Society precedes the subject." This assertion does not mean that society is without its individual moments. Nor does it mean that Adorno thinks that the subject is the effect of language. He is adamant that society is an objective existent. All the same, Adorno’s overarching materialism ensures that concepts and entities, even of the individual, are dependent on the greater whole.

The thesis that society precedes the subject connects to Adorno’s allegations about the relationship between nominalism and liberalism. To the extent that nominalism—even that propounded by sophisticated twentieth century minds—must include the concept of society in its ban on abstraction, Adorno’s criticisms are relevant. The entire argument that sex is an abstraction and a creation of culture, and that there are only particular bodies or individuals, can be connected to the central nominalist/liberal thesis that society itself is a "shorthand for individuals." Adorno suggests that nominalism further intersects with liberalism in the positing of individual solutions to collective problems. According to Adorno, the risks

---

72. Ibid.
are grave:

With direct violence erupting everywhere, our thought, unwilling to dispense with the protection of morality, is induced by nominalist trends to attach morality to the person, as to an indestructible property. Freedom, which would arise only in the organization of a free society, is sought precisely where it is denied by the organization of the existing society: in each individual.\(^\text{73}\)

It seems fair, from my perspective, to ask that poststructuralism and constructivism address these allegations. Although poststructuralists and constructivists are hesitant to attribute objectivity to the thought categories of the individual, there is, all the same, the residual insinuation that representations of individual bodies, pleasures, sexes, and the like, are in some way more material and objective than categories like sex. There is also a tendency amongst constructivists and poststructuralists to advocate political solutions emphasizing the individual's capacity to work at the margins of a discourse, as illustrated in my analysis of Butler, Kessler, and McKenna. If critical distance from liberalism and its ontology of the individual is desired, I suggest along with Adorno that it cannot be accomplished with an absolute denial of the reality of laws, totalities, and kinds. Similarly, critical distance from liberalism cannot be accomplished through a philosophy favouring individual (albeit constructed) materiality and agency.

**Negative Dialectics as a Critique of Positivism and Behaviourism**

This section applies Adorno's negative dialectics to the tension between the competing doctrines of behaviourism and phenomenology. Adorno earlier criticized Hegel's attribution of positivity to the constitutive subject.

\(^{73}\) Ibid., 276.
This resulted, in Adorno's eyes, in the detachment of the subject from other subjects, and from the objective world. The assignment of all constitutive powers to the subject further resulted in the levelling of the appearance-essence distinction. Once the constitutive project of idealism was completed, the reification or thingification of both subject and object ensued. The postfoundational philosophies accordingly followed in the wake of idealism. Both subject and object are now alleged to be the effects of a language no longer connected to either polarity of the dialectic. Surface qualities ascribed by language to the world are deemed to be "objective," but only from the perspective of a specific culture or discourse. The notion that entities are connected by causal forces, or possess material powers that we can make attempts to understand, is dismissed. The notion that the subject is in possession of an agency or capacity in excess of its linguistic constitution is likewise rejected. As Adorno argued at the beginning of the chapter, idealism leads to liberalism, nominalism, positivism, and behaviourism, and I have argued that these in turn hook up with poststructuralism and constructivism.

As usual, Adorno assumes a dialectical stance in his analysis of positivism and behaviourism. It should be clear by this point that he concurs with poststructuralism and constructivism that the subject is not constitutive or originary in the sense that idealism postulated. He is also adamant that bodies, identities, and objective entities have been shaped by the various regimes of history. But because he couches these arguments in materialism, the explanation for these theses is primarily that the subject has an objective component both empowering and restraining it, and that the object has a particularity and truth exceeding its subjective definition. Adorno now uses
this argument to re-establish a distinction, albeit dialectical, between appearance and essence. In the process he will resurrect a definition of causality. This conceptual work will provide the basis of a challenge to positivism and behaviourism.

As I discussed above, Adorno has negotiated space between Hegel and Kant regarding the existence of an unknowable thing-in-itself. What is essential about the object or the subject is therefore neither completely unknowable (or knowable), nor is it an in-itself. As with the other binary categories Adorno discusses, his conception of essence is also imbricated in a relationship. There is no stasis, no logical positivity, in negative dialectics. A representative passage suggests that essence can be recognized, "only by the contradiction between what things are and what they claim to be."74 Essence becomes a measure of the inability of thought to capture entirely its object, or the materiality exceeding the thought categories of the subject,

Essence can no longer be hypostatized as the pure, spiritual being-in-itself. Rather, essence passes into that which lies concealed beneath the facade of immediacy, of the supposed facts, and which makes the facts what they are.75

Adorno's treatment of the affiliated concepts of origin and cause entails a similar relational aspect. "The concept 'origin,' ought to be stripped of its static mischief," Adorno writes, "it is only from the goal that the origin will constitute itself."76 Thus, essence and cause require the points of comparison furnished by appearance and effect. As such, neither are traditional ontological categories.

74. Ibid., 167.
75. Ibid.
76. Ibid., 155-56.
Neither can it be said that the concepts lack objectivity because of their relatoriality. Adorno does not, as do others of this century, reject all talk of causality or essentiality. He alleges that if nothing can be said to be the cause of anything else today, this is only because we have succumbed to the idealist claim that thought constitutes the world and that this project is now complete. We have effectively detached the object from its relationship to other objects, and hence the processes of transformation and evolution. This is the error of positivistic natural and social science. Analogously, if nothing is said to be essential, this is because we have equated inessential surfaces with reality, and given up the hope of social change. Adorno interjects that to assume that the human subject is merely a linguistic effect is to accept as fact the reification of the subject resulting from idealism's hegemony. "Determinism acts as if dehumanization," cautions Adorno, "were human nature pure and simple."77 This is the error of behaviourism, and as discussed above, Adorno contends that it is part and parcel of the project of idealism, and I maintain, poststructuralism and constructivism.

But Adorno has indicated that specific content must be given to concepts in order that they can be meaningful, and in order that they can be critically evaluated. He now offers a brief outline for the conception of cause and essence in the natural sciences, and a more substantial intervention using both concepts for the social sciences.

*The Natural Sciences.* Adorno's dialectical conceptions of essence and cause have several implications for the natural sciences. Firstly, the simple fact that he is reinstituting the concept of causation is a deliberate revocation

77. Ibid., 264.
of positivism and the purely deductive scientific method. Adorno further contends that linear, deterministic causal arguments are to be avoided. He refers encouragingly to the alternative of "causal networks" recently developed in the natural sciences. These networks devote proper attention to the "infinity of the enmeshed and the intersecting," without lapsing into complete indeterminism, or into the dead-end declaration that everything is interconnected. Causality is instead the objectivity linking the seemingly disjointed entities and events of Humean and nominalist philosophy. Similarly, the concept of essence is to be retained as an explanatory tool in the natural sciences. Adorno's notion of essence lurks at the limits of knowledge, representing the objectivity not yet fully disclosed to science, yet not permanently beyond its reaches, either. The concept of essence provides a further challenge to positivism in its refusal to postulate any underlying capacities, tendencies, or connections between entities. It allows for the maintenance of a notion of tentative truth, in opposition to the old certainties of logic and the contemporary aporias of relativism. In Chapters Four and Five, I will expand upon Adorno's brief analysis of the concepts of cause and essence using realist philosophy.

The Social Sciences. Adorno works his differentiation of appearance and essence, and his dialectical conception of causality, into a significant social theory and criticism of contemporary society. He firstly contends, as I have indicated several times, that idealism's decay into what Quine heralded as "linguistic behaviourism" results in the denial of the subject's objectivity and
Furthermore, the allegation that subjectivity is fully an effect of discourse results in the odd intersection of idealism (and, I must add again, poststructuralism and constructivism) with Aristotle’s doctrine of potential/actual. Aristotle argued that an entity’s potential fully prescribed its possibilities. What was actually manifested could never be anything other than what was potentially possible in the thing itself. The entity cannot transform in its relationship to other entities. As Adorno summarizes, "whatever is can be reduced to what once has been." Adorno alleges that this thesis has been preserved even amongst those who are, on the surface, anti-Aristotelian. For example, I note that it turns up in Butler’s claim that the source of social change can only be found in the relationship between one linguistic category and another. If something changes, its only inspiration is another already existing social category. Subtle mutations in the social order may take place, but there are no means by which something truly new can appear on the scene. There can be no changes in the essence of the entity, because this essence is not believed to exist in the first place. In Adorno’s eyes, this argument is tantamount to a doctrine of fate.

In opposition to the latent behaviourism of idealism, poststructuralism, and constructivism, Adorno re-empowers the subject by attributing to it a dialectically mediated notion of causal power and essence. It cannot be repeated enough that for Adorno, the subject’s potency comes from its embodiment and immersion in the material world. The fact of this interrelationship entails that both the material and immaterial components

---

80 Ibid., 220.  
81 Ibid., 216.  
82 Ibid.
of consciousness are open to transformation. The immanent possibility of change permits Adorno to introduce an element of the new into subjectivity, in contrast to the reified "I" of idealism and the non-existent "I" of poststructuralism, constructivism and behaviourism. The Adornian subject has a potency, but neither in an Aristotelian teleological sense, nor in a sense confined to already existing cultural motifs. Spontaneity arises as the subject interacts with the objective world, a thesis I will revive in Chapter Five.

Although newness is accordingly contextualized, it is not to be thought of as a predetermined "reaction," as behaviourism or fatalism would assert. Adorno states that even human self-preservation involves more than a simple response to a given stimulus situation.\textsuperscript{83} The spontaneity to which Adorno refers is, in his understanding, the unconscious component of the will, our natural drives, emotions, and the like.\textsuperscript{84} Adorno maintains that the conscious component of the will is essentially a behaviourist reaction, it is a construct of discourse and culture. On this point Adorno agrees with contemporary philosophy. However, this state of affairs is not, Adorno argued above, the inevitability that Quine, Foucault, Butler, Kessler and McKenna take it to be. But under the hegemony of idealism and now behaviourism (and as a consequence of the type of society that we inhabit, which Adorno will address shortly), consciousness is truly an effect. Any attempt to extract transformative agency out of conscious subjectivity will fail as a result, because there will be nothing new upon which to draw, only the results of already existing discourses. On the other hand, Adorno continues, our unconscious drives are available as a source for agency and potential

\textsuperscript{83} Ibid., 217.  
\textsuperscript{84} Ibid., 229.
social change. Adorno maintains that these can only be experienced negatively, as, "the difference that has evolved between the self and the reflexes." The impetus for social change must therefore tap into the spontaneous responses individuals express in the face of objective events. These urges are not "in-themselves;" but we can obtain a sense of them in interaction with our environment. (Again, in Chapter Five, I will provide a further analysis of spontaneity and the organism's interaction with its environment.)

Adorno provides examples relating to the feeling of horror individuals experience upon hearing news of the suffering of others. It is in instances like these that possibilities for social transformation are revealed. Writes Adorno: "The impulse—naked physical fear, and the sense of solidarity with what Brecht called 'tormentable bodies'—is immanent in moral conduct." The spontaneity in which Adorno expresses the most interest has a long history in materialist philosophy. If all thought depends on an irreducible objectivity, if the subject has a somatic moment, Adorno argues that spontaneous feelings of unhappiness and happiness have a real, material basis. We are physical, objective beings, and our subjectivity, however derivative, is a gauge of our sensual well-being. Adorno wants us to heed these subjective impressions.

---

85. Ibid., 217.
86. Ibid., 286.
Given the real basis of suffering,

[U]nhappiness is not a delusion of the mind's vanity but something inherent in the mind, the one authentic dignity it has received in its separation from the body. . . . The physical moment tells our knowledge that suffering ought not to be, that things should be different. Hence the convergence of specific materialism with criticism, with social change in practice.  

Adorno suggests that the desire for happiness and the correlate desire to avoid unhappiness are the prime spontaneous forces provoking the subject into action and words. The presence of unhappiness tells us that happiness is a possibility. We cannot regress to the claim that the need for happiness is purely subjective. Adorno writes that "the need in thinking is what makes us think." It is the human need for happiness (with its undeniably objective component) that is the motor force in all thought of social change.

Adorno's contention that felt unhappiness is real unhappiness has implications for political theory in general. Although this is not the focal point of my dissertation, it is interesting to demonstrate the way in which Adorno makes the connection between philosophical materialism and a Marx-informed historical materialism. I will provide a brief overview of this strand of Adorno's philosophy. To this end, Adorno argues that if many signs of unhappiness are present in the world, these can and must be taken as the basis of social criticism. According to Adorno, the plethora of neuroses of contemporary society is evidence of unhappiness. He does not discuss any particular neurosis by name. However, he suggests that these neuroses make manifest the spontaneous inner forces that we are incapable of controlling.

---

87. Ibid., 203.
88. Ibid., 408.
We are, however, capable of determining that our neurotic behaviour is "not us;" we are aware that something is amiss. The existence of these neuroses ironically provides evidence that things need not be the way they are. We are well aware that we would be happier without their controlling influence. People sense that they are unhappy when they observe evidence of their own behaviour that they feel is alien to the way they would like to live:

The truth content of neuroses is that the I has its unfreedom demonstrated to it, within itself, by something alien to it—by the feeling that "this isn't me at all." Neuroses are true in so far as they demonstrate the ego's unfreedom precisely where its rule over its inner nature fails.99

The neuroses illustrate, according to Adorno, that we are profoundly unfree yet could be otherwise. The fact of mass neuroses indicates that the problem is social rather than individual. The origin must by systemic.

Relying on his dialectical reformulation of the concepts of causality and essence, Adorno attempts an explanation for the spontaneous outpouring of unhappiness our society elicits. Firstly, his materialism redirects philosophical attention to the social totality. It is in this whole that all practice and thought, including categories like truth, cause/effect, appearance/essence, and happiness/unhappiness are embedded. Adorno then argues that there are overarching laws of the whole. "[T]he law that governs the divergent perspectives," explains Adorno, "is the structure of the social process as a preordained whole."90 Adorno therefore counters the relativism resulting from the erasure of the concept of causation with the

99. Ibid., 222.
90. Ibid., 37.
position that some things are true within a specific material whole. As I argued earlier, this assertion is not the same as the statement that truth is relative to a linguistic or cultural backdrop. The fact of relatedness and mediation does not invalidate the objectivity of social laws. Truth lies in the world, and it is both possible and necessary to make some tentative stabs at defining it. Although we must use language, because this language emerges from objectivity, it is possible to capture something about the world in our theories.

Adorno, accordingly, makes the fairly blanket judgment that a better society should have as its goal the abolition of unhappiness:

The telos of such an organization of society would be to negate the physical suffering of even the least of its members, and to negate the internal reflexive forms of that suffering.

Yet we are so clearly unhappy, as stated above. The laws of the whole that are of primary concern to Adorno in explaining our unhappiness are those of the capitalist economy. His dialectical criticism consists of the observation that the way we actually live (the unhappy essence) is not the way we claim to live (the happy appearance), and the explanation that this disparity is connected to the underlying laws of the whole (capitalism). Our proclaimed happiness is ideological because it stands in contrast to our authentic unhappiness. What is alleged about capitalism's fulfillment of human needs is therefore false because of the blatant signs of unhappiness amongst people. Capitalism, in other words, makes us unhappy.

---

91. Ibid., 168.
92. Ibid., 204.
93. Ibid., 203, 378.
**Conclusion**

Adorno's allegation marks a form of critique that some postfoundational thinkers have disavowed almost entirely. I am drawing attention to much of poststructuralism's continued inability or failure to connect its arguments up with a critique of the non-discursive, or with social structures such as the division of labour, whether between men and women, races, classes, or North and South. Butler is unusual in that she acknowledges that her brand of poststructuralism does not address all aspects of social inequality. It is my contention, however, that Butler and other poststructuralists and constructivists cannot address social and economic justice without the addition of materialism to their paradigm. For example, Butler, Kessler and McKenna could not utilize their theoretical frameworks to criticize a society in which only some people, even if they were of a variety of shapes and colours, performed domestic and/or other types of either socially abject, low-paying, or dangerous labour. Adorno's materialism, with its insistence that some interpretations of material reality are truer than others, provides many of the tools of poststructuralism while maintaining the grounding I think is necessary to engage in an analysis of various aspects of the division of labour. The *basis* for making a critique of the division of labour lies in the epistemological ground of the material; the *content* of that critique is neither fixed nor static and is open to debate. One is a materialist if one insists on the ontological reality of that material ground.

---

In conclusion, I assert that Adorno's principle of the primacy of the material, ensconced in a negative dialectics, provides a basic framework from which to challenge the combined force of foundationalism and antifoundationalism. I maintain that Adorno moves philosophy past the standstill of the mediation of knowledge thesis. From a negative dialectics, I mounted the barest beginnings of a criticism of poststructuralist and constructivist feminism, although some of those criticisms will prove quite salient. The remaining two chapters of my dissertation will build on the materialist building blocks provided by Adorno. In the next chapter, I will level a more detailed challenge to the Goodman-informed nominalist strand of constructivism and poststructuralism, clarifying the notion, introduced by Adorno, of abstraction as objective explanation. In the final chapter, Adorno's contention that the subject is both linguistically and materially connected to objects and to other subjects will be further explored in my criticism of the Quinean strand of constructivism and poststructuralism.
Chapter 4
CONTEMPORARY REALISM

In this chapter, I will deal primarily with various realist rebuttals to the nominalist strand of constructivist and poststructuralist thought, building on some of the admittedly abstract notions Adorno introduced earlier. I have argued that nominalism has been used to defend the contemporary feminist contention that there is no "law of sex" unifying biological similarities into sex categories. I maintain that poststructuralist and constructivist feminists state that there are no natural kinds, and that sexual kinds must be included in the prohibition against classification. I will present a conglomerate of theories circulating in contemporary realism as criticism of this thesis. I will be employing, for the main part, the ideas of Roy Bhaskar, Richard Boyd, Richard Miller, Ruth Millikan and Rom Harré, philosophers united in their assertion that the world is structured by natural laws that we can approximate with our observations and theories. Using realist philosophy, I will challenge the prohibition on induction to natural laws and kinds initiated by Hume and elaborated by Quine and Goodman. Accordingly, the realism I am about to elaborate and endorse will provide an alternative to the philosophy that has been used to support poststructuralist and constructivist feminism.

A lengthy analysis of the aporias left in the wake of constructivism and poststructuralism will be the means by which I flesh out this general realist thesis. Before I commence with this criticism, however, two tasks are necessary. I will first address the issue of the relationship between Adorno's materialism and contemporary realism. I will then address several overarching philosophical issues from the perspective of contemporary
realism. Finally, after these clarifications, I will begin my realist critique of nominalism.

**Realism and Materialism**

I argue that there are essential bonds connecting Adorno’s materialism and the realism I will now outline. The term materialism has several common applications, at least two of which Adorno employs. First and foremost, although his ontology is inscribed in a negative dialectics, Adorno is asserting that thought and language emerge from the material world. In this understanding of materialism, the philosophy is opposed to idealism, the doctrine that ideas have an independent existence and constitutive role in the world. Materialism is therefore the doctrine that all things, including ideas, originate in matter. Because of his materialism, Adorno argues (and I agree) that truth is a relationship between language and the world, and that objective truth is a possible human goal. Adorno does not reduce language (or thought or truth) to physical matter or hard facts, however, as is the case in the doctrines of "reductive materialism" or "physicalism," variations on the materialist position.\(^1\) While Adorno does not provide a specific analysis of the emergence of thought and language from the world, I believe he falls in line with a position that has been called emergent powers or non-reductive materialism.\(^2\) In this version of materialism, as the world evolves, different levels of reality emerge one from the other. The biological emerges from the physical, for example, as it is hypothesized that life originated in various bits of inorganic matter. While the laws of physics are not broken by biological organisms, emergent powers materialism argues that greater complexity and

---

1. In my Introduction, I indicated that the logical positivists were often physicalists, as they argued that all events could ultimately be explained in terms of the laws of physics.
variability will be evident amongst living entities than is the case for physical matter. I will explain this position in greater detail in this chapter. Secondly, and of less importance for my work in this chapter, Adorno adheres to a Marx-influenced historical materialism. Although adopting a materialist philosophy need not commit one to this political platform, Adorno explains the operation of belief systems and social structures in terms of underlying economic forces.

Realism also has several definitions. In the first application of the term, already suggested above, realism is the doctrine positing the real existence of causal laws, structures, kinds, and other universal terms. In other words, realism is opposed to the nominalism I presented in Chapters One and Two. Many realists are also adherents of what I just described as "emergent powers materialism." The realist philosophy I will employ, therefore, maintains that laws, potentials, and the like, exist only as physical entities, not as ideal forms. However, as non-reductive materialists, they do not contend that laws of psychology and sociology, for example, can be reduced to the laws of physics without an accompanying loss of explanatory power. In the second, related sense of the term, realism is the philosophy that it is possible for our theories about the world to obtain some measure of objective truth. In this sense, realism is opposed to relativism (the philosophy that the truth of a proposition is relative to language and culture), skepticism (the philosophy that it is impossible to ascertain the truth of any proposition), and pragmatism (the philosophy that the truth of a proposition is a measure of its ability to achieve practical results in the world). Finally, there is often, but certainly not always, a link between the adoption of a realist philosophy and a historical materialist politics. At least two of the realists I will be analyzing in this chapter fall into this category (Richard Boyd and Roy Bhaskar), with a
third demonstrating some affinity with that philosophical/political position (Richard Miller).

I would therefore argue that realism and materialism share central premises, but are defined in relation to the philosophies they opposed at specific historical junctures. Thus, materialism opposes idealism, either Platonic or German, and stresses the material origin of all things. Realism opposes nominalism, and stresses the real existence of laws and categories. However, realism and materialism concur that a world exists beyond our thought processes. I argue that, at least from the perspective of the thinkers I will examine, realists and materialists share the position that language and thought emerge from the material world. Both philosophies also assert that it is possible for humans to obtain some measure of objective knowledge. As I indicated at the close of the last chapter, Adorno moves philosophy past the mediation of knowledge thesis. The realists I will now present provide more detailed understandings of the workings of the material world, buttressed as they are by accounts from the natural sciences. Concepts introduced by Adorno, such as law and essence, will meet with fuller definition in this discussion. In other words, these realists engage in the work of conceptual clarification that Adorno argued is central to both philosophy and social change.

**Natural Knowledge**

I now turn to my discussion of several philosophical issues, issues necessary to clarify before I begin my evaluation of constructivism and poststructuralism from the standpoint of contemporary realism. First of all, contemporary realists announce that a refutation of Cartesian or Humean skepticism will not be forthcoming in their philosophy. It is generally agreed that philosophy cannot provide an a priori foundation for our knowledge
claims. As skeptics have convincingly argued, realists concur that there are no means by which we can escape, in any absolute sense, the perspective of our own knowledge. Descartes and Hume are, therefore, essentially correct. It is possible that a demon watches over us as we sleep, just as it is possible that the sun may not rise tomorrow.

Contemporary realists, however, challenge the contention that such certainty must needs be the goal for philosophy or science. A common tactic pursued by realists today is, in effect, the diminishment of expectations for knowledge. The quest for an absolute a priori foundation is abandoned, and what is offered in its place is the best possible a posteriori explanation for our knowledge. Realists contend, and I agree, that the best philosophical explanation for our knowledge is that our language and thought categories have evolved to tell us something true about the world. Therefore, although language and culture mediate our knowledge, because they are ultimately of the world (as Adorno argued), objective knowledge is a possibility. At the moment, it is not necessary for me to explain how specific theories or knowledge claims are defended, though the realist position does not entail that all theories are objectively true. I am setting out the general realist position—that it is possible to obtain objective knowledge, most importantly, knowledge of natural laws, forces, and kinds—against the constructivist and poststructuralist position that because knowledge is mediated, it is culturally constructed and relative. Although none of the theorists I presented in Part I (with the usual exception of Quine) have provided the means by which they would evaluate competing theories from within their overarching constructivism, I have addressed this issue from a realist perspective in Appendix One.
The goal for a realist science and philosophy becomes, then, to provide the most convincing answer to questions such as the following: what explains our knowledge? how did we come to believe the things we do? Roy Bhaskar asserts that today's realism asks after "the conditions of the possibility of some significant or pervasive feature of our experience." Realists will therefore examine certain knowledge claims and explain how we came to have these beliefs. If it is countered that the realist solution misses the larger philosophical point, realists are no longer troubled by their shortcoming. Ruth Millikan provides a detailed justification for the post-foundational realist project:

Of course we could never KNOW in a rationalist or foundationalist sense that any such theory was true. . . . [Realism] supports us not by grounding our knowledge and certainly not by grounding it in some prior order--some order other than the natural order. It supports it by explaining what our knowledge is and what it is not and, schematically, how we came to have it. That such an explanation can be given does not ground anything. But certainly it should make us feel more comfortable. Put it negatively. If we could give no explanation at all of what our knowledge is or of how we come to have it, surely we would have reason to contemplate being skeptics.  

Millikan acknowledges the skeptical criticism that a psychology (an explanation of how the brain works) cannot be transmogrified into a traditional foundationalist epistemology (a theory of knowledge). Therefore, once again, realist knowledge claims abandon the quest for certifiable truth.

---

5. See Goodman's formulation of this common relativist critique of realism in Chapter One. In essence, skeptics and relativists charge that an explanation of how we came to have certain beliefs does not certify those beliefs. In other words, we can develop a highly scientific explanation for the means by which a sense impression is processed by the brain, how it evolved from earlier mammals, and the like. However, this explanation of how the brain works cannot be used to prove that our sense impression is telling us the truth of the object that provoked it. As relativists point out, we could have evolved differently, and we can only refer to the sense impression through obfuscating language.
But if psychology can be connected to the world out of which it must evolve, psychology and epistemology are re-united in a non-foundational fashion. In other words, Millikan is arguing that if we can demonstrate how thought, language, and knowledge evolved in interaction with the world, thought and language are discovered to be far from arbitrary, or culturally constructed. Language, thought, and knowledge, I argue along with realists, have the potential to tell us something true about our world. Therefore, contemporary realism is post-foundational in that it does not furnish an a priori or logically certain footing for knowledge, foundational in that it still provides an a posteriori explanation for knowledge.

I agree that a case can be made that poststructuralism and constructivism have abandoned the attempt to provide a logically certain foundation for any philosophy, including their own skepticism. The theorists I presented in Chapters One and Two state as much on more than one occasion. Thus, constructivists and poststructuralists can always fall back on the claim that they are merely throwing doubt on realist certainty, rather than attempting to provide foundations for their doubt. However, as demonstrated, I believe that constructivism and poststructuralism are also caught up in providing their own answer to the question, what explains our knowledge? Seldom did Foucault, Goodman, Butler, Kessler, or McKenna rest content with the assertion that natural kinds may not exist, or that laws of nature may not exist. An alternative explanation for our knowledge was supplied on just as many occasions as the temptation was resisted. In varying degrees, the alternative explanation offered is that our experience of natural laws and kinds is a discursive construction. Realists, I reiterate, maintain that our knowledge of natural laws and kinds is a potential reflection of the evolved

---

6. Quine is exempt from this charge; his alternative will be fully addressed in Chapter Five.
connection between our thought and linguistic categories and the way the world really is.

Given the fact that constructivism and poststructuralism provide a competing explanation for our knowledge, I maintain that it is not simply a case of comparing—as poststructuralists have argued—a naive and metaphysical realism on the one hand, and a fashionably cynical post-foundational constructivism on the other. The situation confronting theorists is rather, as Richard Boyd suggests, one of a "rational choice" between competing philosophies, based on "assessments of their relative merits." I insist that realism is no more out of the question in a priori terms than is constructivism or poststructuralism. The task of this chapter is to demonstrate why the realist explanation for our knowledge leads to fewer philosophical problems than does the constructivist explanation.

Finally, if social and political theory are to get past the truism that knowledge is mediated, I maintain that a sophisticated realist philosophy provides a possible starting point for studying the world. Adorno asserted that we must move beyond the assertion that knowledge of the world is always mediated, and I now argue that a realist philosophy provides a more detailed framework for making this move. I am in the initial stages of promoting the general realist argument that there are natural laws and kinds, and that our theories may approximate them. I repeat that contemporary realists do not deny that skepticism or relativism may be warranted in specific situations. Furthermore, realists agree that no scientific theory should be heralded as true for all time. "Realism is the view that we are often in a position to make certain existence claims," writes Richard Miller, "not that

---

we always are." With the declaration that some theories are true, however, it is true that others must be wrong. It may appear that relativism is the more tolerant philosophy, as it does not level such judgments. However, I assert that judgment need not necessarily bring with it intolerance; it may instead cultivate modesty. As Richard Boyd quips, "If being a constructivist is never having to say [other individuals or cultures are] wrong, it is never having to say we're wrong either."9

I will now animate my admittedly sketchy overview of realism as I address the aporias of poststructuralism and constructivism. I will argue that three problems follow from the adoption of constructivist/poststructuralist nominalism, problems to which the feminist variants of these philosophies are not immune: (1) Adherence to the thesis that laws are voided by exceptions—potential or actual—is misguided, and furthermore, unjustified, for a philosophy positing that we have no unmediated access to the real; (2) The contention that there is no difference between correlation and causation, and that all categories/kinds are equally justifiable/unjustifiable as a consequence (except from within a specific discourse) leads to the untenable levelling of all forms of explanation; and, (3) As a consequence of the synthesis of these two theses (laws, now defined as cultural posits, are voided by their exceptions), it becomes impossible to explain the existence of exceptions to supposedly hegemonic cultural categories, other than through vague reference to other discursive regimes. In other words, poststructuralists and constructivists have argued that our sense that a law is in operation is culturally constructed. When exceptions to culturally constructed laws arise, the only argument available to explain these

---

exceptions is the nebulous contention that another cultural construction interfered with the original construction. I will maintain that this is an inadequate explanation. Overall, I argue along with the realists I am analyzing that a single solution to these three problems is found in the positing of a real or ontological structure consisting of natural laws and kinds.

**Laws and Exceptions; Constructions and Constraints**

**The Constructivist and Poststructuralist Position**

I will now address the first problem. The classical Humean formulation of the problem of induction, outlined in my Introduction, charges that it is forever possible that an exception to a hypothesized law will surface, in the process voiding the law. Thus, Nelson Goodman charged that "anything may follow upon anything,"\(^{10}\) and declares that green emeralds may turn blue at some future point in time. But it is not necessary to resort to the realm of the logically possible, but highly unlikely, in order to refute the thesis of natural necessity. Contemporary constructivists and poststructuralists have simply pointed to the many actual exceptions to laws that are supposedly universal. The example of prime consideration for my dissertation is the existence of intersexed individuals. It was asserted by Butler, Kessler, and McKenna that the birth of babies with ambiguous genitalia or atypical chromosome and/or hormonal patterns, or the existence of cultures in which individuals assume the identity of the opposite or a third sex, voids the contention that there is a law of nature dividing bodies into males and females. Related to this argument are Butler's allegations that certain bodies "resist" full description,\(^{11}\)

---

\(^{10}\) Nelson Goodman, *Fact, Fiction, and Forecast*, 81.

\(^{11}\) Butler, *Bodies That Matter*, 25. See Butler's employment of the concept of "resistance to materialization" in Chapter Two. Essentially, Butler argued that the establishment of any discursive category of necessity entails the marking off of individuals who do not fit into the category. However, Butler is adamant in her insistence that the lack of fit does not stem from any material qualities the individuals in question might possess; the most she will say is that they "resist materialization."
that the constitutive power of discourse, "does not mean that any action is possible on the basis of a discursive effect," and that discourse does not create the world ex nihilo. Butler—following Foucault—also seems quite certain that there is no instinctive sexuality, nothing extra-cultural about the body which connects us sexually to other individuals or motivates our behaviour. Each of these arguments, I conclude, rests on the principle that there are some things discourse cannot do, or that there are certain theories that we have proof are wrong.

I contend that in the process of defending nominalism, poststructuralist and constructivist feminists have invoked the Popperian principle that laws can be disproved by experience, but never proved. Observational evidence has been accepted in order to refute various theories. Thus some hypotheses are rejected out of hand as representations of the world, while none are accepted. This was also the trick of Goodman's nominalism: while no theory is true, all are false potentially, and many are false actually. However, Goodman is careful to reject no single theory out of hand other than the general realist theory positing the existence of categories. The dilemma was avoided by Quine altogether, as he assiduously refused to defend or reject

---

12. Ibid., 187.
13. Ibid., 107.
14. Butler, *Gender Trouble*, 25. In Chapter Two, I made reference to a recent talk Judith Butler gave at the University of Toronto. Butler repeated her allegation that we cannot make claims about what lies beyond culture. However, referring to Freud's theory of innate bisexuality, she asserted that "he should know better than that." She continued that he was flat out wrong, as there is no innate bisexuality. I maintain that this represents an inconsistency throughout Butler's work; she makes definitive arguments that there are no natural drives, yet she insists in her philosophical musings that it is impossible to say either way what lies beyond culture. Butler, "Antigone's Claim," Public Lecture, University of Toronto, 15 April 1998.
15. In my Introduction, I provided the following analysis of Popper's falsifiability principle. Because of the problem of induction as formulated by Hume, Popper accepts that we can never conclusively prove that a certain theory is true. The sun may not rise tomorrow. However, through experimentation we can demonstrate that certain theories are false in the present; there is no need to make predictions about the future in these cases because we already have experience that contradicts the hypothesized theory. See Karl Popper, *The Logic of Scientific Discovery*, 2nd. Eng. ed. (London: Hutchinson of London, 1982), 27-70.
nominalism (after an initial flirtation with the doctrine), perhaps in acknowledgment of the philosophical problems posed by such an assertion against a backdrop of ontological relativism. It is, I maintain, Foucault, Butler, Kessler, and McKenna who succumb to the temptation to reject specific theories while they are at the same time rejecting realism. Each has asserted that we have no unmediated access to nature, and none has provided means for evaluating competing scientific theories. Foucault, Butler, and Kessler and McKenna have, all the same, argued that there are things that we know with certainty do not exist, and things that our theories cannot construct.

A Realist Alternative, Part 1

Realists, myself included, first contend that the poststructuralist and constructivist rejection of certain theories is troublesome and stands in need of explanation, relying as it does on a definitive statement about the structure of nature. These definitive statements, albeit negative, come in the face of repeated contentions that knowledge of the structure of nature is impossible. Realists assert that the contention that theories can be disproved requires an ontological commitment just as strong as the one supporting the contention that theories can be proved. To argue that nature is not one way, or that discourse cannot constitute absolutely anything, is to imply that there is a causal order preventing nature from taking that path. In other words, the claim that certain theories have been disproved is metaphysical. Rom Harré
and Michael Krausz elaborate:

[T]he supposed asymmetry between confirming a hypothesis as true and disconfirming it as false is difficult to defend. While the former seems to depend on the inductive assumption that the future will be like the past in relevant respects, itself in need of inductive support, the latter seems to depend on a related assumption, that the future will not be unlike the past in relevant aspects, an assumption equally in need of inductive support.\(^{16}\)

Disproving a theory, therefore, summons the same Humean problem of induction as does proving a theory. Without the positing of some natural order, Bhaskar asks, "[W]hat is there to prevent nature altering so that our most decisively rejected theories turn out true and our most cherished falsifiers, implicitly universal, false?"\(^{17}\) I assert along with realists that consistent poststructuralists and constructivists must abandon their allegations that certain theories have been disproved because of the existence of exceptions, or that discourse cannot constitute just anything. If knowledge is mediated, our awareness of exceptions is just as mediated (as is our awareness that there are some things discourse cannot constitute), and cannot provide proof of anything one way or the other.

Realists, on the other hand, are not troubled by the insinuation that the best explanation for the constraining impact of the material realm upon our discourse is that there are laws and kinds operating in nature, and that these laws and kinds sometimes have exceptions.\(^{18}\) It will take the course of this chapter for me to explicate fully this core realist premise. For the moment, I will make some general, fairly non-technical statements, and explain by way

---


\(^{17}\) Roy Bhaskar, Scientific Realism, 2.

of example. Firstly, realists assert that our incapacity to create something *ex nihilo*, or our observation of "resistances" to discourse, stems from the operation of theory-independent laws of nature that we do not have the power to break, even if our knowledge of them is mediated. The causal mechanisms structuring human embryonic development, for example, foreclose the birth of an aardvark foetus. Pregnant women do not have to waiver between purchasing a crib or a pen.\(^{19}\) Less facetiously, I add that intersexed individuals do not merely represent "resistances to materialization" in the face of the dominant discourse of sex. Adorno argued that all individuals possess a material integrity, that there is truth in the particular, and that we must make attempts at defining this truth. Realists now assert that this material integrity is best explained through reference to laws of nature, laws that periodically permit of, in many cases, explicable exceptions. I would therefore propose that sexually ambiguous individuals possess a combination of male and female attributes, attributes reflecting the continued operation of a real law of sex.

Following is a brief discussion of the science of sex that I will use to clarify the realist position throughout the chapter.\(^{20}\) Although the chromosomal makeup of an embryo is determined at the time of conception, it is initially "bipotential," meaning that it has the capacity to become male or female. The originating materials of sexual differentiation are tiny gonads and two duct systems. One duct grows and the other recedes depending on the sex of the

\(^{19}\) Thanks to Michelle Baert for provision of this example.

embryo. The penis and the clitoris mature out of identical tissue. It is hypothesized that this is a remnant of our evolution from an androgynous or hermaphroditic organism. From this source, "male development" typically means that the gonads contain only XY testicular tissue, and "female development," only XX ovarian tissue. Thus, testes and ovaries are the usual indicators of genetic maleness and femaleness. While some propose that a single factor, the Y chromosome or some gene located on it, is responsible for sex differentiation, it has also been hypothesized that at least nineteen genes play a role in the maturation of both sexes. Typically, the growth of testes leads to the secretion of male hormones, furthering the embryonic development of the male. It is also postulated that ovarian estrogen or possibly the hormones of the mother contribute to female sexual differentiation, although this is not certain at the present time. It appears that both "male" and "female" hormones are necessary for the growth of either sex.

Even though the complexity of sex differentiation is no greater than that for other developmental processes, it helps to explain the occasional variations on the theme male/female. One cannot develop both a penis and a clitoris, but it is possible to possess a combination of male and female internal organs, or to be born with ambiguous genitalia, as poststructuralists

21. Ursula Mittwoch, "Males, Females and Hermaphrodites," Annals of Human Genetics 50 (1986), 103-121. It should be noted that this bipotentiality is not limited to the sex organs; other tissue in the body has the capacity to develop into any number of things. What the tissue ultimately becomes is dependent on its location in relation to other tissue. See Konrad Lorenz, Behind the Mirror: A Search for a Natural History of Human Knowledge (London: Methuen & Co Ltd., 1977), 81.
24. Wilson, George and Griffin, "The Hormonal Control," 1283.
and constructivists have repeatedly contended. There are in fact XX individuals with partial or full testes development, and XY individuals with either small penises, or large clitorises. There are also XXY individuals, XYY individuals, XO individuals, and hermaphrodites (individuals with both XX and XY gonad tissue), among others. It is estimated that three in one thousand births will have one of these chromosomal irregularities, while a smaller number, approximately one in two thousand, will have "ambiguous" genitalia.25

However, I argue along with realists that these exceptions are reflections of the laws of sex. It is a natural law that genes, however many are involved, tend to produce a certain chromosomal pattern, and a certain hormonal distribution. The law does not operate with one hundred percent predictability, as demonstrated. However, hypospadias, the condition in which the male urethral opening extends along the underside of the penis, is a phenomenon made explicable when the common tissue origin of all genitalia is acknowledged. The condition reflects a shortage of the hormones necessary to convert the bipotential fetal genitalia into a male penis; in other words, hypospadias is a penis with a female genital opening. Cryptorchidism, the failure of male testes to descend, is similarly best understood in this fashion. In other words, the phenomenon of intersexuality is a reflection of the causal structure of sex, a structure that intimately links male and female bodies while explaining differences. Intersexuality is not an effect of a general "resistance" or even lawless chaos. In like fashion, I would note that male adults wishing to develop breasts must ingest vast quantities of estrogen, even if part of "passing" as female can be attributed to cultural expectations about male/female appearances and behaviour. When we grow breasts

---

25. Kessler and McKenna, Gender, 78n8.
where before there were none, we must make use of natural laws. Bernice Hausman cautions, therefore, that "plastic surgical practices . . . must take account of sexual difference at the level of tissue function," and she adds that genetic sex itself cannot be altered. It is possible to intervene with hormones and surgery into the shape of the body, but it is not possible to convert XX chromosomes into XY chromosomes.

It might be countered that these intersexed individuals are a unique sex, and not simply "intersexed." I maintain that it is still the case that their bodies manifest a combination of male and female traits, not human and horse, for example, or human and oak (as I will extrapolate upon in Chapter Five). The cultural display of intersexuality, or of the berdache, constructed through dress, carriage, and the like, does not rest on the breaking of natural laws. To the extent that we intervene in nature, it is always with the aid of another natural law, or at least, not through the transcendence of existing ones. Boyd calls this the "metaphysical innocence of conventionality." Conventions or constructions do not alter the laws of nature. I conclude that what has been called a "resistance" to materialization or a construction is, therefore, explicable in terms of natural laws, and that intersexuality does not provide evidence that there are no laws of sex.

It might also be argued that no poststructuralist or constructivist intends to suggest that human babies will be born as aardvarks. Given this acknowledgment, however, I insist that the status of this claim, and the status of resistances, constraints, and exceptions to laws must still be clarified. The

---

27. Ibid., 139.
29. Ibid., 173.
fact that discourse does not create the world in its image on all occasions must be addressed. Why is it, in other words, that human babies will not be born as aardvarks? Richard Boyd demands of constructivists and poststructuralists the following question:

[W]hat is the justification for denying that resistances are theory-independent causal structures, and for denying that, in accepting that scientific theories and methods must be accommodated to resistances, a philosopher has already accepted a realist (or empiricist) interpretation. . . ?

I concur: what explains the conviction with which poststructuralists and constructivists deny that there are theory-independent causal structures, when they caution at the same time that discourse cannot create something out of nothing? Why is it impossible for discourse to have this power?

Poststructuralist Rejoinder

I assert now that constructivists and poststructuralists retain an option allowing them to maintain their overall doctrine in the face of these realist challenges. This option is the argument that the posited "constraints" or "resistances" to materialization and discourse are present to us only as tangled nature-culture webs. As a consequence, the separate contribution of "nature" is impossible to delineate. This position has been promulgated by Quine, Butler, Foucault, Kessler, and McKenna. With its adoption, however, I maintain that it is no longer possible to declare that some theories have been disproved. Rather, I argue, the most that can be said is that from within our nature/discourse regime, it appears to be the case that a theory has been falsified. It would no longer be possible to assert definitively that, for example, sex is not structured according to a binary law. One must rest content with saying that it appears that sex is not structured in this fashion.

---

30. Ibid., 179.
Emphatic statements about the impossibility of a natural sexual instinct must similarly be rejected. In general, from the vantage point of this philosophy, no laws have been proved or disproved, and we know nothing definitive about "sex" or anything else one way or the other.

A Realist Reply, Part 2

Given this inevitable watering down of the poststructuralist/constructivist project, realists mount a related charge, a criticism of the contention that even theories about nature-culture hybrids could ever be disproved by their empirical counterexamples. According to contemporary realists, this argument is still held hostage to the traditional epistemological paradigms, and can be broken down into two components.

Bhaskar calls the first suspect component the principle of empirical-invariance, whereby laws represent nothing more than a Humean "constant conjunction" of observations. I contend that it is from a perspective similar to this that Foucault, Butler, Kessler and McKenna have periodically conceded that individuals might possess a set of chromosomes, and a range of other sex traits. However, these thinkers have repeatedly suggested that there is no law of sex transcending particular chromosomes causing them to produce the secondary sex traits, and no law of sexuality structuring sexual behaviour. If "sex" is anything, it is the particular assortment of traits each individual possesses. This principle is difficult; to clarify, poststructuralists and constructivists are invoking the empiricist and nominalist injunction against induction, or against hypothesizing the existence of causal laws connecting and explaining a pattern of empirical events. Foucault, Butler, and Kessler and McKenna (for the most part), have vehemently denied the legitimacy of any appeals to natural laws, in the case of natural categories such

as sex, or extra-discursive psychological structures such as motive or instinct, in the case of social ones.

The second component of the argument is the contention that even an empirical "law" can be disproved on the basis of rare exceptions. Bhaskar calls this the principle of instance-confirmation (or inversely, instance-falsification).\textsuperscript{32} I have already contended that this principle requires an ontological commitment. I will now argue that it is based on an erroneous understanding of biology and the practice of science, both natural and social. As discussed in my Introduction, Hume sanctioned the search for constant empirical conjunctions. Positivists then advocated that the formulation of scientific laws should proceed deductively in the same manner as the rules of logic: an outcome had to be guaranteed given its premises. Positivists accordingly denounced the social sciences for their inability to uncover laws as rigorous as those found in physics. Goodman, as I discussed, rejected the long-standing practice of defending laws through instantiation, yet he retained the skeptical thesis that there are no laws of nature. Poststructuralists and constructivists—feminists included—while denouncing the connection between logic and knowledge, have accepted the logician's conclusion: either a law be demonstrated deterministically, or it is no law at

\textsuperscript{32} Ibid.
all. Bhaskar summarizes,

Neither hermeneuticists [constructivists and poststructuralists] nor positivists doubt for a moment that empirical invariances are necessary for laws, or that the conceptual and the empirical jointly exhaust the real.\textsuperscript{33}

I assert that poststructuralists and constructivists are linked in another fashion to positivism and the age-old logic/knowledge nexus.

Realists illuminate the hazards of this dual position by drawing connections between it and arguments coming from quarters with which many poststructuralists and constructivists would not choose to be aligned. For example, spokespersons for cigarette companies argue that smoking does not cause cancer because some smokers do not develop the disease. I would add that critics of the global warming hypothesis can smirk at below-normal temperatures in a single month. The principle of instance falsification adopted by poststructuralists and positivists also permits individuals to declare that society is no longer prejudiced because their MP is female, gay, or a person of colour. Positivist social science is filled with allegations to the effect that Freud is simply wrong, because all individuals do not mature according to his stages, or that Marx is wrong because class struggle does not always lead to revolution.\textsuperscript{34} If one accepts the thesis that theories are disproved by their counter-examples, I assert that as a result, complex phenomena become inexplicable. It is always possible to find an exception to any posited theory.

Furthermore, I argue that an empiricist ontology is at the heart of all liberal theories of knowledge and politics, whereby what we perceive is the whole of what exists, and in which the world consists of atomized events, individuals,

\textsuperscript{33} Ibid., 22.
\textsuperscript{34} Miller, *Fact and Method*, 27, 143.
and behaviours.\textsuperscript{35} The argument that there are always exceptions to hypothesized laws has been historically used to diminish any efforts to develop a supra-individual understanding of human behaviour. "There is no such thing as society," as Margaret Thatcher famously paraphrased Jeremy Bentham. Poststructuralist and constructivist feminists themselves are devoted to the thesis that individuals and events are thoroughly interconnected. I contend that the positing of an atomized ontology underneath this dialectical superstructure warrants theoretical justification.\textsuperscript{36} I caution that the alignment of poststructuralism and constructivism with cultural conservatism and/or liberal individualism is unavoidable if it is maintained that laws, even mediated "laws," are negated by their exceptions, and are nothing more than the summation of their empirical manifestations.

As I have already declared, realists—myself included—do not deny that the rejection of a theory is sometimes in order when unexplained events occur. However, realism once again challenges the uncritical application of the rules of logic to the study of the natural world. Unlike poststructuralists and constructivists, realists dispute the conclusion that when a law cannot be deterministically deduced, or a natural kind precisely delineated, or the origin of a phenomenon exactly located, it follows that there is no law, no natural kind, and no cause. Realists maintain that it is a greater challenge to the philosophical tradition to concede that the world does not operate with the precision of a number series, but to insist that it does all the same possess an order.\textsuperscript{37} When exceptions to theories are discovered, therefore, I contend along with realism that the better strategy is to attempt to find an explanation

\textsuperscript{35} The explicitly behaviourist implications of the injunction against depth and inwardness will be discussed in Chapter Five.

\textsuperscript{36} As I argued in Chapters One and Two, poststructuralists and constructivists presently argue that language relates what is otherwise disjoint.

\textsuperscript{37} Richard Boyd, "Realism," 143.
for these exceptions, rather than to imply that their mere existence is grounds for abandoning a theory. I will now explain, in more technical terms, the general structure of laws and their exceptions.

The realist argument reconciling the existence of exceptions with the operation of laws builds on the above assertion that there are causal structures in nature. Realists are united in the belief that natural laws must not be reduced to what is witnessed in empirical events. Realists argue that the empirical event does not equal, but emerges from, the causal mechanisms underlying it. This assertion has two implications: (1) contrary to Hume and Goodman, our knowledge of the world must lead to the hypothesization of laws connecting empirical events, and (2) empirical departures from a law do not necessarily negate the existence of the law.

But what sorts of things can be identified as laws? Realists often state that the identification of a law rests on the formulation of an abstraction as opposed to a generalization. It is a generalization to hypothesize, for example, that a body will be capable of pregnancy because all bodies that look like this one are capable of pregnancy. It is a generalization to say that black people are more likely to commit crime, or that realist philosophers are united on the basis of the fact that their first name begins with the letter 'R,' as is the case for the realists in my dissertation. Abstraction, on the other hand, may originate in a generalization, but it must make reference to causal forces beyond those events that are immediately perceived. It rests on the introduction of new concepts that explain both the Humean "constant conjunction" and many, if not all, occasional departures from it. These concepts refer to laws or mechanisms explaining why women can get

---

38. See Ibid. for one clear articulation of this overall thesis.
39. See, for one example, Bhaskar, The Possibility of Naturalism, 162.
40. Miller, Fact and Method, 56.
pregnant and why skin colour is not a causal force in the phenomenon of crime. Just as empirical similarities may betray underlying structural differences, empirical differences may betray underlying structural similarities. All the same, constant conjunctions or general patterns are a fertile starting point for the determination of natural laws.

In seeking to provide the best explanation for our knowledge and a solution to the problems posed by constructivism and poststructuralism, I cannot deny that realism is in a fundamental sense metaphysical. Existential hypotheses, or hypotheses about the nature of being, are formulated, referring to mechanisms transcending our perception or mediated understanding of events. A tendency in poststructuralism and constructivism is to equate any hypotheses about an extra-cultural nature, or anything resembling psychic inwardness or causation, with philosophical naïveté, or with hypotheses about spirit and God, because any form of explanation automatically leads to an infinite regress. It is consequently implied that realist abstraction is nothing more than generalization dressed up in pseudo-scientific garb.

However, I hold that the claim that laws operate "beyond" events as observed by humans is not an argument locating laws in some transcendent realm of spirit. As I stated earlier, realism seeks to provide a natural explanation for our knowledge. Laws accordingly require physical entities, in fact, they are physical entities. Just because there are occasional minor

---

41. The positivists presented in my Introduction were clearest in their indictment of postulations about the nature of being. They maintained that the realist hypothesis that "there is a world beyond my knowledge," was irredeemably metaphysical. Quine furnished the clearest version of the dilemma of the infinite regress. Recall that he argued that even the simple question, "what is a rabbit?" is couched in a theory of what rabbits are (and is expressed in a background, relativizing language). This theory is in turn couched in a theory of what animals are, and then what evolution is, etc. There is no end to the nesting of theories or "infinite regress" as it is typically called, unless one wants to posit a first principle like Being or God (as foundationalist philosophers have done through the ages), or one wants to use the results of one's investigations to prove the point one is trying to make (hence using a "circular" defense, as does Quine.)
variations in the genetic pattern producing sexed embryos, it is this genetic pattern that puts biological sex differences into motion. Roy Bhaskar asserts,

[T]he logical subject of a law of nature is a natural kind of thing—
the locus of a real generative mechanism, grounding some but not other possibilities.42

I argue, furthermore, that there isn’t an animal alive that doesn’t make use of a notion of causal law, justifiable in the same natural fashion. Thus, a dog caught in a revolving door will forever avoid the street on which the incident occurred.43 People everywhere farm with some knowledge of the change of seasons, hunt with awareness of the flight path of their weapons and the forward motion of animals, and strike or stroke another individual with the recognition that this will provoke a response.44 "The hypothesis that a baby is at least uncomfortable, when crying," summarizes Richard Miller, "seems to have . . . unique reasonableness."45 We have good reason to believe that wind causes leaves to blow. Similarly, we do not believe that if we have misplaced our traveller’s cheques, it is the result of their transporting themselves of their own accord to a place other than where we left them.46

These examples illustrate what it means to have a concept of one thing’s causing another, even if we are not in possession of knowledge of a first cause. In each case, I concede, the forbidden infinite regress of explanation is invoked.47 That we are not driven to distraction by this failure of grounding,

45. Miller, Fact and Method, 487.
46. Ibid., 82, 353.
47. See n41 above.
and accept the implications of our causal connections nonetheless, demonstrates that realism need not be troubled by its similarly natural explanations. Richard Boyd summarizes,

Thus, to a far greater extent than has been widely recognized, scientific realism must be thought of as a component of a general naturalistic and antifoundationalist epistemology.\(^{48}\)

Contemporary realism, therefore, is post-metaphysical in that it does not resort to claims about non-physical spirits or essences, metaphysical in that its explanation for our experience hypothesizes about laws operating beyond our mediated knowledge. The realist explanation does lead to an infinite regress, but this is the regress of natural history. We accept the explanation that wind causes leaves to blow, and explain this further using laws of meteorology, and further using laws of physics. A constructivist or poststructuralist arguing that the concept of cause is nonsensical or metaphysical because of this regress has to explain what is going on in these instances from everyday life. If she accepts that these everyday things are instances of the operation of natural laws, I maintain that she must explain why sex is so obviously a different phenomenon. If she does not accept that these everyday things are instances of natural laws, I maintain that her position is divorced from the lived experience of most creatures.

Roy Bhaskar also argues that poststructuralism and constructivism implicitly and perhaps unknowingly depend on a notion of causal efficacy, or on the belief that like causes can explain like effects.\(^{49}\) Adorno levelled a similar charge when he argued that nominalists posit that society creates a worldview, only to deny that society, as an abstraction, has any meaningful existence.\(^{50}\) Combining Adorno and Bhaskar's allegation, I assert that the

---

\(^{48}\) Boyd, "Realism," 144.

\(^{49}\) Bhaskar, Possibility of Naturalism, 186.

\(^{50}\) See Chapter Three.
cultural components touted as constructive of sex reflect the existence of a causal order. One cannot simply will oneself to be perceived as a female or a male, nor can one perform gender in any old way. The cultural realm poses a "resistance" to our wishes that is equally a manifestation of causal laws; we must present ourselves in a certain way in order to cause others to perceive us as male/female. In any case, a material intervention is required, one that I contend demonstrates a general relationship between cause and effect. A certain presentation of self (cause) is interpreted as female, another as male (effect), and these presentations must be successfully approximated through individual behaviour. The steps required were outlined by Kessler and McKenna, and alluded to by Butler. Although there are permissible differences between performances of male/female, there is a general pattern that must be approximated in order to be effective. I ask how such a general cultural presentation of the body can have a discernible causal effect on perception, when constructivists and poststructuralists deny the possibility of any general potency to the biological or physical components of sex. Therefore, I charge that poststructuralists and constructivists break their own ban on abstraction to laws explicating regular empirical events.

Contemporary realism then proceeds to provide an explicit philosophical analysis of these everyday understandings of causality, including this example from poststructuralism and constructivism. The realist process involves the making of an ontological distinction between laws and empirical events based on the notion of abstraction (which I introduced above) into a deeper, more explanatory stratum of the world. The resultant ontology is expressed in a variety of related ways. Roy Bhaskar posits the existence of three ontological layers, distinguishing between (1) the "real" laws and mechanisms that

---

51. Kessler and McKenna, Gender, Chapter Five entire.
establish the potential and limitations of a thing, (2) the "actual" effects of such laws, and (3) the "empirical" event that humans may or may not witness. In other words, natural laws may or may not be actualized, and may or may not be perceived.\(^5^2\) Rom Harré expresses this relationship in a slightly different fashion. "A Particular Being," states Harré, "has a Tendency which if Released, in a certain type of situation, is manifested in some observable Action but when Blocked has no observable effect."\(^5^3\) This depiction of causal structure embeds the mechanism in its broader environment, making it partially dependent on the presence/absence of appropriate conditions (which are, in turn, also reflective of laws). Analogously, Richard Miller provides the following description of a sound realist explanation,

\[\text{[A] theory tells us that certain mechanisms cause certain patterns to occur when the latter do occur; or that the mechanisms described have a certain impact on phenomena when the former are strong enough; or that certain mechanisms are typically the causes of the most important features of certain phenomena.}\]

In each case, the crucial point is that a real or ontological distinction is being made between what is potentially possible, yet does not occur, and what was never possible in the first place.

As such, I acknowledge that contemporary realism clearly invokes the old and, I would add, often wrongly ridiculed Aristotelian distinction between potential and actual. Today's realism is, however, tempered by the awareness that potentials are not always realized. Causal laws explain the high frequency with which some events occur, while not discounting the possibility of anomalies. The source of the variation between potential and actual, however, is not to be located in some law-free zone, or in a mysterious

\(^{5^2}\) Bhaskar, *Scientific Realism*, 45.
\(^{5^3}\) Rom Harré, *Varieties of Realism*, 284.
\(^{5^4}\) Miller, *Fact and Method*, 140.
"resistance" of nature. Variability—such as that expressed in intersexuality—is a result of the intersection of numerous laws, (or even, as I will show in the next section, the effect of the emergence of new properties as entities interact with their environments). I repeat that variability is not in and of itself a sign that a hypothesized law has failed to operate.

Realists use scientific theories to develop further this general thesis. It is widely accepted that the laws of physics furnish the overall framework for the world. However, many scientists (aside from the philosophical issue of whether they are realists, pragmatists, or whatever the case may be) posit that as different realms of life evolve, the complexity of the world's interactions increases. I noted above that this philosophy has been called emergent properties, or non-reductive, materialism. In cases where a single physical law can be successfully isolated, there is a tight if not perfect connection between potential and actual. In the case of more open systems, the empirical event is the result of the interplay of more than one mechanism or law, and as such is more likely to be variable. The laws of chemistry, biology, psychology, and sociology become progressively less deterministic. This variability does not mean that there are no relatively constant biological or even sociological features. Furthermore, non-reductivism is not a defense of a chaotic theory of nature. "[I]ndeterminacy does not mean lack of cause," clarifies noted biologist Ernst Mayr, "but merely unpredictability."55 However, post hoc explanation must take the place of prediction in these less certain realms of investigation.56

Therefore, realists conclude and I concur that it is a misrepresentation of the goals of knowledge (and a misunderstanding of the world we inhabit) to

assert that a law must predict all empirical events. Laws inscribe a range of possible empirical manifestations, despite the possibilities that mechanisms will not function as they typically do because of the interference of other laws. The realist option explains both the high frequency of breastless XY individuals, and the occasional instances of breasted ones. I now turn to an analysis of the second and third aporias of poststructuralism and constructivism, which I have combined into a single section because of their substantive overlap.

Explanation, Categories, and Classes

The Constructivist and Poststructuralist Position

As suggested throughout the dissertation, poststructuralists and constructivists alternate between the radical stance that discourse or language can create (metaphorically speaking) the world in its image, and the more moderate position that it is impossible to distinguish where nature leaves off and culture takes over. In an important respect, however, the two theses lead to the identical conclusion: it is wrong or (merely) impossible to say that one system of grouping individual entities into categories is "more natural" than another. Even when theorists favour the mediation thesis, there is a tendency to declare that the source of any classificatory schema must be attributed to a social contract in the untraceable past. The process of "naturalizing" a category is called entrenchment by Goodman, and construction or constitution by Foucault, Butler, Kessler, and McKenna.

To recapitulate, Goodman asserts that our culture thinks in terms of green emeralds because we have entrenched the belief that emeralds are green. Not only might emeralds turn blue in the future, the hypothesis that they are presently united in the sharing of a quality "green" is erroneous.

57. Once again, Quine is the exception, as I will explicitly detail later in this chapter.
Accordingly, Goodman rejects the Humean solution that laws represent empirical constant conjunctions. Similarity is everywhere, according to Goodman, and it is thus impossible to state that one form is more salient than another. Foucault expresses adherence to this position with his assertion that categorizations of dogs and cats are no more natural than are categorizations of animals painted with a fine camel-hair brush, or frenzied animals. This principle is perhaps the single most important support for the contention that there is no greater rationale for dividing individuals into sexes than there is for dividing them into races, economic classes, or even eye-colour groups. In all cases, poststructuralists and constructivists have asserted the bankruptcy of the realist notion that natural similarity can be used to ground kinds or laws.

Problems With The Poststructuralist Position

Distinguishing Between Natural and Cultural Kinds. Contemporary realists concur that Hume's "constant conjunction" solution to the problem of induction must be rejected, for reasons discussed above. I now draw attention to the broader philosophical ramifications of the alternative solution provided by the constructivist/poststructuralist thesis of cultural entrenchment. Realists argue that the nominalist equation of correlation and causation will render it a matter of indifference the form of explanation proffered for a given pattern of events. Cultures or individuals must always be judged to be mistaken when making a distinction between a physical and a biological kind, on the one hand, or a natural and a social kind, on the other, as any such distinction is true only from within a particular discourse. I also argue that the equation of correlation and causality has the byproduct, intended or otherwise, of negating differences between the natural and the social sciences. Interestingly, whereas positivists levelled the distinction
between the sciences by arguing that the social sciences must be as deterministic and predictive as the natural sciences, I allege that poststructuralists and constructivists level the distinction with the contention that all sciences are equally relative. Similarly, I assert that the distinction between potentiality and actuality is eradicated in the poststructuralist and constructivist framework. Without any appeal to natural law, it must be conceded that there is no real difference between individuals who have a potential yet do not exercise it, and those who do not possess the potential.

Realist philosophers offer concrete illustrations of the implications of the complete blurring of the nature/culture distinction. Ruth Millikan observes that from the perspective of either the radical constructivist or the more moderate mediation of knowledge thesis, it is impossible to distinguish between the status awarded to a group of green balls, on the one hand, and a group of emeralds, on the other.58 I add that a group of boys will have no greater footing in nature than does a group of bachelors.59 A colourful example is also provided by Len Doyal and Roger Harris. Suppose a professor repeatedly winks at his or her students. If no distinction between natural and cultural causation is allowed, (and if laws and forces are reduced to their manifestation in single events), it is impossible to evaluate between the claim that the professor has a nervous tic and the claim that s/he is participating in the social convention of winking to indicate sexual interest. The sole determining factor in the case will be the observation that the professor did wink.60

58. Millikan, Language, Thought, 278. Millikan uses the example of the differences between gold and red round objects.
59. "Bachelor" is of course the classic philosophical example of a socially-defined category.
60. Doyal and Harris, Empiricism, 53-54.
Finally, I address the full implications of the thesis relativizing the sex categories. From this position, it becomes impossible to distinguish between the category of emeralds and the range of traits and behaviours associated with the gender categories. Gemology and sociology must be deemed fundamentally similar in their analyses of nature/culture networks, for poststructuralism and constructivism have provided no means for asserting that some kinds or laws are less constituted than are others. Without reference to natural law, I note, there is no structural difference between a group of pre-menstrual girls, a group of infertile women within typical childbearing years, and a group of fertile women who choose not to conceive. In each instance, no individual has produced the empirical event of a baby. I assert that it is only failure of nerve that keeps theorists from arguing that men are reproductively equivalent to the women in this instance. Realists insist, therefore, that the assertion that all categorizations of individual entities or events are equally indebted to cultural factors leads to the levelling of all forms of explanation. All kinds become cultural, or equally and impenetrably natural/cultural.

*Perceiving Similarity and/or Difference.* As I indicated above, I will discuss the third poststructuralist and constructivist dilemma before I provide my realist reply to problems two and three together. The third problem is that arising from the attempt to juggle simultaneously the two principles analyzed to this point. It is one thing to argue that there are no natural kinds because there are no similarities *deterministically* uniting individuals into categories. It is another thing, I maintain, to supplement this principle with the argument that we perceive the world as though there *were* natural kinds all the same, because entrenched categories foster this impression. I contend that the combination of these two principles renders observation of the
exceptions to the laws—laws that are now either cultural constructs or nature/culture hybrids—problematic. The question, in broad terms, is, "How can the recognition of variability and change be explained from within the combined theses of social constructivism and nominalism?" How can we know when things are different or when they change, in other words, if culture constitutes the way we see the world?

Goodman avoided the question of change and variability altogether by restricting his analyses to the relatively deterministic world of rocks and stars. His constructs have the security furnished by logical puzzles and the physical sciences. Within a culture positing green emeralds, it is unlikely that individuals will be confronted with a blue emerald, throwing their world into disarray. Within a culture believing that emeralds just might one day turn blue, no proof to the contrary can ever be conclusive. For Goodman, important deviation occurs between cultures, not within. It is then always a case of one world-constructing paradigm versus another. However, the example of the homogeneous culture implodes the moment one considers a less deterministic phenomenon. Foucault, Butler, Kessler, and McKenna, writing in the wake of substantial criticism of the initial constructivist project, are cognizant of the need to address examples from outside physics and geology. The issue of change or variability is accordingly raised through the biological example of intersexuality, but I will argue that it still problematizes their overall philosophical stance. I will furnish another example from the biology of sex to illustrate my point.

Take any of the cultures that divide animal bodies exclusively into males or females. If it is argued that there are no natural kinds, these existing biological sex categories must be depicted as the effect of an ancient cultural pact favouring certain similarities over others. In other words, the culture
perceives a female as "the same as" other females and "different from" males on the basis of a few entrenched attributes. It would be possible to group bodies according to other attributes as no variables are naturally more salient than others. Within such a culture, it is now observed that fish are presenting with ambiguous sex traits. Entities formerly only labelled male or female are now sometimes being labelled intersexed. The material correlate to this linguistic category is, in other words, manifest against the background of the already existing categories male and female. What explains the recognition of individual fish deviating from these supposedly hegemonic norms of sex?

I suggest that poststructuralists and constructivists could provide several explanations for this phenomenon from within their overarching philosophical framework. It is possible, firstly, to propose that such variability was always present. Up until the moment, it simply went unremarked, or rarely discussed. Since there is evidence that intersexuality has existed throughout history, poststructuralism and constructivism provide a plausible explanation for why the phenomenon has been ignored until recently: ambiguously sexed creatures were simply squished into the existing sex categories. However, to sustain this thesis across all examples would be to posit that everything that exists now has always existed. Furthermore, to the extent that anyone in history noticed intersexuality, the source of this rare dissent remains to be explained. How would an individual scientist, for example, initiate the step out of a hegemonic cultural construction and into another one?

Secondly, it could be argued that the world is so variable, random in fact, that it is not an issue whether intersexuality *per se* was or was not present historically. It is rather the case that infinite variations on "sex," including
the supposedly secure male and female categories, have always already existed. This logic informs the thesis that biological sex is purely an individual phenomenon, and I have argued that it holds a certain appeal for each of Foucault, Butler, Kessler, and McKenna. However, I maintain that the apparent ability of societies across time to forefront some variable traits at the expense of other variable traits, and to call the forefronted features "male" and "female," still stands in need of explanation. If it has been possible to isolate a few traits and to call these "male," and a few other traits and call these "female," why do these traits not form the basis for natural sex categories? If it is posited that the cultural constructs literally make things that are different seem the same, and that therefore, there are in reality no traits that can be even loosely associated with males and females, it is not clear why certain variations would suddenly pose a threat to the existing sex system. Up until the present, in other words, these individuals were just "squished in," as was everyone else. Why is this strategy no longer effective, in a world in which everyone is really their own unique sex?

Finally, it is still possible to retreat to the logically unassailable thesis that knowledge of the material or natural is always already mediated. The thesis of the discursive mediation of knowledge explains intra-cultural variability, not by denying potency to the material realm, but by denying that we can understand this potency in a direct fashion. To the extent that there are anomalies and changes in all discursive regimes, for example, Butler suggests that these must be understood as the interplay of competing yet related discursive regimes, as she phrases it, "inadvertent convergences with other such networks."61 In the case being discussed here, Butler has argued that our understanding of intersexuality, even the choice of that word, must be

contextualized within our existing understanding of sex, which is in turn a combination of material and linguistic components. Therefore, there are no "intersexed" individuals without sexed individuals. In this mediated sense, intersexuality may be a new phenomenon, or alternatively, it may be a phenomenon occurring more frequently.

I see two problems with this solution. Firstly, I do not think it is a particularly helpful analysis in the case of the intersexuality of fish, or in any other example, for that matter. As I have stressed above, Goodman, Foucault, Butler, Kessler and McKenna have not provided any means of distinguishing between superior and inferior mediated theories of reality. Without some such discussion, it is impossible to make any distinction between the berdache's cultural intersexuality and the biological intersexuality of the fish; each is equally constructed. It is impossible to explain why intersexuality assumes some shapes rather than others (if indeed it does), or why only some individuals are intersexual. Once again, the only solution poststructuralists and constructivists have offered is the allegation that all of our knowledge is mediated. I contend that any attempt to offer some kind of deeper explanation for the appearance of intersexed fish would require recognition of natural laws and kinds, even if these laws and kinds are only knowable from our mediated perspective. Both Hume and Quine acknowledged the necessity of such a step, and I argue empiricism (even of a relativist variety) represents a superior option to poststructuralism and constructivism for this reason. Kessler and McKenna made a minimal allowance in their reference to the sperm/egg producing functions of human beings; Butler has not followed suit. Without such a concession to laws (or again, relative "laws"), poststructuralism and constructivism are stuck at the impasse of the mediation of knowledge thesis.
Secondly, and I would argue more problematically, without some empiricist acknowledgment, I insist that there is still no reason why one apparent variation in the mediated world could garner more attention than another apparent variation. Since every event is dissimilar in the nominalist hypothesis, no reference to materiality, even a mediated one, can be used to explain the existence of an exception to a law. More difference is yet more of the same. Every event is equally an exception to some generalization. If similarity is without natural structure (outside the norms of culture), so is difference, and it makes no sense how certain differences could be given more accord than others. Even if the culture might have a reason (allocation of resources, for example) for abjecting some individuals, the way the culture identifies these individuals over and over again is impossible to explain without reference to some similarity in the world or some similarity in our mediated perception of that world. How could individuals know that one person's sexual difference is intersexuality, while another's is within the acceptable range of girlhood and boyhood, when constructivists and poststructuralists have consistently denied that similarity is a defensible category?

I maintain that on this front, Hume and Quine have again supplied the only possible non-realist solution to the dilemma. Quine broke with Goodman because the latter could not explain how a culture could come to recognize any similarity, even culturally constructed ones. If one wants to avoid the hypothesis that similarity exists in the world, the only way to explain our capacity to see one thing as "the same as" something else is to posit the existence of an innate capacity to note similarity.\footnote{W. V. O. Quine, "Natural Kinds," in Quine, Ontological Relativity and Other Essays (New York: Columbia UP, 1969), 123.} Although Quine
indicated that, of course, green emeralds have more in common than grue emeralds from the perspective of our innate capacity, I showed that he denied (along with Hume) that we could equate this understanding with the real structure of the world.

Interestingly, Goodman also conceded the possibility that we could possess an innate sense of similarity. I maintain that with the recognition of this possibility, however, the bulk of Goodman’s philosophy becomes more or less moot, apart from its relevance to logic. He has, I grant, demonstrated that similarity is a logically imprecise category. However, he has not demonstrated that we could choose to perceive the world in any which way, that there could, in fact, be a group of people perceiving grue emeralds. If we have an innate capacity to note similarity, the possibility arises that we will inevitably see the world in a certain way, even if that is not the "real" way of the world. Poststructuralists and constructivists have been reluctant to hypothesize the existence of any innate capacities. I argue that they are aware of the consequences of such a recognition: it would become impossible to insinuate that we could somehow overcome our perception of natural kinds, particularly sexed kinds.

Butler has defended her reticence to discuss any biological "facts" by warning that there are many other voices hectoring us about the natural structure of sex. Yet poststructuralists and constructivists—including Butler—have eagerly employed the nominalist argument that the observation of exceptions to laws (or discursively mediated "laws") provides evidence that there are no laws. As I have indicated, it is this joint adoption of the nominalist thesis (banning abstraction to similarity) along with the

---

constructivist hypothesis (our sense of similarity is constructed) that results in the philosophical incapacity to register a distinction between underlying law (either natural or cultural) and empirical anomaly. Again, if there is no means of grounding similarity other than in culture, we are all equally walking exceptions to every law, all equally intersexed. How then, do we define some group of individuals as intersexed? What permits us to focus on any group of exceptions to the so-called law rather than the infinite others, if similarity is an empty term?

Roy Bhaskar sums up the difficulties of nominalist constructivism and poststructuralism as follows:

The immediate difficulty [is the] incapacity satisfactorily to cope with the notion of natural contingency (or account for the 'empirical moment' in theory), in virtue of its manifestly undifferentiated, uniform ontology. . . . [N]on-transcendent conceptual realism [constructivism or poststructuralism] actualistically collapses any surplus to human subjectivity and reduces natural to logical or conventional necessity.65

I assert that Quine (and Hume's) postulation of an innate standard of similarity—even if it does not counter the impact of the constructivist thesis relativizing all theories to language or to the peculiarities of our evolved state—at least breaks the constructivist stalemate that culture alone can define similarity. Similarity has been grounded in nature, or at least "nature" from Quine and Hume's perspective. This is the empiricist solution to the problem of induction. My forthcoming assertion that an ontological distinction must be made between natural kinds and culturally constructed kinds, even from within an overarching theory of the mediation of knowledge, will provide a partial realist solution to the second and third problems posed by constructivism and poststructuralism. I will challenge

65. Bhaskar, Scientific Realism, 66.
Quine's (and by extension, Hume's) relativization of our innate capacity to note similarities in Chapter Five, where the issue of similarity will again prove relevant.

**A Realist Alternative, Part 3**

Realists agree with constructivists and poststructuralists that it is not simply a question of the frequency with which a pattern or similarity is observed that determines whether a natural kind will be established. The solution of entrenchment has been rejected as wrong, however, and the mediation of knowledge thesis is rejected as partial at best, unproductive at worst. The realist alternative is, once again, the premise that the location of a natural category or kind depends on the development of a natural explanation for an observed constant conjunction. Previously, realists argued that good explanations abstract from empirical phenomenon by introducing concepts of mechanisms, structures, and laws. This thesis is now used to justify the following realist assertion: natural kinds consist of individual entities united in their possession of a similar causal structure. States Boyd, "A natural kind is associated causally with a large family of methodologically important properties." If what is methodologically important is in part culturally determined, the causal association of the properties is not.

I must remind that causal mechanisms are physical entities. Contemporary realists concur, as Goodman himself asserts, that it is not the case that "green" exists apart from green things. For realists, however, to be an emerald is to be structured—in the same way as all emeralds—according to natural laws making the stone green. Therefore, if a realist speaks of the essence of a category of things, this essence is not a second nature existing

---

apart from the things themselves. Millikan clarifies,

To believe that a thing falls in a certain ontological category is not to harbor another inner representation for it but to have a fuller concept of it.67

A natural kind's essence is not literally "beyond" the objects in question. Culturally constructed classes, on the other hand, do not share a natural causal structure, and are correlated by definition alone, i.e., culturally.68 I will now address some of the differences between physical and biological kinds to show how this differentiation between nature and culture plays out in the world.

**Physical Kinds.** Ruth Millikan approaches the problem of distinguishing categories governed by physical laws, examining the difference between red sulfur and round red objects (I will call the latter RROs). In her illustration, two cultures exist; in one, red sulfur is considered a chemical element, in another, RROs are accorded this status. Millikan asks proponents of the latter belief to uncover a property that is of necessity shared by all or almost all of the RROs, thereby justifying the thesis that RRO is a natural kind. In other words, relatively stable structures uniting round red objects must be located, and explained in terms of natural laws. The futility of the project is easily demonstrated. There are square red objects and round blue objects, as obvious examples. More to the point, it is a simple matter to cut some round red objects, thereby making them square on the spot, and excluding them from the supposedly natural category.

---

68. I am not arguing that the social and cultural realms are unstructured, or that they do not possess a causal logic of their own. Part of the realist/naturalist project involves the extension of the concept of law and causal structure into the social sciences. Unlike the positivists, however, realists believe that different sciences have different truth standards. The goal in this section is to make distinctions between categories united by definition, like round red balls, and categories united by natural law, like red sulfur.
I caution, however, that it is never simply a case of finding a constant conjunction, or alternatively, a single exception to a hypothesized law (the logician's trick with which philosophers have occupied themselves for centuries). If it is hypothesized that true round red objects are really those united by the fact that they have a maximum life span of one thousand years, Millikan suggests, this finding is not yet grounds for the assertion that a substance category has been located. Millikan contends that "some kind of natural necessity" must be located to explain this longevity of round red objects. If no such explanation can be unearthed, the property is not reflective of a law of nature. The RROs are merely a class, defined through the simple conjunction of all objects that are round and red.

On the other hand, red sulfur is not sulfur that is red; the category does not consist of entities that happen to be sulfur and just also happen to be red. Instead, Millikan writes,

Red sulfur is an allotrope of sulfur and is a substance in its own right. . . . It is not true of red sulfur that it is red analytically or "by definition." Rather, it is true by natural necessity. I argue that Millikan has chosen the example of red sulfur quite deliberately, for the following reason. Allotropes of a chemical element are substances with the same molecular constituents, strung together in different patterns. As a result, they possess measurable property differences. In other words, there is a molecule possessed by red sulfur that makes it sulfur, and a pattern that makes it red. A physical explanation therefore exists for the redness of red sulfur, and the discovery of such an explanation serves to unite red sulfur into a natural kind. The tiniest sample of sulfur can be shown to possess the same properties as an enormous chunk. Ordinary sulfur that is painted red

---

69. Millikan, Language, Thought, 278.
70. Ibid.
can be shown to have a distinctly different structure than red sulfur. Round red objects are, once again, in possession of no such structure. However, it need not be the case that a natural kind has no conventional features whatsoever. "The definition of the kind 'gene' should possess few conventional features," clarifies Boyd by way of example, "whereas the definition of the kind 'fish fork' should be largely arbitrary."71

I can now address the riddle posed by Goodman's grue emeralds that has proved so important for contemporary feminism. The experience of similarity and causation in the natural world leads humans to believe that objects do not change colour dramatically without a change in physical state. Pre-scientific cultures know that a change in fruit or vegetable colour is indicative of a change in flavour and texture: what was once sour is now sweet, for example. Our scientific culture has the tools for expressing this transformation in terms of molecular structure. In either case, we have a realist explanation for the belief that colour constancy is a sign of structural stability, and that colour change is reflective of a change of state. The culture believing that green emeralds will one day turn blue is, therefore, positing one of three things. Firstly, the culture could believe that green emeralds are in possession of a structure that will lead them to change colour, just like an apple or a pear. The culture could alternatively believe that entities sometimes change colour with no correlative change of state. Finally, a culture believing that there are presently uncovered emeralds that are blue is perhaps in possession of a belief of a more complex nature.

In the case of the first and second explanation for the sudden colour change, western science possesses the means for determining whether or not

71. Boyd, "Realism," 140.
minerals are structured like fruits, or for determining whether random structural change ever takes place in minerals. In either case, Harré notes,

[W]e try to find out why something would seem to change from green to blue, some stable thing that would allow for this.\textsuperscript{72}

Failing to find such a structure, we can argue that we lack plausible means of explaining a colour change in emeralds, and thus have no reason for believing that the transition will occur. Without an understanding of molecular structure, reference to thousands of years of colour-constant physical things can still be made. Nothing in our experience of very hard, stable, entities explains why a wholesale transformation such as the green-blue one would occur.

I thus argue that a culture believing that hard dense crystalline things change colour spontaneously does not inhabit the world that we inhabit, and does not have the concept of colour possessed by humans evolved in our world. The hypothesization of grue emeralds still stands in need of explanation, in other words. On the other hand, the fact that there is no culture with such a category does not stand in need of explanation. The fact that we can imagine such a class need not imply that it has roots in reality.\textsuperscript{73}

The class of emeralds that are now green and will turn blue without a corresponding change in their structure is a purely logical construct, one with no basis in nature as we have experienced it up to the present.

The third type of grue emerald presents a slightly different case. It is not reflective of wholesale transformation, as are the first two instances, as it is believed that exposed emeralds are green, while those still buried deep under the earth are blue. It is possible, as I believe Millikan’s red sulfur example was constructed to suggest, that the culture in this case hypothesizes that

\textsuperscript{72} Harré, Varieties of Realism, 119.

\textsuperscript{73} Miller, Fact and Method, 495.
allotropes of emerald are in existence. Allotropes are variations in substances whereby the molecules are the same, but the pattern in which they are organized is different. Much like carbon has allotropes of diamond and graphite, or oxygen has an allotrope of ozone, emeralds could have an allotrope that is blue. However, if it can be demonstrated that these grue emeralds have the same molecules as the green ones, there is still a natural, causal relationship between the two types of emerald. I am suggesting, therefore, that if a blue emerald were found, it need not negate the general thesis that there is a causal structure explaining the greenness of exposed emeralds.

In conclusion, I concede that we do not know for sure that green emeralds are a natural category, and grue emeralds an imaginary logical puzzle. But realist theories about the world can be used to provide a natural explanation for our belief that emeralds are green, that they will not "turn blue" like a fruit, and that if blue emeralds were uncovered at some future date, they would possess an allotropic, causal relationship to green emeralds. Green emeralds, are, therefore, a natural category or kind with highly stable common properties.

**Biological Kinds.** I must still address the central issue of the sex categories. As indicated earlier, poststructuralist and constructivist feminists do not rest their case on logical puzzles like that posed by grue emeralds. It seems patently obvious to these theorists, however, that men and women are neither emeralds nor red sulfur, because there are many existing exceptions to the sex binary. It is therefore argued that there is no "law of sex," no genetic structure that can explain the allocation of bodies into two types. Sex must be a conglomerate of traits, a generalization based on an overall empirical impression of bodily features. Sex is compared to race and social class, and
just as the latter are arbitrary social categories, the same must be concluded of sex.

Realists respond that, on the contrary, there is ample justification for referring to the "law" of sex and the sex categories. Contemporary biological theory is employed in order to formulate a natural distinction between physical kinds and biological kinds. I have referred above to the thesis of "emergent properties materialism." To recapitulate, it is maintained that orders of existence emerge one from the other. The example often provided is that organic life emerged from simple physical components like carbon. Although biological entities do not break physical laws, the laws governing biological entities are more complex, with the result that there is more biological variability than physical variability. Noted biologist Ernst Mayr now adds that biological systems are fundamentally different from physical ones, in that the former are open to their environments.74 The information stored in the genetic code of an organism has no parallel in the physical world. For example, uranium will decay at the same rate regardless of its environmental interactions.75 However, a female mammal with drastically inadequate nutrition will typically lose her capacity to reproduce, while a human female with the capacity to conceive may make an explicit choice not

74. Mayr, Toward a New Philosophy of Biology, 14.
75. Ibid., 61.
to do so. Mayr summarizes the traits of living things as follows:

Organisms are unique at the molecular level because they have a mechanism for the storage of historically acquired information [DNA or RNA], while inanimate matter does not. . . . The presence of this program gives organisms a peculiar duality, consisting of a genotype and a phenotype. The genotype (unchanged in its components except for occasional mutations) is handed on from generation to generation, but, owing to recombination, in ever new variations. In interaction with the environment, the genotype controls the production of the phenotype, that is, the visible organism which we encounter and study.⁷⁶

Because of genetic recombination, random mutation, and the organism's openness to its environment, individual variability is a rule in biology to an extent that it is not in physics.⁷⁷ However, as I intimated earlier, this reality of variability does not mean that biology is without laws. The results of some environmental interactions are more successful than others, in that they lead to the evolutionary survival of the gene code in question. Thus are specific organism/environment interactions encoded in DNA. The genotype consequently contains the evolutionary history of the organism, which then controls the phenotype, except for the crucial portion of the phenotype's program that is open to its environment.⁷⁸

Furthermore, Boyd writes of the necessary indeterminacy of biological kinds. Variability is effectively a law of biology. Evolution depends on

---

⁷⁶ Ibid., 16.
⁷⁷ Ibid., 346.
⁷⁸ Ibid., 55.
variability,

Any 'refinement' of classification which artificially eliminated the resulting indeterminacy in classification would obscure the central fact about heritable variations in phenotype upon which biological evolution depends and would be scientifically inappropriate and misleading.\(^79\)

A complete lack of variability in the biological world would stand in need of explanation, as it would represent a thoroughly unnatural development. Boyd continues that the belief that kind categories must be logically precise is a holdover from traditional empiricism. In place of these old beliefs, he argues, we must recognize that "kind definitions must conform to the (sometimes messy and complex) causal structure of the world."\(^80\)

Building on this overarching theory, Mayr then argues that explanation of regularities or kinds in biology is of a specific nature. A proper explanation in biology, if it is to adhere with the overall theory of evolution, must answer the following question: why is a specific trait in evidence? In other words, the purpose or function served by a biological feature must be uncovered in order to understand it fully. Red sulfur has a specific molecular structure; this structure explains its colour. But we do not need to know why red sulfur is red as opposed to blue. It just is as a result of its structure; red sulfur contains no record of its successful interactions with its environment. Because of our understanding of evolution, however, a prominent biological feature, particularly one evident across many species and many eras, should be explicable in terms of its contribution to evolutionary survival. Therefore,

\(^{79}\) Boyd, "Realism," 142.

\(^{80}\) Ibid., 143.
Mayr does not mince words about the implications of this hypothesis. All phenotypic features (again, the parts of the organism in interaction with its environment) must be understood in terms of the processes of evolutionary selection. A biological law is not identical to a physical law. The former is both more open to variability than the latter, and must answer the specific question, "why?"

I can now further explain the biological law of sex using this realist framework and the research I outlined above. Less than one half of one percent of babies are born with an irregular sex chromosome pattern. There exists a biological explanation—genetic mutation, as opposed to the operation of another discursive regime—for these occasional deviations. There is also an extremely high correlation (98 percent or more) between XX chromosomes and female genitalia, on one hand, and XY chromosomes and male genitalia, on the other. Finally, there is still a remarkably high correlation between XX chromosomes, female genitalia, and female secondary sex characteristics, and similarly for their male counterparts. The explanation for the lower correlations between genotype and phenotype is that new variables have entered the picture: hormones, which the genotype typically controls, and environmental interactions with the phenotype. The connection between

82. Ibid.
the chromosomal differentiation of gonadal sex, and the anatomical differences of the sexes, is, accordingly, recognized as an imperfect relationship. I use the realist argument from above to argue that if there weren't this variability, biological entities would be thwarting the evolutionary process.

More importantly, the mere fact of variation does not in itself mean that the resulting phenotype will survive. When Mayr declares that phenotypes must be explained in evolutionary terms, he is referring to evolutionary features—i.e., features with a long history, features that permit the performance of activities increasing the organism's chance of survival and propagation. Ruth Millikan addresses the same issue in her notion of a thing's "proper function." She criticizes those philosophies that emphasize optical illusions and other logician's tricks to demonstrate the supposed inapplicability of natural laws. A thing's proper function is what it normally does, and what it normally does is that which has served an evolutionary "purpose" of some sorts:

Putting things intuitively, products of evolution have in common with various other kinds of products the fact that they are reproduced or continue to be proliferated because they, rather than certain other things, have been associated with certain functions.\(^3\)

We do not define the evolutionary function of a liver by examining a cirrhosis patient, nor should we define the evolutionary function of sex organs by examining infertile ones. Social theorists will and must insist that every empirical instance of a thing need not fulfill its proper function. I agree that this caution is valid and important. However, the argument that proper evolved function is a matter of irrelevance to theory, and indeed, to human

---

\(^3\) Millikan, *Language, Thought*, 27.
life, is an argument advocating the end of our existence. As Adorno simply countered, "All activities of the species point to its continued existence." With the adoption of a nihilism to the contrary, I find it is hard to see why any theorizing whatsoever would be warranted.

Therefore, the "why" question posed by biology necessitates that phenotypic features that endure are those that enhance reproductive success. If an organism is infertile, it will not pass on its gene code. Similarly, sex hormones are vital to physical development within certain boundaries, and certain chromosomal configurations are more likely to result in healthy bodies than are others. Above and below these ranges, hormonal and chromosomal abnormalities can be harmful or even lethal. Without estrogen and an X chromosome, life itself cannot commence; at the other extreme, too much estrogen can produce cancer. Each extra Y chromosome brings with it a greatly increased risk of health problems and mental retardation. Furthermore, individuals with XY-testes can never conceive, regardless of the amount of estrogen they voluntarily or involuntarily ingest. Barring incredible technological intervention, two XX or two XY individuals cannot hope to parent a child. At the prospect of such future developments, we have no means of knowing the evolutionary implications of the hormone injections and genetic programming that would be required.

Therefore, I argue that the poststructuralist/constructivist contention that the connection between chromosomes and hormones is a continuous

---

84. Adorno, Negative Dialectics, 203.
relationship elides the importance of both the biological limits of these relationships and the relatively stable boundaries between the two basic forms of biological sex. The genotypic and phenotypic division of bodies into two sexes crosses species and millennia. The multi-coloured people of the world could mingle and produce offspring over many generations; eventually, the category of race would become meaningless. The sexed people of the world could do the same and we would still have what we call men, women, and the occasional intersexed individual. I do not to deny that there are substantial areas of overlap, nor obvious exceptions, to the existing sex categories. The biological similarities between the sexes are there for those willing to look for them, just as the physical bodies of intersexuels transgress the artificially rigid binary male/female palpably and demonstrably, not simply discursively or culturally.66

Contrary to some contemporary commentators then, I am arguing that the existence of intersexed individuals demonstrates only that the biological categories are variable, not that there are no laws tending to produce males and females. If one chooses to quibble by stating that this structure of sex is not lawlike in the sense of a logical deduction, this is to miss the point that biological structures are fundamentally different from physical ones. The realist contention that there are natural sex categories is not a simple summation of events like pregnancy, genitalia, facial hair, and the like. I maintain that the abstraction "female" refers to a genetic law tending to produce fertile ovaries and female secondary sex characteristics. The abstraction "male" refers to a genetic law tending to produce fertile testes and male secondary sex characteristics. There is nothing unnatural about intersexuality or infertility. The infertile and the intersexed are no more and

_____

no less natural, and no more and no less subject to the laws of nature, than anyone else. I see no inherent reason why an acknowledgement of the naturalness of variation in biological categories, embedded in a challenge to the domination of the standards of logic and physics in all of the sciences, wouldn't do just as much for the equality of intersexuals as the assertion that they are a cultural construction.

All the same, it is not the case that all humans could choose to be childless, or that all humans could choose to be intersexed, if we accept as the minimal requirement for social theory the belief that the perpetuation of life is a desirable goal. What we call "sex" is structured causally for evolutionary reasons, typically producing two natural categories, as well as occasional, yet thoroughly natural, variations. While culture surely mediates our understanding of sex, and while individuals can surely adopt the roles of the "opposite" sex or even a third sex, the existence of biological exceptions to the general pattern male and female is best explained through reference to natural laws, rather than through reference to other discursive regimes.

Implications for Feminist Theory. My statements cannot be read conservatively, unless all arguments about nature are deemed to be conservative by default. I contend that the poststructuralist and constructivist thesis that feminism must challenge the sex-gender distinction, and challenge the belief in the existence of two natural sexes, cannot be accepted without question. Gender roles have changed substantially in the past 100 years, remarkably in the last twenty. Feminists everywhere are quick to point out that sex roles differ widely across cultures. Throughout this period of the past 100 years, and across the world, it has been believed that sex is a natural, biological phenomenon. Thus, gender has varied across a fairly static biological base. If anything, the scientific drive to attribute sex to a single gene
has intensified the belief in the existence of two biological sexes. In other words, gender has varied widely while sex, or the cultural construct "sex," has remained more or less constant.

I assert that the dramatic changes in gender roles within our culture, and the differences in gender roles across cultures, are difficult to explain if it is argued that the relatively static concept of biological sex is the prime causal force. Above I argued that green emeralds will not turn blue unless there is a causal structure behind this change. Similarly, gender roles cannot change without a cause. Roy Bhaskar puts this in technical terms not originally related to the issue of sex:

[I]f x is relatively unchanging and y is not, 1.) x cannot be the sole source of, or completely explained in terms of y, and 2) y cannot be fully justified or comprehensively criticized in terms of x.87

I have translated this passage into language that is both simpler and more appropriate to the sex and gender issue:

If sex is relatively static (or believed to be) and gender is not, 1.) sex cannot be the sole source of, or completely explained in terms of gender, and 2) gender cannot be fully justified or comprehensively criticized in terms of sex.

If the static sex binary is at the root of sex inequality, the wide variability in gender is unexplained. I therefore maintain that there must be other, quite massive, contributing factors behind the success of feminism. It cannot be argued that the belief in the existence of binary sex categories is the only way in which gender is supported, nor even the most important.

Furthermore, in arguing that gender inequality is best explained in terms of the cultural logic of sexual difference, poststructuralists and constructivists are implicitly denying that there could be any other logic explaining

87. Bhaskar, Scientific Realism, 45.
oppression. I contend that this denial truly does reflect the reduction of sociology to biology, now culturally constructed "biology." It is as though there are no perfectly good reasons (i.e., explicable) to want to oppress someone, apart from their physical shape as constituted in a discourse. Whereas it was for centuries argued that bodily facts justified gender inequality, poststructuralists and constructivists now alleged that it is our belief in bodily facts that provides an adequate explanation. The implication that menial labour would dry up, that cultural perks would be divided equally, in the face of a deconstruction of the sex categories, is at present purely hypothetical. The questions for poststructuralists and constructivists are as follows, as I raised at the end of my chapter on Adorno. Suppose gender and racial inequality were eradicated. What would be wrong with a society in which people of various shapes and colours were exclusively performing the menial labour? What would explain the continued existence of this inequality, if at present this logic is not made manifest? The realist demand for structured explanation suggests that social inequality has more than one logic behind it, and that this logic will remain intact unless it is explicitly challenged.

It remains for me to reply to Quine's thesis relativizing observations to theory, and explaining language acquisition via behaviourism. I think it is highly likely that Quine, and those influenced by his line of argument, could agree with everything I have asserted in this chapter. However, Quine would insist that each of my assertions must be relativized to the quirks of evolution, and to my language and culture. "Yes, yes," he might say, "but how can you prove that our experience of laws is an objective reflection of the world?" It is to this question that I now turn.
Chapter 5

STRUCTURE AND THE EVOLUTION OF SEXUAL FORM AND MEANING

This chapter replies to what I have described as the Quinean component of poststructuralist and constructivist feminism, although there will be passages with continued relevance for the nominalist component of that project. I will provide a fairly lengthy recapitulation of Quine’s position before I begin.

A Quinean Refresher

Quine dissents from the nominalist thesis that similarity is everywhere and hence nowhere. He instead adopts an evolutionary approach and concedes that it is only natural that humans would share certain innate perceptual categories. It makes sense that there is no known culture positing that emeralds are grue. Quine, however, immediately pulls the realist carpet out from under this naturalist thesis. Because evolution proceeds along a series of chance developments, he argues that the possibility that our innate categories could reflect a truth about the world (such as the greenness of emeralds) is negligible if not laughable. Surely, he insists, another perceptual category could have emerged permitting a different, yet equally workable division of the world.

Despite this contention, the interesting philosophical problem for Quine is instead one of reference. With the introduction of language—which Quine argues occurs at virtually the instant of conceptual thought—humans are whisked light years away from the humble origins of sensory data and innate evolved capacities. We have no immediate sense of these categories, and Quine warns that it is impossible to determine which part of the world is being emphasized with any specific word or category. Every word in a language is connected to other words in an infinite loop. Hundreds of
theories may be extrapolated from any single observation. Statements beyond the simplest exclamation "ouch" or "green," therefore, operate in an arena impossible to trace to shared pre-linguistic categories, and correspondingly, to precise referents in the world.

Because of the complexity of language, Quine continues that every individual must learn and understand words in slightly different fashion. In effect, we each have an ever-mutating personalized dictionary in our heads. Even if meaning exists within the context of these dictionaries, just as natural laws are only knowable through their manifestation in empirical events, Quine asserts that meaning is only perceivable as it is expressed in words or behaviour. The intricacy of language relativizes and obscures any originary potency of meaning or sense. Immediacy is accordingly lost, and language is without inner or outer mooring. Although Quine's primary focus is linguistic meaning, reference to and knowledge of any other innate capacities, be they drives, desires, or impulses, must analogously be obscured. Words are the currency with which we interact with others and the world, and words, whether they refer to things in the world, or emotions and instincts, only mean something in relation to other words. Therefore, the fluke processes of evolution render impossible true knowledge, on the one hand, while language destroys the possibility of even a common knowledge, on the other.

Quine drew many implications from his ontological relativism. Because of the indeterminacy of reference, he alleges that there are no neutral observations available either to ground a single theory or to arbitrate between competing ones. Observations are always already theories, in other words, and one of the prime means of defending realism is destroyed. Quine is consistent in his application of this premise, contending that a theory can be
disproved no more than it can be proved.¹ His cross-cultural gavagai example is intended to demonstrate that even relatively simple terms cannot be traced to specific empirical events. It becomes impossible to judge that one culture's interpretation of an event is a more faithful representation of reality than another's, because it is impossible to determine whether the different cultures are even talking about the same phenomenon. All attempts at clarification involve yet more words; at one stage Quine alleges that even the act of pointing is relative to a theoretical backdrop. Within a single culture, Quine continues, the fact of a shared language reduces some—but by no means all—of the possible slippage between words and the world. A culture can therefore establish a more or less coherent perspective on "the world" in the form of, for example, a natural science. All the same, a "fact" in such a natural science is known only against the backdrop of an overarching theory, or yet more words. Even Quine's assertions pertaining to innate perceptual categories are relativized to an overarching theory of evolution, the latter which is by no means true, he admits, in any absolute sense.

Secondly, Quine advocates linguistic behaviourism. The contention that people are "thinking the same" or "feeling the same" because they respond with like words to like stimuli is surely false. In our efforts to understand others, we have only their behaviour, linguistic or otherwise. No matching takes place between words and our innate sense of similarity (except, again, in very primitive utterances). Quine concluded that there is only one possible explanation for sophisticated communication of any sort: "we talk alike for no other reason than that society coached us alike in a pattern of verbal response

¹ I make this point in reference to Popper's famous thesis that theories can be disproved yet not proved. In Chapter Four, I argued that poststructuralist and constructivist feminists occasionally assume the Popperian position. In such instances, these feminists argue that we know for sure that there is no natural sexuality, yet we cannot make any comparable affirmative statements about nature.
to externally observable cues." A culture-wide process of conditioning homogenizes responses and lies at the root of what we wrongly believe to be a shared inner meaning. Two individuals say the same thing in the face of the same approximate stimuli, and "understand" one another only on this basis. Emotions, drives, and tendencies are all acquired along with language. Children are instructed that they are tired when they yawn, and they repeat "I am tired" in similar situations after that baptizing event.

I suggest that Quine might agree with the proposition that reproductive needs necessitate the perception of some distinction between male and female bodies. However, he would undoubtedly caution that the observation of these sex differences will always be contextualized against a backdrop theory, because the relativity of observation is one of his central philosophical tenets. I asserted that Butler, Kessler, and McKenna have used this premise to defend the contention that understandings of biological sex are always derivative of a specific theory of gender. Investigations into sex differences in our culture, they argue for example, typically take for granted that sex is a natural category with two types. Male bodies are perceived and understood, therefore, in relation to female bodies. Since poststructuralists and constructivists maintain, in Quinean fashion, that relationships are derivative of language and culture, it follows that sex differences are always relative. It becomes impossible to ground sex in any givenness of natural bodies. There is no "sex in itself." While Kessler and McKenna grant that some difference between egg and sperm carriers is paramount to reproduction (though with Quine they caution that this minimal requirement is still just a theory), Butler and Foucault have never made concessions of this nature. The allegation is that different gender beliefs could lead to a different interpretation of the supposedly raw data of sex. It comes as no surprise to these theorists that there
are three sexes in some cultures. In a Quinean flourish, they imply that any attempt to arbitrate objectively between the competing gender theories of our culture and these three sex cultures must fail.

Foucault, Butler, Kessler, and McKenna have likewise engaged in creative adaptations of Quine's behaviourism, broadening it to incorporate explanations of non-linguistic behaviour as well. They have maintained, I argued, that sexual behaviour must be divorced from speculation about innate tendencies and drives. Sexual behaviour is, from this vantage point, strictly a question of what a specific society encourages and prohibits. Individual behaviour is gradually fixed or conditioned into a "type" like homosexuality, pedophilia, heterosexuality, bisexuality, and the like. There is nothing innate about the body of another human compelling our sexual interest; nothing within us that is the source of our desire. Furthermore, "being" a girl or boy entails nothing other than a life-long performance or "citation" of behaviours, postures, vocal patterns, emotions, and so on—all similarly entrenched, similarly conditioned, activities. Cultural change, from within this paradigm, results from the interplay or comparison of different discursive regimes, not from the discovery of new knowledge or the expression of individual spontaneity. Accordingly, I have argued that "the new" is always a recombination of the already-existing.

Finally, even if it could be argued that sex is a property structured in nature, or that sexual forms evolved in order to attract attention, poststructuralist and constructivist feminists maintain that it remains the case that the words we use to refer to these facts are situated in the elaborate, transformative networks of language. Hence Butler's allegation that the "sexing" of a baby at birth is

---

3. See Ibid., 15, for example.
comparable to a judge's citation of common law, and Kessler and McKenna's assertion that our association of individuals with a stable sex is a cultural construction. These utterances or beliefs have no origin other than past practice; the respective authorities invoke the weight of culture and thereby perpetuate the legal framework and the binary sex system. We laypeople learn to say "girl" and "boy" because this is the way we have been conditioned or indoctrinated, not because these words tell us something about the world. The words are linked in the dictionary of our cultural history, a history that is passed on, not through the transmission of shared inner meanings, but through spoken language.

If a single thesis can be said to unify my response to Quine and the Quinean strand in contemporary feminism, it is the following: to be related is not necessarily to be derivative of language or culture. Some relations, I will argue, are primary, fundamental, or ontological, or however one chooses to define the facts of existence. I have already alluded to this thesis in Chapters Three and Four; here I will provide a more detailed clarification. I will first contend that the relativity of biological sexual difference is a relativity structured in nature. Using Ruth Millikan's neo-Aristotelian realism, I will further defend the thesis that sex is a property of certain biological substances. I will then explore the thesis that the fundamentals of sexual meaning are located in the body, presenting evidence that the physical forms of male and female bodies have evolved hand in glove. Sexual drive or mood, I will contend, cannot just be an artifact of culturally imposed standards. I will assert that the desire to avoid the charge of foundationalism, represented in the poststructuralist and constructivist reluctance to hypothesize the existence of natural drives, results in a fundamental misunderstanding of biological organisms and laws.
Finally, I will be arguing that the meaning networks of language originate in pre-linguistic categories shared by all human beings. It is of course the case that Quine himself formulated this hypothesis to differentiate his position from that of Goodman. However, I will be asserting that the introduction of language does not absolutely relativize these originating innate categories. I will argue that language is rooted in the world in a much more intimate fashion than is alleged by Quine. While it is not the case that all words in a language will closely correspond to innate pre-linguistic categories, I will assert that archetypal forms with direct implication for our understanding of sexed bodies do have strong links to such categories. The connection of the word "girl" to certain bodies and "boy" to other bodies is not, therefore, merely the effect of cultural authority, as poststructuralist and constructivist feminists argue. Meaningful words have a felt sense that maps onto objects in our environments, some words with closer links than others. Given the salience of sex to evolved organisms, sexed bodies evolve along with innate concepts, and ultimately, words referring to those concepts.

A Postfoundational Law of Non-Contradiction

I now turn to the first component of my analysis of the structured relationship of male and female, as expressed in Ruth Millikan's neo-Aristotelian realism. I concur with the Quinean thesis that female and male bodies can only be understood in relation to one another. However, I will maintain that this relationship is an ontological one, rather than one derivative of or dependent upon language and/or culture. In Chapter Four, I argued along with realists that the natural world was structured according to laws and their manifestation in events. I will now build on that proposition, using Millikan's revision of the Aristotelian notions of property and substance, on the one hand, and identity and non-contradiction, on the other.
I will maintain that the relationship between properties or qualities (as made manifest in things) is a fundamental structuring principle of reality. Thus will I argue that structure and relationships are sometimes ontological and not just epistemological, and not just an artifact of our position on the evolutionary ladder as Quine asserted. Although the content of these ontological relationships changes and evolves over time, the relationship of properties is a fact of existence. Using this background philosophy, I will argue that male and female are properties of many living creatures, properties presupposing or related to one another ontologically, *from the very beginning*, and not merely in theory or in language.

**Substances and Properties**

As indicated, Millikan revives several ancient philosophical concepts, definitions of which are necessary. Substances and their properties, she writes, are the "basic ontological categories," or the fundamental "variants in world affairs." A *property* is something the possession of which excludes, as a result of the operation of laws, other properties in a specific range. Properties are properties "by virtue of having contrary properties." For example, to be green is to be green instead of blue or red. Properties, in other words, are what they are by virtue of relationships to other properties. A thing that is red is not green by virtue of natural necessity. Colour is therefore a range of properties, and green one possible value in this range. Millikan thus incorporates the notion of structure into the definition of property.

Furthermore, Millikan continues, there is no green "in itself." Properties exist in space and time in *substances*, not as forms in a Platonic realm.6

---

5. Ibid., 197.
6. Ibid., 11.
Substances are "logical subjects in re," meaning that they, too, are variants in world affairs. Substances are entities capable of being characterized by a number of properties. But not all things (or nouns) are substances. Substances possess one property in a range "to the exclusion of others in that range," again, by virtue of natural law. In plainer language, a substance is something about which we can collect "relatively stable" information in the form of these mutually exclusive, structured according to natural law, properties. Therefore, I allege that the concept of property is essential to ontology because it gets at the structured nature of reality. The concept of substance is essential to ontology because properties, as manifestations of physical laws, require entities in order to exist at all.

Further words of clarification are in order. There can be no a priori statements as to what is a property, what is a substance. Determination of a thing's ontological status depends on empirical investigation. Individuals, for example, can be substances, even though many of their properties must be temporally qualified (i.e., they change over time). Millikan maintains that if there is something that, for reasons of natural necessity (like a micro-structure), "instantiates a collection of properties at a particular place or a series of connected places," we have grounds to call an individual thing a substance. Furthermore, the fact that something is a substance does not mean that it cannot also be a property. Gold is in possession of a range of properties to the exclusion of others and is in this respect a substance. It is, however, feasible to think of gold as a property of something else. It is also

---

7. Ibid., 259.
8. Ibid., 278.
9. Ibid., 254.
10. Ibid., 275.
11. Ibid., 264-66.
12. Ibid., 292.
possible to collect substances into a variety of different categories. Metal is a category from which perspective gold and silver each has one atomic number, one melting point, a specific electrical conductivity, etc.\textsuperscript{13} But it is entirely possible to look at the world without the schema of metals. I will switch my example from gold to the more familiar one of green emeralds. Our culture collects emeralds into the category of gemstones, and as a consequence thinks of emeralds in terms of their cleavage (tendency to break in a definite direction) and hardness (as measured on the Mohs scale). Surely the category "gem" is somewhat arbitrary, however, and our culture or any other could put emeralds in another grouping.

Poststructuralists and constructivists might rejoice that my agreement regarding the capricious nature of these divisions of the world provides a perfect illustration of grue/green thesis, or the relativity of sex to gender thesis. Millikan responds that on one front, poststructuralists are correct,

\[\text{A}] \text{great deal of room is left for decision on our part as to how to divide the world into sensible-sized and sensibly unified temporally extended wholes to be recognized and honored by coordination with common and/or proper names.}\textsuperscript{14}

Millikan nonetheless maintains, and I concur, that no matter what, gold and emeralds are substances. Each is identical to itself, or "always the same as itself relative to certain property ranges."\textsuperscript{15} Millikan insists that it is a characteristic of a substance to possess roughly—although not exactly—the same properties across time, regardless of how that property is measured.\textsuperscript{16} Thus, emeralds

\begin{itemize}
\item \textsuperscript{13} Ibid., 275.
\item \textsuperscript{14} Ibid., 293.
\item \textsuperscript{15} Ibid., 276.
\item \textsuperscript{16} For example, water is a substance with one property that it freezes at the same temperature all of the time. Although it freezes at zero degrees Celsius or thirty-two degrees Fahrenheit, it is not the case that it sometimes solidifies at fifty-four degrees on either scale. Variables such as altitude or salinity do change the boiling point of water. This variability is also lawlike, however; it is not the case that a certain percentage of salt will make water boil at one temperature on one occasion, and a different temperature on another occasion. See Millikan,
will always have the same cleavage and hardness. If most cultures do not measured emeralds on a Mohs scale, our decision to do so does not contradict the information provided by sight or touch, but rather supplements it.17 The information about the various properties of emeralds is non-contradictory for the explicit reason that emerald is a substance.

Millikan maintains, therefore, that the culture-dependent status of categories does not reduce substance to a similar culture-dependency, nor does it negate the fundamental relatedness of properties. Similarly, if we evolve to a gold- or emerald-free world, it would still be the case that gold and emeralds were substances at one point in our history. A substance or property of which we have repeated experience, that is "entrenched as a historical variant in nature," can thus be awarded ontological status.18 Substances and properties are, in conclusion, facts of existence.

The certainty with which these statements are made is not logical certainty, but, as I suggested at the beginning of Chapter Four, a certainty provided by "natural necessity," as discovered through engagement with the world. Millikan therefore warns (as she did in Chapter Four in her discussion of the "proper function" of a thing) that it is misguided to use the existence of illusions and errors to discredit the general hypothesis that substance and property categories approximate ontological structures. I will employ the example of colour again. Many philosophers have suggested that optical illusions and colour blindness demonstrate the foolishness of the hope that colour could represent a real-world property. It is observed that one can focus

\footnotesize

17. This general thesis is confirmed by ethologist Konrad Lorenz. He writes that different creatures may have different capacities in their environments. Regardless of the capacity in question, however, the information provided is never such that contradictory messages are communicated at the same time. See Konrad Lorenz, *Behind the Mirror: A Search for a Natural History of Human Knowledge* (London: Methuen, 1977), 12.

on a red mark and a green mark on a piece of paper, and eventually, the red and green will appear superimposed. If our sense of colour can be so easily manipulated, the argument runs, how can it be presumed that colour is an ontological property?

Millikan replies to the contrary,

Suppose that objects often looked this way to us when we focused as usual. . . . Suppose that no one's right eye ever agreed with his left. . . . Or suppose that no agreement could ever be reached between people on the color of things. . . . Our confidence that red and green are contraries . . . is supported over and over again by empirical evidence. And this is evidence for the objective validity of these concepts. . . .

Millikan is insisting that despite the possibility of illusion, and despite the possibility of colour blindness, the vast weight of evidence suggests that things are not red and green in the same spots at the same time. The fact that there are colour mixtures—that orange is a mix of red and yellow, for example—does not negate the core argument that a thing that is red is not at the same time orange, it is either red or orange. The structural law of non-contradiction illuminated in this example approximates reality in many additional cases. As I similarly argued in Chapter Four, the possibility of colour blindness or bad lighting is to be granted no more philosophical weight than is the possibility of liver disease when studying the evolutionary function of livers. Neither instance detracts from the laws of nature structuring substances and properties in general. Our sense of colour, Millikan therefore concludes, reflects "an ability to map an outer-world property." Colour, like emeralds and gold, must be awarded ontological status.

The preceding issue, however, diverts attention from Millikan's more important hypothesis: it is the substance-property relationship that is

---

19. Ibid., 270.
20. Ibid., 271.
structured according to natural laws. To repeat, Millikan is contending that a substance possesses the same properties over time to the exclusion of other properties within a specific property range. Substances are therefore identical to themselves. I would add that red is therefore related to green, not to sweet, sharp, or cold. Things might be red and sweet or red and salty, red and sharp or red and soft, red and hot or red and cold, but they are never red and green. Red and green are related in a fundamentally different way than are red and sour. To return to the realist theories of Chapter Four, one set of natural laws structures colour into red and green, whereas another set structures sweet and sour. Millikan is arguing that we learn to think of red in relation to green through the empirical experience we have of non-contradiction between red and green. We develop a sense of red, and are able to identify it over and over again, because of this empirical experience. Therefore, colour is a property of substances structured by these relations of non-contradiction. Millikan summarizes as follows,

Hence the identities of substances, of properties, and of contraries of properties are identities only as in a natural nexus with one another. Identity is a structured natural phenomenon. . . rather than merely a "logical" phenomenon.\(^{21}\)

Red not only could not exist without red things (as nominalists have historically argued), it would not exist without blue and yellow things. There are no red things without things of another colour. Red is relative to these other colours, but this is a relativity at the heart of being, not language.

I assert that it is the last component of Millikan’s argument that is ignored in the nominalist focus on individuals, or in the Quinean emphasis on the relativity of objects to theory. It is not the case that red is relative to the laws of light in our culture, and in another culture, relative to the laws of taste or

\(^{21}\) Ibid., 257.
sound. The nominalist thesis that a green emerald or lump of sulfur exists only as a particular is, therefore, as much of a misrepresentation of the structure of nature as is the constructivist thesis that light is a theory that relativizes colour. Millikan's realism stresses that properties are related in their innermost nature. The fact that identity is relational does not diminish its ontological status; rather, it grounds some of the relationships between individuals in nature. Therefore, I argue, to speak in terms of individuals first, and relationships afterwards, as nominalists do, or to relativize properties to theory, as constructivists and poststructuralists do, is to ignore the structuredness of being as reflected in ontology.

In conclusion, Millikan has salvaged Aristotle's logical categories even as she heeds contemporary warnings about logical certainty and absolutes. She stresses, not that logic is irrelevant to the study of nature, but rather that it represents a fundamental misunderstanding to conceive of logic as a system of formal tautologies—like mathematics—which does not depend on the world but can be applied to that world all the same (as Goodman and Quine have quite freely argued). Millikan instead demands that the process be reversed, as it was for Aristotle. Accordingly, the laws of non-contradiction and identity that she employs are derived from our knowledge of nature, with the added benefit of our contemporary understanding of the differences between biology

---

22. Should another law one day be hypothesized to explain colour better than the laws of light, such a law would in all likelihood continue to support our understanding that colours are structurally related to one another.
and physics:

[T]he law of noncontradiction as applied to representations reflects a thoroughly natural structural principle rather than an a priori metaphysical or rational principle, or the workings of our language (or, say the workings of a constructive Kantian understanding). . . . If the law of noncontradiction is grasped "a priori," this must be so only in the sense that nature, via evolution, has built this grasp into us as a mirror or reflection (possibly only a sufficing reflection) of a structural principle in the natural world with which we must deal in order to survive.  

Therefore, Millikan's contention that substance and property categories and the law of non-contradiction have a role to play in ontology does not conflict with the Chapter Four thesis that biological substances will often have less clear-cut boundaries than physical substances. "Some substances are perfect," Millikan simply notes, "others imperfect." The fundamentals of biological reality are still circumscribed by substance/property structures. Our knowledge of the structure of reality may be less than logically certain, and it is unquestionably acquired a posteriori, but it provides the best possible explanation for our experiences.

**Sex as a Structured Natural Property**

I will now apply Millikan's analysis to the issue of biological sex. It is true that there is no "sex in itself," that sex requires the substantiating presence of living creatures. It is wrong, I maintain, to move from this assertion to the contention that sex is a fictitious causal force (as I demonstrated in Chapter Four), or to the classic nominalist thesis that the prime components of reality are individuals. The treatment of sex as an attribute of *individual* bodies

---

23. Millikan, *Language, Thought*, 257-258. Millikan (269) therefore synthesizes the superficially contradictory Aristotelian thesis that properties are related to their contraries "in their innermost natures," with the Leibnizian tenet that natural things cannot be one thing and their opposite at the same time.

24. Ibid., 276.
overlooks the fundamental nature of the relationship between the values of the sex property. Accordingly, the poststructuralist and constructivist thesis that an individual's sex is dependent on this relationship between variously sexed bodies is correct. However, I would vehemently deny the Quinean variant of this argument that alleges that this dependency is cultural or linguistic. I would also reject the further implication that, through the formulation of a different theory, male and female could somehow shed their ontological connection. Sex is, as I think Millikan would concur, a property. Even if we identify girls because they are "not like" boys, this relationality is a fundamental structural fact about the world, not an artifact of thought, language, or culture. In other words, the relationship between the sexes is as real, and as fundamental, as are the individual properties in the relationship.

I will cite one last explanatory passage from Millikan, as it expresses succinctly a core contention of my dissertation:

> It is not that "in the beginning" there were properties that in their own selves—in order to be what they were—could have been indifferent to all other properties and that then something else came along and made some of them enemies.  

Thus, to be a girl is, from the very beginning, not to be a boy. Girlhood could not exist in a state "indifferent" to boyhood. The body is programmed to assume a property in the sex range so that to possess the capacity to reproduce is both to exclude and to require the existence of bodies with the capacity to impregnate. While some of the details of sex are less clear-cut, it is not the case that a person's sex could also turn out to be gold or another set of ears. Just as red and sour are related in a different way than are red and green, male and female are related in a different way than are boyhood and sourness. Therefore, the fact that we would not have a sense of women were there no

---

25. Ibid., 269.
men has different implications than those alleged by poststructuralists and constructivists. I maintain that there could be no human society, with our evolutionary history, inhabited only by individuals who possess the biological properties of those we now call women. The individuals in such an evolutionary counterexample would either be hermaphroditic and in possession of different bodies, or, shortly, dead. The point is that our evolutionary outcome is not derivative of a theory about sex, it is structured into the "theory"—really, an evolutionary law structuring male and female properties out of the same embryonic gonadal mass—from the very beginning.26

It might be possible to adapt Millikan's argument to the thesis that sex is a property structured like colour, capable of many tints and tones. In other words, it could still be argued that sex is indeed a natural property, but one organized along a range rather than a binary. I suggest that the debate then becomes an issue for empirical science, however, rather than a data-free speculation. As such the issue is best addressed in the context of the theories presented in Chapter Four, as I did at that time, and in the context of the theories I will present in the next section. Furthermore, as stated above, the fact that colour is a continuum does not belie the core realist thesis that while things may be orange, they are not red and yellow at the same time. What I have demonstrated in this chapter is that in either case, the "dependency" of biological sex differences on relationships is not purely a culturally relativizing dependency. It is not as though some societies have a sexless regime and others a twenty sex order. There seem to be a constrained number of options that can be pursued.

26. See my discussion of fetal sexual development in Chapter Four.
To this extent, the property of sex is "relative" to a theory of gender, but not to the absolute extent alleged in some quarters. Even if there is some blurring of the boundary between girls and boys in instances of intersexuality, girl and boy are properties related in an ontologically necessary fashion. We do not ask if a newborn is a girl on one hand, or sour on the other, just as we do not ask if the baby is an apple or an orange. Even Kessler and McKenna record that all cultures appear to assign babies at birth to sex categories via a genital inspection, and that there has never been a report of a culture with no sex categories.27 As a property of biological entities, I agree that sex is not structured as definitively or determinately as are some physical properties. Sex is, all the same, structured. A decision to see sex as producing three properties in a range as opposed to two would not change this ontological fact.

Form and Meaning

I will now provide a concrete illustration of Millikan's thesis depicting the ontological relationship between properties, which I employed in my contention that biological sex is such a property relationship. I will address the issue of the evolution of the human form, presenting evidence that it has evolved such that an observer of that form is assumed. Distinctive patterns appear on the human body designed to attract attention and solicit a behavioral response. A significant number of these patterns are tools of sexual communication. Thus, the male form evolves with the "knowledge" that a female will be in the audience, and vice versa. In the process of making this argument, I shall be presenting a challenge to the behaviourist strand in poststructuralist and constructivist feminism. I assert that the capacity to respond to an evolved form in anything other than a purely reflexive fashion necessitates the development of a consciousness capable of recognizing that

27. Kessler and McKenna, Gender, 36-37.
The evolution of consciousness is a result of the evolution of responsiveness, primitive in many organisms, more complex at higher levels of evolution, material and real in all cases. The implication of these two theses together is that the body is naturally meaningful; the roots of meaning are structured right into the body. In slightly different wording, I will be arguing that the body is designed to attract attention and solicit behaviour, to be "understood" by others, and that, furthermore, this understanding is also built-in to the body. The specific issue of linguistic behaviour will be broached in the third and final section of the chapter. I will be relying on the theories of biologist Adolph Portmann on the one hand, and phenomenologists Maxine Sheets-Johnstone and Eugene Gendlin on the other.

Evolutionary Footnote

Throughout this discussion, it will be important to keep in mind several key concepts in evolutionary theory introduced in Chapter Four. The first is the differentiation between teleology and adaptation to the environment. Teleologies presume that organisms are goal-directed or future-oriented because they are acting in fulfillment of an inner purpose or telos. The most famous example is that of the Aristotelian rock, thrown in the air only to return to the ground because of its earthen nature or essence. The evolutionary concept of adaptedness, alternatively, maintains that living organisms often behave as though they were goal directed, because successful adaptations to the environment have been encoded in that organism's

---

28. Adolph Portmann was a German biologist producing work through most of this century. Portmann couches his theories in something of a vitalist evolutionary theory, which is suspect from a Darwinian perspective. His rationale is too complicated to entertain in this dissertation, and, more importantly, does not affect his contentions about the evolution of form which I will be employing. In other words, Portmann's research can be accommodated from within a Darwinian theory of evolution based on strictly chance developments.
genotype. Biological organisms contain a living record of these past adaptations, and they act in fulfillment of a genetic programme that often meets their survival needs for this reason.

Today, it is argued that the postulation of any innate programme directing individuals towards something else—such as a sex drive—is an Aristotelian remnant. A clearer understanding of evolutionary theory demonstrates that this is not the case. But this clearer understanding also illuminates the ways in which the possibility of change and unpredictability must always be incorporated into any analysis of living creatures. The DNA genotype structures, without predetermining, an outcome within that structure. An organism's phenotype is to a certain extent open to its environment. While it is the genotype itself that determines which parts of the phenotype will be open, there will all the same be aspects of an organism's behaviour that are unpredictable.

Secondly, the use of the terms "higher" and "lower" in reference to various forms of life must be clarified. There is a justified contemporary reluctance to affix these adjectives to living creatures, for fear of ascribing an evaluative term to an evolutionary process that is not governed by any overarching telos. However, biologists often require the means to convey the fact that some forms of life are capable of more complex interactions with their environment. "When we use the terms 'higher' and 'lower' of living creatures," writes Konrad Lorenz, "our evaluation refers directly to the amount of knowledge, conscious or unconscious, inherent in these living systems..."29 Similarly, Adolph Portmann stresses that "higher" forms of life are higher because their relation to the world is more inclusive, more

29. Konrad Lorenz, Behind the Mirror, 28.
complex, and richer.$^{30}$ In particular, Portmann emphasizes that a richer connection to the world includes more intricate bonds to other living creatures:

The higher vertebrates evolve, the more social relations they form, both by transmitting more social stimuli and by receiving more sense impressions connected with social life.$^{31}$

Thus, although it is incorrect to intimate that humans are superior to frogs in all respects, the human brain does record and store more complex information than does the frog's. The former can be said to support a higher form of life for that reason.

Thirdly, the question of whether evolved traits are by definition traits best-suited to their environment. Fortunately, I do not have to provide a definitive answer, because there is some controversy on this issue. Ernst Mayr cautions, for example, that "not every character of an individual or of a species is optimally adapted."$^{32}$ I will assert with conviction, however, that traits that are evident across many eras, and across a broad range of creatures, are functional in at least some sense. Biologists write to this end, "Functional DNA sequences change slowly across evolutionary time as compared with nonfunctional DNA sequences."$^{33}$ Mayr, despite his caveat in this paragraph, concluded in Chapter Four that "No feature (or behavioral program) of an organism ordinarily evolves unless this is favored by natural selection."$^{34}$ Traits observable across many creatures are, accordingly, "highly conserved," those without such consistency are "poorly conserved."$^{35}$ I will be arguing

$^{32}$ Ernst Mayr, *Toward a New Philosophy of Biology*, 146.
$^{34}$ Mayr, *Toward a New Philosophy of Biology*, 54.
$^{35}$ Ibid.
that the general structure of sex traits is highly conserved, with interesting evolutionary modifications across species and time.

**Meaning and the Evolution of Human Form**

I now turn to the substance of this section, commencing with a discussion of various understandings of meaning. Traditional definitions of meaning maintain that it is the linkage or correspondence between a referent, which is usually understood to be something in the world, and a symbol. The OED, for example, defines meaning as follows:

> That which is or is intended to be expressed or indicated by a sentence, word, dream, symbol, action, etc.; a signification, a sense.\(^36\)

Thus, the word "elephant" refers to a large-eared gray creature, and the word "happy" refers to a psychic state of contentment or pleasure. In either case, the received understanding of meaning holds that a word or symbol has a determinate sense, as it is ultimately traceable to a single referent. It is this determinacy that is challenged by Quine and the strand of poststructuralism and constructivism influenced by his thought. Quine asserts that meaning is always indeterminate. Just as males and females are only knowable against a background theory of sex, Quine alleged that words and symbols can be traced neither to perceivable referents in the world, nor to the intentions of the subject. Thus is it impossible to map the word elephant onto a set of stimuli or a real-world elephant, while happiness is only experienced in comparison to a range of other emotions, all circumscribed against the backdrop of a language and culture. Even the words in the above dictionary entry must be further defined, ad infinitum. Meaning is always like this, Quine concluded,

a relationship between words and yet more words, rather than words and objects.

Biologist Adolph Portmann agrees that meaning is a relationship, defining it in those very terms, "the recognition of a general relationship." However, like Millikan, Portmann sets out to demonstrate that meaning is a relationship structured into our very being, in this case, the forms or patterns of our bodies. While animate form is typically—and wrongly—overlooked in the contemporary scientific emphasis on genetics, Portmann alleges that it plays a fundamental role in evolution. He locates the ingredients of a meaning-laden social life in these evolved forms.

Portmann begins with some observations about animate form. For example, the visible outsides of wild animals are almost universally symmetrical. Piebald creatures are by and large the product of domestication. Portmann is not suggesting that leopard halves are mirror images of each other. Rather, it is quite difficult to distinguish one side from the other, whereas the family cat is typically notably asymmetrical. The fact that domestication leads to asymmetry suggests to Portmann that feral symmetry must serve an evolutionary purpose. Furthermore, while it is often difficult to distinguish species on the basis of an examination of their internal organs, Portmann asserts that animal outsides are quite singular, falling into reasonably well-defined (from the perspective of biological science) species categories. While the relative homogeneity of insides is often used to defend the thesis that species are cultural constructions (from the genetics-biased perspective that "inside" is of greater significance than

---

38. Ibid., 26.
39. Ibid., 30-31.
40. For example, the argument that symmetry is simply easier to encode genetically would not answer the question why this ease is given up when an animal is domesticated.
"outside"), Portmann vehemently disagrees. "What is presented to the eye," he instead concludes, "is formed according to different laws from what is invisible." He will formulate hypotheses about these laws shortly.

Portmann then draws attention to the many ways in which the appearance of higher species is more distinctive than that of lower animals. In lower animals, the head is often barely distinguishable from the body. Portmann records the blank faces typical of these creatures. The head region of highly evolved animals, on the other hand, is typically accentuated in a number of ways. Hair distribution unlike that found on the body, an elongated neck, and colours atypical for their surroundings are but three of the most obvious features drawing the eye to the face. For example, in comparing true monkeys to lemurs, the former have manes and beards while the latter have none. Some monkeys, like the mandrill, even have an extremely rare blue on their nose. Portmann expands:

We must once more remind ourselves for a moment of the endless number of almost expressionless heads belonging to the lower mammals . . . all the mouse-like and rat-like faces of the simpler groups, distinguishable only by a zoologist. Then we can realize what special features are revealed in the heads of the higher animals, and how significant it is that the mood of the moment should be manifested externally.

The generic nature of mouse and rat faces does not mean that these creatures find one another indistinguishable. For the moment, Portmann is merely suggesting that the possession of a more elaborate form makes possible the expression of more complex moods. The observation seems obvious, yet

---

41. Portmann, Animal Forms, 33.
42. Ibid., 75-79.
43. Ibid., 70-71.
44. Ibid., 75.
45. Ibid., 78-79.
46. Ibid., 189.
little research has been conducted into what is really an astonishing evolutionary development.

Portmann indicates that the evolution of reproductive organs displays a similar trend. For example, the male and female functions are united in many lower hermaphroditic organisms. Moving up the evolutionary tree, these functions separate into two forms. However, the sexes still resemble one another in virtually all respects except the shape of their reproductive organs. "[T]he meeting of the sexes," Portmann observes, "depends upon characteristics that are very thoroughly hidden [to the eye]." Furthermore, Portmann notes, the form of the respective genitalia is governed by purely functional considerations. Reproduction plain and simple is the goal; there are no bells and whistles, so to speak. In contrast, the genitalia of higher animals are truly spectacular. Hair whorls are contrasted with hairless spots, red appears liberally, testes descend from the abdomen, vulvas expand, and penises increase in girth. Such a correlation between form and evolution is evident across a broad swathe of the planet's creatures.

On the basis of the above observations, Portmann draws a series of conclusions. In other words, he formulates hypotheses about the laws of the visible. Firstly, he avows, animate form is clearly designed to attract attention. It furnishes what he poetically calls a "feast for the eye," or performs a "composition" for an appreciative audience. The "eye" of an observing creature is, of course, a synecdoche for the nervous system of an entire animal. In other words, the perceivable form of many organisms refers

---

47. Ibid., 168.
48. Ibid., 166-182.
49. Ibid., 25.
50. Ibid., 162.
to and implies the existence of creatures capable of witnessing these forms. Portmann elaborates,

[W]e are presented with optical structures, organs to be looked at, the total appearance of which has a meaning only when it is appreciated as being directed towards a beholding eye, be it that of a member of the same species or that of an enemy. These visual organs are the transmitters tuned-in to a very special receiving set; their transmissions must be judged with respect to the particular character of the receiving organ.\(^5\)

Therefore, appearances—particularly those of higher animals—are nonsensical outside of a relationship to an observing other.

It is taken for granted that a full understanding of the operation of lungs can only be had with a knowledge of atmospheric gases, or the digestive apparatus, with a grasp of the type of nutrients in an environment.\(^5\) Portmann now asserts that the relationship between animate form and eye is governed by evolutionary laws as "strict" as are these.\(^5\) Since I am interested in biological sex, the gaze of fellow species members is of particular significance, and it is the sole relationship I will consider here. A student of Portmann’s quips, "[A]ll the training in the world will still leave a dog bored with ballet."\(^5\) Ballet does not act as a stimulus for a dog (barring a steak bone performance), whereas another dog will provide this stimulus. In the case of an individual human or even an entire culture that dislikes ballet, this dislike will not be the same as the sheer indifference of the dog. The dog’s gaze will but momentarily pass over what is a feast for the human eye. The evolutionary contrast between interest and indifference to a specific form must therefore be embodied in an appropriately programmed organism; form

---

\(^{51}\) Ibid., 111-112.
\(^{52}\) For example, lactase enzymes digest lactose sugar.
\(^{53}\) Ibid., 113.
and response must evolve together. Portmann accordingly awards the animate form and observing eye of a single species the status of a "functional unit," as is the case with digestive system and food, or lungs and air.\textsuperscript{55}

There is a way in which the linkage between formal appearance and observing eye is not as essential as is, for example, the connection between lungs and air. An individual organism's life is not immediately threatened if it lacks a suitably disposed audience for its formal shows. However, the continuation of the species is certainly so threatened. Form is, for this reason, comparable to language. Portmann observes that the physical capacity for speech, as reflected in the larynx, is present in virtually all human beings at birth. However, contact with other humans is necessary for the full potential of speech to be realized. The potential for speech, along with the general patterns that speech can take (for example, the limited number of phonemes expressible by humans), is hardwired into the species' genetic code. The actual speaking is, however, dependent on the individual's interactions with a group.\textsuperscript{56} This interaction with fellow species members, Portmann maintains, is not simply left to chance. It is not the case that group life could just as likely not take place. Portmann contends that the peculiar slowing of human growth from the second year of life until puberty (not found in other primates) serves to ensure that we mature in close contact with our kin.\textsuperscript{57}

Portmann concludes that animate form is like speech, a potential encoded in the gene not fully realized until a receptive audience, the other half of the functional unit, is encountered. The perceivable form is designed to attract the attention of members of one's species; unless these other creatures are

\textsuperscript{55} Portmann, \textit{Animal Forms}, 113.
\textsuperscript{56} Portmann, \textit{Essays in Philosophical Zoology}, 111-113.
present, the form's full evolutionary purpose will not be fulfilled. For example, I suggest that the eyebrow might protect the eye from sweat, but its arching in surprise or furrowing with rage will have no impact without an audience. I must stress again that evolutionary selection has served to ensure the likelihood of this contact. Phenomenologist Eugene Gendlin provides a helpful clarification of the concept of functionality in light of this further analysis,

[T]he living body . . . also includes "unfinished" or "potential" patterns for certain preordered interactions with objects in the environment. These objects may or may not be present, yet the body order includes the patterns of interaction that could obtain if they were present . . . We say that not only is the body order "structural," it is also "functional" in that it includes the orderly patterning of many functions that will not actually occur till certain objects present themselves.  

The survival of the individual is in a sense the first order of business, and is provided for reflexively. However, individual survival is merely the necessary first step of species' longevity. The full realization of the individual's potential, and the survival of the species, rests on the presence of other individuals. Only then can the functions implied by animate form be fulfilled.

I assert that such an understanding of form poses a yet more explicit challenge to the nominalist tenet that individuals are the building blocks of existence. Portmann is demonstrating a specific way in which other individuals are an extension of the self, as the functional unit form/eye evolves together. Furthermore, I suggest that the Quinean belief that the relational aspect of meaning renders it secondary in ontological stature--derivative of and hence relative to language and culture—is further

threatened. The mere establishment of a relationship, Portmann demonstrates, is not enough to transpose meaning to the realm of language and culture. Animate form represents an evolutionary, ontological, and genetically encoded connection between subject and object, self and other, individual and society, and finally, nature and meaning. A contemporary commentator on Portmann concludes succinctly: "Animate bodies are already a system of meanings."

The Moody Animation of Form

At this juncture, the biological arguments I have been employing incorporate concepts of experience or inwardness. I maintain that a delicate balance between reductionism, the doctrine that all behavior can be explained in terms of biology, and voluntarism, the principle that behaviour can be explained purely in terms of individual will, is thus ensured. The existence of a consciousness capable of making decisions will be hypothesized, albeit one for which no metaphysics is required. I will argue that behaviour is the combined product of the form structured by functional units, and the moody content of the creatures on both sides of these units. I assert that this balance will provide the basis for a powerful challenge to poststructuralist and constructivist arguments tending to explain behaviour, including sexual behaviour, purely in terms of cultural artifact.

Above I hypothesized that the continuation of much of animal life depends on the interaction of individuals, at least some of which (but by no means all) is sexual interaction between males and females, and that provisions for this interaction are located in our physical appearances. Now I will advance the argument that some forms of species' communication are

---

tightly constrained by form, while other instances are less so. Even in the presence of an attentive other, I will suggest, the precise nature of the contact between two individuals depends on more than the displaying of a certain form before a certain eye. Communication, although structured in the body, is not simply a logical deduction from the two poles of a functional relationship. "Having a certain part," asserts phenomenologist Sheets-Johnstone, "in no way entails the having of a certain behavior." It is at this point that poststructuralists and constructivists conclude that meaning must be made relative to language, because cultural variables are alleged to override biological forces. But this is not the only theoretical option available, although it undoubtedly explains a portion of our behaviour. Just as causal depth was used to explain empirical variability in Chapter Three, another tradition (evident even in the writings of Darwin) stresses that animal mood, inwardness, or an "inner psychical world" must be attributed to explain behavioural variability. For this reason, I will occasionally refer to the theories propounded in this section as "emotional realism." Living forms are always in a certain mood, and this mood animates the beings on both ends of a functional unit. I therefore locate mood as a causal law of animal behaviour.

For example, mood, although it is probably only instinctual at this level, explains the contrast between a dog's indifference to ballet and a human dislike for the art. Even in the case of a relatively less-evolved animal,

---

60. Ibid., 329.
61. Portmann, Animal Forms, 185.
Portmann begins,

[W]e must presume that it has a particular inner state, in order that certain processes in its environment should act as stimuli at all.62

Thus, Portmann observes that male grasshoppers make one sound when in proximity to other males of the species, and a second at a distance. The former sound is more threatening, and it leads the grasshoppers to distance themselves. Some primitive act of differentiation is taking place, although it is surely not a conscious one. The grasshopper's behaviour requires both this inner state and the physical form furnished by another grasshopper. Near/far is a relationship, yet the grasshopper has evolved so that the signaling insect is in a state in direct correspondence to this variant in world affairs.63 Adapting Ruth Millikan's language, I assert that inwardness is a property because a specific state is experienced in relation to, and by natural necessity to the exclusion of, other states.64 Thus is a formal structure in the world transformed into an inner property, a property that then lays the groundwork for the experience of mood in higher animals.

I will illustrate the application of this thesis to the issue of human inwardness. A connection between mood and weather might be hypothesized. Sadness is experienced on cloudy days, and happiness on sunny days. Adorno suggested that our experience of pleasure was a material capacity related to our experience of pain. Portmann furnishes clearer means of making this relational aspect of mood truly material. I suggest that the structure of happiness and sadness is encoded in our genome as a result of the fit between the organism and its environment. Mood, as a consequence, has

64. Once again, the making of this argument about properties and substances need not dictate that the laws in operation are as rigid and certain as are the laws of physics or logic.
the potential to come as an authentic response to something in our surroundings. Mood is not a merely a "subjective disturbance" willfully chosen from a spectrum of infinite possibilities, but nor is it by definition always a cultural construction. Eugene Gendlin expands on this embodied aspect of mood or emotion,

"Coming" is a characteristic of the body. . . . appetite comes, also orgasm, tears, sleep. You recognize the bodily nature of such comings. Emotions also come in this way. You can feign joy or anger but to have them, they must come.

There is, I assert, a material difference between moods that come and moods that are simulated. While Darwin himself remarked that a simulated mood can lead to something like an authentic feeling, recent studies show that a fake smile is accompanied by different neuro-physiological markers than a real smile. Therefore, I argue that one can awaken to a sunny day and feel an authentic happiness come over oneself unbidden, whereas forcing oneself to make the best of the occasion will not be quite the same. The mood of happiness cannot be reduced to the behaviour of smiling, whereas the former often gives rise to the latter.

I repeat that proof of the relativity of mood cannot in itself, therefore, be used as proof of its relativity to culture. The gene code of an organism contains a fixed record of that organism's successful historical interactions with its environment. Thus, humans can neither fly with their arm-wings, nor breathe under water with their lung-gills. Just as these attributes reflect an evolved fit between form and environment, now structured in our

---

65. Portmann, Animals as Social Beings, 125.
genome, it must be assumed that moods are similarly adapted to our historical needs. Considerable scientific evidence exists to support the thesis that the elements of emotion are evolved human capacities, measurable as "bodily states" and expressible in the animate form Portmann outlined. Damasio summarizes that happiness, sadness, anger, fear, and disgust are cross-cultural invariants with distinctive physiological correlates and facial expressions.68 A famous study by Eibl-Eibesfeldt shows that children born deaf and blind, across a diverse range of cultures, express these body states as readily as do hearing and seeing individuals.69 Finally, since the time of Darwin, numerous studies have revealed the links between animal and human emotions, giving credence to the thesis that our moods have evolved.70 "There are good reasons for believing," summarizes Lorenz, "that our emotions contain a large number of inherited, phylogenetically fixed factors."71 I suggest that the behaviourist model of learning promoted by poststructuralists and constructivists in Part I cannot explain the results of these studies. For example, if no reference to extra-cultural instincts is permitted, how can the expression of emotion in these deaf children be understood?

But I have introduced the concept of mood to explain more than the two-pronged reactions of grasshoppers and the susceptibility of humans to weather. Furthermore, my assertion of the likelihood that mood structure is

68. Antonio R. Damasio, Descartes' Error: Emotion, Reason and the Human Brain (New York: Avon Books, 1994), 149. For important reasons, Damasio distinguishes between emotions and feelings; the former can be measured in physiological changes, whereas the latter are our own experience of these emotions, literally, our "feeling" them. The distinction does not take away from the argument in this section.
70. Darwin's entire The Expression of Emotions is premised on this thesis.
71. Lorenz, Behind the Mirror, 182.
encoded in our DNA does not rule out the fact that specific moods can, through processes of conditioning and learning, come to be associated with a diverse range of environmental situations. I heartily agree that individual and cultural factors alter the experience of mood. Hence the obvious observation that an individual may still experience sadness on waking to a sunny day. To return to my emphasis on the role played by human form in evolution, the mere fact of the complexity of our appearance suggests that a similar complexity might animate it. Were human inwardness to consist of nothing more than the sum total of hardwired correlates to the "feast for the eyes" provided by our bodies, it would nonetheless amount to a substantial presence. For example, as I stated above, the eyebrow, while playing a role in the protection of the eye, can also be arched in surprise or furrowed with rage or grief. These moods are typically recognized as such by observing others. Similarly, different postures and carriages of the head convey different states. Erect penises can divulge sexual intent or aggression. These same erect penises do not always solicit ready sexual partners, and the range in response is obviously due to more than just the proximity of the individuals involved. An individual provoking ravenous lust in someone today may inspire disgust tomorrow. A person may experience a wave of desire, yet all the same choose to overlook a sexual advance.

There is, however, a well-documented biological explanation for this dual nature of mood. Portmann observes a clear correlation between the size of an animal's cerebrum—the "newer" portion of the brain housing reason and language skills—and the variability of its behaviour. It is hypothesized that the "higher consciousness centers" in the cerebrum take over some of the functions of the older, more instinctive parts of the brain. Portmann then

---

states that human moods are the joint product of the older, instinct-driven hypothalamus, and the newer cerebral home of consciousness. The latter provides for the "controlled expression" of the former's "spontaneous manifestations." In general, animals with larger neocortexes are open to more elaborate interactions with their environment and can exert greater control over their moods, thus countering instinctive pressures. Damasio summarizes the contemporary literature and comes to a comparable conclusion. He cites one study showing that animals with larger neocortexes (such as fruit-eating monkeys in comparison to leaf-eating monkeys), engage in more complex decision-making activities. The widely accepted conclusion is that animals with larger neocortexes, including humans, are capable of learning in the face of new stimuli, and of making decisions rather than simply responding reflexively.

Therefore, I suggest that mood furnishes another example of the dual nature of biological entities. Human inwardness is both structured by the functional units of animate form and instinctual behaviour, and variable because of our openness to our environment and our neocortical capacity to reflect. If mood is attributed entirely to hardwired reflex reactions, I suggest that behavioural variability is difficult to explain convincingly. But if mood is attributed entirely to culture, the above-discussed relationship between animal form and observing eye stands in dire need of explanation. What

---

73. Ibid., 197. Again, for an up-to-date discussion, see Portmann’s Zoologist Looks at Human Kind, 67.
74. The study Damasio cites is J. M. Allman, T. McLaughlin, and A. Hakeem, "Brain Weight and Life-Span in Primate Species," Proceedings of the National Academy of Science 90: 118-122. Damasio himself goes on to argue that rationality in creatures with larger neocortexes is not divorced from the functioning of their hypothalamus or subcortex. He asserts that evolution has not simply supplanted the activity of the hypothalamus. Thus, he continues, in a fashion similar to Portmann, "The mechanisms for behavior beyond drives and instincts use, I believe, both the upstairs and the downstairs: the neocortex becomes engaged along with the older brain core, and rationality results from their concerted activity." See Damasio, Descartes’ Error, 128.
would be the evolutionary purpose of elaborate formal differentiation if it were not capable of eliciting a response from like creatures? Just because humans express a variety of responses to form, the conclusion cannot be drawn that we are innately indifferent to form. Extra-cultural moods or instincts with the capacity to motivate behaviour are the vital correspondents to animate form; as Damasio quips, "[E]motions are not a luxury."\textsuperscript{75}

It is likely that the various moods evolved as a consequence of particularly salient formal interactions. Once "in place," however, the various moods can be expressed in a variety of situations not necessarily connected to their historical origins, but instead dependent on experience. Portmann attaches the rider, familiar from earlier sections of my dissertation, that precisely which aspects of the organism will be open to both the environment and rational control are still decided by the organism's gene code. He writes,

\begin{quote}
[G]roups of moods are laid down in such a way as to determine the mode of world experience characteristic of each event. The open positions in the system are also prearranged throughout the entire developmental path. These positions, what is more, have the ability to lead to the formation of new relational modes--but only in conjunction with experience. However, it is the preparation effected by heredity which controls the extent of this openness and thereby the new world relationships which are only later minted in the course of processes involving learning.\textsuperscript{76}
\end{quote}

Furthermore, while there is ready evidence of culture influencing behaviour and invoking emotions, I doubt that there is any evidence of the cultural construction of a mood, with accompanying physiological responses heretofore unobserved. As Boyd argued in Chapter Four, we can manipulate natural laws with other natural laws, but we cannot create new laws or break

\textsuperscript{75} Damasio, \textit{Descartes' Error}, 130.

\textsuperscript{76} Portmann, \textit{Essays in Philosophical Zoology}, 35.
existing ones. Thus does mood animate our form and structure our behaviour without predetermining the precise nature of human expression.

Portmann's Unique Hypothesis

Unlike other biologists, Portmann is also attempting to link explicitly the increase in the complexity of mood and behaviour to the increase in complexity of form. Darwin argued that expressive functions were the byproducts of other more salient evolutionary "goals," so that nothing about animate form evolved with the primary purpose of increasing communicative possibilities.77 For example, it might be argued that the eyebrow evolved to protect the eye from sweat, and only gradually came to be used to express surprise and anger. To the extent that all of the features Portmann discusses could serve to enhance sexual success alone, it is possible that Darwin is still more or less correct. However, Darwin does not discount, and in fact even encourages, the notion that once the expressive possibility of a form is present, the form could meet with increased evolutionary success because of that function. Portmann, however, wants to ascribe an even greater evolutionary role to form. Form, Portmann argues, is not merely a byproduct of other evolutionary pressures, but is instead an important codeterminant of the increase in brain capacity as species evolve. For Portmann, therefore, the neocortex comprises the "supreme biological complement" to the formal "riot of shapes and colors" of higher creatures.78 In Portmann's estimation, elaborate form and complex mood play a part in the evolution of increased rational capacity (and vice versa).

But what sort of evolutionary "purpose" could be served by this alleged connection between form, mood, and brain function? In other words, how

---

are survival odds increased with the simultaneous enhancement of inwardness and outwardness? Portmann proposes that the formal appearance of highly evolved creatures must be designed to link them together in ever more numerous and complex ways. To the extent that higher creatures do possess more "intensified forms of social relationships" as part of their more intricate interactions with the environment, there must be some route to this development. Portmann has presented one plausible explanation in his contention that the pairing of showy form and complex mood is "designed" to enhance social bonds, which in turn improves fitness. Elaborate form requires a mood expansive enough to bring it to life. While it becomes impossible for fellow species members to ignore the walking advertisement of their kin, inwardness evolves so that the precise nature of the response, even one pertaining to instinctive behaviours like sexuality, becomes less and less predictable. The explanation and consequence is a richer—in that it is more complex and more varied—social life.

In general, Portmann concludes, the more highly evolved a creature, the showier its facade, the larger its neocortex, the more capable it is of non-reflexive expression, and the more complex its social life. Portmann announces that with form, "[W]e have thus come across true organs of social relationship." Even if Portmann is wrong about the initial force behind the evolution of form, elaborate forms and moods would not continue to proliferate were it not for their serving some purpose, and this purpose is (at least in part) the enhancement of sociality.79

---

80. As noted above, Darwin hypothesized that "movements of expression" originally evolved to serve other processes, and as a byproduct came to be of used as a means of communication between species members. Darwin notes the smiles of encouragement given by a mother to an
**Sexual Form**

I will now more thoroughly address the implications of Portmann’s work for the issue of the evolution of sexual form and mood. Above, Portmann drew attention to the descent of the testes in many species of higher animals. This development has been considered perplexing because of the fragility of the organ involved and its centrality to reproduction. The dominant hypothesis is that the testes descended because sperm production required a lower temperature than that found inside the body. In Portmann’s estimation, this explanation is tautological in the worst sense, because sperm production proceeds apace in those many animals with internal testes. In other words, Portmann insists that the lower incubating temperature is a result of the descent of the testes, not a cause. Given that genitalia generally become more elaborate with higher life forms, Portmann asserts that the testes descended because of the increased visual allure they thus provided. More, rather than fewer, signs of sexual differentiation are the hallmark of higher life forms and their richer, increasingly complex social existence.

---

infant, for example. He summarizes,

> [W]e readily perceive sympathy in others by their expression . . . mutual good feeling is thus strengthened. The movements of expression . . . reveal the thoughts and intentions of others more truly than do words, which may be falsified.


Portmann states:

Even a first reconnaissance yields a few facts which show that sexual form production is not a matter of chance. The two most significant possibilities, hermaphroditism, or else the separation of the sexes, are not distributed at random amongst the different groups of animals or within the groups themselves.\textsuperscript{82}

Sex "just happens" between less evolved organisms, most obviously in the case of hermaphroditic creatures. With evolution to higher life forms and animals with larger neocortexes, the sexes separate and their distinctive characteristics become more pronounced. It is no longer merely a situation of being in possession of the requisite anatomy. Higher animals require more sensory stimulation to guarantee their attraction to the opposite sex.

As I have noted throughout this chapter, it is not the case that females of a species are over here evolving, and males over there. Quine's contention that our innate perceptual categories reflect a series of chance mutations seems to pertain specifically to the relationship between our brain and the relatively more stable physical world. He does not address the issue of the functional units connecting living entities evolving simultaneously, and for whom appearances may be essential. The larger penis of the male homo sapiens (in comparison to monkey species) makes perfect sense when observed in relation to the larger vagina of the female. The penis may well have increased in dimension with the move to upright posture. As estrus and its signaling functions were lost, something flashy was required to bring the sexes together. Given that we were in possession of penises and vaginas prior to our evolution to uprightness, it cannot simply be said that any other outcome could just as easily have taken place. These features evolved together, building on structures already intact. Hence, I suggest that the

\textsuperscript{82} Ibid., 166.
contention that penis and vagina are not related in a way that is "true" is philosophical quibbling.

Furthermore, from the perspective of Portmann's work, I assert that the thesis that human sexual form is not structured into two basic varieties, if true, would mark an evolutionary regress on our part. Kessler and McKenna's thesis that biological sex difference can be reduced to the capacity to release an egg or produce sperm devolves human life to the life of much simpler organisms. Organisms with less pronounced sexual differences have relatively impoverished (in comparison to our own) bonds to the world. Relying more on scent, these creatures have no need for elaborate visual displays. The enhanced visibility of human sexual differences corresponds to the enhanced role vision plays in general in our experience of the world.83 Portmann writes,

[I]n assessing an animal species, or larger group, as 'high' or 'low' few properties are more characteristic than the fact whether the animals can or can not see images, and so are able to see one another.84

We are different from animals that rely strictly on non-visual cues for sexual reproduction. If we were not, our visible forms would not have evolved. This assertion does not mean that humans do not rely on smell; it simply means that we now have the capacity for vision, too. I maintain that were we to become truly indifferent to human sexual form, our elaborate facades would slowly morph, just as subterranean creatures eventually lose their sight and colouration. Our elaborate sexual form, therefore, evolved hand in hand with our richer more complex connections to the world in general. In more evolved organisms, sexual behaviour demands more than a simple

83. Ibid., 177.
84. Portmann, Essays in Philosophical Zoology, 108.
meeting of the functional unit of penis and vagina. The species must be "built" to attract members of the opposite sex, even if each form can also readily attract members of the same sex.

On the basis of this explanation of the role of animate form in evolution, I will level a fundamental charge against poststructuralist and constructivist feminism. Poststructuralists and constructivists are denying the special features of biological kinds. The decision to abandon all forms of causal explanation, particularly those pertaining to sexual kinds, represents a misunderstanding of natural history and evolution. Our DNA—a natural history carried around inside each one of us, before or behind culture—means that we behave as though we are goal directed, in many instances.85 The thesis that any reference to causal relationships between males and females, or to extra-cultural instincts and moods, is metaphysical or "essentialist" ignores the fact that these genetic programs represent adaptedness to a past, not an Aristotelian, future-directed teleology. It also ignores the fact that functional units connect individuals to each other genetically; our appearances and moods presume the existence of other creatures, and are encoded in our DNA, from the very beginning.

Mayr illustrates the explanatory impoverishment that is the fallout of this misunderstanding, although he does not apply it to the specific case of poststructuralism and constructivism. He offers an example of an "essentialist" explanation referring to the migratory habits of a bird species:

The Wood Thrush migrates in the fall . . . in order to escape the bad weather and food shortages of the north.86

The phrase "in order to" invokes the evolutionary history of the Wood Thrush; birds that did not migrate died, birds that did migrate survived and

85. Mayr, Toward a New Philosophy of Biology, 40-50.
86. Ibid., 55.
their genetic code was passed on to succeeding generations. A non-causal, non-essentialist explanation of the kind promulgated by constructivists and poststructuralists demands that the phrase "in order to" be removed, however, and substituted with "and." Hence,

The Wood Thrush migrates in the fall . . . and escapes the bad weather and food shortages of the north. The Wood Thrush now simply behaves. Although true at the level of physical laws, nothing is learned about the creature’s evolutionary history, nothing that would explain its instinctive drive.

In the case of sexual genotypes and phenotypes, I allege that Goodman, Foucault, Butler, Kessler and McKenna are proposing that we ban use of explanations such as the following,

The human penis surpassed the size of the monkey penis in order to better attract the selective gaze of the female of the species, the latter receiving increased sexual pleasure from a larger penis.87

The bans on asking "why?" and on suggesting that sexual phenotype might play any natural, causal role in human relations, means that we cannot develop any evolutionary hypotheses for this development. It simply occurred. We are left with bodies with no causal connections between them, and random events.

A feminist theory unafraid of the issue of biological kinds and laws could learn much from the above hypothesis about the evolution of the penis. Maxine Sheets-Johnstone suggests that primate studies and anthropology should pay more attention to this issue of male sexual presentation and the significance of female choice of partner.88 Even Darwin hypothesized that

---

87. For the formulation of this hypothesis, see William G. Eberhard, Sexual Selection and Animal Genitalia (Cambridge: Harvard UP, 1985), 14.
female choice was the motor of evolution. Males, he wrote, must compete for the attention of females; furthermore,

[I]n a multitude of cases the males which conquer other males, do not obtain possession of the females, independently of choice on the part of the latter. The courtship of animals is by no means so simple and short an affair as might be thought. 89

At present the hypothesis of "sexually aggressive male/sexually passive female" still permeates our culture, and it is undoubtedly up to feminists to force such a change in focus. I am arguing that the desire to avoid the charge of essentialism and foundationalism has led to a fundamental misunderstanding of biological organisms, categories and laws, and a reluctance to consider research hypotheses such as the one just posed.

**Sexual Mood and Behaviour**

I will now clarify further challenges to the poststructuralist and constructivist feminist project that follow from the above analysis. The basic structures of mood have been situated in the body, and described as powers distinct from yet potentially animating form and motivating behaviour. Although my realist analysis has required no reference to metaphysical inner forces such as the self or the subject, a central allegation of poststructuralism and constructivism is that moods, instincts, or urges of any sort exist only as behavioural manifestations, not as potentials that may or may not come to be expressed. Hence mood would simply be the various behaviours or alterations in animate form. Thus, it could be argued à la Quine that we say an individual is "happy" because smiles are the culturally conditioned sign of happiness. More to the point, smiling is happiness, there is nothing more to the mood than the behaviour. Similarly, Foucault and Butler have insisted

that an innate drive or tendency directing individuals towards other individuals, be they members of the opposite sex, or the same sex, or shoes, for that matter, cannot be inferred from the observation of a sexual act. It follows that there are no sexual instincts or moods; "sex" is simply sexual behaviour. To the extent that individuals come to identify themselves with a general type of activity, their argument continues, the source of this identification is language and culture, as conditioned by various reward and punishment regimes.

"Emotional realists" instead argue that it is necessary to maintain a distinction between mood and behaviour. The former can but does not always lead to the latter; similarly the latter can, but need not, invoke the former. Using Portmann's framework, I have argued that moods evolved as paired responses to forms in our environment. It is thus likely that explicit moods will be provoked in certain archetypal situations. However, as stated above, our greater neocortical complexity permits us to interact in new ways with our environment. We need not always behave in accordance with our moods, and can even control the extent to which we experience some moods. Furthermore, we can learn or be conditioned to express our moods in any number of "new" situations. Each of these factors leads to the greater complexity of mood expression in higher animals, and the greater likelihood that behaviour and mood will diverge.

From within the position just outlined, it can still be maintained that much of sexual behaviour is learned or conditioned. Realists insist, however, that the complete levelling of the distinction between instincts and behaviour leaves much of the latter inexplicable. I have appropriated this argument to

---

90. The following analysis was inspired by my reading of Craig DeLancey's "Real Emotions," a manuscript forthcoming in the journal Philosophical Psychology. I also owe to DeLancey the phrase "emotional realism."
formulate the contention that the levelling of the distinction between instinct and behaviour leaves the mechanisms of sexual arousal unexplained. While we can quite possibly learn to be aroused by any number of stimuli (including but not limited to shoes, corpses, and animals), I argue that the mechanics of arousal cannot be taught. Interesting research challenging the early behaviourist premises that there are no innate instincts and that organisms can be conditioned into doing virtually anything, is widely available. The most famous example is the work of Keller and Marion Breland. They discovered that instinctual behaviours tend to return after conditioned responses "wear off," even in the face of continual re-enforcement of the conditioned behaviour. Furthermore, although a chicken can be conditioned to scratch for a reward, a chicken cannot be conditioned to jump up and down. Chickens scratch, that is what they do. Although human beings are not chickens, I assert that the mechanics of arousal are one aspect of what we do; furthermore, our incorporation into functional units with other members of our species means that our arousal is directed to those other individuals in more or less specific ways, even if much variability occurs.

I stress that the behavioural norms of society are everywhere we look: men and women are arm and arm, we are often born into two-parent heterosexual families, and the like. Additionally, we are instructed as to which behaviours are "taboo." I ask all the same, where do members of a culture learn the measurable—but not always perceivable—physiological processes of arousal? How are we taught to achieve erect penises and lubricated vaginas (even if we witness these forms), or to feel an increased heart rate upon arousal, something very few of us have observed? How

could these physiological signs of arousal be "conditioned" in the same way that we can be taught to walk arm and arm with a member of the opposite sex? Even if sexual behaviour can be partially conditioned by culture, the mechanics of sexual arousal cannot be so conditioned, nor can our own sense of our arousal (or lack thereof) be entirely attributed to cultural pressures. Finally, I repeat again my allegation that our sexual forms are rendered inexplicable if these forms are not in some way innately meaningful to other members of the species. Even if sexual behaviour can be bisexual, polymorphous, homosexual, just to begin the list of human possibilities, some innate sexual instinct channeling our aroused bodies towards the bodies of other human beings must be hypothesized to make sense of our elaborate sexed form.

Extrapolating from the realist distinction between drive and behaviour, I argue that it is therefore necessary to maintain a concept of sexual instinct, and to keep it distinct from sexual behaviour. I do not have to "solve" the issue as to what percentage of sexual mood is conditioned to culturally relative stimuli, and what portion must be left to hardwired responses. My intent here is simply to preserve the distinction between instinct or mood and behaviour. While some portion of mood is conveyed consciously, and some through perceivable form, I have asserted that aspects of it are reflexive and sub-perceivable. The measurable yet unobservable facts of arousal, its similarity to processes observed in other animals, and, not of least importance, our ability to feel the difference between arousal, disgust, and indifference, all point to a biological role in arousal, and for its playing a potentially causal role in sexual behaviour.

There is no need for me to invoke a "subject" of sex. On the contrary, arousal is explained via reference to physiological processes, and our
awareness of it from the parts of the brain furnishing us with conscious thought. Our sense of our own bodily moods is not a mystical process depending on the existence of a little man inside our heads. Even if those moods can be in part conditioned to certain environmental events, the moods themselves are not constructed. If the Enlightenment subject is nothing other than this neocortical force, we should not feel diminished in any sense. But nor should we deny the impact of this capacity or the power with which it furnishes us.

Furthermore, our dramatic moodiness, along with our awareness of it, increases the variability of sexual behaviour, and this too, is a sign of our more evolved state. There is no shame in being able to direct one's sexual mood towards virtually anyone or anything. Sexual variety is a manifestation of our capacity to interact consciously with our environment. Perhaps it is the case, as I suggested above, that we require more stimuli, more provocation, more pleasure, more variety, as a direct result of our increased complexity. Otherwise, perhaps, we would not pay attention to sex. It is even possible that the incredible richness of human sexual behaviour has something to do with the emergence of language, and the capacity it gives us to convey some of these sub-perceivable features of our arousal. The communication of sexual mood becomes an issue for higher creatures. I repeat, sex does not just happen for humans (or at least, not always); the forms can be aligned but the mood lacking (and there are obvious cases in which the mood can be willing, but the body slow to rouse). Consent suddenly becomes more than just a concept specific to liberal political theory. All the same, it seems less than likely that an instinctive mood sparked by the sight of the naked human form could be completely eradicated by any culture over the long run, or that some heterosexual contact between humans (even
if only as a byproduct of general sexual conduct) could have absolutely no basis in nature.

As I indicated, it is not necessary to argue that humans are innately bisexual or heterosexual or homosexual. But nor can any of these theories be ruled out in any a priori fashion. Seyla Benhabib concurs with my statement. She writes,

How do we know whether there is sexual desire with a marked directionality which precedes "the law of culture" or whether all human desire is essentially plastic and acquires its directionality by being impacted upon by culture? The answer is that we do not, and all theorizing about the "origins" of desire is a form of retrospective speculation. . .

Benhabib goes on to indicate, however, that "retrospective speculation" is not to be discouraged, nor is it to be precluded from coming up with some kind of tentative affirmative statements. I maintain that it must be stated that humans are innately sexual, and directed towards other humans, to the point that a certain volume of heterosexual activity will be ensured to reproduce the species.

To this not-insignificant extent is meaning structured in nature. To rephrase this conclusion somewhat, human sexual form is "understood" by other human beings apart from the operation of language and culture, and human sexual behaviour is in part a natural response to this form. Individuals are intimately, and ontologically, connected to one another. I am not suggesting in the slightest that feminists need accept social inequality.

---

92 Seyla Benhabib, "Subjectivity, Historiography, and Politics," in Feminist Contentions: A Philosophical Exchange (New York: Routledge, 1995), n5, 121. At the end of this footnote, Benhabib indicates that Butler is coming to the same conclusion. I disagree, based on the analysis in this dissertation.

93 The seeming bisexuality combined with the reproductive heterosexuality of one of our nearest evolutionary cousins, the Bonobo chimpanzee, provides some evidence for this hypothesis. See Frans de Waal, Bonobo: The Forgotten Ape (Berkeley: University of California Press, 1997).
Nor am I implying that my postulation of innate drives connecting individuals will provide the miraculous solution to the problem of inequality. However, I am emphatically arguing that couching a feminist theory and politics in a philosophy disavowing the real nature of "relations" between males and females, or same-sex individuals, or ruling in an a priori fashion that there are no extra-cultural instincts, is an untenable position. Disagreement with my formulations does not diminish the significance of two phenomena, which I contend that any theory of sex and sexuality, including any feminism, must explain. One, humans are in possession of elaborate but structured sexual forms, forms which have been perpetuated and exacerbated across a wide range of animal species. Two, humans engage in variable, but not completely inexplicable, sexual behaviour. A philosophy that cannot address the synthesis of these phenomena, or that sees nothing significant in this synthesis, I would suggest, is a philosophy that limits itself in its divorce from evolutionary theory.

**Meaning and Language**

In the following final section of my dissertation, I will address the issue of language. I have suggested that the Quinean strand of poststructuralist/constructivist feminism shows signs of influence by behaviourism. To the extent that Quine openly calls his doctrine "linguistic behaviorism," and demonstrates a fairly explicit kinship with Skinner and Watson, I maintain that it is up to Butler, Kessler and McKenna to demonstrate more fully why their positions should not be similarly labelled and aligned. I am not simply making this connection for the sake of arguing that any linkage to Skinner is by definition, bad. I will instead demonstrate that behaviourism offers an inadequate—in the sense that it is incomplete—explanation for the transmission of language, and by extension, culture. In
place of behaviourism (or rather as a supplement to it), I propose a realist and phenomenological theory of language learning. This theory, I maintain, provides a fuller and clearer understanding of the means by which language proliferates. I will be exploring the possibility that the just discussed innate ability to recognize and respond to animate form lies at the heart of meaning, and not its dim horizon (as Quine alleges). I will also argue that language evolves, and as such, often (but not always) tells us something true about the world as a consequence. Therefore, I will assert that particularly salient things (such as the sexed form of other individuals of our species) are likely to compel the evolution of linguistic terms, and are therefore more closely linked to pre-linguistic concepts than are other things.

Counting Bees, or A Realist Theory of Language Acquisition

I begin with a colourful story from the world of insects. In recent years there have been a number of scientific studies demonstrating that animals, even insects, possess conceptual abilities similar to our own. For example, it has been suggested that bees, ducks, and monkeys can count. When I first heard of this research, my reaction was one of utter disbelief, so accepting was I at the time of the creed that all human knowing is the product of culture. Surely counting, of all things, represents an arbitrary way of dividing up the world. However, the discovery that bees can count should be no more astonishing than the fact that they can communicate the location of a rich grove of flowers to fellow bees with "bee dances." Bees apparently further navigate their surroundings by "counting" landmarks. In one study, bee

---

feeders were set up in relationship to various landmarks. The bees initially located food, for example, three landmarks away from their hive. The landmarks and feeders were then shifted repeatedly. The bees continued to fly to the feeder three landmarks away from their hive, regardless of whether this was the original feeder. Scientists are not suggesting that a bee mutters to itself, "one . . . two . . . three." Rather, it seems to be the case that bees sense or immediately experience the difference between two and three.

This finding has been replicated in higher species as well. Birds apparently know the difference between three and four food repositories, and monkeys have displayed signs of confusion when two eggplants turn into three behind an obfuscating screen. These examples suggest to realists, myself included, that our number system might originate in pre-linguistic categories that map onto the world, or, minimally, "the world," from the perspective of several animal species. We do not need to read the number on the Four of Spades to know that there are four symbols on the card. It might be the case that there are dictionary definitions of the word "four" dependent on and hence relative to the meanings of other words. There is, all the same, a felt sense to "four" that does not rely on this dictionary definition. Phenomenologist Maxine Sheets-Johnstone asserts, "[N]umbers as such are not essential to counting."97

Realists and phenomenologists also point to the difficulties inherent in the behaviourist explanation for childhood language acquisition. To reiterate, Quine and Skinner--and, as I have suggested, Foucault, Butler, Kessler and McKenna--argued that a child learns language through processes of conditioning. Thus, all words are learned in the following fashion. Baby sees Mommy at the same time Baby hears the word Mommy. Baby eventually

---

96 Sheets-Johnstone suggests several resources, see The Roots of Thinking, n13, 88.
97 Ibid., 73.
says "Mommy" and is rewarded. Realists immediately remark on the evolutionary pace at which an individual's linguistic education would proceed if this were in fact its sole path. For example, even the simple "cat" referred to by Skinner evokes a wide variety of responses: Felix, pet, pat, kitty, meow, furry, hssss, no!, nice. Mia Gosselin writes,

In one and the same situation, I might say any number of things. I might see a cat and say: I love cats, I hate cats, cats make me sneeze, this is the cat I saw yesterday, I like dogs.98

Mommy herself comes wrapped in a blanket of many other descriptive terms, and surely, so do the words girl and boy. Linguistic realists draw the obvious conclusion based on this quick analysis: there are many more ways for us to disagree in our spoken observations than there are for us to agree. If verbatim repetition were required to pass on the entirety of a language, it is asked, how could children ever learn to speak? Furthermore, who could possibly communicate in such a narrow, restricted fashion, even when they were talking to a young child?

Realists instead propose the following theory. Our cerebral cortex, it is argued, permits us to gather bits of information about something (the various stimuli provided by the various sense organs) "into a many-sided relationship."99 Sheets-Johnstone writes that children have "fundamental tactile-kinesthetic experiences" prior to learning specific terms.100 In other words, the child has a lot of conceptual data about kitty or Mommy or girl before he/she learns to name them. The child has within its grasp the ability to make connections between these experiences and bits of information,

100. Sheets-Johnstone, The Roots of Thinking, 18.
connections that then ground a number of dictionary definitions. The common innate sense of something serves to unite a wide range of cultural definitions, making it easier to learn a number of terms relatively quickly.\textsuperscript{101}

Sheets-Johnstone extrapolates on this notion of the transference of meaning, or what she calls analogical perception:

To perceive is not only to extract meaning but may involve a transfer of meaning. The transference is of critical significance. Just such transference is at the root of concepts. Without a relationship to like things perceived in the past, a thing presently perceived is devoid of conceptual significance. In reverse terms, were everything different from everything else, there would be no concepts. As concerns language, there would in fact be only proper names with which, incidentally, no sentences could possibly be formed.\textsuperscript{102}

It is therefore suggested that concepts are tested in groups rather than individually. It is not necessary for every single descriptive term to be repeated ad nauseam until the child is "trained." A new word for kitty still needs to be heard to be repeated, but it may be uttered in a totally different context than the operant-response scenario. The child soon knows that cat can be Felix, pet, pat, kitty, meow, furry, and hsss because the child has a felt sense of kitty, and this sense incorporates a whole range of perceptual knowledge. If the child learns that puppy is fluffy, he or she can make the association that kitty is also fluffy, even if no one ever explicitly says (or perhaps rarely says) "fluffy" in the presence of kitty and child simultaneously, and even though kitty fluff is a bit different from puppy fluff.

Realists maintain that simple concepts like cat are learned despite their barrage of nicknames because myriad dictionary definitions are united by this natural and shared felt sense. Skinner and Quine concurred that simple

\textsuperscript{101} Millikan, \textit{Language, Thought}, 311.
\textsuperscript{102} Sheets-Johnstone, \textit{The Roots of Thinking}, 61.
meaning transfers were likely at the root of some components of language acquisition. However, realists and phenomenologists insist that the only way such analogies could be possible is if the child has a felt sense of fluffy capable of being extrapolated to other situations in a way that also makes felt sense to other individuals. It is the distinction of sense and cultural meaning—along with the grounding power of the former—that behaviourism seeks to deny and realism to affirm. Sheets-Johnstone, Mia Gosselin, Ruth Millikan, and Eugene Gendlin (among other philosophers and scientists exploring language) therefore introduce a general distinction between the ability to identify or sense something, on the one hand, from the ability to apply a word in a particular cultural context, on the other. It is maintained that the former, our "sense" of a thing, is more primary to language than is the latter, the "intension" of a word. For the remainder of this paper, I will use the words "sense" and "dictionary meaning" to refer to these concepts respectively.

**Our Sense of Sense**

How accessible to us is the felt sense of something, however? Does language obfuscate or alter the originary power of sense, as is argued by Quine and his followers? Realists counter that it is more likely that innate concepts and structures play a greater role in language development than behaviourists allow. I will demonstrate how routine and everyday our access to sense is through a range of examples.

Millikan and Gendlin employ the illustration of recognizing a friend or a family member, which I have adapted somewhat in the following.¹⁰³ I have a felt sense of my sister. This sense allows me to identify her even if on rare occasions I might mistake someone else's voice for hers or think that I see her

---

coming up the street, only to discover that it is not really her. When I do make a positive identification, I know with certainty—albeit not Cartesian certainty—that the individual is my sister. This sense of my sister is stable and trustworthy, even if she might wear different clothing, cut her hair, speak differently, undergo plastic surgery, or even change her name. Furthermore, the "dictionary meaning" of my sister that relies on the use of words—in this case, perhaps how I would describe her to others—is based on my felt sense.

One dictionary definition of my sister might run as follows: Five feet, five inches, very slim, dark blond shoulder-length hair, blue eyes, small scar on her upper lip. Any number of individuals would undoubtedly fit this description. My sister must be encountered before a definite sense of her will be had. Once she has been matched to the description, however, the sense experienced of her will be relatively unshakable. Her name, "Leanne," corresponds to that felt sense. Granted, the word is always "less than" and more open to error than the sense, a sense that in turn maps onto, without providing a mirror reflection of, her actual person.104 "Properties and concepts of properties," warns Millikan, "are quite different things."105 However, the possibility that different people will pick features of Leanne that are for them most distinctive does not mean that each of us has a different sense of her, nor that Leanne is different under these different descriptions. Millikan and Gendlin are arguing, contrary to Quine, Butler, and Kessler and McKenna, that we have a ready understanding of sense. Furthermore, this felt sense or experience of something is always more fundamental to language than is its dictionary definition, in that the latter must be based on the former if it is to have any meaning at all, in that sense must come first.

even if it is ultimately covered over by many dictionary meanings.\textsuperscript{106} Adorno's thesis that language is immersed in the material world is given considerable clarification through this analysis.

Another everyday illustration is furnished by the basic colour concept, red.\textsuperscript{107} Millikan asserted earlier that we have a distinct sense of red in that we perceive that it is not green, blue, or any other colour. Again, the relativity of red to these other colours does not mean that we develop the concept of colour first, and only then come to think in terms of red. The statement "red is a colour," is, it is true, a dictionary statement dependent on the meaning of many other words. Yet, our identification or sense of red is a more primary thing. The statement "red is a colour," therefore, builds on the prior ability to identify the property red in nature. Our sense of red maps onto the world in the same way that my sense of my sister maps onto her. The statement "red is a colour" then gives the sense a cultural or dictionary definition, of which there may be several. The statement does not divide the world up in some new way. "To believe that a thing falls in a certain ontological category," writes Millikan, "is not to harbor another inner representation for it but to have a fuller concept of it."\textsuperscript{108} We do not learn to sense or identify red differently once it has been defined as a colour, just as having different terms for the morning star and the evening star cannot mean that the process of sensing or identifying the star is different, or that the star itself is different.\textsuperscript{109}

Millikan now argues that even linguistic behaviourists (of the Quinean or poststructuralist variety) must rely on our ready access to the felt sense of things.\textsuperscript{110} Bracketing the issue of why and how one culture chooses to call a

\textsuperscript{106} Gendlin, \textit{Experiencing}, 3.
\textsuperscript{107} Millikan, \textit{Language, Thought}, 150, 270-71.
\textsuperscript{108} Ibid., 255.
\textsuperscript{109} Ibid., 266-67.
\textsuperscript{110} Ibid., 250-51.
particular form "girl," Millikan maintains that any such decision rests on the capacity to identify something as "the same as" over and over. As I argued in Chapter Four, it is precisely this similarity that is thrown into doubt by poststructuralists and constructivists. Millikan counters that these philosophies,

raise the puzzle what it is for the same word or same mental reaction to occur again, hence a puzzle about what it is, at the end of the regress, for the act of identifying to occur.111

The argument that we learn to identify people as girls/boys because we are conditioned by culture cannot, therefore, get around this core problem: how could the culture even realize that it was using the same words "girl" and "boy" to describe the same people over and over, a practice necessary if the successful conditioning of the populace is to take place? Our sense of a similar body, or even a similar word, therefore, must exist apart from the rules we will use to clarify the meaning of the body within a specific culture, apart from its citation in the laws of that society.

In general, I assert that a different sense of a thing need not and does not follow from a different dictionary definition of a word. Dictionary meaning or language, therefore, does not as a rule override felt sense. As argued above, language could not flourish were it not for the accessible cornerstone of felt sense. Sheets-Johnstone concludes that "no language can be spoken for which the body is unprepared."112 Eugene Gendlin expresses the principle in

111. Ibid., 250-51.
poetic fashion,

Language is implicit in the body. The body knows language. But language is not a closed system. The body can always give the words more feedback than can possibly be derived just from concepts or forms or distinctions.113

These theorists are united in the belief that felt sense is prior to dictionary meaning in the development of language, and that this felt sense is something to which we must have ready access. Given that I earlier demonstrated the salience of evolved sexual form, I maintain that it is likely that we would have an innate sense of archetypal sexual patterns. At the very least, it cannot be argued a priori that such a sense does not exist or is inaccessible, as Butler, Kessler, and McKenna have done.

The Work of Language

There is another core principle in the realist philosophy of language. Realists assert that the behaviourist allegation that communication consists in verbal homology divorces language from the evolutionary processes governing the rest of the world. Communication amongst fully "conditioned" members of a culture (never mind between adults and foreign initiates or adults and children) would be completely unnecessary if its only goal were to determine that yes, another person says exactly the same thing when confronted by the same stimuli. Mia Gosselin asks, "What would be the point in saying something if what I was going to say was already obvious to the hearer?"114 Such echoing would represent nothing more than parrot speech, a conclusion seemingly accepted by Quine, Skinner, and Watson, and possibly by Foucault, Butler, and Kessler and McKenna. Realists alternatively pose a crucial question: why language, then, and why its proliferation?

114. Gosselin, Nominalism and Contemporary Nominalism, 149.
Attention is drawn again to the obvious fact that most communicative interaction involves people saying different things, yet obtaining an apparent understanding all the same. Above I used the example of the many words associated with cat. Millikan now provides an illustration of a typical simple conversation between two adults:

It is not, for example, speaking in unison; failure to say the same or to be disposed to say the same at the same time is not disagreeing in judgments. If you look at the sky and say "Fine weather tomorrow" whereas I . . . remark only "Gorgeous sunset," we do not disagree. . . .

Furthermore, Millikan adds, we know that we are not disagreeing. It is the instance of expressing different, yet not contradictory, words that confounds the behaviourist paradigm. How do individuals understand one another in this more typical scenario? I suggest that behaviourists must offer one of two problematic interpretations: 1.) each individual flips through their personal mental dictionary, linking their own words to what the other individual just said in order to determine whether communication is taking place; or b.) it must be concluded that the individuals are not actually communicating anything, since they have uttered different words.

If the first scenario were accurate, it seems highly unlikely that a complex language would be able to evolve. As just discussed, the transmission of language to children becomes virtually impossible to explain. Furthermore, even if it were feasible for the adult brain to make the necessary rapid computations between different established definitions (say between sun and gorgeous day), metaphorical leaps from the sun to a seed-strewing flower to a regent of France would leave a conversation partner speechless. Poetry would be incomprehensible. Not only does behaviourism leave metaphor

---

rootless (because it cannot be grounded in a shared felt sense of a thing), realists and phenomenologists argue, it cannot explain the motivation behind it. What compels a departure from a hegemonic speech norm? British realists Doyal and Harris pose the question as follows:

Suppose that Quine is right, and the sole criterion for agreement/understanding is no more than saying the same under the same stimulus conditions. It then follows that any change in what is said is ex hypothesi unintelligible, because we now no longer do the same thing under the same stimulus conditions.  

The poststructuralist variant of behaviourism answers that "the new" comes from a recombination of the old. Yet this thesis still leaves inexplicable both the rationale behind the shift, and its intelligibility to other members of the culture.

The issue of metaphorical leap leads to the second problem for the behaviourist paradigm. In the case of unintelligibility brought on by the introduction of a new term or metaphor, realists observe, a linguistic interaction would have to end chaotically. With neither the bond of common words nor inner sense, there would be absolutely nothing connecting individuals in speech. One individual could be babbling nonsense to another staring into space. Ultimately, this would lead to an evolutionary dead end; there would be no point either to speaking or

---

listening. Millikan summarizes:

> Without . . . a center of gravity, [speaking and hearing] would diverge in all directions until there would be no motivation for hearers to respond at all or for speakers to use the device at all. A language device that lacked a stabilizing and standardizing proper function or function would simply die out.¹¹⁷

The predictability and homology required for conditioning is lacking in most communicative transactions. Yet we seem to be able to tell the difference between a formal disagreement of words, and a genuine lack of communication. We can also distinguish between a disagreement of opinion and a lack of understanding. We feel different upon fighting with our sister as compared to misunderstanding a foreigner. We know, in general, when we are talking about two different things, and we have all had the discomfiting experience of conversing with someone who keeps changing the subject. Millikan avows that, from the behaviourist perspective, most all conversations would have to end like these examples. It is worth repeating that this conclusion is not explicitly rejected by Quine, Derrida, Butler, Kessler and McKenna. What I am cautioning, however, is that language could not survive under such general conditions.

Realists instead furnish speech with the evolutionary "center of gravity" alluded to by Millikan in the previous paragraph. Adorno provided the seeds of this analysis in his embedding of language in the world. Sheets-Johnstone maintains that language is an evolutionary phenomenon involving work between our innate sense, our words, and the world. Language does not simply emerge as a complete system out of our innate categories, as a "happy ending" to a bizarre evolutionary leap.¹¹⁸ Doyal and Harris contend that language is used to "do things," and as such, different terms (even across

¹¹⁷ Millikan, Language, Thought, 32.
¹¹⁸ Sheets-Johnstone, The Roots of Thinking, 282.
different cultures) will be tested empirically in daily life.\textsuperscript{119} Millikan insists that some of this work of language must be to make true observational statements about the world, or at the very least, the world as it appears to us from our evolved perspective.\textsuperscript{120} Therefore, speaking and listening functions must evolve together united by their "fit" to the environment, as did animate form and receiving eye in Portmann's analysis. Millikan asserts,

\begin{quote}
If man is a natural creature and a product of evolution, it is reasonable to suppose that man's capacities as a knower are also a product of evolution.\textsuperscript{121}
\end{quote}

Such a thesis is quite unpopular today, as demonstrated in the writings of the theorists in Chapters One and Two. According to Millikan, the refusal to entertain the possibility that language conveys objective knowledge, while readily granting that singing helps birds, and sonar, bats, represents "mere cowardice" on the behalf of philosophers.\textsuperscript{122} For Sheets-Johnstone, it is indicative of lingering devotion to the belief that humans are of an entirely different order than are animals.\textsuperscript{123}

We talk in part, Millikan therefore proposes, because one function of language is to produce true beliefs in listeners. We have evolved as knowers, and speech is one means for communicating our knowledge. "True sentences, being direct vehicles for conveying knowledge," Millikan writes, "must bear some kind of natural relation . . . to man's world."\textsuperscript{124} Language blooms because different phrases often provide us with new information about an object or meaning of which all parties have a prior sense. We talk around the same theme or the same entity, using different phrases,

\begin{footnotes}
\item[121] Ibid., 17.
\item[122] Ibid., 7-8.
\end{footnotes}
expressions, and interpretations, and we are by and large rewarded for conveying correct information, not for simply echoing the dictates of our culture. For the most part, others must be good recorders of the world. Millikan maintains,

> Coming to know something by believing what someone else says is making use of another instrument that extends perception—an instrument that is hardly an artifact. This instrument is the carefully adjusted perceptual and cognitive systems of another person. . . .

Words and sentences evolve only through elaborate processes of empirical testing, not via an analysis in a single philosopher's head. We don't, in general, just make up words, nor do we carve metaphors out of nothing. Therefore, we "trust" rather than mimic the words of others as extensions of our own capacities to observe.

The realist theory of language by no means entails that all aspects of a language at any specific point in time must relate something true about the world, or that every word in a foreign language will be comprehensible to a visitor. Language is a form of knowing about the world, and as such it is corrigeable and variable. But if we are sometimes wrong in this way of knowing, Millikan proceeds, we cannot as a rule, as a species, be wrong. Similarly, just because we sometimes learn a word through mimicry, this cannot provide the sole explanation for the transmission of language. Millikan insists that just as internal organs have "proper functions" that cannot be judged on the basis of diseased versions, language, too, has a proper function, "something it is supposed to be able to do yet perhaps cannot do." If all livers were diseased, we would be dead. If all language conveyed

---

125 Ibid., 305.
126 Ibid., 274.
127 Ibid.
inaccurate information, or merely conventional truths, or simply "cohered" as a system with no link to the world, we would meet a similar fate.

There is no magical solution as to whether a specific word or a specific observation maps onto the world in some way. We sense—but only through experience, and again, not with Cartesian certainty—that gavagai refers to the entire rabbit, and not to a rabbit bug or a rabbit spirit. Doyal and Harris elaborate,

[I]t may be the case that 'rabbit', 'rabbit part', 'rabbit moment', etc., are all possible equivalents for 'gavagai' where the translator is simply being shown around the alien's forest. But the same would not hold for the 'gavagai' on the dinner table. Try eating a 'rabbit moment' or 'a glimpse of rabbit' or suggesting that the alien do so!128

Quite obviously, people lie, or utter what is merely a conventional belief. If this were the case with the bulk of our communication, again, language would be purposeless, even dangerous, from an evolutionary perspective. That it proliferates indicates otherwise. Millikan cautions that it is not simply a question as to the status of our various beliefs; it is impossible to understand the evolution of thought and language unless we connect it to the world in some way.129 "[B]oth meaningfulness and truth," Millikan concludes, contrary to behaviourists, poststructuralists, and constructivists, "lie with relations that are genuinely between thought and the world."130

I hope I have illuminated some of the difficulties of the behaviourist paradigm, difficulties I believe need to be addressed before the theory can be taken as an adequate analysis of the transmission of language and, indeed, all forms of expressive behaviour. I have argued that language learning would be inexplicable were it not for the existence of an innate sense, a sense that must

130. Ibid., 263-64.
be more accessible than is alleged by the Quinean strand of poststructuralism and constructivism. Language proliferation would also be inexplicable were it not for its conveyance of true knowledge, even if this knowledge is mediated by our evolved perspective on the world. To the extent that these problems have not been addressed by Butler, Foucault, Kessler and McKenna, or even Quine, I fail to see how it can be so obviously concluded that (a) language has no (or a minimal, or an inaccessible) connection to innate perceptual categories, and that (b) innate sense or experience cannot form a point of comparison across individuals, cultures, and even species.

Therefore, I conclude that my agreement with another individual that a person we meet is a girl must rest on more than just cultural conditioning. An error in attributing the sex of several persons, or a cultural disagreement reflected in a decision to divide bodies into three or more sexes, is not a discrepancy that should make us automatically detach the entire apparatus of language referring to sex from shared meaning or reference to the world. I assert that it cannot automatically be concluded that words and things bear no natural relationship to one another, or that members of cultures with different sex systems do not understand each other’s sense of sex in the slightest. I have already demonstrated the evolved salience of perceivable form to living creatures. In this discussion of language, I argue that we have a felt sense of things that precedes the development of a word. Given the demonstrated natural salience of perceivable sexual form, therefore, it seems likely that we would have a felt sense of sex, and that our words referring to sex would be grounded in this felt sense. Furthermore, as language evolves in tests between it and the world, "girl" and "boy" (words that every culture understands to some extent) must tell us something true about the operation of that world.
I therefore argue that the words "girl" and "boy" cannot be entirely learned through processes of cultural conditioning. Even if the passing of a judgment in a court is to a large extent culturally specific, this juridical example cannot be made to stand for a wholesale explanation of the transmission of language. Therefore, I conclude that behaviourism needs to be supplemented with an understanding of the ways in which language is grounded, at least in part, by a shared inner sense of things, a sense of things which in all likelihood encompasses a sense of sexed animate form. My realist challenge to Quine's thesis relativizing observation to theory and language, and reducing meaning to behaviour, is thus complete.
CONCLUSION

In my dissertation, I have forged links between the twentieth century antifoundationalism of Goodman, Quine, and Foucault, and the recent feminist arguments deconstructing the sex categories represented in the work of Butler, Kessler, and McKenna. I have not disagreed with the goals of these feminists, if it is accurate to say that these goals—like those of most feminists—are the eradication of sexual hierarchy and the opening of increased possibilities for individuals through challenges to hegemonic social norms. However, I have argued that, regardless of any protestations to the contrary, poststructuralist and constructivist feminists couch their theories in a nominalist, relativist, and behaviourist philosophy. I have maintained that reliance on this framework results in a number of philosophical problems and brings with it political consequences that remain by and large unexamined by the proponents of the position. I have defended a realist alternative, arguing that it is only from a perspective distinguishing between natural and social kinds, laws and their exceptions, mood and behaviour, and truth and fiction, that the phenomena of the world can be explained, including the phenomena of sex and sexuality.

I have repeatedly asserted that the poststructuralist and constructivist position reminding us that knowledge of the world is mediated, is, at least on the level at which most people interact with the world, of "trivial" consequence, as Adorno phrased it.¹ While this statement was perhaps a rhetorical flourish on his part, Adorno warns that philosophy has spent too much time exploring the implications of the constructivist thesis. I have argued that the principle that knowledge is relative is undoubtedly accurate at

¹. Adorno, *Negative Dialectics*, 120.
the level at which knowledge is equated with absolute truth. And poststructuralists and constructivists are right, we have no way of definitively knowing if any of our knowledge claims are certain. Our words are not the world; the former cannot be the latter. The mediation of knowledge thesis is logically unassailable, because as skeptics have noted for centuries, it is impossible to prove or disprove statements about the empirical world with definitiveness. For this reason, my research will not convince true philosophical skeptics. But I have argued that we need not, and should not, operate at the level of logical certainty. Once we resolve that a natural explanation for our knowledge is possible, we can become less concerned with the standard of logical certainty. Once we accept that language and knowledge emerge and evolve from the world, it is harder to argue that culture can completely obfuscate our interaction with that world.

However, even if close links can be drawn between our words and innate concepts, even if the behaviour of one individual can be linked to the perceived form of another individual (two propositions that poststructuralists and constructivists seriously challenged), it is always possible to assert that the peculiarities of evolution could have led to a different outcome. I suggest that this allegation about evolution lurks as a trump card in the constructivist and poststructuralist hand. Thus, even if psychologists demonstrate that language has closer connections to pre-conceptual categories than is conceded by Quine, he and others of his persuasion can always invoke this "what are the odds..." argument. The evolutionary argument, I contend, is really an updated version of Descartes: how can we ever know anything with logical certainty?

But this charge, too, is unproductive of a further understanding of our evolved perspective. The mediation of knowledge thesis, no matter what its
form, produces desperately little in the way of further analysis. Hegel noted long ago that the principle is a starting point rather than a stopping point:

Reciprocity is undoubtedly the proximate truth of the relation of cause and effect . . . [but] we should not rest content with applying this relation. If we go no further than studying a given content under the point of view of reciprocity, we are taking up an attitude which leaves matters utterly incomprehensible. . . . To make . . . the manners of the Spartans the cause of their constitution and their constitution conversely the cause of their manners, may no doubt be in a way correct. But, as we have comprehended neither . . . the result of such reflection can never be final or satisfactory.²

I maintain that poststructuralism and constructivism have not moved passed the impasse whereby all we can say about the world is that nature and culture are an impenetrable mix. I have argued, along with realists, that the fact of mediation does not unilaterally destroy the objectivity of knowledge claims, and that it is possible to hypothesize about the contributions of nature to our theories about the world.

I contend, furthermore, that realism has not been given a fair chance to defend itself against poststructuralism and constructivism. I am not insinuating that there is no one challenging these philosophies. I am asserting, however, that the philosophy that concerns itself with the questions most relevant to issues of biological sex, the philosophy of science, has been more or less ignored by proponents of poststructuralism and constructivism. I was initially drawn to both biology and the philosophy of science because it struck me as odd that sweeping statements about sex were being formulated without the benefit of either. Even if the questions and problems I have posed can be resolved on some level by poststructuralists and constructivists, they have not yet addressed the issues. I believe them to be

² Hegel, Logic, §156, small print.
unaware of the problem of similarity which caused Quine to distance himself from Goodman, for example. At present, as I argued, constructivists and poststructuralists have offered no explanation for how we can come to identify a kind, even a culturally constructed one. I also do not believe that poststructuralists and constructivists have adequately addressed the issue of the differences between physical and biological matter. What typically takes place is instead a poststructuralist/constructivist refusal to be tied to any position, and a reluctance to acknowledge the philosophical ancestry of their framework. As Adorno also argued, without conceptual definition and clarification, it becomes impossible to criticize a position. At the same time, it becomes difficult to apply the framework to any concrete situation, because conceptual definition, even tacit, is a precursor to praxis. Hence the reluctance and perhaps inability of poststructuralist and constructivist feminists to engage in concrete problem solving.

Accordingly, I will close my dissertation with a brief analysis of several contemporary issues. Firstly, I return to my example of Chapter Four pertaining to the intersexuality of fish. It has recently been hypothesized that disorders of the reproductive tract—similar to those witnessed in instances of intersexuality—are increasing in incidence. These disorders include hypospadias, the condition I earlier described in which the male urethra remains open along the underside of the penis, cryptorchidism, the failure of the testicles to descend from the abdomen, and testicular cancer. It is also possible that sperm count is declining. The synthetic estrogen DES

---


4. Richard M. Sharpe and Niels E. Skakkebaek, "Are oestrogens involved in falling sperm
(diethylstilbestrol), once prescribed to pregnant women to control morning sickness, is a known cause of all four problems in male offspring, as well as vaginal cancer and cervical/uterine abnormalities in female offspring. Any hormones ingested during pregnancy may technically have the capacity to induce these and related problems.

However, hormones are no longer prescribed to pregnant women. What could be behind the increased occurrence of reproductive tract disorders? One possible answer has been receiving considerable attention in the past few years. It has been observed, as I intimated earlier, that fish, birds and reptiles swimming in certain waters or feeding in certain regions have become sexually ambiguous. It is believed that these cases of animal intersexuality are due to high levels of environmental pollutants either mimicking the activity of hormones or interfering with their typical functioning. Some have hypothesized that pollutants might be interfering with the sexual attributes of humans in the same way that they clearly seem to be interfering with those of animals. To the extent that cancer and other illnesses are possibly connected, there is more than one reason to be concerned about these recent trends.

6. Gray, "Chemically-Induced Alterations." It is for this reason that women using oral contraceptives are cautioned not to become pregnant for several months after taking their last pill.
A contemporary feminist might begin her analysis of this research by emphasizing the social marginalization of sexually ambiguous individuals. She might argue that binary thought repeatedly forces the world into opposing categories and correspondingly caution against the risks inherent in further stigmatizing intersexuality. At this level, she is influenced by poststructuralism, and is tempted to argue that sex is a construction and that there is no such thing as a "deviant" body. Yet she would probably be troubled by the possibility that we are subjecting ourselves to increasing doses of hormones in ignorance of their harmful effects. But is the best framework for analyzing the relevant science the contention that there is no unmediated access to reality, that there is no raw data or sex, or that sex is a continuum? I have indicated that these arguments might be interesting philosophical points of departure, but they provide no means of distinguishing between good science and bad, or, as I argued in Chapter Four, sociology and biology. I suggest that at this real world juncture, in the face of this important contemporary problem, the realist philosophical framework outlined in my dissertation is of greater service than further incantation of the thesis that knowledge of reality is always mediated.

Many contemporary feminists, even those aligned with poststructuralism and constructivism, will be ready to concede my argument here. I have maintained that they have not provided the means with which they can make such a concession, however. I am, furthermore, concerned that theorists have for this reason grown reluctant to address issues of the body, biological sex, or even science for that matter. Quite frequently, the only positive statement formulated about the body today is that it is not a tabula rasa. I insist that we must preserve some means of talking about evolution, reproduction, illness, and pollution, for example. I do not want to abandon,
or lose through lack of use, the feminist or social science capacity to engage in debates in the natural sciences critically and constructively. Science will proceed apace even if we do not attempt to engage it. Evelyn Fox Keller writes that contemporary criticisms of realism leave science to those who have little or no interest in social change:

It would appear that, when we were naive realists, faithful to the idea of pure science, we were either too timid or didn't know how to ask [questions]; and as relativists, disabused of both "purity" and "scientificity", we somehow lost interest.⁹

I assert that the continued emphasis on the thesis that we have only a mediated understanding of the world is, therefore, unintentionally promoting the neglect of important scientific issues. Poststructuralists and constructivists are aware that the minute they attempt to distinguish between different theories and laws, they will have to account for how they make such a distinction, and some of their philosophical presuppositions will be challenged as a consequence.

Aside from these philosophical fears, I realize that there are realpolitik concerns in some quarters that any mention of a natural body must lead down the slippery slope to biological determinism. I imagine that some critics will argue that I have literally put the slide in place. Indeed, I concede that there is a risk that my arguments could be used conservatively, and that it is partly for political reasons that poststructuralism and constructivism are so popular. However, as I suggested in Chapter Four, a refusal to look at nature can just as easily result in the overlooking of evidence that could help

---

to counter inequality. Sheets-Johnstone writes:

Certainly we can acknowledge as threatening the idea that the body is intrinsically tied to knowledge: immediately one thinks of biological sex differences, and biological sex differences lead straight to essentialism. But we must also acknowledge the possibility of the threat's blinding us, thus keeping us from examining what is actually there. Clearly, we might discover something other than what we are assuming is there.10 Sometimes, it is true, the results of an engagement with science might disappoint us (we might find, for example, that there are natural differences between human beings, as well as natural similarities); however, the results might also enlighten and liberate us. No inequality functions in a monolithic fashion, and feminists are closing off a powerful line of argument by refusing to explore the natural sciences and claims about natural bodies. As I argued in Chapter Five, a closer look at nature might remind us of the role played by female sexual selection in evolution.

This leads to my second example, provided by the President of the United States' apparent promiscuity. It has been argued, even proclaimed loudly by some American feminists (i.e., arguments of the "I'd go to bed with him if he grabbed me. . ." ilk) that Clinton's sexual success demonstrates the servility and weakness of women in the face of the powerful male.11 What is missing in this account is an analysis of the implications of Clinton's status in relation to other men. The evolutionary approach I outlined in Chapter Five suggests that female sexual attraction to a man like Clinton may often (but not always) be a reflection of his relative success compared to other men. This success means not only, or not even primarily, that Clinton may have his pick of several women, but more importantly, that other men will not be so lucky.

In other words, women choose Bill Clinton and not other men. Women drive (apparently to a great extent according to Darwin) the competitive process that resulted in Clinton's ascendancy.

It is this latter part of Darwin's equation that is so often forgotten today: female choice has resulted in the evolution of many masculine traits. In Chapter Four, I cited a passage from Darwin's *The Descent of Man* illustrating the implications of male competition for females. Here, I repeat his conclusion. Female choice serves "to add not only to the strength and fighting powers of the males, but likewise to the various ornaments and other attractions."¹² Men must compete for female sexual attention. If the Clinton story is left to the non-feminist media, or if feminists are afraid to couch any arguments in terms of biology and evolution, the power of female sexual choice will be overlooked and women will again appear as victims. I assert that a philosophy resting on nominalism and relativism and accordingly reluctant to define its concepts, or a philosophy afraid to address biology, may as a byproduct ignore such facts. It is perhaps the case that women have come to act like sexual victims because the power of female sexual choice (and not simply the contemporary assertion that women, too, enjoy sex) has been repressed by culture. Although it can be repressed, my arguments about instinct in Chapter Five suggest that it cannot be eradicated, and that it might lurk as a potential force for social change.

I realize that the spectre of race looms large over my dissertation, and that it has merited my attention in a number of instances. I have saved discussion until now because I think the issue serves to tie up a number of points in my

work. Firstly, in Chapter Four I argued that empirical differences might betray underlying natural similarities, just as empirical similarities might betray an underlying natural difference. I maintain that the uncovering of some natural kinds does not mean that every classification we employ is a natural kind. I have, furthermore, provided the means for making distinctions between natural and cultural kinds. Therefore, the widespread cultural belief in the existence of races is belied by the scientific research indicating that race is only skin deep, that beyond variations in levels of pigment, race is a social category. An argument that races are kinds does not follow from my assertion in Chapter Four that colours are properties structurally related to one another; nothing I have written indicates that the grouping of things by colour is an adequate definition of a natural kind. If this were indeed the case, the round red objects of Chapter Four would also be legitimate natural kinds. Furthermore, as I argued earlier in my work, skin colour differences diminish as individuals procreate amongst themselves; the same cannot be said of the structured properties of natural kinds.\footnote{For example, although species boundaries are not absolutely impermeable, they are fairly difficult to penetrate. See Ernst Mayr, Toward a New Philosophy of Biology, 315-320. In the body of my dissertation, I also argued that no matter how many sexual permutations there are, female and male divisions show no signs of disappearing.}

Furthermore, my research shows that it could be mistaken to try to fight racism solely through repeated assertions that race is a cultural construction. I have argued that humans have an innate capacity to note similarities. If these similarities can be explained through reference to a causal law, there is evidence that our sense of similarity refers to a real natural kind. Although our innate sense is wrong to the extent that skin colour is not indicative of a difference in racial kind, in all likelihood, we cannot erase this perceived sense of similarity. Anti-racist movements can challenge how these
observations of similarity and difference are translated into essences, stereotypes, and inequalities, but perhaps not the perception of the patterns themselves. Arguments that we can completely restructure our sense of similarity are perhaps simplistic when seen in the light of evolution. I further suggest that feminism should not rest its hat on the possibility of eradicating our perceived sense of sexual difference. In any case, I assert that it cannot be argued—in a priori fashion, or without the use of science—that it is possible to forge a culture in which biological sexual difference can be ignored, or downplayed to the point where it is only salient at the instant of procreation.

Finally, it strikes me as a capitulation to an unequal society to refuse to consider the possibility of the existence of any natural differences between the sexes. I am arguing that there are natural sex differences, and an instinctual sexuality of some sorts. But I am emphatically not arguing that the uncovering of such differences justifies gender inequality. It is central to my work that a biological determination of natural similarities or differences in general is not justification for inequality. I maintain, additionally, that justifying entire political movements on the basis of what there is/is not in nature misses the point; I insist that we fight hierarchy because we believe it is unjust, not because we believe it is mistaken. The implication following from poststructuralism and constructivism is that if women were in the slightest way naturally different from men, or intersexuals from men and women, any resulting social inequality would somehow be justified.
Appendix

THE EVALUATION OF COMPETING THEORIES

As I have asserted in the body of my text, I am defending the overarching realist philosophy that our theories can obtain objective truth, and that natural laws and kinds exist in the world, against the constructivist and poststructuralist thesis that our sense of kinds and laws is purely the effect of a cultural construction. The constructivists and poststructuralists I analyzed in Part I do not address the issue of evaluating competing theories against their background philosophy. However, because the issue of comparison is central to the realist position, I will provide a general outline of the means by which we can begin to evaluate competing theories.

Realists further defend their philosophy by pointing out that theories are not simply measured against their data, but also against competing paradigms. Richard Miller offers several examples which I have adapted considerably in the following. Suppose it is argued that Jean Chretien became Prime Minister because it was his personal destiny. Everyone else who is not prime minister, it follows, was not so destined. In the same vein, some people are destined to be rich, others to be poor. An explanation in terms of fate or destiny offers nothing further in the way of understanding either scenario. Alternatively, Miller continues, psychological theories can provide means of "explaining why some people, superficially like the [prime minister] had a different fate." In the case of the lot of the poor, sociological theories can provide an explanation for the wealth or poverty of many individuals.

---

1. Miller, Fact and Method, 9, 55.
2. Ibid., 53.
Psychology and sociology, therefore, can provide a more encompassing explanation of individual similarities and differences than can the blanket statement that we are all destined to become what we have in fact become.

In a second example, entelechy theorists (Aristotle, for example) believed that embryos had inherent tendencies to develop in a certain way. No further analysis of the physical properties of an embryo was offered. Evidence that chemical intervention produced systematic deviations in the developmental path could, therefore, only be explained in terms of the relative weakening of the entelechy. On the other hand, the hypothesization of causal structures operating in both the chemical and the embryo opens the way to a non-tautologous explanation. The precise ways in which a chemical interferes with an embryo can be articulated; the specific cause of a specific defect can be located. For example, it can be demonstrated that certain environmental hormones have the capacity to mimic estrogen, leading to feminization of male fetuses.3 (I employ this example several times in my dissertation.) Although Aristotle's entelechy theory explains some aspects of fetal development, it has difficulty explaining such departures from the norms. Theories of chemical structures and hormones, alternatively, provide an explanation for these departures as well as the more typical developmental path.

Miller summarizes the implications of these examples. Explanation, he

---

writes,

seems to identify the particular producers of particular events. The basic distinctions between explanation and non-explanation seem to require causal notions, which cannot be analyzed away in favor of non-causal ones. Explanation, together with the justified choice of an explanation, seems to be intrinsically comparative. Therefore, proper explanation is causal, comparative, and addresses both norms and their departures.

Although the theories contrasted above (fate versus sociology, or entelechy versus biochemistry) were drastically different, the general principles I have outlined are relevant in comparisons between theories that disagree only as to details. In these more ordinary cases, we look for the theory that is better able to explain departures from the norm; in other words, we look for a theory that can encompass more observations, in a non-tautological fashion, than its competitors. Bhaskar clarifies this more ordinary situation:

A theory $T_c$ is preferable to a theory $T_d$ . . . provided that $T_c$ can explain under its descriptions almost all the phenomena that $T_d$ can explain under its descriptions, plus some significant phenomena that $T_d$ cannot explain.

To draw on my earlier exposition, some scientists argue that a single gene on the Y chromosome explains the differentiation of male and female fetuses, whereas other scientists contend that a conglomerate of factors better explains sex. The theory that will meet with the broadest acceptance will be the theory

---

that covers the most phenomena, in this instance, that can best explain instances of intersexuality.

Despite the possibility that a genetic explanation for all instances of intersexuality may not be found (as Butler, Kessler and McKenna have repeatedly highlighted), I argue that it is not at issue that copulation can lead to pregnancy, or that anatomical differences between a mating pair correlate to distinct roles in the process. Science led to our culture's understanding of the functions of sperm and ova, which explained why some acts of intercourse do not lead to fertilization. The information so provided did not contradict the understanding of reproduction that most cultures possess, even if we may wish to attach less commitment to more abstract hypotheses about the role of specific genes in that process. I assert that conflict in one area of exploration, therefore, need not undercut the near-universal acceptance with which other explanations are greeted. Realists contend that room must be made for different levels of commitment to scientific theories. I maintain that the notion that all theories addressing sex differentiation, for example, are just as uncertain as is quark theory, say, or even molecular theory, must be challenged. The evidence pertaining to sex differentiation is substantially closer to the daily experience of human beings in all cultures than is the evidence pertaining to quark theory. Even Kessler and McKenna concede that no culture has created less than two sex categories, and that all cultures engage in some genital inspection of a baby upon its birth.7 Accordingly, it is

---

natural that we would have greater faith in the general hypothesis regarding the differentiation of the sexes, even if there is some disagreement as to the various mechanisms in operation, or even if we have little or no understanding of these underlying mechanisms.
WORKS CITED


---------. "Verification and Experience." In Ayer, Logical Positivism, 229-247.


---------. "For A Careful Reading." In Benhabib et al. *Feminist Contentions*, pp. 127-143.


DeLancey, Craig. "Real Emotions." Forthcoming in *Philosophical Psychology.*


--------. "On the Genealogy of Ethics: An Overview of Work in Progress." Afterword to Dreyfus and Rabinow, Michel Foucault: Beyond Structuralism and Hermeneutics., pp. 229-252.


--------. "What is Enlightenment." In Foucault,The Foucault Reader, pp. 32-50.


--------. "Epistemology Naturalized." In Quine, Ontological Relativity, pp. 69-90.


--------. "Speaking of Objects." In Quine, Ontological Relativity, pp. 1-25.


