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A PHENOMENOLOGY OF MIMETIC LEARNING AND MULTIMODAL COGNITION: INTEGRATING EXPERIENTIAL KNOWLEDGE INTO PROGRAMS IN RHETORIC, COMPOSITION, AND TECHNICAL COMMUNICATION

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A PHENOMENOLOGY OF MIMETIC LEARNING AND MULTIMODAL COGNITION:

INTEGRATING EXPERIENTIAL KNOWLEDGE INTO PROGRAMS IN RHETORIC, COMPOSITION, AND TECHNICAL COMMUNICATION

Ву

Kevin R. Cassell

A DISSERTATION

Submitted in partial fulfillment of the requirements for the degree of DOCTOR OF PHILOSOPHY

In Rhetoric and Technical Communication

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This dissertation has been approved in partial fulfillment of the requirements for the Degree of DOCTOR OF PHILOSOPHY in Rhetoric and Technical Communication.

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Table of Contents

| Acknowledgements | 4 |
|--|-----|
| Abstract | 5 |
| Introduction: | 6 |
| Chapter 1: Mimesis in the Phenomenology of Merleau-Ponty | 27 |
| Chapter 2: The Complex History of Mimesis - An Overview | 57 |
| Chapter 3: Cultivating Experiential Knowledge in Rhetoric | 90 |
| Chapter 4: Bodies as Media in Multimodal Ecologies | 122 |
| Chapter 5: Integrating Experiential Knowledge into College Curricula | 158 |
| Works Cited | 201 |

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Abstract

My dissertation emphasizes a cognitive account of multimodality that explicitly integrates experiential knowledge work into the rhetorical pedagogy that informs so many composition and technical communication programs. In these disciplines, multimodality is widely conceived in terms of what Gunther Kress calls "socialsemiotic" modes of communication shaped primarily by culture. In the cognitive and neurolinguistic theories of Vittorio Gallese and George Lakoff, however, multimodality is described as a key characteristic of our bodies' sensory-motor systems which link perception to action and action to meaning, grounding all communicative acts in knowledge shaped through body-engaged experience. I argue that this "situated" account of cognition - which closely approximates Maurice Merleau-Ponty's phenomenology of perception, a major framework for my study - has pedagogical precedence in the mimetic pedagogy that informed ancient Sophistic rhetorical training, and I reveal that training's multimodal dimensions through a phenomenological exegesis of the concept mimesis. Plato's denigration of the mimetic tradition and his elevation of conceptual contemplation through reason, out of which developed the classic Cartesian separation of mind from body, resulted in a general degradation of experiential knowledge in Western education. But with the recent introduction into college classrooms of digital technologies and multimedia communication tools, renewed emphasis is being placed on the "hands-on" nature of inventive and productive praxis, necessitating a revision of methods of instruction and assessment that have traditionally privileged the acquisition of conceptual over experiential knowledge. The model of multimodality I construct from Merleau-Ponty's phenomenology, ancient Sophistic rhetorical pedagogy, and current neuroscientific accounts of situated cognition insists on recognizing the significant role knowledges we acquire experientially play in our reading and writing, speaking and listening, discerning and designing practices.

Introduction

In this dissertation I emphasize a cognitive account of multimodality in an effort to integrate experiential knowledge work into the rhetorical pedagogy that currently informs so many college-level composition and technical communication programs in the United States. I argue that mainstream versions of this pedagogy privilege conceptual knowledge and learning. A paradigm that posits multimodality as a function of cognition brings greater attention to their experiential dimensions. As we know, "experiential learning" is a kind of buzzword in colleges and universities, expressing the assumption that students learn best when there is a significant "handson" component to their education. I share that assumption but have also wondered: What is the nature of knowledge-work in such a paradigm? This dissertation offers an account of that type of "work" that I then apply pedagogically to the curricular areas of Rhetoric-Composition ("Rhet Comp") and Technical Communication ("Tech Com"). Multimodality is a site in both fields where an account of experiential knowledge can be profitably developed and applied pedagogically.

We need, however, to think a bit differently about multimodality. In Rhet-Comp, it is often envisioned in terms of what I call the "Big Three" modes of communication: Written, Spoken, and Visual Communication. In addition, these modes are usually articulated and taught within social and cultural contexts. The pioneering multimodal theorist Gunther Kress, for instance, tells us that all modes of communication are "social semiotic" in that they are shaped ultimately by the context that is culture. In some emerging branches of cognitive neuroscience, however, multimodality is described quite differently. The neuroscientist Vittorio Gallese and the neurolinguist George Lakoff use "multimodality" to describe what they believe to be the primary characteristic of our sensory-motor system, which links perception to action and action to meaning. They argue that this neurological-perceptual system shapes language and hence all of our communication practices. Culture plays a role, yes, but it is not the only one. Such a model insists that our primary way of learning is always-already experiential. We experience the world by interacting with it, and our interactions are mediated by multiple sensory and perceptual modalities. I argue that this mostly unconscious, dynamic, ongoing cognitive process is knowledge work - work done not by our "minds" but by our bodies - and in this dissertation I associate that

knowledge work with the ancient Greek concept of *mimesis*. We learn quickly and experientially because the multimodal sensory-motor systems are mimetically attuned to the situations our bodies move through and are enmeshed in. Mimesis is what situates us in what is essentially a cognitive environment. It is an essential function of our sensory-motor systems and operative as what I will call in later chapters *body-engaged learning*.

The work of Gallese and Lakoff and many other thinkers whose work I draw on in this dissertation all subscribe to the theory that cognition is situated; that is, that thinking and knowing is equivalent to doing and interacting with the people and things that constitute our immediate situations. This theory of situated or embodied cognition² that in recent years has made significant inroads in cognitive psychology and several branches of neuroscience is actually not new. The work of the French phenomenologist Maurice Merleau-Ponty posited such a theory as early as the 1940s by emphasizing the integrated relationship between the body's perceptual apparatus and the people and things the body comes into contact with. His phenomenology of perception, along with his theories on the role of imitation in habituating the body to its surroundings, will serve as the primary theoretical framework for this study. By putting Merleau-Ponty's phenomenology into conversation with neuroscientific theories of situated and embodied cognition, especially those of Vittorio Gallese (one of the discovers of the so-called "Mirror Neuron System"), a philosophy of mind as inextricably bound to the body emerges, one which shares significant similarities with the strongly mimetic pedagogy that informed ancient Sophistic rhetorical training. As rhetorical scholars like Debra Hawhee have shown, the first "schools" of rhetoric in ancient Greece developed in public gymnasia. Students learned the arts of rhetoric in relatively dynamic spaces where no clear distinctions existed between philosophy and athletics, rhetoric and wrestling, civic education and the musicopoetic arts. These gymnasia were perhaps the first sites in Western history where experiential learning in rhetoric, philosophy, civics, and art took on its first formal shape. It is here too where mimesis emerged as a vital pedagogical technique - bodily knowledge-work through repetition - as well as a rhetorical strategy for both invention and delivery, one that would develop centuries later into the dominant school of Latin rhetoric known as imitatio.

This ancient rhetorical pedagogy, which Hawhee describes as a "bodily art," would take a back seat to new forms of education that emerged with the dawning of classical philosophy and the formalization of rhetoric, first by Aristotle, into telosdriven persuasion. Interestingly, Aristotle's formalization of rhetoric resulted through a kind of recovery effort of a practice that his former teacher, Plato, so famously denigrated. As the founder the first "Academy" whose thinking significantly shaped the tradition of Western education, Plato launched a prolonged attack against the practitioners of what he called *rhetorike*, the Sophists, and the mimetic tradition that had become associated with them and other so-called "poets," the *rhapsodes* or public performers, who bewitched and enchanted the public with their songs and stories of historical events. The arguments and rhapsodies these public figures made created a false impression of the world which Plato believed was an inferior manifestation - a mere "copy" - of a more profound metaphysical Truth. In denigrating techne - the practical and technical art of builders and craftsmen - and elevating the "forms" and "ideas" of *episteme*, Plato helped set the stage for what would become an institutionalized privileging of conceptual knowledge and learning throughout the West. This is one reason why knowledge acquired experientially through body-engaged learning has been traditionally devalued along with the school programs that cultivate it. One thinks here of secondary level physical education programs, "Phys Ed," or of the industrial and vocational curricula that were once called "Shop," which have historically been treated as supplements to "academic" curricula in mathematics and computer technologies, the social and physical sciences, even the arts and humanities. The privileging of conceptual over experiential knowledge work contributes to a stratification that still permeates most institutions of formal education and manifests itself in a hierarchy which promotes theory over practice, research over teaching, and critique over creativity. I believe that this hierarchy has its structural roots in Plato's separation of metaphysical mind from material body, an epistemology that reached its culmination in the dualistic logic of the modern thinker Rene Descartes and lives on through the designs of the modern institutions created within its conceptual framework.

However, since the early 20th century, this paradigm has been slowly shifting. Pragmatist inquiry that developed in the United States around the turn of the century

was highly skeptical of Cartesian logic and the reifying conceptual structures of European philosophy, giving birth to progressive education and the concept of "experiential learning." In the world of 20th century continental philosophy, poststructuralism and deconstruction disrupted the dichotomous logic upon which the hierarchies that support absolute distinctions are based, while phenomenology has displaced the subject of classical humanism - "Man" - by insisting that the "human being" is not a unique entity but an amorphous state of being-in-the-world. Neuroscience has grounded the "mind" in the very material processes of the body's central nervous system, and cognition, as noted above, is increasingly seen as extending beyond brain and body to include the environment in which that body is situated. Theories of relationality have worked their way into educational philosophy as well, supporting pedagogical models of collaborative learning that advocate meaning making as an intersubjective rather than solitary enterprise. Meanwhile, the advent of digital technologies and multimedia communication tools is rapidly transforming traditional classrooms into smart environments, ushering in learning outcomes that increasingly reflect hands-on components to academic work. I think, then, that multimodality - a term in Rhet-Comp and Tech Com that is primarily associated with digital technologies - is a good site to build a theory on what experiential knowledge is and, hence, what "experiential learning" actually means beyond project-based assignments and ethnographic field work in undergraduate curricula.

My Pedagogical Objective and Methodology

In his "Memorial Address," Martin Heidegger claims that just as a composer is present in his or her composition, so too is meaning present in everything that exists. He compares humans to plants that are meant by nature to rise from the earth in which they are rooted to bear fruit in the sun (47). However, in the modern West, people have lost their rootedness - their *autochthony* - due to the hegemony of a mode of cognition he calls "calculative thinking" (46-49). This kind of thinking has replaced the kind of "meditative thinking" humans are naturally inclined to (56). Whereas calculative thinking "computes," "plans and investigates," meditative thinking "contemplates the meaning which reigns in everything that is" (46). It has so

objectified the world that "Nature becomes a gigantic gasoline station, an energy source for modern technology and industry" (50). In order to recover our rootedness, Heidegger claims, we need to cultivate our capacity to think *meditatively*. Being open to that which does not lend itself easily to calculation - Heidegger calls it "the mystery" - seems, to me, to be not just a way to think meditatively but to act mimetically since such "a vision of a new autochthony . . . someday even might be fit to recapture the old and now rapidly disappearing autochthony in a changed form" (55).

I would like to suggest that calculative thinking as described by Heidegger is enabled in part by the West's emphasis on conceptual knowledge as an abstract series of metaphysical principles, disembodied "laws of Nature" that, once ascertained through rigorous study and experimentation, can then be hylomorphically imposed on dumb matter in the production of significance - or, in the case of calculative thinking, of some kind of usable resource. It seems as though calculative thinking disembodies concepts whereas meditative thinking, by "rooting" cognition in the actual world of experience, seeks to embody them; in this sense, meditative thinking may be the cognitive mode of the recent paradigm of embodied mind, which George Lakoff and Mark Johnson famously claim "challenges" the entire tradition of Western thought. 5 It therefore also challenges how we think about teaching and learning. I believe that the currently popular model of persuasive rhetoric that informs instruction, curricular development, and assessment protocols not only privileges conceptual knowledge acquisition over experiential knowledge making but anchors rhetoric in a model that encourages calculative thinking. The classical rhetorical paradigm of persuasive argumentation contributes to a linear transmission view of communication. As such, it tends to support a nonmaterial account of information as a set of principles a skilled rhetor draws on when imposing an argumentative strategy on a predetermined situation and audience. Under certain circumstances, this rhetorical paradigm is very useful. But is the best approach to *all* situations and audiences necessarily persuasive? Can and should rhetoric be employed in ways that do not subscribe even tangentially to the model of a skilled rhetor appealing to passive audiences with the calculated intention of persuading them?

My answer to this question is yes, and I want this dissertation to contribute to the development of new rhetorical models that integrate experiential knowledge-work into our undergraduate curricula. I believe that education will be stronger if conceptual knowledge-work is appropriately balanced with the experiential. At this point, I should explain more precisely what I mean by these terms. In the context of this dissertation, conceptual will signify the following: an educational model invested primarily in the transmission of ideas through the replication or imposition of identifiable forms and formats (the eidos of episteme); it is concerned primarily with the symbolicity of meaning and meaning-making; it is generally hypothesis-driven; and it has a strong commitment to critique and "critical thinking." It seeks to cultivate knowledge with recourse to the "mind," a construct that comes with a coded architecture that needs to be programmed by filling it with information obtained through critical contemplation, logical analysis, and credible research methods. The term experiential, on the other hand, will be used in support of a model that attends to knowledge-work as material praxis (techne); attends to the role of affectivity in meaning-making; is generally data-driven (with data being conceived as material information, not just empirical evidence in support of specific claims); it emphasizes creative engagement with others and with things, and bases communication on reflexivity rather than transmission. In this model, knowledge is first grounded in the body's sensory-motor system and emerges through that system's mimetic attunement a word I borrow from Thomas Rickert and use throughout this dissertation⁶ - to the conditions of the situation in which that body is situated.

I should make it clear that I am well aware of the constructed nature of the dichotomy I posit here between the conceptual and the experiential. I do not believe that these classifications reflect what some call "the Real"; rather, I see them as reflective of a dichotomous logic shaped by cultural convention and entirely susceptible to Derridean desconstruction. At the most basic levels of cognition there is no real distinction between these two seemingly distinct forms of knowledge work. But Western culture's historical adherence to dichotomous logic has helped create conditions whereby certain world views are privileged at the expense of others. My dissertation represents an effort to trouble what I argue is one such privileging. As I hope I have clarified above, I do not want argue that conceptual knowledge *is*

calculative thinking and experiential knowledge *is* meditative thinking. All humans naturally conceptualize, but not all humans calculate in the sense Heidegger means it. Again, calculative thinking arises from the privileging of conceptual knowledge *over* knowledge that I am calling experiential, one manifestation of which might be conceived as what Heidegger calls meditative.

I would like now to describe my methodology and theoretical orientation. For this dissertation I used a modified version of "Grounded Theory" (GT). GT was developed by the sociologists Anselm Strauss and Barney Glaser in the 1960s and used for their 1965 book Awareness of Dying. In their work with terminally ill patients, both men entered the caretaking environments with no preconditions other than to learn about how people coped with their lives knowing that death was imminent. In the process, they collected enormous amounts of data - personal notes, interviews, audio and film recordings, observations of interactions between patients and their families and caretakers, books that were circulated, medicines that were compared - from which their theoretical concepts emerged and upon which they are "grounded." As is evident by this description, GT takes a data-driven rather than hypothesis-driven approach to qualitative research. Most traditional research methodologies require the application of a theoretical model to the phenomenon being studied. GT takes an opposite approach, beginning not with a hypothesis but with the collection of data. Once a sufficient amount of data has been amassed, GT researchers look for patterns or "key points" that emerge from the data and which are then "coded" (Strauss, 14-15). This initial stage of "open coding" naturally leads to one called "axial coding" in which these coded data are grouped into concepts. At this point, coding becomes more "selective" as clear relevant patterns emerge. These coded patterns are then arranged into structured categories that are the grounds for "theoretical codes" (25-26) The final stage of this research process is marked by the emergence of a theory, or a state of "theoretical saturation," when no relevant new patterns can be ascertained outside of the scope of the research area (25-26).

This approach seems particular appropriate given the phenomenological framework of my study, informed as it is by the work of Maurice Merleau-Ponty. Phenomenology, as described by one of its pioneering figures Edmund Husserl, grounds study of the world in the *phenomena* that are "things themselves." So-called

"objective" interpretations of the world do not *represent* "the Real" so much as they are *abstracted* from it. He believes that, first and foremost, we inhabit a "lived world" (*lebenswelt*), the appearances of which do not exist as "objects" in a geometrically mappable space and behind which exist the "real." Instead, "the Real" is generated in our *perception* of phenomena, in how the things of the world appear to us not through analysis and contemplation but by literally *experiencing* them. Our "theories" about the world, the "meaning" and "significance" of life, do not pre-exist experience but rather emerge through it. In this sense is GT phenomenological: it is grounded in phenomena and the theoretical suppositions it advances arise from the ground in which it is always rooted.

I write above that I take a "modified" GT methodology. Because GT is associated primarily with the social sciences, it is conceived as a method for studying people in specific social contexts. As open-ended as Glaser and Strauss's study was, its focus was clearly on the personal struggles and interpersonal relationships observed of people in the mid- to latter-stages of terminal illness. The theoretical framework of this dissertation, however, did not arise from an ethnographic observation of people but rather from an extensive engagement with a wide variety of texts. As early as 2009, I began to read texts that had a loose thematic affiliation among them specifically, theories that took into account the nonhuman dimensions of our worlds. I read books and articles (I also read blogs and watched online videos) that related to Posthumanism, Actor-Network Theory, Object Oriented Ontology, and many others that were not easy to classify. My readings spread across multiple fields and research areas - philosophy, rhetoric, anthropology, critical theory, animal studies, cultural studies, cognitive neurosciences, reader response theory, composition studies, technical communication. In the process of my readings I encountered the phenomenology of Maurice Merleau-Ponty. My first exposure to his work came through secondary texts like Glen Mazi's Humans, Animals, and Machines and David Abram's Spell of the Sensuous, both of which apply Merleau-Ponty's theories in such a way that the nonhuman dimensions of experience were rendered both palpable and compelling. I then read his *Phenomenology of Perception*, followed by a number of other texts that I cite throughout this dissertation, and developed an interest in focusing on the body as our (and these are his words) medium for having a world.

At the same time, I encountered references to the ancient Greek concept of mimesis that seemed to lend themselves well not only to Merleau-Ponty's phenomenology, but to theories of material rhetoric and embodied cognition that were emerging in my readings. My first encounter with mimesis was Morris Berman's 1981 text The Reenchantment of the World. It popped again in Mark Hansen's 2000 book Embodying Technesis: Technology Beyond Writing, where Hansen develops a theory of "corporeal mimesis" drawn from the Marxist philosopher Walter Benjamin in advancing a theory of embodiment that was *phenomenological* as opposed to "epistemological." I then remembered how mimesis had popped up in other works, including Debra Hawhee's 2000 study Bodily Arts: Rhetoric and Athletics in Ancient Greece, a book which sheds light on an ancient pedagogy that one reviewer has called experiential learning. 8 It was quite by accident, fortuitously enough, that I came across Merleau-Ponty's use of the concept of mimesis in his essay "The Child's Relations with Others." His description of mimesis provided me with the basic building blocks for a model for what I call *experiential knowledge*, something that I attempt to trace the contours of in this dissertation.

I took an old-school approach to the data-collection process. I photocopied and kept print copies of numerous articles and book sections in files that were arranged by authors' last names. In the "open coding" stages of my research I annotated these print copies, writing notes in the margins and summarizing the article's key points in an available area of white space, usually on the last page. I then copied onto 3x5 notecards passages from the texts - mostly direct quotations, which, like the files I kept, were arranged by authors' last names and arranged alphabetically in plastic containers. After having amassed literally hundreds of these data, I entered the stage of "axial coding," sorting cards into groups that designated some kind of thematic consistency. Each group of notecards morphed considerably; it was not uncommon for two groups - each suggesting a sort of semi-concept - to be combined with one or two other semi-concepts, forming a more identifiable concept. Arranged across a variety of physical surfaces that included two kitchen counters, a covered piano keyboard, the cushions of my couch, and two small tables, these groups of cards slowly - with my help, of course - arranged themselves into categories that later became the chapters of my dissertation and the sections of these chapters. Although what I ended up with

(an account of experiential knowledge and how to integrate that into composition and technical communication programs) was quite different from what I began with (an investigation into our relations with nonhuman others), there remains an underlying thread that weaves together both process and product. As Merleau-Ponty might observe, I tapped into a "certain style," a pattern with which I developed familiarity, that culminated ultimately in an *expression* - a theory, a dissertation - that my effort and knowledge-work helped to enact.

Mimesis: An Overview of this Dissertation's Dominant Concept

I want this dissertation to contribute to a recovery effort of a lost dimension to mimesis - a dimension that I call "phenomenological" in that it attends to the lived world of everyday experience and takes as primary our bodies' perceptual engagement with the things we encounter. I am not interested, nor capable, of recovering any "original meaning" for these words. In fact, I use recovery somewhat hesitantly because in many ways my project is concerned with *uncovering* something that has not been "lost" so much as metaphorically buried under misconstruals, reductive definitions, and cultural prejudices. Conceiving of mimesis as the manner of producing a direct copy of something cannot account, for example, of blurs boundaries between categories that have historically kept far apart. One important example would be the human and nonhuman. Some of the earliest recorded references to the word group mimos, from which mimesis derives, reveal aesthetic and even intellectual intercourse between the human and nonhuman worlds. The Thebian lyric poet Pindar employed the verb *mimeisthai* to describe a choreography in which dancers were instructed to match the movements of animals (Halliwell, 19). The fifth-century philosopher Democritus believed that humans learned certain crafts, including music, through the imitation or emulation of animals, a point Aristotle later tried to "correct" in his History of Animals by observing how many mimemata (analogies, resemblances, but not imitations) cut across both human and animal life (154). Aristotle also famously described the aesthetic function of mimesis as an imitation of "nature" (phusis), implying thereby that the mimetic arose through active observation by the human of nonhuman patterns and activities.

Unfortunately, as evidenced by the pejorative connotations of the word "imitation," which is the most common English translation of the Greek concept, mimesis has endured a largely negative reputation. This is primarily Plato's legacy. Plato's objections to mimesis were in part the result of his philosophical conviction that representation simply imitated the world of mere appearance, thrice removed from the ideational forms of Truth. In Platonic metaphysics, the couch upon which Socrates sat was a mere material "copy" of true metaphysical Couchness. But Plato's distrust of mimesis went beyond that. According to the classical scholar Stephen Halliwell, Plato's distrust of mimesis was primarily psychological, "grounded in the assumption that there is a continuity, even equivalence, between our relations with people and things in the real world and to people and things presented in mimetic art" (78). Halliwell contends that for Plato the highest degree of psychological absorption was akin to what we know today as *empathy*, a state at which "the mind experiencing the poetic representation is so immersed in the mind of the character as to have no room for emotional or critical dissociation" (80). 10 When audiences "surrender" completely to the point of view of a performer or artistic representation, they fix themselves ever more adhesively to the illusory imitations of reality projected on the walls of the cave in which Plato so famously located the intellectually stunted masses. So absorbed are they in the material appearance of things that they cannot rationally detach themselves to contemplate epistemic matters of truth. In a sense, the empathetic identification with others through the enactment of an event or experience created an uncritically accepted false consciousness not unlike that which the twentieth century Marxist playwright Bertolt Brecht sought to disrupt in audiences. 11 The only difference is that where Brecht desired to disrupt conformity to the ideological status quo, Plato desired to uproot all obstacles blocking the ascension of an intellectual orientation based on reason.

It is clear that mimesis to Plato was more than just mindless imitation. The "imitative arts" seen in poets, performers, and public speakers were transformative of a "real" that in essence was intransigent. Thrice removed from the true forms and ideas that constituted authentic knowledge, they operated in a world of mere appearances, hoodwinking all nonphilosophers who bought into the illusion. Despite Aristotle's efforts to reconstitute mimesis - something I will address in Chapter 2 - the

term never fully recovered from Plato's disparagement. Reduced to the category of imitative repetition and representation, mimesis carries the pejorative sense of being trite and limiting, an obstacle to be overcome. For example, in 2010 Spring Press published *Beyond Mimesis and Convention: Representation in Art and Science* as part of its series Boston Studies in the Philosophy and History of Science; the text explicitly advocates moving "beyond" notions of mimicry, similarity, resemblance, convention, and imitation in the arts and sciences. And for another example: In support of his argument that rules governing human conduct should be slippery enough for people to elude coercive traps social orders set for them, the political theorist Richard Flatham cites the ability of such rules to "diminish the incidence of rote, mechanical, mimetic, or otherwise submissive behavior" (qtd in Bennett, *Enchantment*, 155). Like Plato, Flatham associates mimesis with the "submissive behaviors" of audiences. He also uses another term that is often associated with mimetic imitation: "rote."

In the field of rhetoric, mimesis is often figured in this fashion. Mary Carruthers associates it with the aesthetics of "truthful representation" and artistic "realism," and she opposes its "rote" learning strategies to the complex memory architectures used as rhetorical invention strategies by Medieval monks through the practice of *mnesis* (2-3, 72). Nathan Stormer similarly cites *mnesis* as a way of moving beyond the "age-old predilection to treat memory as mimetic," as "copying" ("Recursivity" 38), and elsewhere associates mimesis with "representational practices of human beings seeking recognition" ("Encomium," 225). No doubt these significant scholars are thinking of mimesis through its popular representation as imitatio, a doctrinal formulation of mimesis begun by the first-century BCE Greek rhetorician Dionysius of Halicarnassus that promoted the emulation of literary and historical works. Centuries later imitatio would be taken up and given new force by the Latin rhetorician Quintillian and the Renaissance thinker Erasmus, whose widely-read 1512 textbook Copia: Foundations of the Abundant Style instructed rhetors in how to adapt pre-existing texts into their own compositions. In Chapter 4, informed by concepts of Merleau-Ponty and others, I will offer an interpretation of *imitatio* that I hope will bring to light its enactive and "expressive" dimensions which have fallen to the wayside by the emphasis on the reproduction of ready-made forms.

Although I work toward a reconceptualization of mimesis that is more positive, I want to be clear that my dissertation will not shy away from aspects of mimesis that some compelling thinkers have argued devalues individual identity, erases difference, or reproduces static or idealized versions of "reality." In Chapter 2, I will, for example, look closely at the work of Rene Girard, for whom mimesis is the origin of all that has plagued humankind from the inception of culture. But in doing so, I will point to how difficult it is, for Girard as well as for Horkheimer and Adorno – in fact, even for Plato and Aristotle – to pin the concept down to a single signification. Mimesis is and has for long been a slippery idea. As the literary scholar Matthew Potolsky fittingly puts it:

Mimesis takes on different guises in different historical contexts, masquerading under a variety of related terms and translations: emulation, mimicry, dissimulation, doubling, theatricality, realism, identification, correspondence, depiction, verisimilitude, resemblance. No one translation, no one interpretation, is sufficient to encompass its complexity (1)

The classical scholar Stephen Halliwell, in a study of the aesthetic tradition of mimeticism, ¹² argues along similar lines for broader conception of mimesis. He describes one of the guiding aims of his study as tracing and exposing "the complex diversity of mimeticism, from Plato to the present," and he cites the "still regrettable translation of mimesis as 'imitation'" as the greatest obstacle to a "sophisticated understanding of all the varieties of mimeticism" (13). It should be noted that Halliwell uncovers varieties of the concept within a framework restricted to *aesthetic* mimesis – *mimeticism* – and intentionally does not attend to its nonaesthetic dimensions.

In this dissertation I will attend explore the nonaesthetic dimensions of mimesis and argue for why I think they are important for education, both in general and for the fields of Rhet-Comp and Tech Com where multimodality continues to emerge as a significant force. I therefore concur with the mimetic scholars Gunter Gebauer and Christoph Wulf that

[c]onventional understandings of mimesis fall short of the complexity and significance of the concept. It is restricted in some cases to aesthetics, in others to imitation. These definitions reveal neither the anthropological

dimension of mimesis nor the variety of meanings that can be and have been attached to the term (1).

With this dissertation I join these scholars and others who seek "to expose the buried dimensions of [mimesis] and to correct and move beyond reductions . . . that result in an impoverishment of the term (7).

To sum up, my particular approach to mimesis will employ a phenomenological framework informed by key concepts drawn from the work of Maurice Merleau Ponty. In the process, I hope to develop a phenomenology of what Walter Benjamin calls the "mimetic faculty," a cognitive model of mimesis that I will frame as multimodal and offer as a paradigm for praxis in writing and communication. Mimesis is a vital function in our sensory-motor perception and hence central to body-engaged doing, making, and learning. I will link my reading of Merleau-Ponty to recent neuroscientific theories throughout my study. This will help me to show reconceive the largely disparaged term imitation - and its rhetorical instantiation as imitatio - as a key component of experiential knowledge. Through our social interactions, we all automatically - some might say instinctively - engage in a form of imitation that Vittorio Gallese calls embodied simulation, a term that captures how our bodies intentionally attune themselves to situations and contexts and to other humans who inhabit them. Experiential knowledge, from which all of our concepts derive, is cultivated in this basic mimetic capacity that all human beings, like many other species, possess. 13 I believe that the mimetic theory I develop in this dissertation aligns nicely with recent incarnations of rhetoric as a form of attunement to situations conceived multimodally (Rickert would use the term *ambient* here)¹⁴, an attunement that is originary in the what the Greeks called *phusis* and which Enlightenment philosophers and Romantic poets idealized as "Nature." Conjoined with Merlea-Ponty's phenomenology, I will offer a pedagogy that I will call, simple enough, mimetic-multimodalty with the hope that it will influence scholars and teachers in the fields of Rhet-Comp and Tech Com. I will now provide some background to my putting into pedagogical conversation mimesis and multimodality.

The Organization of this Dissertation

In addition to this introduction, my dissertation is divided into five chapters. Each one is subdivided into sections. My conclusion is integrated with Chapter 5 and in that section I provide an account of the kind of rhetorical theory I would like to see balanced with the current emphasis on persuasive argumentation. Endnotes can be found at the end of each chapter and a comprehensive bibliography (Works Cited) is provided at the conclusion of Chapter 5. I will conclude this introduction with a brief overview of the chapters that lie ahead.

I begin Chapter 1 by first situating Merleau-Ponty in the philosophical movement known as phenomenology whose founder was Edmund Husserl and which includes as well the philosopher Martin Heidegger. Where Heidegger provided theories of relationality between people and their worlds, Merleau-Ponty focused on the actual "lived body" as the medium of those relations. For this reason, he was interested in how the body played a role in knowledge making and communication and identifies mimesis (in a version of the concept he borrows from the developmental psychologist Henri Wallon) as a key function of what he refers to throughout the corpus of his work as the body schema - a formulation that approximates what today is called by cognitive neuroscientists the sensory-motor system. 15 Because Merleau-Ponty's discussion is foundational to the reconceptualization of mimesis that I develop in this dissertation, I trace its shaping power through several of his key ideas, including the body schema, his theories of style and expression, and the thin line between the actual and virtual - the experiential knowledge of the body and the conceptual knowledge that derives from it and has long assumed to stem from "the mind." Of all of Merleau-Ponty's ideas, though, intercorporeity perhaps best aligns his phenomenology of perception with neuroscientific theories of situated cognition whose nexus, I argue, supports the mimetic-multimodal pedagogy I will develop in the last chapter of this dissertation.

Chapter 2 provides a phenomenological exegesis of the concept of mimesis, a continuation and elaboration of the rough sketch I provide above. I argue that the historical reduction of mimesis is in part the result of an overemphasis on its representative aspects, on rote "copying" in the service of aesthetic realism, which has effectively buried its nonrepresentational dimensions. Using Merleau-Ponty's

phenomenological framework and drawing on the recent work of several mimetic scholars, I reveal how this expressive dimension is inherently bodily (which is one reason for its suppression by metaphysical conceptualism) and hence expressive and enactive, not just representational. I will show how this "dual-aspect" of mimesis that Stephen Halliwell sees as central to Aristotle's theory of mimesis reveals itself in the work of even its most vitriolic critics, including Plato, Rene Girard, and (less virulently) Theodor Adorno. After attending to some of its more compelling problematizations, I consider Aristotlean mimesis from the vantage point of Merleau-Ponty's phenomenology and map its cognitively embodied instantiations in the philosophy of Walter Benjamin, the neuroscientist Vittorio Gallese, and the affect theorists Anna Gibbs and Mark Hansen.

My objective for Chapter 3 is to pose my philosophical reconceptualization of mimesis for pedagogical application in embodied and material rhetorics. I begin by pointing out how the denigration of mimesis by Plato was intimately linked to his attack on the "imitative art" of *rhetorike* as practiced by the Sophists. The hegemony of Platonism in Western educational philosophy resulted in the privileging of highminded conceptualism, marginalizing the mimetic experiential pedagogy linking ancient rhetorical training with athletics (specifically grappling and wrestling) that took place in ancient gymnasia under the Sophists tutors. However, what Debra Hawhee calls the "bodily arts" of these ancient training regimens persisted in rhetorical education through the school the Romans called imitatio - a term that, in this dissertation, should be seen as a somewhat doctrinal formalization of the Greek mimesis. I argue that the "law of propriety," which the Greeks called to prepon and the Romans saw as a key strategy of *imitatio*, preserved - and, in fact, exploited - the expressive and enactive dimensions of mimesis through the stylized representational enactments of epideictic oratory. I argue that the imperative to enact through language, vocalization, and gesture historical events in such a manner that listeners would palpable experience them speaks to an affective and thoroughly material rhetoricity that subtends symbolic representation and is a significant force in persuasive influence.

Chapter 4 applies the mimetic theory I have developed to multimodal composing. I begin by noting how the multimodal compositionists Kristin L. Arola and

Anne Frances Wysocki offer Merleau-Ponty's claim that the body is one's primary medium - "taking medium here in its grounding sense of that which is between, in the middle" (3) - in advancing a view of media not as a carrier of messages but as a living environment in which we are "always already embedded—embodied—in mediation" (4). The communication scholar Anna Gibbs takes this perspective even further by conceiving the body as an affective site of what she calls mimetic communication¹⁶ in which it "is not so much a medium as a series of media, each of which connects in its own way with technological media, including writing" (201). These and other recent theories of media allow for a phenomenological investigation of the sometimes ambiguous relationship between "multimedia" and "multimodality." Where some feel we need to distinguish both terms, I argue in favor of the ambiguity. While distinction is important in *production*-based contexts of a course, I believe that in *process*-based contexts the blurring of the distinction between "modes" and "media" (a distinction even Gunter Kress struggles to maintain) can be pedagogically useful in having students cognitively situate themselves in creative or ambient environments. I believe that a cognitive rendering of multimodality insists on the (at least occasional) blurring of modalities and medialities, and between expression and representation, since similar perceptual and sensory overlaps occur sensory-motor body schemas and cultivate the experiential ground in which even conceptual knowledge is rooted. I believe that students (and instructors) should be able to think and experience multiple modes/media together for the purposes of invention as well as to distinguish one from the other for purposes of production.

In my fifth and concluding chapter, I offer pedagogical application of what I call mimetic multimodality to the disciplines of Rhet-Comp and Tech Com. I believe that we need to explicitly integrate this approach into the rhetorical pedagogy that informs so many undergraduate composition and tech writing programs. I begin by critiquing the standardizing of rhetoric in undergraduate curricula as persuasive argumentation, a model that subscribes to a transmission view of communication and is invested in conceptual knowledge work. I end by offering a re-envisioning of rhetoric as receptive and enactive of *influence* as opposed to being beholden always to persuasion. While the broader category of influence includes persuasive argumentation, influencive rhetoric¹⁷ opens our disciplines more fully to the

experiential dimensions of communication - embodied, material, affective - which I view as reflexive and, following Merleau-Ponty and Gallese, intercorporeal before it is intersubjective. In between these two ends, I argue for a body-engaged (as opposed to hands-on) approach to teaching and learning in Rhet-Comp and Tech Com. This involves, first, recognizing how the mimetic tradition of classical *imitatio* lives on through the increasingly popular pedagogy (especially in multimodal composing) of remediation and remix - the repurposing of the old to create the new. It also involves attending much more to the role of play (tinkering, fiddling, playing with) as a form of knowledge-building praxis; a re-envisioning of information (conventionally viewed conceptually as disembodied facts and details for transmission purposes) as enacted in material spaces or "cognitive ecologies"; and a re-integration of "writing" into a communicational model that inextricable weaves it with reading, speaking, and listening. I call such a model OVAL (an acronym for Oracy, Visuacy, Auracy, and Literacy) and offer it as an alternative to current writing-centric models whose forms and formats dominate undergraduate composition and technical communication courses.

Finally, I would like to say a few words about my slightly heterodox critique of persuasive argumentation, which I see as the dominant rhetorical theory informing undergraduate composition and technical communication programs. While my model of mimetic multimodality could perhaps be employed to critique some current institutional practices that Sidney L. Dobrin claims are "haunted by academic prescription, economic and management thinking, and subject-driven approaches" (94), I want to my project to be perceived as congenial to the necessary procedures many academic programs have been forced to adopt in recent years under pressure by university administrations eager to satisfy accreditation criteria. In *Postcomposition*, Dobrin argues that the future of composition studies "demands disruption, epistemological and bureaucratic" (7) of student-focused, classroom-based, pedagogyoriented scholarship, practice, and program assessment. He attacks the CWPA (Council of Writing Program Administrators) - an organization I belong to - as a body that is "overtly about control and maintenance of power ... over writing programs and writing pedagogies" (98) while only minimally acknowledging the influence exerted by wider ideological structures on the assessment processes and other "management" protocols

these programs have institutionalized, almost always through collaboration across disciplines and with periodic revision.

While his *post*humanist, *post*pedagogical, *post*student account of postcomposition compels philosophically, ultimately as professionals we need to work with and within existing structures. This dissertation will therefore advocate for a compositionism of the kind the philosopher Bruno Latour calls for in "An Attempt at a 'Compositionist Manifesto." As he frames it, compositionism offers an alternative to critique, which "has all the limits of utopia: it relies on the certainty of the world beyond this world. By contrast, for compositionism, there is no world of beyond. It is all about *immanence*" (4). This view is, surprisingly for Latour, quite phenomenological. 18 I would argue that it is also mimetic if we take immanent to mean expressive and enactive. But the larger point is that the things of the world which people like Dobrin perceive to be obstacles can reversibly be perceived as gateways. This is the view I take of the privileging of conceptual knowledge and the systems of instruction and assessment that help to maintain its dominance. It is not a boogeyman or even a necessary evil. It is simply the status quo, which every now and then needs to be balanced with an alternative in order to create a new way of thinking, doing, and living. I believe that my mimetic theory of multimodality and influencive rhetoric, by shedding light on the significant role experiential knowledge plays in everything we do both inside and outside of traditional classrooms, can help us and our students not only to think differently about learning and communicating, but to attune ourselves to the situations in which we learn and communicate, opening up a whole new horizon of knowledge work that is actually much more familiar to us than we may think.

¹ By "curricular area" I have in mind primarily undergraduate courses offered through programs coordinated by a director. "Rhet Comp" is the popular shortened version of the field commonly called *Composition* and speaks to that field's association with the rhetoric, a classical discipline that in recent scholarship has been going through marked transformation. Composition is sometimes called "writing studies," a term I eschew in this project since it marginalizes modes of communication that I feel composition should attend to (this is discussed in the last chapter). Composition programs are variously called "freshman English," "writing programs," or simply "composition programs." The Council of Writing Program Administrators uses the term "First Year Writing Program" (FYW) and calls directors of such programs "Writing Program Administrators" (WPAs). "Tech Com" is a shortened version of Technical Communication, a younger discipline and has not established itself as firmly as has composition in the general education curricula common to most higher education institutions in the United States. However, that may change given the technological sophistication of so many professional practices and the demand

for people to know how to communicate that sophistication across multiple professional fields. Technical Communication is the scholarly and professional field that developed around specialized curricula that was originally designed for students in the engineering and technical fields for professional communication. However, with the proliferation of so many different specializations both across and within professional fields and academic majors, undergraduate courses in technical communication must address the needs of students with a wide variety of majors. As a result, undergraduate programs in Tech Com are often a mix of traditional technical writing (writing about technology in genres such as training manuals or user guides), scientific writing (lab reports, research articles), and professional writing (business proposals, grants, career documents). The term Tech Com refers to both the scholarly field and to the programs it encompasses.

- ² I will use the more general adjective "situated" for understanding cognition as embodied, extended, and distributed. Each one of these terms designates a specialized research area within a general framework that understands cognition as involving more elements that just the human brain and "mind." The term that most generally applies to such a framework, *situated*, I will use primarily in this dissertation.
- ³ In this dissertation I draw frequently from Hawhee's 2004 book *Bodily Arts: Rhetoric and Athletics in*
- ⁴ This comparison is made through a reference to a quote by Johann Peter Hebel (Heidegger's citation: Works, ed. Altwegg III, 314): "We are plants which - whether we like to admit it to ourselves or not - must with our roots rise out of the earth in order to bloom in the ether and bear fruit."
- ⁵ This is clear in the subtitle of their 1999 book *Philosophy in the Flesh: The Embodied Mind and Its* Challenge to Western Thought.
- ⁶ The title of Rickert's 2013 book is *Ambient Rhetoric: The Attunements of Rhetorical Being*. Although my own study only occasionally references Rickert's major concepts, I do feel that there are strong parallels between his work with kairos and my work with mimesis, his drawing on Heidegger and mine on Merleau-Ponty, as well as his conception of rhetoric as ambient and my model - given at the end of Chapter 5 - of a rhetoric of influence. I very much like how he describes attunement as "given in its dynamic unfolding by an originary, world rhetoricity, an affectability inherent in how the world comes to be. Attunement conveys the countless modalities of responsiveness to this affectability [which means that we] are always already attuned; there are only changes in attunement" (8-9). In this dissertation, I offer mimesis as a force in how we structurally and materially attune ourselves with others, our situations, and environments.
- 7 I base this statement on the compelling argument made by George Lakoff and Mark Johnson in Philosophy in the Flesh: The Embodied Mind and its Challenge to Western Thought: conceptual thinking is rooted in the body's experience of material space as evidenced by the spatial metaphoricity of language. even in its most abstract instantiations. A similar argument is made by Lakoff and Vittorio Gallese in their article "The Brain's Concepts: The Role of the Sensory Motor-System in Conceptual Knowledge," ⁸ See Chris Drew's "Sophistic Training and Experiential Learning: A Methodology of Mind-Body Syncretism"

(*Pedagogy*, 7:2, Spring 2007, pp. 303-8)

9 Halliwell considers this definition of mimesis by Aristotle reductive, failing to capture the philosopher's

broad conception of both "imitate" and "nature." I will discuss this in Chapter 3.

¹⁰ Halliwell compares empathy with a slightly more congenial approach to identification achieved emotionally through sumpaschein, ("sympathy") that, while bad in Plato's eyes, at least allowed a subconscious degree of mental disassociation (80).

¹¹ In a similar mode, the playwright Bertolt Brecht sought to denaturalize theatrical productions that allowed for the sympathetic identification of audiences with characters and situations in order to create a "critical spectatorship" (Halliwell, 91). Such a perspective would, he hoped, shake awake mass audiences from the bourgeois spell cast over them, a perspective they would then bring to the everyday world where their lives were controlled by an aristocratic elite. Though they occupied opposite poles of the political spectrum, both Plato and Brecht believed that rationalist critique would have liberatory effects. ¹² Throughout his study, Halliwell uses the term mimeticism for a mostly artistic tradition that is informed by cultural understandings of the concept mimesis. In many cases, both terms are used interchangeable. ¹³ As I will show in Chapter 1, not all human beings possess this capacity in full. Merleau-Ponty reveals how a brain-damaged WWI veteran is unable to mimic a salute that he once had performed many times. While at the level of basic perception his body is able to translate the world so that he can engage with it in meaningful ways - such as holding a job - his mimetic capacity is seriously diminished due to damage to his brain. As for the mimetic faculty of nonhuman species: there is a vast body of literature detailing how

insects, frogs and toads, fish, and many mammals attune themselves to intimately to their environments

that their bodies, as Caillois noted, blend into it. The Mirror Neuron System that I discuss ahead was discovered by scientists working with monkeys. As a cognitive function, mimesis is shared among many living things.

¹⁴ For Rickert, the "attunements of rhetorical being" inherent in our existence require a reconceptualization of rhetoric as ambient (the Latin ambientem attends to what is surrounding, encircling, environing; p. 5). Importantly for my purpose, ambient rhetoric is phenomenological, Rickert tells us, in its attention to the "ensemble of things, situations, and purposes that define the everyday" (171), and its participation in the "world" as thought through Martin Heidegger as a mutually achieved composite of meaning and matter. What is presented to us through our doing and making "is disclosed as already fitted into material environments and holistic forms of significance" and includes nonhuman elements (xii-xiii). In line with similar proposals made recently by the rhetorical scholar Diane Davis, Rickert asks us to reconceive rhetoric as ontological - not just persuasive - since it engages with questions on how we interact with each other, generate and negotiate knowledge, and how the "human being" and the world simple are (xv, 162). Ambient rhetoric offers a framework that reveals the enactive dimension of praxis - practice, doing and making - that I will argue is not only fundamentally rhetorical but mimetic. ¹⁵ The Merleau-Ponty scholar Scott Marratto, a member of my dissertation committee, has noted how neuroscientific discussions of the sensory-motor system tend to focus predominantly on the neurological processes of the brain at the exclusion of the body's many other attributes and functions which altogether contribute to the body schema. While the mimetic theories of Vittorio Gallese (such as intentional attunement and embodied simulation) extend outward to the social realm, they are very much rooted in the so-called Mirror Neuron System of the brain's pre-frontal cortex - a theory discovered long after Merleau-Ponty had died - and of which Gallese was one of the discoverers.

¹⁶ I will discuss Gibb's theory of mimetic communication in Chapter 2.

¹⁷ I prefer this spelling to "influential" and its connotation of persuasive appeal rooted in some kind of

power structure.

18 In *Pandora's Hope*, Latour somewhat reductively writes: "Phenomenology deals only with a world-forthe-human-consciousness" (10). Although Merleau-Ponty in later years recorded a similar criticism about his book *Phenomenology of Perception*, Marratto believes that this text along with other work from his early years was nonetheless "not inattentive to ontological concerns . . . " (6).

Chapter 1: Mimesis in the Phenomenology of Merleau-Ponty

Abbreviations of sources by Merleau-Ponty:¹

- PhP Phenomenology of Perception
- WP World of Perception
- PoW Prose of the World
- CAL Consciousness and the Acquisition of Language
- VI Visible and Invisible
- CRO "The Child's Relations with Others"
- EO "The Experience of Others"

Maurice Merleau-Ponty and the Phenomenological Tradition

Before exploring Merleau-Ponty's work in relation to imitation, I would like to situate him in the philosophical movement known as phenomenology. Founded around the turn of the twentieth century by the German philosopher Edmund Husserl, phenomenology offered an alternative to the scientific realism that influenced European intellectual trends for some time. Scientific realism attempts to discover what is "real" by examining the properties of objects and things that can be measured and quantified. Properties that do not lend themselves to this kind of mathematical analysis were not deemed to have "reality." The distinction that Plato made long ago between reality and appearance, wherein with appearance was associated with the physical world and matter, and hence with the body, became concretized. The couch that Socrates sat on was of the realm of appearance, a vague formulation of a metaphysical Couchness. But where Plato saw the material world as an inferior copy of ideal reality, the scientific tradition saw it instrumentally, as a means of obtaining insight into the "Nature" that was reality or what the Greeks called phusis. The seventeenth century philosopher Rene Descartes' separation of "mind" from "body" contributed to this clear-cut distinction in an intellectual movement that culminated with the Scientific Revolution. Neoclassicism represented the body not as we actually know it - from an experiential first-person perspective - but more as an object observed from a third-person, or "objective," perspective. Phenomenology attempts to turn this entire tradition inside out.

Although HusserI did not discount scientific accounts such as Galileo's mathematically rendered representation of the world, he argued that objective interpretations did not *represent* the real so much as they were *abstracted* from it. He believed that, first and foremost, we inhabit a "lived world" (*lebenswelt*), the appearances of which do not exist as "objects" in a geometrically mappable space and behind which exist "the Real." Instead, the "the Real" is generated in our *perception* of phenomena, in how the things of the world appear to us not through analysis and contemplation but by literally *experiencing* them. Simply put, we come to *know* the lived world through experience, by literally living in it. All theories about the things that we perceive, including scientific realism, are secondary to the primacy that is perception itself. This means that knowledge is, fundamentally, the ongoing product of experience. Our conceptual knowledge rests solely on the foundation of knowledge we acquire by interacting with the very material world in which we live.

Merleau-Ponty's philosophy takes up Husserl's idea of a lived world but shifts the focus from how it appeared to human consciousness to how it was registered by the human body's sensory-motor perceptual system. He considers not only how we become conscious of the living world but how we come to inhabit it through direct experiential contact. In doing so, he offered a radically first-person perspective that called for a revamping of the received accounts of human behavior that in his time were accepted across a wide range of philosophies and scientific fields, including psychology. His phenomenology also offered a radical rethinking of the classical separation of ontology (being) from epistemology (knowing). To Merleau-Ponty, the meaning of things, their "significance," is not the product of interpretation by the mind after it has processed data transmitted to it via the senses - a model famously proposed by John Locke and which later served as the theoretical basis for a "computational" paradigm that long informed theories of cognition; rather, significance is generated at every moment by the body's interaction with its *Umwelt*, its surroundings, its world. Since action *itself* is meaning, there can be separation between "mind" and "body" or between "body" and "world."

This account departs radically not only from the empirical and intellectual traditions that Merleau-Ponty saw as constituting the framework of our received knowledge, ² but also from classical humanist accounts of subjectivity whereby the

"human being," in addition to being the measure of all things and the highest of all living species, was a distinct entity whose individuality bespoke of an independent self with full agency. In ways that complemented and in some ways completed the phenomenological work of his contemporary Martin Heidegger, Merleau-Ponty advanced the idea that humans are *beings-in-the-world*, not separate from it, not over and above it, but simply *in* it and *of* it. By recasting the human "self" or "psyche" as a *body-subject*, Merleau-Ponty rooted human *being* in a body that was itself rooted in the world and whose "sense" of the world is generated through embodied experience with it - again, "sense" not being a product of consciousness but the interaction between one's body and world that is itself significance. Life does not "have a meaning"; it *is* meaning.

One gets the impression in reading Merleau-Ponty that he sees phenomenology as a kind of recovery effort. In a series of radio broadcasts in 1948, he repeatedly describes what he calls the "world of perception" - "the world which is revealed to us by our senses and in everyday life" - as something that modern art and philosophy is just to beginning to "rediscover" (WP 31-2). He wants to bring this world hidden from us beneath the sediment of received knowledge and social life "back to life" (69). The slow-moving paradigm shift from the classical to the modern era was the initial spark of this "reawakening" (53) and things are still changing radically. In his Phenomenology of Perception he flatly states that the empiricist and intellectualist models upon which Western intellectual culture has been built are "collapsing before our eyes" - bringing down with it the "ideality of the objective, the objectification of the living body," and the reduction of experiential phenomena "to third-person processes" (64-5). Philosophy therefore needs to return to the "actual" world that is prior to the objective world and "rediscover phenomena" as the layer of experience through which other people and things are first given to us. Experiential existence he calls "the system of self-other-things" and its incessant coming into being at each moment of our lives we have lost sight of (65-6).

Clearly, my aspirations for this dissertation resonate with those he held for phenomenology. I, too, wish to contribute to a "rediscovering" of experiential knowledge and the role it plays in learning and living. I want accomplish this by unearthing the buried phenomenological dimensions of mimesis. In this sense what I

have been calling a reconceptualization is primarily a rediscovery or, better (given the metaphor of burial I am using here), a recovery effort. Merleau-Ponty's phenomenology will help me in this endeavor, and it is toward his theories about imitation that I now turn.

The Function of Mimesis "in its Most Fundamental and Irreducible Form"

In the pages ahead I will provide a general overview of the role played by "imitation" in Merleau-Ponty's work. I put "imitation" in quotation marks because that is the word which appears most frequently in the English translations of his work I am working with. He also uses the term "mimic" and "mimicry," sometimes in seemingly specific ways, 4 when describing certain manners or styles of imitation, and at one point he employs mimesis itself to describe a fundamental "function" in the body's sensorymotor perception of things. While Merleau-Ponty does not offer an *explicit* theory of imitation, the human imitative capacity is clearly fundamental to, and significantly broadened by, four of his concepts that I will refer back to in the chapters ahead: the body schema, intercorporeity, style and expression, 5 and our bodies' ongoing reversible slippage between actual and virtual modes of existence. Threaded throughout all three categories are other concepts whose significance to imitation can be teased out with reference to the contexts in which he touches on them as well as to scholarship on his work. They include reversibility between subject and object, identification through habituation, intersubjectivity, the body as a form of media, and perceptual apprehension as the enaction of meaning or significance. These concepts are not distinct from each other but are interwoven with each other along with the three that I identify above.

I will embark on Merleau-Ponty's theory of imitation by grabbing the proverbial bull by the horns and zeroing in on his direct use of mimesis. The term is used several times in his essay "The Child's Relations with Others" when describing the renowned child psychologist Henri Wallon's theories of infant development. Sympathy, he tells us, paraphrasing Wallon, appears in the child "on the foundation of mimesis" (154). Merleau-Ponty describes mimesis as "an ensnaring of me by the other," an attitude by which we assume the gestures, conducts, words, and ways of doing things of those we confront. He elaborates:

Mimesis, or mimicry, is the power of assuming conducts or facial expressions as my own; this power is given to me with the power I have over my own body. It is the 'postural function appropriate to the needs of expression' (Wallon). The constant regulation of bodily equilibrium, without which no function (and in particular no perceptual function) would be possible in the child, is not merely the capacity to reunite the minimal conditions for balancing the body but is more generally the power I have to realize with my body gestures that are analogous to those I see. (154).

He describes how Wallon shows "great insight" in relating mimesis to the postural function of what Wallon calls the "postural schema" and what Merleau-Ponty calls, following other researchers, the "corporeal schema" (schema corporel) or body schema. He notes in particular Wallon's idea of "postural impregnation that is resolved in gestures of imitation" – that is, the bodily absorption of another's conduct which is manifested in its imitation (for example, a yawn) – and cites Wallon's description of a child who, after watching a chirping bird for some time, "sets himself to reproducing the bird's sounds as well as something of the bird's bearing" (145). Merleau-Ponty observes that "not only the perception of another child but even that of an animal quite different from the child himself shows up, thanks to the postural function, in attitudes that resemble those of the other and have their same expressive value" (145).

It is important to note that Merleau-Ponty uses the term "expressive," not representational, to describe "attitudes that resemble those of the other." Mimesis here, grounded as it is in intersubjective identification through sympathy, is not rendered as copying which I feel bears a closer relationship to representation than does expression. The child's mimicry speaks to a bodily association that may indeed be "mindless" in its replication, but that does not mean it lacks significance. What we see in this example, I contend, is an instance of experiential knowledge work. But as I asked in my introduction: what is the nature of that knowledge work? Merleau-Ponty here provides an answer. In fact, he uses this example to distinguish somewhat his own view of mimesis from Wallon's. Whereas Wallon sees the postural function as an "inward formulation" of gestures, Merleau-Ponty sees "the unfolding of different

phases of this process" where the perception arouses in the perceiver "the preparation of a motor activity related to it" (146):

It is this fundamental correspondence between perception and motility . . . that allows the perception . . . to translate itself into an original motor organization. This is what would be the function of mimesis or mimicry, in its most fundamental and irreducible form. (146)

This fundamental correspondence between perception and motility that enables an original motor organization - mimesis in its most fundamental form - is apparently the operation which allows an infant of around three months old to imitate a smile even though it has no visual experience of her own body that would allow for a "point to point correspondence" between the smiling mouth of the adult and the her own mouth. Merleau-Ponty sees the "motor smile" that the child makes as generated not by her "mind" but by her body schema. Constituted kinesthetically, introceptively, cenesthesically, and tactilely, the body schema allows the young child to "globally identify" with the actions she observes performed toward her by others (116-117). Her body is able to "translate" the smiles and other facial expressions she observes because "they all have in common a certain style of action, a certain gestural meaning that makes of the collection an already organized totality" (118; emphasis his). Because global identification arises from a "coupling" - Merleau-Ponty cites Husserl here - between the body schema of the perceiver with the body schema of the perceived, there arises a kind of attunement, a sense of the familiar, a "certain style," wherein "the other's intentions somehow play across my body while my intentions play across his" (118-119). The culmination of significance engendered through an attunement through to a situation's "style" Merleau-Ponty calls expression, which I will describe in the next section.

The (intercorporeal) coupling between body schemas allows for (intersubjective) expression and, ultimately, communication. Merleau-Ponty observes how sympathy - "the system 'me-and-other'" - would emerge from this complex "foundation of mimesis" since what is being "translated" from perception to motility in the observer's body simulates what is being transferred, via perception, from the body of the other to the observer. Sympathy stems from a global bodily identification that in the stages of "precommunication" is characterized as the absence of a division

between the self and others. The phenomenon Wallon calls "syncretic sociability" is hence exemplary of sympathy: when a group of babies are together and one responds to something with a cry, they all start crying - a kind of "contagion" that Merleau-Ponty believes disappears only as visual perception develops. (124, 125-6). While at one level syncretic sociability reveals how human infants are so attuned to each other that the cry of one becomes the cry of all, at another level we understand that their attunement is also *situated*. To say simply that "the babies cry because they identify with each other" ignores the global parameters. The babies also identify with the situation. What does that mean? Merleau-Ponty gives the example of a child who is scolded by his father for having a glass in his hand. After putting the glass down, the child forgets about it and moves onto other things. But five minutes later, upon hearing the sound of breaking glass, the child becomes just as agitated as if he still were holding the forbidden item. "The child confuses himself with his situation," Merleau-Ponty explains. "He is someone who has been holding a glass in his hand, someone who has had a relation with the glass, so that the subsequent breaking of the glass concerns him" (146-7). This, along with a few other examples, demonstrates how "[t]he child is, in fact, the situation and has no distance from it" (147).

Merleau-Ponty's description of mimesis, based as it is on Wallon's account, is by far more complex than the word's conventional association with imitation conceived as rote copying and monotonous repetition. Before moving on, I would like to point out a few important details here. First, following Wollan, Merleau-Ponty conceives of mimesis as a fundamental function of our body's sensory-motor system in that it governs the process by which a perception "translates itself" into a motor action while simultaneously transferring that action across an intersubjective field. Second, mimesis, while primarily introjective in psychoanalytic terms, ⁷ seems central to the enactment of a global identification that is not limited to human others. The relations between the child and his world are evoked in his interaction with animals as well as things (the glass) and extend to include the situation in which these interactions occur. Hence "[w]e must link the notion of ipseity [selfhood] to that of the situation," he tells us elsewhere, "the ego ought to be defined as identical with the act in which it projects itself" (CAL, 49). What might be said to be intersubjective relations - relations between human subjects - are not the only set of relations

mimesis functions to enact; relations are also intercorporeal if we see corporeality as including bodies that are not limited to human subjects. Third, imitation stems not from an act of copying but from "coupling" or attuning to others and situations; in imitating one identifies not so much with a specific action but with its larger contextits "style" - that arises through this coupling. No metaphysical or symbolic meaning is transmitted here; rather, "conceptual meaning must be formed by a kind of *gestural meaning*" which is immanent in all our communication acts, including speech (PhP, 208; italics in original). Finally, and in sum, complex mimetic operations occur at the level of affect and are *embodied* - that is, mimesis is a function of the sensory-motor body schema.

It is important to note that Merleau-Ponty in this essay conveys the idea that the child's "ensnared" mimetic relation with others erases their distinction and eliminates difference. In the following pages, I will show that this is not quite the case. Because "The Child's Relations with Others" was composed as a series of introductory lectures for a university course he was teaching, his primary concern seems to have been to represent the theories of Henri Wallon and other experts in childhood psychology and development. His own views on these theories seems to take a back seat to this exposition. Still, in addition to showing how Merleau-Ponty engaged with mimesis itself, this essay serves as a nice initial foray into his complex understanding of imitation, which I will now delve into in greater detail beginning with the concept of the body schema.

The Body Schema and Our Capacity for Intercorporeal Embodied Simulation

According to Merleau-Ponty, the idea of a *corporeal schema* (or "body schema" as it is more popularly rendered in English) was pioneered by the English neurologist Henry Head before being taken over and "enriched" by Henri Wallon, who preferred the term *postural schema*. (CRO, 145). Merleau-Ponty describes it as a *system* "whose different introceptive and extroceptive aspects express each other reciprocally, including even the roughest relations with surrounding space and its principal directions" including the vertical, horizontal, and other axes that coordinate our positions within an environment (CRO, 117). The "consciousness" we have of our bodies is not of an "isolated mass"; rather, it is the body schema that is evoked

(however, as I will discuss below, some researchers distinguish between the *body image* that we are "conscious" of and the body's proprioceptive awareness of itself, which would be the *body schema*). In actuality, we never perceive an integral "self" or "psyche" in the people we interact with; instead, we perceive "conduct" that is expressive of their intentions as coordinated by their body schemas (117). Following Wallon, Merleau-Ponty believed that experience, hence experiential knowledge, begins introceptively as a way to navigate the "chaos in which I am submerged" (118). It only begins to take on discernible shape between the third and sixth months as the interoceptive system collaborates with the exteroceptive system to create a "minimal body equilibrium" (122) that ultimately serves as the foundation of a sense of self. The child has a "tacit understanding" of his or her being-in-the-world but this kind of subconscious self-awareness is not, he stresses, a "positional consciousness, a representation, *Vor-stellung*" (PhP, 119).

Empirical studies of neonate imitation in recent times provide support for the existence of a body schema and how Merleau-Ponty described its functions, but with an important exception. Contrary to Wallon's and Merleau-Ponty's belief that the body schema developed after birth through a child's intersubjective perceptual relations with others, evidence suggests instead that a general structure consistent with a body schema is innate. Shaun Gallagher and Andrew Meltzoff contend that all humans, at the time of birth, possess "a built-in neural framework or substrate; a schema from the very beginning, but one that is also open to modification by multimodal sensory experiences" throughout their lifetimes (214). Whereas Merleau-Ponty believed that an infant's neurological immaturity at the time of birth blocked an elaboration of the body schema, studies conducted by Meltzoff and M. Keith Moore⁸ have shown that infants are capable not only of external perception but of outright imitation of the gestures of others within the first hour of birth (one infant who "showed a strong imitation" effect was just 42 minutes old) (212, 221). The ability of the child to engage in invisible imitation - the "motor smile" that Merleau-Ponty calls the expression that appears on a child's face in response to the "visible smile" perceived in another (CRO 116) - is not something that comes to her over time but something that can be enacted immediately after birth.

What does develop over time is what Gallagher and Meltzoff describe as the *body image*, which they distinguish from the body schema in ways that are not always clear in Merleau-Ponty. They describe the body image as "a complex set of mental representations of the body" that derives from a subject's perceptual experience of his body, conceptual understanding of the body in general, and emotional attitude toward his body; though the latter two are not necessarily conscious, because they contribute to a set of beliefs or attitudes they form part of an "intentional system." In contrast, the body schema is a system of motor functions operating below the level of self-referential intentionality and "involves a set of tacit performances, preconscious, subpersonal processes that play a dynamic role in governing posture and movement" (216).

What links the body image to the body schema is proprioception, which has a twofold function: (1) it consists of nonconscious, physiological information that updates the body with respect to posture and movement, and therefore plays a vital role in the body schema; and (2) this proprioceptive information can be the basis for proprioceptive awareness - allowing me to tell you where my legs are when my eyes are closed - which helps support the perceptual aspect of the body image (223). Because the child is born with a "primitive" framework for both of these systems - the body schema and body image - she possesses a proprioceptive awareness of her own (invisible) body that allows her to simulate novel facial expressions and gestures she observes in others as well even to "monitor, correct, and improve imitative performance" (225). Meltzoff and Moore have called this primitive framework a "supramodal perceptual system" in which proprioceptive and visual modalities of perception are already in communication with each other and "enables the infant to recognize a structural equivalence between itself and the other people" (225-6). Interpreting what Merleau-Ponty terms a "certain style of action" (CRO 118)¹⁰ as a "translation" between perception and motility in the "transfer" of gestural signification, Gallagher and Meltzoff offer as an alternative model this "supramodal code." Consequently, they argue,

no "translation" or transfer is necessary because it is already accomplished, and already intersubjective. A supramodal code already reaches across the child's relations with others. Infants already apprehend, with quickly-improving

precision, the equivalences between the visible body transformations of others and their own invisible body transformations which they experience proprioceptively. The concept of supramodal code means that the visual and motor systems speak the same "language" right from birth. . . . The [body] schema, working systematically with proprioceptive awareness, operates as a proprioceptive self that is always already "coupled" with the other. (225-6)

The "proprioceptive self" the authors describe here is what the body intuitively perceives as its distinction from others and situations, even in infants whose excess of sympathy Merleau-Ponty saw as "ensnaring" them with others. Frederique de Vignemont argues that this implicit sense of "self" - which she hypothesizes is grounded exclusively in the body schema 11 - is what keeps us from confusing self and other despite evidence that shows how observing pain and other bodily effects in others activates the same ("mirror") neural network in the somatosensory cortex as in those directly experiencing it (431). It is what gives us a first-personal sense of bodily "ownership" and has a permanency that lasts longer than a single bodily experience (445). Vittorio Gallese, Morris N. Eagle, and Paolo Migone reach a similar conclusion. Although fMRI studies of people witnessing disgust exhibited in the facial expressions of others directly experiencing disgust activated the anterior insula in the same overlapping location - indicating how first- and third-person experiences of a specific emotion "are underpinned by the activity of a shared neural substrate" (141) - their embodied simulation of the phenomenon is not a "mere repetition" because of different "degrees of activation" in the same somatosensory areas that support the "disentanglement of who is who" (152,142). In other words, we are born with an innate sense of difference. Identification with others or with a situation is never total despite nearly identical neural activations. Similarly, our bodily imitations are not "copies" of some external model (as Plato would argue) or emanations of some essential inner form (as Aristotle would suggest); rather, they are approximate, appropriate simulations that correspond to actions we perceive in others. We are "ensnared" only in the sense that we respond automatically to the other bodies we are (intercorporeally) coupled with, but this does not erase our distinction as individual entities.

At this point, we might need to update the term "imitation" as used by Merleau-Ponty in the work he produced during the mid-20th century. In our situated interactions with other people and things, we all 12 automatically engage in what Gallese, et al., call "intentional attunement," a specific, shared, phenomenal state generated in part by the mirror neuron system. This system allows for embodied simulation that is "automatic, unconscious, and noninferential in the observer of actions, emotions, and sensations carried out and experienced by the observed" (131). They oppose embodied simulation to theories of "standard simulation" which posit that observers generate mental representations by imaginatively adopting the circumstances of the observed target (143). The authors make it clear that this mandatory, prereflexive mechanism "is not the result of a deliberate and conscious cognitive effort" and instead "generates a peculiar quality of familiarity with other individuals" (143-4). It is notable that Gallese, one of the discoverers of mirror neurons, joins his colleagues in arguing that the term mirroring is "misleading" since "simulation does not necessarily imply overt imitative behavior." If a baby cries, they write, the mother does not also cry, "a response that would reflect contagion rather than empathic attunement"; instead, her response is "in some way congruent with" the bodily state of her baby (151). Similar observations made by the psychoanalytic theorist Daniel Stern about how this kind of cross-modal translation process enacted by a baby's cries is productive of difference - "isomorphism without identity" - helps to facilitate the infant's gradual recognition of its "self" (its body image) over time (Gibbs, 195).

As we will see, this concept of embodied simulation nicely complements what Merleau-Ponty's refers to as the "imitative way" through which we attune to, or couple with, the situations or people we come into contact with. It also helps to detotalize his example of syncretic sociability which implies that *all* babies cry automatically when one sets off the chain reaction; while there is a "degree of activation" in each one's mirror neuron systems that allows for global identification, there are also *degree of simulated response* to the situation, including the fact that some babies in some groups may very well react in ways other than crying.

There is another component to embodied simulation that we need to consider before moving on. Like Gallagher and Meltzoff, Gallese elsewhere ("The Two Sides of

Mimesis") contends that at the moment of birth "humans are engaged in interpersonal mimetic relations" that occur in a shared "we-centric" space (11). This makes embodied simulation a crucial component to what recent theories in developmental psychology call a "shared mind" (12) that is intersubjectively constituted. But Gallese suggests the term *intersubjectivity* - that is, comprehension and communication between human subjects - does not adequately capture the *bodily* dimension of our behavioral simulations that subtends comprehension and communication. These bodily "instantiations of unconscious mimesis" (9) is best understood, he contends, through an account of "intersubjectivity viewed first and foremost as intercorporeity" (13), a term he apparently appropriates from Merleau-Ponty. ¹³ Our neurologically responsive "situated motor systems" creates a *pragmatic* "openness to the world" before and below our *theoretical* takes on it which allow humans to "share the same intentional objects" (4). If we are "ensnared," Gallese would argue, it is at the level or intercorporeity. Intersubjectivity simply stems from this.

While Gallese's emphasis on a primary intercorporeity has the potential to bring us to the brink of a *nonhuman* dimension to embodied simulation - the role of objects in our interactions - his focus remains centered on human interaction. 14 In the chapters ahead, I will make the case that Merleau-Ponty's account of intercorporeity allows for a coupling with bodies that include nonhumans, often through mimetic imitation and repetition is the foundation of our habits. Scott Marratto points generally in this direction when he attends to Merleau-Ponty's description of a simple handshake: "he and I are like one single intercorporeity" (qtd, 144). Marratto interprets intercorporeity as a "field" in which the unity of one's body is accomplished unconsciously through the "mutual involvement of bodies" in certain interactions. Whereas intersubjectivity concerns a relation between (conscious) *subjects*, the point to be made about intercorporeity is that "my body is already bound up with the other's body before there can be any relation between conscious subjects" (144), a statement with which Gallese would agree. Taking a cue from Merleau-Ponty, I will similarly adopt the perspective of intercorporeity as binding relations between *bodies* - not *subjects* - but will include nonhumans in the former category since they are, with the exception of some animals perhaps, clearly excluded by the latter.

In the *Phenomenology of Perception*, nonhuman bodies intersect with human ones in ways most of us (due to an ingrained anthropocentrism perhaps) are rarely cognizant of. Merleau-Ponty points out how our habits - which are acquired primarily through imitation¹⁵ - help to give us "our anchorage in the world" (167). It is, he says, "literally true" that a subject learning to type "incorporates" the keyboard space into his bodily space; similarly, the experienced organist "incorporates within himself" the dimensions and directions of an organ he has never played before, settling into it "as one settles into a house" (168). In these examples and in others, Merleau-Ponty clearly demonstrates Gail Weiss's contention that to "describe embodiment as intercorporeality is to emphasize that the experience of being embodied is never a private affair, but is always already mediated by our continual interactions with other human and nonhuman bodies" (5). These interactions are accomplished through our attunement to certain frequencies (this is my term here) that emerge from the situations in which we are immersed. These currents Merleau-Ponty calls "style" and it is one of two intimately related concepts that I will turn to now.

Enacting Expression through Mimetic Attunement to Style

Two key concepts in Merleau-Ponty's philosophy - style and expression - are so closely entwined that it makes sense for me to discuss them together. "One cannot say that style stands apart from expression," he tells us. "The expression of sadness, for example, is a means of being sad" (EO, 49). Merleau-Ponty describes style as a "certain manner of dealing with situations ... by taking over that manner myself in an almost imitative way, even though I may not be able to define it" (PhP, 382). Our "existential mimicry" of a situation's style enacts a "process of expression" that "brings the meaning into existence as the very thing at the heart" of situations (212). Style is a sort of frequency one attunes to when their actions help give rise to the significance of a situation or event. Expression *is* that significance. Both concepts help Merleau-Ponty to develop an ontology wherein our bodies, threaded through the global fabric of this process, enact the world through perception and motility; this enactment is simultaneously the world expressing itself through our bodily actions.

Before continuing, I want to foreground a word I have been using all along: *enactment*. I use this term as a very general equivalent to expression, a sense

captured in Marratto's statement that "expression is always the enactment of a decision about the sense of sensible being . . . (188). It is not a decision reached and acted upon by a single human agent. Like style, expression is a complex concept in Merleau-Ponty and probing its ontological layers is impossible within the scope of this dissertation. But in numerous descriptions - for instance, "[e]xpression is everywhere creative, and what is expressed is inseparable from it" (PhP, 455) - expression is clearly figured as an enactive process or event. This is important, the "expressive" powers of mimesis (Halliwell 14, 293) that so alarmed Plato and strongly inclined Aristotle toward an enactive conception of the term¹⁶ (168) resonate both with Gallese's (2009) association of mimesis with enactive cognition through embodied simulation and with what Merleau-Ponty's provocatively describes as the "magic" of expression in dramatic events. The actor's enactment of another's bodily gestures and expressions through the "nonlogical operation" of imitation - an operation whose roots sink into our body schemas - has the power to "animate" (his word: entraîne) our own bodies, stirring up "highly ambiguous feelings" between actor and audience (52-53). The basis of this "magic" enacted by the actor, he writes, "is in the intentionality which links our body to the world" (53). In this sense, the "actor's art is therefore only an extension of the art we all possess. My body schema directs itself to the perceived world and to the imaginary as well." For some people, there is a real danger in that "movement of transcendence that represents the expressive signification of the body." It is precisely this expressive signification - the "sympathy" Plato saw generated from mimesis - that Merleau-Ponty says "explains the history of why actors have been so admired and nevertheless excluded from normal civil rights" (53).

Clearly, Merleau-Ponty's articulation of imitation in terms of style and expression provide a useful way to think about mimesis as expressive and enactive. But, like the *body schema* as well as *style* and *expression*, these are not ideas he came up with on his own. They worked their way into this vocabulary through his readings of the phenomenologists Edmund Husserl and Max Scheler as well as his research in early childhood development. A small hint of expression, in fact, occurs in the opening paragraph of *Consciousness and the Acquisition of Language* when Merleau-Ponty directs attention to something most people often conceive as insignificant: the babbling of babies:

During the first months of life, the child cries; he makes expressive movements; and then he begins to babble. One must consider babbling as the ancestor of language: it is, above all, extraordinarily rich and includes phonemes which do not exist in the language that is spoken around the child, and which he himself, once he becomes an adult, is incapable of reproducing. (11)

He goes on to identify this babbling as "a polymorphic language, which is spontaneous with respect to its environment" and is constituted by a "large amount of imitation." This imitation is "rudimentary" in that the child does not "grasp the meaning of that which he is imitating." But still there is a lesson to be learned here: "This imitation concerns the melody of the sentence just as much as the words, because the child tries, as it were, to speak 'in general'" (11). Babbling is to language, he tells us, as scribbling is to drawing. The baby's babbling suggests a graduate attunement to the sounds – many of which are other human voices – that are themselves *styles* of spoken language: not words, not sentences, just rough phonemes and muscular gurgitations that have been refined into what we might call "tone," "intonation," "stress," "accent," and other features of adult linguistic behavior. The babbling is the "imitative way" the baby attunes herself to these styles.

As the child grows older the imitation becomes "immanent" in that the child seeks to replicate *results* rather than amorphous patterns. Merleau-Ponty here draws on the work of the child psychologist Paul Guillaume, who "goes beyond the classical conception" of imitation as actions that replicate cognitively registered representations (32). Guillaume provides an example of a child who, upon seeing his father using a pencil to draw, seizes the pencil upside down and hits the table with its eraser; after a few times, he turns it right-side-up and puts the point on the paper; weeks later the child uses the pencil not for hitting but for tracing lines on paper. In all phases, Merleau-Ponty notes, following Guillaume, it "is not a question of the child reproducing the gesticulation of this father, but rather a question of obtaining the same result as he" (33-4). In other words, imitation cannot be reduced to a *monkey-see monkey-do* model of representation. What we observe instead is the child's attunement to an *intentional* dimension in the situation that includes but is not limited to his father. This, too, is an instantiation of a situation's style, and it is clearly vital to the child's motor and cognitive development.

We need to be careful not to confuse this notion of style with conventional understandings of the term. It is not something that lends itself to identification, as does the spare "style" of Ernest Hemingway's prose or the arpeggiated "style" of Elton John's piano playing. Merleau-Ponty insists that style "is not a concept, an idea: it is a 'manner' that I apprehend and then imitate, even if I am unable to define it" (43). Even when one partially imitates the behavior of others, one takes on the "total attitude" corresponding to that behavior. In other words, we are told, "true imitation permeates beyond conscious limits and becomes global: once it has become accommodated, imitation supersedes itself." It is this superseding that allows for the appropriation of new structures, including the acquisition of language (40). It is in the perception of other people's behavior that the phenomenologist Husserl and the child psychologist Guillame share a "completely parallel" analysis, one that touches on an intercorporeal aspect of imitation that Merleau-Ponty describes this way:

When I witness the setting in of the behavior of others, my body becomes a means of understanding them, my corporeality becomes a comprehending power of their corporeality – I regain the final meaning ... of other people's behavior, because my body is capable of achieving the same goals. (42)

This is precisely embodied simulation as described by Gallese, in which one becomes empathically attuned to another so that one's bodily state "becomes in some way congruent with" that of another's (Gallese et al, 151). But style is not enacted solely through our bodies' relations with other *human* bodies. Merleau-Ponty describes how style arises in language use - his example is the word "sleet" - as a "meeting of the human and the nonhuman, as it were, a piece of the world's behavior" (PhP, 469). When a book, for example, "takes possession of the reader," an "expressive moment occurs" (PoW13). Significance is generated on the spot. It is not transmitted as data into the reader's mind where it forms a representation, like a photograph captures and transmits an image. Instead, the language-knowledge the reader brings to the text - "the stock of accepted relations between signs and familiar significations without which he could not have begun to read" - "couples" with the "certain arrangement of already available signs and significations" embodied in the text, transfiguring each so that "in the end a new signification is secreted" (13). Here is described a meeting place of systems, not of subjects but of body schemas.

This coupling that occurs in global contexts has "real world" effects for human subjects. For example, before reading a book by Stendhal, Merleau-Ponty knew what a "rogue" was and this "sedimented" awareness of rogue allowed him to understand Stendhal's description of the character Rossi the revenue man as a rogue. But as he continued reading, this sedimented meaning of rogue begins to break up, the term is given a new twist, "the cross-references multiply," until the term rogue takes on a new significance. The meaning the reader brings to the text is not erased, for roque still retains that general familiarity; but as "[m]ore and more arrows point in the direction of a thought I have never encountered before," Merleau-Ponty's "imitative way," his manner of engaging with rogueness as expressed by the text, becomes productive of new dimensions of that word. We see at work in this enactive moment what Marratto identifies as the "dual manner" of style in Merleau-Ponty, one that individuates things as singular identities while simultaneously adhering to a typicality that cuts across things and situations (102). The expressive moment of "rogue" is enacted through the individuation between the familiar significations of rogueness that enables Merleau-Ponty to tap into the style of roqueness as expressed by the text. The new "rogueness" enacted is transformative of rogueness but without losing its sedimented typicality that links it always to the sense Merleau-Ponty had of it prior to reading Stendhal.

What is important to note here is that our bodies do not remain idle as we read or look at things. In *Phenomenology of Perception*, Merleau-Ponty tells us that when we run our eyes over a text our perceptions do not stir up representations but, rather, "patterns are formed" which are "endowed with a familiar physiognomy" (167). In other words, we respond to a text and other artifacts similarly to how we respond to the facial and bodily conduct of people we encounter. Gallese et al. refer to numerous studies conducted in the past thirty years which assumes an understanding of language as "embodied." One showed that the mirror neuron system was activated in specific ways when people were read different kinds of sentences, with most activity registering to action-related sentences (139). Evoked Readiness Potential (ERP) studies of people reading silently noted that arm-, leg-, and face-related words showed different somatotopically arranged activation sources, with face-related words registering the strongest inferior frontal source and leg-related words showing a

maximal superior central source (140). The art historian and critic James Elkins notes that when people are first confronted with a unfamiliar object - a blot, a funny smear, a wild landscape, a building, a cloud - they seek a body in it: "[W]e try to see something like ourselves ... or even just a part of ourselves - a face, a hand or foot, an eye, even a hair or a scrap of paper" (129). This automatic response stems from our proprioceptive "sense" which weaves our bodies "so deeply and tightly into our thought that we have to work to see how little we would understand without them" (159, 137). Merleau-Ponty takes a similar stand when he tells us how "normal imitation" operates not in an objective or representative space conjured through thought; rather, that space "is already built into my bodily structure," an "open system of equivalents" called the body schema (PhP,162-3). Clearly, the cognitive ground in which mimetic identification has its roots is bodily.

As I said above, I consider expression here as the enactment of meaning and significance that is sometimes brought to consciousness as a *happening*, an event. Attuning ourselves to the style emanating from our encounters with people, with situations, with things, is essentially what makes this *happening* happen. Figuring this process mimetically lends support to William Schweiker's reclamation of mimesis as "a figure for the fundamental actus, the being-in-act, of understanding, action, and language" which he sees as a common thread in recent philosophical interpretations of it (specifically by Gadamer, Derrida, and Ricoeur) (34). Schweiker argues that the performative dimension of mimesis embodies a convergence of figure and practice, "a specific form of action that is not iconic 'imitation' or 'mirroring'" (34) but something more fundamental: praxis. "There simply is no 'world' out there independent of our practice; the world comes to be through our enactment" (37). Schweiker calls this enactive, "performative" aspect of mimesis "figurative practice" and it clearly corresponds to Merleau-Ponty's claim that thought ("figure") and speech ("practice") are not independent but *inter* dependent: "The orator does not think before speaking, nor even while speaking; his speech is his thought" (PhP 180).

In the next section, I will contextualize mimetic praxis as described by Schweiker by Merleau-Ponty's identification of the reversible relationship between *actual* experiential knowledge and *virtual* conceptual knowledge. Before concluding this section, though, I would like to address one scholar's interpretation of expression in

Merleau-Ponty that might be seen as posing a direct challenge to my mimetic approach to expression. In *Merleau-Ponty's Philosophy*, Lawrence Hass tells us that expression offers an extremely promising new account of thought, language, and knowledge that Western culture has traditionally conceived as in representational terms (147):

For at its core, expression is not about imitation (mimesis), correspondence, or isomorphism - these are the basic watchwords of representation theories of thought, language, and knowledge. Rather, expression is about the creative transformation of some previous data or experience so that it yields new knowledge or radiates a powerful, new sense about the original without the original data disappearing or being covered up (155).

While I agree with Hass²⁰ that expression is creative transformation, clearly I must respond to his statement regarding mimesis. He's right that expression is not "about" mimesis (yes, he actually uses the term in parenthesis as cited) or these other watchwords of representation; but as I have shown, mimesis is *about more* than representation. We see here yet another example of how the term has been reduced to such a narrow scope that even a scholar of a philosopher who read and wrote extensively about imitation – and even about mimesis – loses sight of the breadth of imitation in the work he is expounding on. We must not follow suit. Just as the imitative babbling of babies is an expression of the melody of language, which is itself an expression of the world, so too are common everyday words expressive of dimensions that exceed the narrow definitions we confine them to.

Contextualizing Practice: The Mimetic Interface of the Actual-Virtual

In *The Aesthetics of Mimesis*, Stephen Halliwell identifies in Aristotle an "enactive" conception of mimesis - revealed most acutely in his discussion of music - which gives a "double sense" to the mimetic operation. Aristotle saw as desireable an aesthetic perspective he called *suntheorein*, which means "to contemplate or observe *at the same time*" (181). Mimetic representation included two complementary aspects: its status as an artifact, as a product of an artistic shaping of materials, and its capacity to signify and "enact" the patterns of supposed realities. His assumption that art forms maintained an "internally organized identity" - an idea I will depart from - made him accept the need for ways of talking about art that kept "the artifact and its

meanings, the 'materials' and the 'object' of mimesis, *conjointly* in focus" (172). Mimesis is at once "iconic," or representational, *and* "expressive" of "the perceived affective content of the musical work and the corresponding pattern of the listener's experience." (153). This "dual aspect" of the concept not only aligns Aristotle's theory "with a much broader current in ancient mimeticist thinking," it also conceives of mimesis as "constituted partly be the experiences that it opens up for, and induces in, its audience" (161-2). Halliwell concludes that, in Aristotle, to call a work mimetic "is to situate it in a context of cultural practices that grow out of certain human instincts," which means that the "intentionality" of mimetic works is not located only in the design plans of an artist but in shared conventions, traditions, and possibilities of a culture. (153).

I will come back to Aristotle in the next chapter. I begin this section with him, though, because I hope to show that there is also a kind of "dual-aspect" mimesis at work in the domain perception as described by Merleau-Ponty. I have already described his account of mimesis, following Henry Wallon, as a "translation" between perception and motility. Now I will look at another level of operation: the interfacing of actual and virtual, or what might be called for the time being a transfer from "concrete" perception to "abstract" conception in the enactment of significance. Merleau-Ponty illustrates this phenomenon by considering how an individual who suffered a permanent brain injury has lost, among other things, his capacity to imitate and, in a very real sense of the word, invent - perhaps the fundamental principle of praxis. I will understand this capacity as something similar to what Walter Benjamin described as "the mimetic faculty," which I will come back to in Chapter 3 but here will approach through the lens of the cultural critic Brian Massumi, who conceives Benjamin's notion of "nonsensuous similarities" that derive from sensuous (bodily) as the virtual. They are also heavily contextualized. At this point, I will depart somewhat from Merleau-Ponty's phenomenology of imitation, which is anchored primarily in the individual body schema, to consider mimesis as a current that cuts across the multiple modalities that constitute *context*, the *situatedness* of which our body is one constituent. Here I will draw on Herbert Spiegelberg's application of Edmund Husserl's phenomenology of constitution to construct a phenomenological theory of context. This will help me to connect the actual, sensuous, perceptual account of mimesis I

draw from Merleau-Ponty with the virtual, nonsensuous, conceptual accounts of it that we find in its aesthetic incarnations in Aristotle and many other thinkers. Most importantly, it will help me lay the foundation for a mimetic-multimodal praxis that I will elucidate in later chapters.

Praktognosia and the Mimesis of the Phantom

Merleau-Ponty tells us that "the perceived, by its nature, admits of the ambiguous, the shifting, and is shaped by context" (PhP, 13). He knew that it takes a special type of intelligence to *make sense* of ambiguous, shifting, highly contextualized phenomena. He uses the term *praktognosia*, a "practical intelligence" or "practical wisdom," to describe knowledge obtained and retained experientially "as original and perhaps as primary" (PhP, 162). It is the innate, pre-reflective, tacit knowledge of the body schema on which all other knowledge is based. A disruption in the *praktognostic* functions of this "primary" level of knowing affects all other levels of thought. If that disruption incapacitates our imitative abilities, our conceptual skills necessary for invention and communication can be seriously impacted.

Merleau-Ponty demonstrates this quite vividly in *Phenomenology of Perception* in analyzing the condition of a 24 year-old WWI veteran who suffered two head wounds that had penetrated the occipital lobe of his brain. The patient, "Schneider," was examined by two prominent neuropsychologists, Adhemar Gelb and Kurt Goldstein, whose meticulously described observations became the basis of Merleau-Ponty's considerable study. Although Schneider was capable of performing a large number of actions, including working with scissors, thread, needles, and leather for his job making wallets, the injuries to a certain region of his brain caused lesions that impaired his ability to perform actions that cognitively-abled people do automatically "without thinking."

Following Gelb and Goldstein, Merleau-Ponty adopts the words "concrete" and "abstract" to designate two types of active movement that I contend reflect two types of knowledge work, the *actual* and the *virtual* or what I call the "experiential" and "conceptual." According to Merleau-Ponty, concrete movement occurs "in the realm of the actual" and abstract movement "in that of the virtual," a realm projected by the body which results in a "free space in which what does not necessarily exist may

take on a semblance of existence" (PhP, 128). He makes it clear that this virtual "semblance" should not be thought of as a representation (*Vor-stellung*), which "yields the object to us quite unambiguously" through a positional and objective consciousness outside of one's "bodily space" (119). When Schneider is asked to mimic a salute he can no longer replicate what he did habitually in his past. Rather, he must consciously create a context in which to situate the salute by "pantomiming" a series of concrete actions: he repeats the command in a questioning tone of voice, then he makes his body assume the position required for the task; but the actual salute emerges only in conjunction with added actions such the combing of his hair with one hand while holding a mirror with the other (119).

Merleau-Ponty contrasts Schneider's process of enacting a salute with that of "normal" person who, like an actor, can restrict movement to its most important elements by "slip[ing] his body into the 'great phantom' of the character to be played" (120). Most people can easily extricate their bodies from the actual, concrete realm "to make them breathe, and if need be, weep in the realm of the imagination. This is what [Schneider] is no longer able to do" (120). His condition keeps him "tied to actuality" and hence he "lacks liberty" to create that semblance of free space before him that "comprises the general power of putting oneself into a situation" (157), in this case an imagined one. Because the "normal imitation" of which Schneider is incapable is built into his bodily structure and therefore cannot be located in an objective or representational space, he cannot do what cognitively-abled people do automatically: re-enact a virtual rendering of a concrete action by synthesizing time and space. Lacking the imaginary "liberty" to make the salute, he must arduously go about creating a context by pantomiming related motor actions that ultimately leads him to pull it off.

William S. Hamrick observes that pathologies like Schneider's play a "key role" in *Phenomenology of Perception* because of their ability "to illuminate what lies at the center of that phenomenology, the lived-body (*le corps proper*)" (181-2). Pathological behaviors allow for an understanding of the lived body "as a system of motor-intentional powers of inhabiting situations spatially and temporally" by being "involved in a practical network of relationships with physical objects and other people" (182). Schneider's impairment reveals how his involvement in this "practical

network" is seriously curtailed by disruption to his powers of motor-intentionality. He is confined to a hylomorphic "mode of consciousness" to which, as Hamrick observes, "the classical form/matter analysis of experience" would apply. The meaning of actions like performing a salute must be "expressly, thematically constituted" in such a way that the sign becomes a representation of the signified (183). His actions must arise from what Merleau-Ponty referred to repeatedly as an "I think" mode of consciousness - in which the mind is a thing separate from the body - rather than from an "I can" mode of being-in-the-world through which mind and body are unified. As a result, oddly enough, Schneider is the ultimate Cartesian: he must deductively conceive its form by classifying it in relation to other forms before shaping it into a product. This is, ironically, his pathology. Consequently, he cannot engage in the "imaginative process" that the philosopher Gilbert Simondon, a student of Merleau-Ponty's, described as integral to invention:

[A] more profound analysis of the imaginative process would undoubtedly reveal that the determining factor playing an energising role is not forms but that which supports form, that is, their background. . . . The participational relationship connecting forms to their backgrounds is a relationship which straddles the present and brings the future to bear upon the present, that which brings the virtual to bear upon the actual. This is so because the base is a system of virtualities, of potentials, and of moving forces, whereas forms are a system of the actual. Invention is a taking into account of the system of actuality by a system of virtualities; it is the creation of a new system from these two (*On the Mode of Existence of Technical Objects*, 51)

Imprisoned as he is in the system of actualities, Schneider cannot inhabit that middle ground - or even oscillate between the two systems - in order to invent or enact. He cannot perform externalized acts that the cognitive neuroscientist Merlin Donald contends are enabled by a mimetic capacity that has been fine-tuned through our evolutionary process (he calls this capacity "mimetic culture"). Such acts are predicated on "a brain capacity that allows us to map our elementary event perceptions to action, thus creating, at a single stroke, the possibility of action, metaphor, gesture, pantomime, re-enactive play, self-reminding, imitating diffusion of skills, and proto-pedagogy, among other things" (33). This is precisely what we see

in Schneider. Because he is incapable of "play-acting" (of "play" and "playing"), ²² Merleau-Ponty observes, he cannot "enter into a fictitious situation without converting it into a real one . . ." (156). He cannot even for a moment slip into the "great phantom" (120) and play the role of the solder he once was. ²³

The "great phantom," a term Merleau-Ponty appropriates from the playwright Denis Diderot, emerges again in his essay "The Experience of Others." On his reading, Diderot's ideal actor develops his character through a "special operation of a prelogical character" rather than through "conventional imitation" (EO, 50). When the actor "turns into a phantom," he essentially "performs an expressive operation by which the body lends itself to the expression of a role other than the one with which it is ordinarily associated" (50). This "existential operation" is something which we all do - minus people like Schneider - on a regular basis, most obviously though habits that Merleau-Ponty argues are "plastic" and not "fixed once and for all. 4 "These analyses" of imitation" drawn from his reading of Diderot Merleau-Ponty opposes to imitation "posed in classical terms" ²⁵ (52) which does not adequately account for its fundamentally embodied dimension. Because the body schema of each one of us "directs itself to the perceived world and to the imaginary as well," he tells us, "the actor's art is therefore only an extension of the art which we all possess," the only difference being that for the actor it is "a much more complex case of such an operation" (53, 52).

While Merleau-Ponty associates Diderot's great phantom in this essay with a kind of dramaturgical "magic," the basis of which "is in the intentionality which links our body to the world" (53), in *Phenomenology of Perception* Merleau-Ponty offers it as an analogue of the *virtual* - the metaphoric or conceptual "reality" that we produce by drawing on the *actual* concrete knowledge structurally inscribed in our body schemas through experience. In an enactment, the virtual significance emerges through concrete action. While that significance has representational characteristics, it is in itself an emanation of embodied experience and as such cannot be reduced solely to "a" representation. ²⁶ As I pointed out earlier, Gallagher and Meltzoff eschew "transfer" along with "translate" in describing the infant's ability to imitate others immediately after birth since an intercorporeal "supramodel" coding has already coupled its body schema with others. For this reason, I will use the verb *interface*

instead of "transfer." *Interface*, in fact, articulates nicely with Merleau-Ponty's description of the body as our our general medium for having a world (169) as well as in Anna Gibbs' slightly different take on the body's being "not so much a medium as a series of media" that connects it to media we see as external: writing, technology (201). It also fits Gibb's description of space as enacted through mimesis: "Mimesis produces the virtual by enabling the reassembling of these disparate media, giving rise to what is 'real without being actual, ideal without being abstract,' as Proust writes of dreams" (201). Schneider's inability to produce a "normal" imitation can easily be conceived as an inability to *interface* the actual medium that is his body with the virtual media that constitute the larger contexts in which he is situated. It is to these contexts that I now turn.

How the Body's "Mimetic Faculty" Infolds Contexts

In her study of virtuality, the late visual scholar Anne Friedberg compares the function of virtual to that of metaphor. Metaphor does not involve transcending or detaching from the actual. "This room is an oven" is a virtual rendering in language of an actual event in time and space experienced bodily. Language is a form of media, but as George Lakoff and Mark Johnson convincingly argue, because language is steeped in metaphor, which is itself steeped in the body's sensory-motor capabilities, what is virtual about language is always-already embodied and, hence, always-already mediated.²⁷ In his short but densely complex essay "On the Mimetic Faculty," Walter Benjamin argues that all beings possess a "mimetic faculty" that, like nature, produces similarities. This faculty has a history "in both the phylogenetic and ontogenetic sense" and, he claims, its "highest capacity" belongs to human beings (333). What he calls the "phylogenetic significance of the mimetic faculty," however, can no longer be understood by the concept of similarity because our evolution has occurred simultaneously with the development of language. Because it is an abstraction of the concrete, the sensuous similarities from which it derives - captured in the phenomenon of onomatopoeia - gives way to the "nonsensuous similarity" of which symbolic systems like language and all written scripts are archives (335). But what else is nonsensuous similarity, Brian Massumi asks,

if not a lived analogy that brings relational differences together in the similarity of an event to its own repetition? Virtual form is the direct, analogical, differential, eventful experience of a 'semblance which does not appear' but is really felt. Being of the nature of an event, it cannot be coded. It can only be activated through codings . . . [i]ts expression takes the form of a directly felt perceptual event that is relational in and of itself, whether it is explicitly 'interactive' or not.²⁸

We must completely rework how we think about the body, Massumi continues, and in doing so come to understand it "as immediately virtual as it is actual" and to see the virtual "as a lived paradox where what are normally opposites coexist, coalesce, and connect" (91). The body, Massumi continues, "infolds contexts, it infolds volitions and cognitions that are nothing if not situated" (91).

But in order to do this productively, we must also rework how we think about the *contexts* it infolds, the *situatedness* that shapes the body's perceptions and actions. This is, in effect, the mimetic method Diderot reflects on in his *Paradox of the Actor* whereby the actor infolds the personal and situational contexts of the character (see Gebauer and Wulf, Chapter 14). It is also, I might add, not unlike the *kairotic* current in Thomas Rickert's reconceptualization of rhetoric as ambient, and the conclusions numerous studies in cognitive neuroscience have reached in the past few decades about human behavior. But Merleau-Ponty's use of Diderot's phantom to emphasize the body's role in the production of the virtual does not quite capture the multiple contexts this phantom haunts. It is in the conjunction of body *and* its situational contexts that a phenomenology of mimetic practice can be prosperously articulated.

The American phenomenologist Herbert Spiegelberg believed phenomenology was particularly helpful in bringing to our awareness the contextual nature of experience, one that was not restricted to sense-experience but included relations, meanings, values, other minds, social and cultural phenomena; within these contexts people entered into "cognitive contact" with each other's individual as well as global bodies, personalities, thoughts and feelings (327). Writing in 1964, Spiegelberg noted that the term "context" did not appear often in phenomenological accounts of experience; rather, the terms "horizon," "field," "Umwelt," and in the most comprehensive sense "world" had the most popular currency (330). Although he does not say so explicitly,

his interest in *context* has a heuristic - not just philosophical or ontological - value. Whereas Merleau-Ponty increasingly sought to move beyond intentional human consciousness that so much of Husserl's phenomenology was anchored in, Spiegelberg worked squarely within that framework.

Spiegelberg was interested in how Husserl's phenomenology of constitution can "tell us how the phenomenon of the context presents itself" (330). In doing so, he wishes to bring to awareness, if only temporarily, the "configuration" that emerges around a "thematic text" (330), which can be any object, a magazine, a table, a play, a work of art. "It is in this manner that the context, first presented only vaguely and peripherally, constitutes itself into a firmer framework on an equal level with the first thematic text" (330). At this point, what was in one moment the "text" in the next moment becomes "context." Becoming aware of their reversible relationship can vastly enrich the perspective one has of engaging with and producing "texts," certainly a vital dimension of praxis in composition and communication, and one I will emphasize in the chapters ahead.

Classical analyses of perception, Merleau-Ponty argues, reduce experience to a single level whereby what is seen is judged to be true. This objectification of perceived things decontextualizes them and they become identifiable concepts. It is because of this objectification that I must endeavor mightily in developing an argument that broadens the concept of "mimesis" - and, hence, the concepts of "imitation," "representation," "repetition," "practice," and other words - in ways similar to how Merleau-Ponty increasingly sought to broaden the terms "style," "expression," and even "perception." We can do this, however, by backing up and considering "the whole setting" - the wider context or 'l'entourage - through which "another modality" is revealed ("Primacy," 14). Because phenomenology asks us to see how the things we perceive are embedded in larger contexts - an all-encompassing and dynamic phenomenal field that is in a constant state of regeneration as we perceptively move through the world - it is, before anything else, the "study of the advent of being to consciousness, instead of presuming its possibility as given in advance" (PhP, 71). In the chapters ahead, I will apply what is fundamentally an ontological study to a number of concepts that come together under the broad aegis of mimesis - as a theory of "imitation" - with the hope of bringing to light a dimension of

thinking, learning, making, teaching, influencing, and communicating that has for long been buried under the weight of misunderstandings.

¹ I will use these abbreviations throughout this dissertation.

² Historically, these traditions have been loosely aligned with the classical Platonism (idealism and metaphysics) and Aristotelianism (empiricism and science).

³ I say "completed" in that Merleau-Ponty inserted into phenomenology something Heidegger tended to ignore: the body. I'm sure, however, that some Heideggerians would object to this assertion.

⁴ For example, Leonard Lawlor suggests that Merleau-Ponty uses the word "mimique" to describe an expressive operation in which one who mimes evokes "the power to stylize," to generate something that can be put into words but which, while recognizable as a repetition, does "not merely resemble the object." Rather the mime generates what is virtual, not real, in the object" (26).

⁵ I suppose that, technically, style and expression are separate concepts. But as I state ahead, Merleau-Ponty himself has noted that the two are intimately linked and so I conflate them here into a single idea.

⁶ There are two points I should make here. First, because the term "body schema" is used in translations of Merleau-Ponty's most well-known work, *The Phenomenology of Perception*, English-language researchers have adopted that term (for example, Shaun Gallagher) in their discussions. To avoid confusion, I will use "body schema" instead of "corporeal schema," although I prefer the latter since it resonates with the term *intercorporeity*, a term I will discuss later in this chapter. Second, as I point out in the next section, the body schema that Merleau-Ponty writes about has been revised as a result of recent empirical studies on neonate imitation. Shaun Gallagher and Andrew N. Meltzoff, drawing on empirical studies, make the case for distinguishing between a *body schema* and a *body image*, something Merleau-Ponty does not do. In this description of postural impregnation, the latter category—*body image*, and not *body schema* or what Wallon called "postural schema" – would most likely be the one Gallagher and Meltzoff would see evoked here.

⁷ In psychoanalytic terms, Merleau-Ponty describes mimesis as "the equivalent of introjection" whereas the phenomenon that gives rise to syncrethic sociability, transitivism, is the equivalent to projection. (CRO, 148) ⁸ See Gallagher and Meltzoff, p. 232, for direct references.

⁹ Scott Marratto, a member of my dissertation committee, made this note about my statement here: "Merleau-Ponty does, I think, actually distinguish the ideas involved here, but he just doesn't employ this kind of terminological distinction. For body schema he uses the term schéma corporel, and for what Gallagher et. al. call body image he uses a number of terms suggesting something like 'objective' body."

¹⁰ This term may be read a bit out of context. Style (which I discuss in the next section) is a complex concept in Merleau-Ponty and no doubt Merleau-Ponty had this larger dimension in mind when he used it. But he does not contextualize the term in this essay, leaving it open to interpretation.

¹¹ Unlike the body image, the body schema is not shared between the self and other and applies only to the subject's own body. It is first-personal not because "it represents the body as one's own, but because it represents exclusively what counts as one's own body" (443).

¹² I am generalizing here. In fact, studies suggest that some people with autism or disorders that affect brain function – something Merleau-Ponty explores as well – do not interactively engage in the same way people without those conditions do. See Gallagher's *How the Body Shapes the Mind*, Chapter 9, 235-6.

¹³ Gallese is well aware of phenomenology, Husserl's lebenswelt, and Merleau-Ponty's work generally. In his 2009 article "Mirror Neurons, Embodied Simulation, and the Neural Basis of Social Identification," he discusses intercorporeity at some length, later citing Merleau-Ponty's claim that the "comprehension of gestures come about through the reciprocity of my intentions and the gestures of others. . . . as if the other person's intention inhabited my body and mind his" – a comprehension that is communicated, according to Gallese, "first and foremost" (523) intercorporally, between bodies, subtending the intersubjective level, between subjects. Of Merleau-Ponty's passage, which I only quotes a part of here, Gallese writes: "These words fully maintain their illuminating power in the present century, even more so as they can now be grounded on solid empirical evidence" (526).

¹⁴ I attribute this focus to two things. First, this article was written for collection of essays about Rene Girard's theory of mimesis, which I will discuss in Chapter 3. Briefly, Girard understands mimesis in terms of a triangulation between an object and at least two people who desire it; this triangulation, he claims, is the root of violence in human civilization. Gallese strikes me as at pain in attending to Girard's theory of mimesis to which his own essay offers an

alternative interpretation. Second, as an expert in physiology and neuroscience, Gallese grounds his theories in empirical studies that almost exclusively focus on human-to-human interaction.

¹⁶ I will discuss this at length in Chapter 2.

¹⁸ He uses "normal" here to describe the kind of imitation a brain-damaged war veteran is incapable of executing.
¹⁹ It is important to recall that Merleau-Ponty did not distinguish, as do Gallagher and Meltzoff, between *body schema* and *body image*. What they describe as *body image* is entwined with Merleau-Ponty's understanding of *body schema*.

²⁰ I do wonder, however, if his rendering of expression as a process that yields new information without covering up existing information tends to absorb too easily the role of style. It sounds like Hass is describing *style* in the last sentence of this passage; however, since style seems to have a somewhat reversible relationship with expression then I suppose what goes for the former goes for the latter as well.

²¹ Advocates of people with disabilities would use the term "abled." Merleau-Ponty is simply employing the terminology used at that time.

The term "play-act" comes from the Colin Smith's translation of the book. In Donald A. Landes's translation (2012), however, the words given are "play" and "playing" (136). Since "play" is a pedagogical concept I will come back to in another chapter, I wanted to cite this alternative translation here.

²³ It is vital to note that his "great phantom" is not Merleau-Ponty's phrase. His footnote indicates that the term is from Denis Diderot's *Paradox sur le comedien* (*Paradox of the Actor*), in which Diderot reflects on imitative mimesis as an acting method (see Gebauer and Wulf, 175). Paradox is the driving force of this method, according to which the performer simultaneously *is* and *is not* the character being performed. The philosopher and literary critic Phillippe Lacoue-Labarthe sees in this work a "modern" conception of mimesis that – because it is an imitation of *phusis*, of *natura naturans*, and hence a form of *poiesis* – is not so much about imitation but about making something new. (For more on Lacoue-Labarthe's interpretation of mimesis in the context of Diderot, see Gebauer and Wulf, 182-3). Indeed, the mimetic arts were counted on by Aristotle as belonging to the class of *techne*, but, more specifically, as forming a subdivision of *poiesis* or productive craft" (Halliwell, 153). In this sense, we should add *enactment* to the English words Halliwell offers – expression, emulation, representation – as a way of rounding out the oftentimes "narrowed and impoverished" translation of mimesis as copy-producing imitation (14).

²⁴ "A habit it an aptitude for responding to a particular type of situation with a particular form of solution. Thus habit as an operation is both bodily and spiritual" (52).

²⁵ He describes this classical model as an "unsolvable problem": "In order to imitate what I have seen, I would need what I do not have: a double knowledge which includes both the muscular contractions of the model and the means to realize this series of movements" (52).

²⁶ The late visual studies scholar Anne Friedberg describes the Latin etymology and definition of *virtual* as referring "to the register of representation itself – but representation that can be either simulacral [with no referent in the real] or directly mimetic" (8); in her own work, her use of the term does not imply "direct mimesis" but a "transfer – more like a metaphor – from one plane of meaning and appearance to another" (11).

²⁷ "Because our conceptual systems grow out of our bodies, meaning is grounded in and through our bodies. Because the vast range of our concepts are metaphorical, meaning is not entirely literal and the classical correspondence theory of truth is false" (6).

²⁸ This reference comes from Massumi's essay "The Archive of Experience" that appeared in *Information is Alive: Art and Theory on Archiving and Retrieving Data*, eds. Joke Brouwer and Arjen Mulder (Rotterdam: V2 Organisatie/EU European Culture 2000 Program, 2003, 142-151). The citation here, however, comes from a copy of this essay (p. 13) posted on his website, brianmassumi.com. (http://www.brianmassumi.com/textes/Archive%20of%20Experience.pdf)

¹⁵ Jack Reynolds makes this statement more than once in his discussion of habituality in Merleau-Ponty's work for the *Internet Encyclopedia of Philosophy* (accessed August 2013; www.iep.utm.edu)

¹⁷ This "coupling" is Husserl's "lively phrase referring to the perception of others" (13). Because style for Merleau-Ponty is a mode of perceptive experience in general, it is not limited only to acts of direct communication between subjects. Here it signifies Stendhal's success "in converting us to his system of harmony, [so that] we adopt it henceforth as our own," resulting in what he describes as "the pure relations of spirit to spirit" between the reader and the book's author (12).

Chapter 2: The Complex History of Mimesis - An Overview

Recovering the Expressive Side of Mimesis

I will open this chapter with an example of the kind of popular representations of mimesis that this dissertation seeks to move beyond. In a 2006 article published in Comparative Literature Studies, Cecile Chu-chin Sun, a professor of East Asian Language and Literatures at the University of Pittsburgh, describes a "radical distinction" between Western and Chinese poetic traditions that, in her view, comes down to the "dominance of *mimesis* in one tradition and that of *xing* in the other" (326). She translates *xing* as "evocation," an "affective-responsive interplay between the 'mind' and the 'object'" (object being wu, or "scene") which evokes an intimate and organic relationship between human beings and the material world (335), "a memorable resonance between poet and environment with its particular locale and moment of time" (351). Opposed to xing is "the whole notion of mimesis," which according to Sun is not only rooted in a "hierarchically-oriented view of reality, but is itself the very product of it" (339). She defines mimesis as a mode for conceptualizing reality with a "distinct anthropocentric privileging of human beings over external nature" (326), making it "diametrically different" from the resonance that is evoked through xing (338-9). Her view of mimesis is shaped, she tells us, entirely by her readings of Plato and Aristotle, "the chief architects of the conceptual construct of the mimetic tradition" (328). The mimetic concept of reality the West has inherited from these thinkers is, following Plato, hierarchical in that a superior plane (ideas or forms) is privileged over an inferior one (sense or matter) and, following Aristotle, anthropocentric in its celebration of human aesthetics and artifice over engagement with the sensory world of experience (330). Western poetry hence cannot take account of the "penchant for natural spontaneity implicit in the xing mode of creativity" that is the driving force of the Chinese poetic tradition (329).

As noted above, Sun's version of mimesis here exemplifies the kind of conventional understanding I will be building an argument *against* in this dissertation.¹ I will bring to light significant dimensions of mimesis that are nearly identical to Sun's description of *xing*, but in doing so I will not ignore other dimensions that may be palatable to her negative rendering of mimesis. In this chapter, I will attend to what I

call the *dual aspect* of mimesis.² I will flesh this meaning out more fully in the pages ahead, but by way of introduction it is worth noting how Gunter Gebauer and Christoph Wulf attribute to human mimetic capacities two sides: an expressive side that serves as an entrée to the world and to others by allowing for a partial overcoming of the subject-object split, and a more instrumental side that can lead to an assimilation to an ossified environment that results in a subordination or even dissolution of the self (265). The gradual historical suppression of the former "expressive" side, according to the authors, has helped create conditions that contribute to a loss of immediacy in our encounters with others and the world at large, a loss that impacts our ability to communicate since such conditions result in a "reduction in the expressive side of language in favor of its semantic content and instrumental function" (267). Recovering this suppressed "expressive" side to mimesis is the primary aim of their 1992 book *Mimesis: Culture, Art, Society* and one I adopt as well more than two decades after its publication.

Recovering this suppressed "expressive" side to mimesis requires us first to acknowledge that the concept's complexity has been greatly hindered by its translation - an observation made by many thinkers and scholars. The rhetorician and philosopher Kenneth Burke complains that the translation of mimesis as "imitation" cannot possibly sum up the "full range of meanings" - including its puns and soundscape (Attitudes, 243). The classical scholar Vivienne Gray tells us that this standard translation of mimesis is "often unhelpful" for a term that has "a wide range of technical meanings" in ancient Greek literary criticism, including what a historian does in creating history (467). The anthropologist Michael Taussig believes that because of its association with imitating and representing reality, mimesis has been lambasted in the recent times "as a naïve form or symptom of Realism," a straw man "against whose feeble pretensions post-structuralists prance and strut" (44). Stephen Halliwell complains that Jacques Derrida's fixation on Plato and Platonism results in a "restrictive construal of mimesis" that assumes a dependence on a metaphysics of truth in reality underlying virtually all versions of mimesis in Western art and philosophy (376). These complaints by scholars of mimesis speak to an abiding frustration that arises from attempts to work with an idea whose narrow conventions have been so thoroughly naturalized. To conceive mimesis simply as the reproduction

of sameness privileges its representational characteristics over its expressive ones, marginalizing its role in the production of difference and its capacity to enact multiplicity while paradoxically sustaining a general unity. As I hope I showed in the previous chapter, I believe that key concepts in the phenomenology of Maurice Merleau-Ponty provide us with a theoretical method for teasing out this *other side* of human mimetic capacities Gebauer and Wulf call expressive and claim has been historically suppressed by the Western philosophical tradition.

In Chapter 1, for example, I discuss Merleau-Ponty's example of how the muscular gurgitations and rough phonemes of babies' babbling are slowly refined into language as the infants attune themselves to the intentional dimensions of situations. This capacity to engage meaningfully with the world is powered by their body schemas' mimetic ability to "translate" perception into motility and generate an original motor action - perhaps the primary block upon which all subsequent knowledge work is built. I refer as well to his example of a young boy who gradually learns how to use a pencil not by reproducing the gestures of his father while writing but by seeking to obtain the same results of his father. In both cases, the young humans initially *identify with situations*. In Merleau-Ponty, the "almost imitative way" in which we actively engage and ultimately incorporate the multiple dimensions of a situation is through a mostly unconscious operation he calls *style*. Scott Marratto describes Merleau-Ponty's concept of style as having a "dual manner": it individuates things as singular identities while adhering to a typicality that cuts across them (102). What is expressed in the process, then, conforms to the typical and familiar while simultaneously enacting something new. Hence, expression in Merleau-Ponty in many ways comes close to what Sun associates with xing's evocation of resonance: as the body attunes itself to the style of a situation or world that situation or world reciprocally expresses itself through the medium of the body. More importantly for later chapters, the "dual manner" of style that individuates a form while conforming to its prior instantiations is characteristic of the most basic methods that guides nearly all forms of building, making, and composing. It also resonates with the guiding principle of *imitatio*, a major movement in rhetoric and other arts whose key concept was mimesis and to which, I will argue in the chapters ahead, current multimodal pedagogies of repurposing, remix, and remediation are historically beholden.

In the following sections I hope to develop this picture to an even greater resolution by showing how there is and, in fact, has always been a dual aspect to mimesis that renders the term much more dynamic, nuanced, paradoxical, and ultimately enactive than its conventional stereotypes allow. In the section below I will introduce what one mimetic scholar identifies as Aristotle's "enactive" conception of mimesis which attends equally to both its representational and expressive sides. After briefly considering the etymology and early history of the term, which I feel supports a dual-aspect account, I will show how even in the hands of three of mimesis's harshest critics - Plato, Rene Girard, and Theodor Adorno - the concept's underlying dual nature resists its assignation to a singular (and in these cases largely negative) definition. I will then, in the following section, draw on the mimetic theories of Aristotle, the cultural theorists Walter Benjamin, Mark Hansen, Morris Berman, and Anna Gibbs in shaping a view of mimesis that provides an innovative framework for its application to rhetorical theory (Chapter 3), multimodality (Chapter 4), and pedagogical approaches to the teaching of composition and technical communication (Chapter 5).

The Dual-Aspects of Enactive Mimesis

Aristotle plays an important role in the history of mimesis, and I will return to discuss that role at some length later in this chapter. For now, though, I want to set up as a framework for the rest of this chapter a particular understanding Stephen Halliwell argues Aristotle held of mimesis, one he describes as "dual-aspect" and which strongly inclined the philosopher, in Halliwell's view, toward an *enactive* view of the concept. Although Aristotle recognized several varieties of nonartistic mimesis, his most significant treatment of it is in relation to music, poetry, drama, and visual art, thereby reifying an orientation that no doubt resulted in a curtailing of its anthropological and philosophical dimensions. However, I believe that Aristotle's enactive conception of mimesis as described by Halliwell, even though it occurs within the context of art and particularly music, can serve as an entrée to a dimension that in many ways complements Merleau-Ponty's concept of expression that is not confined solely to the aesthetic realm.

I cannot in this space fully represent Halliwell's extensive study of Aristotelian mimeticism with justice. I will instead focus on an important observation he makes of that thinker's description of the reception of art by observers. Mimesis for Aristotle operates on the principle of simultaneity: it is at once "iconic" (representational and conceptual) and "expressive" (emotional, affective), and the aesthetic experience depends to a great extent on being able to perceive both at the same time. This "dual-aspect mimeticism" (172) encouraged an audience experience that involved a "combined and balanced consideration of the media as well as the 'objects' of media" so that when we encounter art we need to "keep the artifact and its meaning, the 'materials' and the 'object' of mimesis, conjointly in focus"⁵ (172; italics in original). Aristotle believed that in aesthetic contemplation pleasure is derived from the interplay of two different manners of apprehension that occur simultaneously: a consideration of an artifact's demonstration of its maker's techne (technical and artistic skill) and a response to its "sensuous properties" such as color, texture, or other material properties that evoke its representational significance (181). Dual aspect mimesis, according to Halliwell, involves an "appreciation of both medium and 'object,' of the material artifact and the imagined world that it represents, [both of which] coalesce in a complex state of awareness" (181-2; italics in original).

I will suggest in the pages ahead that this complex state of awareness is not limited simply to *two* views or perspectives. Rather, the dual nature of mimetic experience creates conditions for the emergence of multiplicity while sustaining an underlying cohesiveness or unity. In his essay "Eye and Mind," Merleau-Ponty describes the nature of perception in seemingly dual terms as an integration of sensory ability with movement. When we *see*, he claims, we also *see ourselves seeing*. But this kind of double-vision does not confine us to dichotomous thinking, as demonstrated in by a painter whose work Merleau-Ponty greatly admired, Paul Cezanne:

Cezanne did not think he had to choose between feeling and thought, as if he were deciding between chaos and order. He did not want to separate the stable things which we see and the shifting way in which they appear. He wanted to depict matter as it takes on form, the birth of order through spontaneous organization. (EM 73)

In a sense, Cezanne serves as a nexus between "dualing" modalities, the *integration* of which powers his ability to express the world's "insurpassable plentitude" through an arrangement of colors that also capture the "imperious unity" of the "indivisible whole" (75). Clearly the dual nature of perceptual and sensory engagement with the world in which we are situated, as demonstrated by Cezanne, is simultaneously enactive *and* expressive - not just of two things but of "plentitude," of "insurpassable" multiplicity. Like style and expression, these two terms are so interrelated that separating them potentially impoverishes the significance of the multitude of perceptual and sensory experiences to which they apply.

In the chapters ahead, I will attempt to construct of scenario in which all of us, as perceivers of the world and observers of that its various multidimensional representations, need to experientially inhabit the nexus *between* the things that cultural convention often requires us to "choose": modes and media, idea and artifact, style and expression. We need always to try and keep the dual perspectives that arise through our experiences *conjointly* in focus in the manner in which Aristotle apparently conceived our mimetic experience with art. In the section to which I turn now, I will show how the "dual aspect" conception of mimesis that Halliwell identifies in Aristotle has avatars in other realms where mimesis matters, including areas outside of aesthetics. I will begin by going back to the earliest pre-philosophical instantiations of the concept before moving on to more recent ones.

Mimos: Who Can Distinguish the Mime from the Mime?

When we piece together its fragmented and complex etymology, the picture that emerges of ancient conceptions of mimesis is one of bodily representational practices that endowed not only human performers with expressive force but also larger contextual elements. Although the origin of mimesis is a matter of dispute - Halliwell tells us that the etymology is irrecoverable, rendering the best efforts of several scholars speculative at best (17) - most scholars agree that the *mimeisthai* family to which it belongs derives from the root word *mimos*. By the fifth century B.C. *mimos* was used often within the context of sound effects or musical accompaniment. Aeschylus's lost play *Edonians*, for example, associates *mimos* with the booming sounds of primitive instruments known as "bull-roarers" that sounded like, or

imitated, the voices of bulls (17). A member of the *mim*- family turns up as well in another text dating to around the same time, the *Homeric Hymn to Apollo*, in which the poet describes how a group of Delian maidens bewitched audiences by vocally mimicking (*mimesthai*) the voices of men as well as the "literal" sounds of castanets (19). Pindar's use of the same word to describe the choreographic simulation of animal movements leads Halliwell to conclude that by the fifth century B.C. the *mim*- root "had already come to be associated with the musicopoetic arts in general" (poetry, music, and dance, or *mousikē* collectively). Gebauer and Wulf come to a similar conclusion, interpreting the references by Pindar and Aeschylus as evidence for an interpretation of mimesis as meaning "to represent through dance" and as "expression by means of sound and gesture" (27).

We can see how later translations of mimesis as imitation and its association with representation, aesthetics, repetition, and realism has its logical origins in this ancient history. But there are dimensions that have been lost in translation. Lexically *mimos* balances dual significations, denoting both *the person* who represented, imitated, or portrayed something and *the context* of the dramatic action (Gebauer and Wulf, 27). This dual aspect is retained in the word *mime*, which as a noun signifies both *actor* and *art* of miming, and as a verb signifies the *action* of miming. *Mimos*, then, suggests a fundamental correspondence between doer and the doing. One is reminded here of the paradoxical conundrum underlying Yeat's famous query: "How can we know the dancer / from the dance?" Similarly, what differentiates the *mimos* of actor from the *mimos* of act? Both are intertwined in such a way that there does not seem to be a distinct form/matter hierarchy of the kind introduced into philosophy by Plato. The seat of this conundrum resides in its affordance of the opportunity to perceive difference while simultaneously resisting any clear demarcation in which to classify it.

Such a conundrum was undoubtedly at play in the "bewitching" of audiences who could not distinguish the sounds of nonhumans (bulls and castanets) simulated vocally by humans. In this moment, two distinct realms - human and nonhuman - commonly thought as separate become intimately entwined. The astonishment could not have been generated in the absence of difference. Because they *knew* the human and the castanet were not "the same," the vocal mimicry of the sounds culminated in

an expression of paradox that briefly dissolved difference while simultaneously insisting on it. It is a moment that Merleau-Ponty might label "reversible": humans touch castanets and are touched back, blurring the corporeal distinctions between human subject and nonhuman object. Or, as Anna Gibbs puts it, "mimesis is like an image in which figure and ground can always be reversed, so that sometimes subjectivity is in focus, while at other times it recedes into the background, leaving something new to appear in its place" (187). The mimetic task of the audience, then, is to "know through which optic it is most productive to look at any given moment" (187). As in deconstruction, when a stabilized meaning is destabilized by disrupting a conceptual binary (human/nonhuman, dancer/dance), categorical distinctions dissolve and resolve in an ongoing play of dynamic reversibility. This is not just a conceptual theory but an actual practice that we all engage in when confronting the paradox of sameness being difference. When people are confronted with identical twins, for example, they almost instinctively look for something that differentiates them.

We also see in this ancient account of *mimos* how mimesis is *not* as anthropocentric as Sun claims in her attempt to distinguish it from the Chinese xing. The vocal mimicry suggests an intense level of identification between the human performers and the nonhumans whose sounds are being represented through vocal mimicry. Indeed, mimesis in its most ancient accounts suggests productive intercourse between human beings and nonhuman beings. Its first occurrence as a noun comes from a tract by Democritus suggesting that the origin of music was in human imitation of birdsong (Halliwell, 19). In addition, Pindar's use of mimeisthai to describe a choreography in which dancers are instructed to match their steps to the movement of certain animals suggests that performers were more than just "aware" of them in an identifiable sense but actually identified with them at the bodily level. Perhaps the mimoses' attunement to animals and their uncomfortably accurate representation of them - along with their affiliation with an oral genre Halliwell describes as "subliterary, low-life dramatic sketches" that represented life as experienced by common people⁸ - was what made the practice so unpalatable to the aristocratic Plato, whose high-minded metaphysics insisted on the separation of humans from animals and other lower forms of life. 9 However, as Derrida so famously demonstrated in his deconstruction of *Phaedrus*, the dichotomous logic of Platonic metaphysics

collapses under the weight of its own dualism, generating difference and multiplicity as it stubbornly insists on a stable, coherent, unified, absolute Truth. In the next section, I will show how Plato's seemingly clear-cut denigration of mimesis is actually *undercut* by the dual-aspect dimension to his own rendering of the concept.

Plato's Dual-Aspect Mimesis: A Mimetic Master in Denial?

In my introduction, I aligned Plato's treatment of mimesis with the denigration and disparagement of experiential knowledge. My representation of Plato's treatment of mimesis, though in keeping with the vast majority of scholarship on this matter, did not attend to dimensions of a concept that, according to Halliwell, in Plato "is much more complex and much less easily condensed into a unified point of view than is normally supposed" (24). While Halliwell, like many others, concede that Plato is the first to give to mimesis its perjorative connotation, his contention of its complexity is something I would like to attend to in this section. First, however, I want to look more closely at those aspects of mimesis that so troubled Plato and resulted in his denigration of it - even while he arguably embodied many of those aspects.

One thing that seemed to have troubled Plato was what the Greek mathematician Theaetetus observes about the word in his Sophist: that "the mimetic" (to mimetikon) is "a multifarious and extremely diverse category" (gtd in Halliwell, 64). In the latter part of this dialogue, we learn that it is a form of techne, a productive activity (poiesis), but one whose products - like those produced by the rhetors known as Sophists - were categorized as secondary, illusory, or false (64). As an imitation of something else, mimesis was thrice removed from the true forms it sought to represent. In The Republic, for example, Plato's Socrates describes three types of couches. The first, the highest, is that which is "in nature": the one true form (eidos) of couch. The second, the actual couch that Socrates sits on, is a material artifact produced by a craftsman, a necessary but inferior copy of the original. The third is a painting of the couch - a copy of a copy of an original, thrice removed from the "real" and hence impoverished of "reality." 10 Like Rene Magritte's famous Treachery of Images painting ("This is not a pipe"), the painting is a representation of a material object that is itself a mere representation of "the Real," the eidos of couchness. It is like the shadows that appear on Plato's cave wall: vague adumbrations

of a material world projected by the light of Truth that itself dissolves into the background, leaving people duped by the images dancing before them. As a mode of representation, mimesis in Plato becomes associated with practices that cluster around the motif of "deception," a motif that resurfaces throughout the history of that concept (20).

Halliwell contends that fear of the imagination was the "psychological core" of Plato's critique of the mimetic arts and most certainly of the rhapsodes and performers - including Sophists - who practiced them. Plato believed that within each person existed many potential selves into which the soul can be diffracted. Because the imagination was stirred not only by dramatic performances but also, as Halliwell puts it, by a "disordered or constantly changing multiplicity [which] is given by the very nature of the human mind," one risked losing "self-control" (sophrosune) under its influence. In a dramatic performance, mimesis enabled sympathetic identification (sumpatheia) between poet and audience, between self and other, thereby threatening to release a plethora of potential selves that are locked up within us all. What alarmed Plato, if Halliwell's interpretation stands, seems to be an intersubjective dimension to mimesis that threatened to dissolve the distinct and coherent selfhood of the subject. In other words, he could tolerate difference only as it served to demarcate self from other and, in so doing, stabilize the self; if and when difference encroached on the subject, as would be the case with intersubjective relations, absolute distinctions would blur and render the subject relative and mutable. The many selves Plato saw lurking in the human mind could only be "integrated into a single, stable self under the rule of reason" (95), and in the absence of cunning, deceptive, outright fraudulent *mimesis*. He therefore banned poets, rhapsodes, and Sophists from his ideal republic.

And yet, despite this seemingly clear-cut portrayal of Plato's attitudes toward mimesis, he nonetheless occupies a complex position in its theory and history. As the first thinker to discuss the concept at length, he may be thought of as the "founding father" of mimetic theory (Halliwell, 24) despite having also "invented the pejorative sense" of the term (Haskins, 11). 11 Just as we cannot reduce mimesis to any one definition, we must be careful not to reduce Plato to a monolithic stereotype that he held an unchanging and consistently negative attitude toward mimesis. Such a

stereotype is presented by Eric Havelock's profoundly influential *Preface to Plato* (1963), ¹² which reproduced Plato's representative poet as an automaton whose rhythmical repetition, melody, and dance produced nonrational "memorization" in audiences, placing the audience "under the minstrel's control" (qtd in Haskins, 11) and hence denying oral poetic mimesis the reflective capacity he assigns to literate cultures of reading and writing (13). While this stereotype represents an anti-mimetic position that perhaps was dominant in Plato's thought, we need also to attend to Hallowell's contention that Plato discusses mimesis with a "remarkably large range of contexts" and warns against assuming that there is a "unitary, monolithic conception of mimesis at work in the dialogues" (24, 38). Mimesis, Halliwell argues, "receives fluctuating and constantly revised treatment from Plato" and is "approached from various angles in different works" (38). Indeed, Per Bjornar Grande identifies in Plato a "mimetic inconsistency" that has him, on the one hand, dismissing poets from his *Republic* while, on the other, allowing for a select few to participate in artistic education. Indeed, Plato's Socrates tells Adeimantus in Book III of the *Republic*:

It is not only to the poets therefore that we must issue orders requiring them to portray good character in their poems or not write at all; we must issue similar orders to all artists and craftsmen, and prevent them from portraying bad character, ill-discipline, meanness, or ugliness in pictures of living things, in sculpture, architecture, or any other work of art . . . [A]nd then our young men, living as it were in a healthy climate, will benefit because all the works of art they see and hear influence them for good, like the breezes from some healthy country, insensibly leading them from earliest childhood into close sympathy and conformity with beauty and reason. (401 b-d). ¹³

As this passage shows, mimetic identification in the form of sympathy is not inherently bad providing it is oriented toward the Good. In his *Sophist*, Plato's visitor from Elea, the hometown of Parmenides, divides mimetic imitation into "belief mimicry" and "informed mimicry," the former of which is insincere, manipulative, and characteristic of Sophists. Mimicry that is *informed*, however, is accompanied by knowledge and associated with sincerity. Bjornar Grande says that the informed, hence sincere, imitator "is fearful of his knowledge. He has the Socratic attitude of not knowing anything *a priori*" (9), a reading that is suggested by the text as well (268a) and

figures informed mimesis as potentially adaptable to what the West has come to know as the Socratic method.

Plato's visitor does not elucidate *informed mimicry* to the extent that he dissects the "foolish" belief mimicry of Sophists. It is intriguing to entertain the proposition that Plato didn't delve into the informed mimicry because that designates the actual role he plays as creator of the dialogues. After all, is not every single line composed by Plato a manifestation of mimesis? The philosopher Philippe Lacoue-Labarthe thinks so. The "height of the paradox" he sees in Plato's critique of mimesis is that "Plato does not respect the laws he decrees" - "he," of course, being primarily Socrates, "his" mimos, the mimetic part of "himself," who speaks philosophically while the actual author, Plato, "does not speak one word of the philosophical discourse itself" (134-4; italics in original). In a footnote, Lacoue-Labarthe goes so far as to compare Plato's "manipulation" of the character Socrates to the thaumatopoiikos, the puppet master that Plato frequently alludes to when the question of mimesis is brought up (135). This irony was apparently not lost on Plato's wayward student Aristotle, who "bluntly" called the dialogues a form of mimos, opening a reading whereby, as Johan Huizinga puts it, "even Socrates and Plato [are] reckoned among the jugglers and thaumaturges just like the sophists" (149-50). Decades later, the Athenian rhetor Demetrius of Phaleron would label as mimetic the dialogue style of writing that Plato perfected since dialogue, a public discourse of contest, "imitates a man speaking off the cuff" (qtd in Haskins, 479). Vivienne Gray observes that Plato in his dialogues, with just a bit of a stretch, "can be said to mime Socrates in the same way rhapsodes were imitating a Homer or an Achilles" (11). If this sense, Plato would need to give himself a one-way ticket out of his own republic had such a place come into existence during his lifetime.

We can see that even in Plato mimesis has a kind of dual aspect: even as his representation of it (a mimetic act) says one thing, he ends up simultaneously expressing another. It is also noteworthy that Plato's extraordinary impact on Western philosophy might itself be conceived as a kind of bewitching not unlike that of Helen by Paris, son of the King of Troy, as represented in the Sophist Gorgias' *Encomium of Helen*. Gorgias argues that the infamous Helen should be absolved of her reputation as an adulterous traitor to her husband and kingdom since blame should be located in the

language her suitor Paris used - one which constructed a persuasive *logos*, or Truth - that provoked her to follow the path he laid out for her. Similarly, Plato's dialogues simulate speech in the construction of an epistemology of Truth that has been undeniably persuasive in its influence on the intellectual, aesthetic, pedagogical, and theological traditions of the West. We seldom consider the impact of philosophers as a contagious bewitching of our faculties and intellects. Maybe it's time that we did.

The Slippery Slope of Rene Girard's "Mimetic Desire"

Although in this dissertation I attempt to create a generally positive account of mimesis, I do not want to ignore its negative accounts. Partly this is because attention to its negative or stereotypical renditions allows me to highlight contradictions or gaps in support of helpful and usable reconceptualization of this important concept. First, though, it is important to represent the alternative versions as accurately as possible. As a segue into Rene Girard's largely negative account of mimesis, I want to briefly consider research conducted on infant imitation by Andrew M. Meltzoff, the current Co-Director of the University of Washington's Institute for Learning & Brain Sciences. In one experiment, Meltzoff tested how 18-month-old babies responded to a mechanical device that mimicked the movement of a human in picking up a dumbbell. The inanimate device did not look human - it had pincers rather than hands - but it did move very similarly to how humans move when performing this action. The babies' reactions to the device convinced Metlzoff that they did not attribute any kind of intention or goal to the device, and hence they did not seek to imitate the action. This observation led Meltzoff to conclude that infant imitation occurs within an intersubjective framework where what is experienced visually is differentiated from a deeper level of *felt experience* involving human intention. A human hand slipping off the ends of the dumbbells suggests what an adult was "striving" or "trying" to do, but a mechanical pincer slipping from it conveys no intentionality and does not inspire imitation of the action (66, "Out of the Mouths"). Mimicry of an action therefore is motivated by the child's perception of intention. Such a perception, he concludes, is the basis of cooperative learning and sociality, but it also serves as grounds for competitive desire for inanimate things or, in the case of siblings, rivalry (70). When a

child perceives the desire for something in another child, he or she adopts that perspective, creating a rivalry that pits the intentions of one with those of the other.

This final observation can be employed to support the mimetic theory of Rene Girard, a literary and cultural critic who argues that mimesis - specifically mimetic desire - is not only the source of violence in humans and many animals, but that "mimesis and violence are essential to account for human origins" and together constitute the source of civilizations (Garrels, "Mimesis and Science: Interview," 245). As Gallese and Lakoff have argued, and as Meltzoff's experiment suggests, humans are intersubjectively attuned to one another's intentions through their mutual interactions. For Girard, such intentions are expressive of *desire* for certain people or things. When one perceives the desire of another for something, he or she adopts that desire, thereby endowing the object with value. This object-based desire then spreads mimetically, through imitation and replication (or "appropriative mimicry"), among a larger body of people. Unfortunately, because humans are, as Girard puts it, "an animal of crisis" (244), we develop conflictual relationships such as jealousy with respect to the desired object (which could be land, food, animals, humans, artifacts, etc). Our mimetic desire often results in violence. To mitigate conflicts, humans participate in sharing, as in the democratic model where everyone gets a piece of the pie. But sharing seems to be just one form of "unconscious avoidance of the problem of human conflict"; we do not so much share objects as we do desires, Girard arques, and our "ability to share desires conceals conflict at every turn." There is clearly a dual-aspect at play in his theory of mimetic desire: "We desire the same thing and we are friends; we desire the same thing and we are enemies" (236-7). Not only has mimetic desire played "an important role" in leading us to the global environmental problems we all face (251), but it is the underlying motivation for scapegoating violence, ¹⁴ particularly the kind that involves whole communities turning against a minority of people scapegoated as other - a phenomenon that Girard believes is "creative of human culture" (245). Girard does not hold back in his condemnation of mimesis. Even Plato may hesitate before considering Girard's claim that mimesis is "obviously the greatest source of conflict in human life" (243).

While Girard's mimetic theory has managed to thread its way across a number of fields currently involved in studies of mimicry and imitation, his intensely negative

construction of mimesis has been critiqued by several mimetic scholars, including Gebauer and Wulf. Acknowledging that Girard has developed a powerful instrument of interpretation, they are quick to point out the problematic nature of his "truth claims," namely the reduction of every society to an essential origin, the definition of society as a mechanism for channeling violence, and the consistency of a chain of events leading to the establishment of a monolithic cultural order: "[M]ust we assume that there ever was an identifiable origin of the social?" (264-5). The authors also note that Girard's theory is based on texts (mostly literary and theological) that are "characterized by a number of family resemblances . . . in that they represent their characters' problems in their relationships with Others and emphasize mimetic action, desire, and violence" (265). In addition, Girard's argument tends to occur at the metalevel of narratives about social origins and crises, drawing conclusions from the big picture while ignoring the many "empirical events" that constitute that picture but which are "left in the dark" (264). This is especially the case with his work on antiromantic novels in which his depiction of mimesis "as a fundamental anthropological mechanism is an oversimplification, the result of a reductionist procedure that leads to the postulation of mimetic processes as independent of context and historical situation" (238).

The deepest hole in Girard's negative theory of mimesis, however, was dug by Girard himself. In a 1992 interview with Rebecca Adams, Girard acknowledges that "mimetic desire, even when bad, is intrinsically good, in the sense that being merely imitative in a small sense, it's the opening out of oneself" (Adams, 24). Because mimetic desire affords people such an "extreme openness," it cannot be isolated solely to conflict but seen as the basis for devotion to others, even love. "Nothing is more mimetic," he says, "than the desire of a child, and yet it is good. Jesus himself said it is good. Mimetic desire is also the desire for God" (24-5). Vittorio Gallese seizes on this acknowledgement by Girard to argue for a view of mimesis as having two sides: the "bad" or conflictual side that stems from mimetic desire and the "good" side that can lead to ethics of empathy once we accept the fact that through cognitively enacted intentional attunement we all inhabit an intercorporeal we-centric space ("The Two Side of Mimesis," 16). Girard, however, eschews as "meaningless" the division of mimesis into good or bad and accuses the empirical sciences of downplaying

the conflictual dimension of imitation and desire (Garrels, "Mimesis and Science: An Interview," 238, 236). He believes that his mimetic theory needs to be better inscribed in evolutionary theory ("I am a Darwinist," he tells Scott Garrells, "I believe in natural selection" [243].) and complains that Richard Dawkin's memetic theory (which sees *memes* as units of culture that self-reproduce and operate similarly to "selfish" genes) fails to account for the conflictual element in cultural evolution that is mimesis (243).

We can see that even in Girard mimesis has a dual aspect: it gives rise to conflict and hate *as well as* companionship and love. This dual-aspect emerges also from Meltzoff's experiment described above: mimetic identification with another's intentions can result in desire and rivalry *as well as* sociality and cooperation. While he remains insistent that we must attend to the conflictual manifestation of mimesis in human relations, he does occasionally acknowledge that mimesis seems to have a positive side. In his 2008 book *Evolution and Conversation*, for instance, Girard writes that the "deeper meaning" to an understanding of mimesis is that

[w]e will always be mimetic, but we don't have to be so in a satanic¹⁵ fashion. That is, we don't have to engage perpetually in mimetic rivalries. We don't have to accuse our neighbor; instead, we can learn to love him (225).

His claim that "we will always be mimetic" conveys his belief that beneath conscious and representational forms of imitation there is an unconscious inclination to imitate the desires and intentions of others. In other words, as Garrells puts it, "imitation operates at a level that precedes representational thought" and serves as an "ongoing function of our affective experience of desire" (14). We are reminded once again of Merleau-Ponty's assignation of mimesis to signify a structuring mechanism of the body schema, one that is activated in response to intentions of desire - to learn how to use a pencil, to imitate a mother's smile - but which are not necessarily conflictual. Girard is clearly cognizant of this dimension of human mimetic capacity, and it seems as if he evokes this obliquely in the passage cited above. But his apparent reluctance to explore this dimension at length should be acknowledged. There is, in fact, a precedent for such an exploration that would not necessarily undermine his view of mimetic desire. Theodor Adorno, along with his colleague Max Horkheimer, also offers a compelling critique of the role played by mimesis in generating human conflicts,

including those that evolve to the point of genocidal scapegoating. But in doing so, he does not lose sight of the mimesis's dual aspects; in fact, as I show in the next section, that dimension of mimesis is what may save us from ourselves.

Adorno's Mimesis as the Way In and Out of Rationalist Instrumentality

Of all the research I conducted for this dissertation, it is Adorno's theory of mimesis that I have found the most challenging to understand. Thankfully, I am not alone. Miriam Bratu Hansen describes mimesis not only as "a central category in Adorno's thought [but] a notoriously difficult one at that" (90). In the anthropologicalphilosophical context of *Dialectic of Enlightenment*, mimesis derives from primordial forms of mimicry and involves assimilation to an environment, a relation of reciprocal, adaptive, and nonobjectifying interchange with the Other, and a fluid, pre-individual form of subjectivity. As such, according to Hansen, it assumes "a critical and corrective function" vis-à-vis instrumental rationality and the identifying logic of conceptual language that distances subject from object. But because the historical subjugation of nature "has sundered its relations with society," mimesis is more or less conceived as a utopian category prefiguring a reconciliation with nature, "which includes the inner nature of human beings, the body and the unconscious" (90). Tom Huhn observes how Adorno characterizes mimesis as "archaic," an "impulse," whose origin precedes history - indeed, to trace its history would deposit us in the realm of biology (9). Adorno's claim in Aesthetic Theory that the first cave paintings "must have been preceded by a mimetic component," a comportment that is "the assimilation of the self to the other" as well as "an immediate practice . . . [that] is not knowledge" (qtd, 9), leads Huhn to conclude that, for Adorno, "[m]imesis precedes image making, by extension all thing making (production), and is thereby initially a praxis rather than a poiesis, a doing rather than a making" (9).

According to Adorno himself, the assimilation between self and other derives from "an indelible mimetic element in all cognition and human practice"; unfortunately, this innate proclivity to identification has been shaped by dialectical rationality to serve the "false conclusion" of identity thinking, which "believes that it knows the unlike by likening it to itself, while in so doing it really knows itself only" (qtd in Whitebook, 64). In other words, the difference that distinguishes the other as

other is erased. In *Dialectic of Enlightenment*, Adorno and his collaborator Max Horkheimer present mimesis as a natural or anthropological phenomenon that was colonized early on and shaped to serve the purposes of the colonizing enterprise:

Civilization replaced the organic adaptation to otherness, mimetic behavior proper, firstly, in the magical phase, with the organized manipulation of mimesis, and finally, in the historical phase, with rational praxis, work. Uncontrolled mimesis is proscribed. . . . The severity with which, over the centuries, the rulers have prevented both their own successors and the subjugated masses from relapsing into mimetic behavior . . . is the condition of civilization. (146)

An unmolested, uncolonized mimesis – "mimetic behavior proper" – manifests itself as a natural phenomenon ("organic adaptation to others") that does not suit the purposes and functions of a civilization that increasingly has sundered its relations with the organic world from which it emerged but over which it seeks ultimate dominion. One cannot be, after all, organically adapted to something that must be converted into a standing reserve of usable resources. At the same time, one must be able to identify those resources by name in order to ascertain their value and significance, which requires a kind of identification. Therefore, mimesis must be controlled in order to serve the colonizing force of civilization.

The historical roots of this control began in what the authors call the "magical phase" of early Western culture. "Mimetic magic" prefigures the split between subject and object by "taboo[ing] the knowledge which really apprehends the object" (11). A language that no longer addresses a tree as simply a tree but as something else, a location of significance that is more than the tree, like mana, "expresses the contradiction that it is at the same time itself and something other than itself, identical and not identical" (11). The kernel of dialectical logic opens and grows into totemism in which the religious authority, the shaman for whom "equivalence is his instrument," wards off danger with its likeness (12). Mimetic magic is the first instance of the "organized control of mimesis" or, more complexly, a "mimesis of mimesis" that develops in late modernity to reproduce the ritualized discipline, the uniforms, the barbaric drumming, the monotonous repetition of words and gestures, and the elaborate symbols that fashion "the fascist cult of formulae" (152). This

compulsion toward cruelty and destruction stems from "the organic repression of proximity to the body" (193) that intensified with the development of civilization. The witch trials confirmed "the victory of male domination over primeval matriarchal and mimetic stages of development" (207), they tell us, and the European anti-Semitism that even the holocaust failed to fully eradicate "is the reverse of genuine mimesis and has deep affinities with the repressed" (155). And yet, "the reason that represses mimesis is not merely its opposite," Horkheimer and Adorno contend,

[i]t is mimesis itself: of death. The subjective mind which disintegrates the spiritualization of nature masters spiritless nature only by imitating its rigidity, disintegrating itself as animistic. (45)

Unfortunately, the dialectical logic inherent in the organized control of mimesis remains a driving force of contemporary capitalism that manifests itself forthrightly in the culture industry that is a hallmark of the whole enterprise. "Bourgeois society is ruled by equivalence. It makes dissimilar things comparable by reducing them to abstract qualities" (6). Those who have been "blinded by civilization" are rent by mimesis's dual aspect which bourgeois ideology has rendered wholly dialectical. "[T]abooed mimetic traits" such as gestures of touching, nestling, soothing, and coaxing act as shameful residues of primacy that has no place rationalized environments: "What repels them as alien is all too familiar" (149).

In many ways, mimesis in Adorno bears resemblance Enframement (*Gestell*) in Martin Heidegger's "The Question Concerning Technology," another concept that has a dual function. The structural or "enframing" mechanism of our perceptual abilities is colonized by an instrumentalizing technology, causing us to collectively order experience in such a way that the essences of things are concealed by their ideological transformation into a reserve of useable resources (*bestand*). And yet, paradoxically, the Enframement that conceals the essential nature of the things we experience is *also* the way out of this ordering mindset. Perhaps by virtue of the fact that enframing is ultimately an embodied perceptual capacity that orders experience by connecting and dividing *also* renders it the source of revealing. Mimesis operates similarly in Adorno: it is the way into the mess it simultaneously offers a way out of. It is, in a sense, the ultimate balancing act. It is therefore troubling that some Adorno scholars do not themselves strike a balance between his account of "uncontrolled" mimesis as

adaptive, pre-reflective, nonobjectifying, and intersubjective and his account of its organized control that perverts these affective qualities in the service of civilization. Part of the problem is that Adorno himself often uses the term "mimesis" and "mimetic" (in passages such as the one indented above) as shorthand for the concept he less frequently describes as a "mimesis of mimesis" and which he sees as a perversion of an originary "mimesis proper."

Still, as Michael Taussig points out, throughout the considerable body of his work, Adorno gave greater emphasis to the notion that mimesis "provided the immersion in the concrete necessary to break definitively from the fetishes and myths of commodified practices and freedom" (254). Such an immersion may be experienced in the "mimetic language" of art - a language that precedes the split between subject and object that is implied in the signifying use of discursive language (Hohendahl, 81). Gebauer and Wulf argue that when mimesis is considered across the bulk of Adorno's work, it is associated with "a decentering of the subject and a dissolution of anthropocentrism," providing the opportunity for a "vital experience," "an intensive mimetic relation to the world, to the Other, and to inner nature" (293). So vital is this experience brought on by mimesis that D. Bruce Martin offers Adorno's theory of mimesis (prior to its controlled organization, of course) as a "more fertile ground for developing radical ecological thought than do existing philosophies of deep ecology" (130-1).

In this section, I have shown how the largely negative portrayals and critiques of mimesis by Plato, Rene Girard, and Theodor Adorno never quite break free from the concept's dual aspect, its capacity to enact sameness *along with* difference, freedom *along with* slavery, hate *along with* love. I have also shown how mimesis is more than just an aesthetic category; in Girard and Adorno especially, mimesis is a key characteristics of what is commonly referred to as "human nature," a phrase that semantically conjoins the human with larger ecological structures while creating a distinction between them. It is from this conjunction that I will construct a model of mimesis that will inform the following chapters of this book. I will begin this effort now by reconsidering the classical definition of mimesis, provided by Aristotle, that art is an imitation of nature.

Aristotlean Mimesis: Beyond Representing Naturata to Expressing Naturans

Aristotle's complex account of mimesis has suffered serious reduction by way of the popular translation of one short phrase he employs to describe what artists do when they create a work of art: mimeitai ten phusin. Halliwell takes great exception to the rendering of this phrase as "imitate nature," which he describes as an inadequate translation that became a "neoclassical slogan" (15). For Aristotle's aesthetics, he argues, the mimetic arts belong to the class of craft (techne) as a whole, but even more specifically to a subdivision of making (poiesis) or "productive craft," which in principle should be analogous to processes perceived in nature. Hallowell argues that mimeitai ten phusin and similar Greek locutions should be translated as follows the process of nature rather than "imitates nature" (153) and spends considerable time showing how there can be no straightforward equation between mimesis and "the imitation of nature" as conceived by neoclassical and romantic thinkers, among many others (351). Gebauer and Wulf interpret Aristotle's mimeitai ten phusin as a call on artists to "produce by means of the same force as nature" - a force that "nature and human beings possess in common" (54, 56). The medieval theologian Thomas Aguinas may have held a similar view when he described the act of imitation not as the conscious copying of an object or thing, of natura naturata, but as a manifestation of the formative force of *natura naturans* (Gebauer and Wulf, 71) - a view that puts his take on mimesis in line with Merleau-Ponty's take of phenomenology, which he tells us "can be seen as a move from *naturata* to *naturans*, from constituted to constituting" (PhP, 70).

Halliwell's objection to this reductive translation stems in part from his discomfort with the largely pejorative sense of the term *imitation*, the semantics of which have been greatly narrowed and impoverished in modern usage (14). Rethinking the significance of imitation will be a prominent project in my next chapter. For now, I want to focus on the significance of the second term in this translation, *nature*, which has received much less attention in mimetic history than the verb modifying it despite its equally precarious translation. In *The Social Creation of Nature*, Neil Evernden argues that when most people think of *nature* (with a small n) they do not think of the "great amorphous mass of otherness that encloaks the planet" but, rather, they think of *Nature* (with a capital N): "the system or model of nature that

arose in the West several centuries ago" (xi) that conceives nature more as an object or thing. The etymologically complex word *phusis*, Evernden claims, interestingly enough, "originally referred to what a thing is like," but in the hands of the pre-Socratics began to refer to what *everything* is like and eventually came to stand for "everything" (19-20).

Martin Heidegger believed that employment of the Latin term *natura* to translate *phusis* destroyed the authentic and original meaning of the term. In "The Question Concerning Technology," he tells us that *phusis* "is indeed *poiesis* in the highest sense" (10) and that *techne* "belongs to the bringing-forth that is *poiesis*" (13). He interprets Aristotle's four causes as "co-responsible" operative modes in the production of an artifact. The production process is enactive in that an artifact (Heidegger's example is a chalice) "emerges" from the interaction of different forces, all of which share responsibility for the making – and only one of which is the human silvermaker (6-8). *Phusis* as described by Heidegger goes way beyond the conventional wilderness image evoked by "nature" and seems more in line with how the composition theorist Byron Hawk describes life: "a complex combination of material, biological, historical, social, linguistic, and ultimately technological processes that produce emergence" (5). It is important to consider that Aristotle's understanding of *phusis* may have been closer to Hawk's description of life than to the convention images that arise when we use the term "nature."

Interpreters of Aristotelean mimesis rarely take into consideration the vastly different signification of the Greek *phusis* from the Latin-derived word *nature*. Hence mimesis in Aristotle cannot be restricted to the iconic representation of "nature" that is responsible for our visions of, say, painters copying what they see around them such as rainbows or sunsets. Instead, Aristotelian mimesis seems expressive of a conjunction between painter, painting, and the painted, more generally between the world and the body that interacts with it *while painting*. Like the 20th century thinker Walter Benjamin, Aristotle believed that the most formidable mimetic powers were possessed by humans. Benjamin gave a name to this unique form of cognition: "the mimetic faculty," a concept that segues nicely to a consideration of the recent resurgence of mimetic theory in scientific studies of sociality, psychology, cognition, and neurology.

The Role of Mimesis in Cognition

As I noted in Chapter 1, the German thinker Walter Benjamin believed, as did Aristotle, that all creatures possess mimetic capabilities that are most fully developed in humans. His famous term "mimetic faculty" signified how similarities between the things we encounter in the world create familiar patterns which allow us to situate our experiences in an intelligible way. Benjamin believed that language evolved along with human culture. As human civilization became more complex, so too did language, becoming more conceptual and hence divorced from the material world with which human interaction helped produce language in the first place. Hence the "sensuous similarities" from which language derives - captured in the phenomenon of onomatopoeia - gives way to the "nonsensuous similarities" of which symbolic systems like language and all written scripts are archives ("Mimetic Faculty," 335). Our formidable mimetic faculty described by Benjamin, Michael Taussig tells us, should be thought of as a "sixth sense, the basis for judging similitude" that enables the "nature that culture uses to create second nature" (213).

Translated into the language I am using in this dissertation, what Benjamin calls "nonsensuous similarities" speaks to the operation of the mimetic faculty in the virtual realm of the conceptual and "sensuous similarities" speaks to its operation in the actual world of the experiential. In ordinary operations, our sensory-motor body schemas, as Merleau-Ponty showed in his discussion of the brain-damaged WWI veteran Schneider, automatically translates between these areas when we think and act. My contention is that we have lost sight of this interplay because of our educational emphasis on conceptual thinking, on symbolic significations and meanings shaped primarily by culture. Benjamin would likely agree. Gebauer and Wulf see as one of his central ambitions the reconstruction of mimetic sensuous experience that was nearly destroyed by Descartes' dualism and scientific order (271). Susan Buck-Morss similarly identifies Benjamin's project as trying to retrieve and revitalize "what was lost along the way" in the sequential development of stages of abstract formal reason specifically an "active, creative form of mimesis" that stemmed from our "unsensed connection between perception and action" and which, once reconstituted, could possible incite revolutionary consciousness in people (263). Benjamin seemed to

believe that the expressive opportunities afforded by a more fully developed mimetic faculty should not be divorced from the (sensuous) material world in which our bodies and minds are ultimately rooted. Such a development might instead strike a *balance* between the two; nonsensuous similarities would not *replace* sensuous ones so much as complement them. Cultivating our mimetic faculty would hence not be a movement *away* from something old but a movement *toward* something new based on the old. For Benjamin, the epistemological shift to the nonsensuous similarities of the of what he called the signworld (*Merkwelt*) does not *necessarily* lead to a dead end, Buck-Morss tells us, since it creates the conditions for a "future of development of mimetic expression, the potentialities for which are far from exhausted" (267).

Benjamin's mimetic theory has in recent years been resuscitated and given renewed vigor by the cultural theorist Mark Hansen. In his 2000 book Embodying Technesis: Technology Beyond Writing, Hansen identifies "two divergent concepts of embodiment that are too often either conflated during analysis or simply collapsed from the beginning" (27). The first and most privileged view, epistemological embodiment, is an "artifactual" exteriorization of some process of inscription which is, in his opinion, ultimately concerned with stabilizing something that is "by nature amorphous or highly tenuous - for example, meaning (for Derrida) or intention (for Latour)" (26). The second and marginalized view, phenomenological embodiment, insists on the corporeality of the body as a site of experiential excess and attends to the nondiscursive, nonrepresentational, affective dimensions of lived experience. Phenomenological embodiment, he contends, "asserts the impossibility of ever completely clarifying - bringing to discursive articulation - the embodied background underlying human practices" (27). Seeing in philosophy an end to what he terms the "semiotic-systemic perspective" of the epistemological account of embodiment, Hansen offers in its place a model he calls "corporeal mimesis" - a concept based on Walter Benjamin's "mimetic faculty." According to Hansen, a cultivated corporeal mimetic faculty would allow humans to better negotiate radical changes (specifically industrial and technological changes) to "the material domain" of our material environments. Refining our mimetic faculty in these times of technologically mediated change, claims Hansen, "leaves room for the introduction of a distinct postlinguistic

form of *mimesis* that would restore a crucial dimension of *sensuosity*—a practical, embodied basis—to our contact with the material world" (232, *emphasis in original*).

Hansen's reconceptualization of Benjamin's mimetic faculty as corporeal parallels Merleau-Ponty's recovery of the bodily experience through phenomenology, which similarly seeks to return philosophy to the world of actual experience by "rediscovering phenomena" as the "layer of living experience through which other people and things are first given to us, the system of 'self-other-things' as it comes into being" that is prior to objective reflection (PhP, 65). In his 1981 book The Reenchantment of the World, the cultural historian Morris Berman strives for a similar rediscovery to a way of being in the world that has been buried under layers of cultural conventions. He promotes the development of "self-conscious mimesis" as the vital next phase in the cultivation of a "participating consciousness" through which people become attuned to the web of relations that threads its way across all beings and things but from which human "ego-consciousness" has disentangled us (72, 296). Berman argues that mimesis is a form of knowledge (173) and that identification of the sensuous with the intellectual is the "crux of the mimetic tradition" in Western culture (157). He claims that the beginning of wisdom is not in analytic dissection but through mimetic immersion in the world and compares mimetic knowledge to Henri Bergson's ecological view of mind/body as a "field" in which our leaning - as demonstrated in the work of Michael Polanyi - is achieved mimetically through bodily engagement with our situations (147-8).

Here we should recall Scott Marratto's description of intercorporeity in Merleau-Ponty as a "field" in which "my body is already bound up with the other's body before there can be any relation between conscious subjects" (144). I have touched on the relationship between intercorporeity and mimesis and here will return to that subject. I believe that the empirical studies that have informed the thinking of the neuroscientist Vittorio Gallese (who has written about mimesis within the context of intercorporeity, a term he apparently borrowed from Merleau-Ponty)¹⁷ is key to the mimetic approach I take toward rhetoric and multimodal pedagogy in the chapters ahead. As I noted earlier, Gallese - one of the discoverers of the mirror neuron systems in humans and other primates - argues that there are "two sides of mimesis" and promotes the "good" side that Rene Girard has played down in his advancing of

mimetic desire as the source of conflict. By putting into conversation key aspects of work by Alexandre Kojeve, Martin Heidegger, and Halmuth Plessner with empirical neuroscientific research conducted internationally over the past two decades, Gallese offers a "different, complementary, not mutually exclusive account of mimesis as one of the driving forces leading to social identification, hence to human sociality and intersubjectivity" - but intersubjectivity viewed "first and foremost" as intercorporeity, "the mutual resonance of intentionally meaningful sensory-motor behaviours" ("Two Sides of Mimesis," 3). Intercorporeity, as Gallese explains it,

describes a crucial aspect of intersubjectivity because humans share the same intentional objects and their situated motor systems are similarly wired to accomplish similar basic goals. Before and below our theoretical take on the world is the pragmatic character of our openness to the world. (4)

In our situated interactions with other people and things, we automatically engage in what he and his colleagues call "intentional attunement," a specific, shared, phenomenal state generated in part by the mirror neuron system. This system allows for embodied simulation that is "automatic, unconscious, and noninferential in the observer of actions, emotions, and sensations carried out and experienced by the observed" (131). This mandatory, prereflexive mechanism "is not the result of a deliberate and conscious cognitive effort" but instead "generates a peculiar quality of familiarity with other individuals" (143-4). From the moment of birth "humans are engaged in interpersonal mimetic relations" that occur in a shared "we-centric" space ("Two Sides" 11). He suggests that these bodily "instantiations of unconscious mimesis" (9) emerge simultaneously with intersubjective relations from the ground of intercorporeity (13). Therefore, he argues, humans have an innate capacity for empathy that does not solely manifest itself as rivalry but also, as Girard himself has noted, as compassion and love - an observation that Meltzoff's experiment referenced above also supports. An ethics that takes serious account of this "good" side of a clearly dual-aspect mimesis should look to neuroscientific studies of cognition in promoting empathy, cooperation, and cohabitation as correctives to the violence, scapegoating, and war that results from its "bad" side.

As I noted earlier, intercorporeal mimetic relations in Gallese are based primarily in human-to-human interactions. In an attempt to move beyond human

sociality, I show in the previous chapter how Merleau-Ponty describes typists and organists as "incorporating" the space of keyboards into their own body schemas through habitation, a process he discusses within the broad framework of imitation. The affect theorist Anna Gibbs, however, provides an even better nonanthropocentric account of intercorporeal mimetic relations that I would like to look at here. In her 2010 essay "After Affect: Sympathy, Synchrony, and Mimetic Communication," Gibbs argues that mimesis, like affect, is not necessarily best thought of as occurring at the level of the individual or the organism; rather it might be seen as a "trajectory" that both organism and environment are mutually caught up in (195). Interpreting mimesis not as direct imitation or "copying" but as reciprocity, entrainment, and synchrony, she aligns it with an emerging "nonhumanist" movement of thought "for whom thinking is a practice that should extend us beyond the known forms of the subject" (187). She herself cuts a path in this direction by offering a mimetic reading of Gilles Deleuze and Felix Guattari's discussion of asymmetrical coevolution that they call "becoming." While the orchid and the wasp may exist separately in different "worlds" or *Umwelts*, a form of symmetrical reciprocity nonetheless emerges in the structural coupling of these two worlds. 18 Gibbs adds empirical weight to this theory by referencing observations made by the behavioral ecologist Anne C. Gaskett on how orchids evolved complex mimicry patterns to deceive, if only temporarily, pollinating wasps (194). Gibbs describes as "communication" the structural alignment between the wasp's alimentary system and the orchid's reproductive system (195). Mimesis, hence, is not just a human function but a complex process of what Aristotle said the work of artists, painters, rhetors, and musicians ought to "imitate": phusis, nature. Indeed, there seems to be a strong mimetic dimension to Aristotle's notion of "function," which, according to Gilbert Simondon, aligns parallels between beings whose modes of existence and structure are different but who are linked through a chain of functioning that gives continuity and permanence of life from one species to another (Two Lessons, 50-2). In imitating phusis, human artists and performers are basically linking themselves to this chain of functioning that, like Gibbs' mimetic communication, cuts across all living things.

At the level of human interaction, Gibbs argues that mimesis reveals itself through our "capacity for synchrony" as a form of "affective attunement," as revealed

in how a baby's squeal of delight is "translated" into a mother's dancing shimmy as a form of response - a "correspondence" between perception and motility that operates "cross-modally," enacting a space "where two subjective worlds come into momentary contact" (195). The mother responds to her baby's needs, Gibbs says, because "she is attuned to the level of the baby's distress"; she and the child are *synchronized* (196). This synchronic attunement is what Gibbs calls mimetic communication and, like the other examples provided above, works against the conventional understanding of mimesis as the reproduction of sameness since the mother's shimmy is an appropriate response to her baby's squeal and not a replication of it. This "cross-modal" process that operates "both intra- and inter-corporeally" (196), Gibbs asserts, is productive of difference, organizing experience so that one's identification with others reversibly becomes one's distinction from them. This is not just a phenomenon of infants. Adults similarly become "entrained" with the gestural manners and speech rhythms of others they observe or interact with, almost always at an unconscious level (196). But never do we entirely "lose ourselves," as Plato believed, in the process. Mimetic communication is not about sacrifice but attunement; difference is not eliminated or marginalized but enacted simultaneously with similarity. One cannot determine what constitutes difference without attending to similarity; they are co-constitutive of each other. The wasp and the orchid exist in different phylums, different "worlds," but the agon of their encounters enacts just enough similarity to allow for symbiotic relations.

As noted previously, Merleau-Ponty believes that we share with our situations a *style*, "a 'manner' that I apprehend and then imitate, even if I am unable to *define* it" (CAL, 43; italics in original). Even when one partially imitates the behavior of others, one takes on the "total attitude" corresponding to that behavior. The acquisition of a total attitude reveals that cognition is not the product of some mental apparatus but rather emerges from the intercorporeal nexus between the body of the imitator with the body of the one being imitated:

When I witness the setting in of the behavior of others, my body becomes a means of understanding them, my corporeality becomes a comprehending power of their corporeality – I regain the final meaning ... of other people's behavior, because my body is capable of achieving the same goals. (CAL, 42)

This is precisely the process of mimesis as described by Gallese through which one becomes intentionally attuned to another so that one's bodily state "becomes in some way congruent with" that of another (Gallese et al, 151). But style is not enacted solely through our bodies' relations with other *human* bodies. Merleau-Ponty describes how style arises in language use - his example is the word "sleet" - as a "meeting of the human and the nonhuman, as it were, a piece of the world's behavior" (PhP, 469). Here we have a meeting place of systems, not of subjects, reminiscent of Gibbs' description of the coupling that occurs not so much between the wasp and the orchid but between the wasp's alimentary system and the orchid's reproductive system. To engage mimetically with the people and things of this world, then, is to engage with the style of all styles that the Greeks called *phusis*. Our engagement is expressive not just representative - of many things that constitute "life," including how we learn and communicate by intentionally attuning to others. In the next chapter, I will look more closely at what Merleau-Ponty calls the "almost imitative way" we attune ourselves to the style of situations, a dimension central to ancient rhetorical pedagogy that was retained through certain skill sets associated with imitatio. But before proceeding I want to contend briefly with the anti-mimetic, anti-phenomenological, anti-ambient ideology of Timothy Morton's so-called "dark ecology," to which I now turn.

A Brief Deconstruction of Timothy Morton's "Dark Ecology"

In his 2007 *Ecology Without Nature*, Timothy Morton argues that contemporary "nature writing" like that of David Abram - who draws heavily on Merleau-Ponty's phenomenology in offering an ecological philosophy that attends to the more-than-human dimensions of perception - suffers from a romantic ideality he calls "ecomimesis," a "device" that "wants to go beyond the aesthetic dimension" of mimesis and "involves a poetics of ambience . . . [that] denotes a sense of a circumambient, or surrounding, *world*" (31-3, 132). By trying to erase the trace of writing in his text and in other texts, Abram and other writers he perceives as given to romanticism indulge in "ecomimetic ekphrasis," an ambient rhetorical device that seeks to absorb readers into the reading itself, evoking thereby a "fantasy environment" that stands in for the world in which we are supposedly immersed or

embedded (129). He categorically attacks the ideas of complex systems as "holism without the sticky wetness, a cybernetic version of the ecological imaginary" (103); intersubjective *fields* of perception as a manifestation of the "rich, spatial quality of field in phenomenology [that] is simply the holographic hallucination," one that wants to conjure a surrounding world that "jumps off the page" (105); and the body as "a phenomenological product of intersubjectivity, which seek[s] to do away with the dilemma of specifying the boundary between inside and outside" (105). Ecomimesis draws on these and other concepts to "carve out a radical embeddedness in the landscape" by conjuring "an ambient dimension incarnated like Merleau-Ponty's 'Flesh,' surrounding and sustaining the narrator and the reader" (132-3). Because ecomimesis aims for immediacy, "it wants us to forget or lay aside the subject-object dualism" (151) and draws on ambient rhetoric to create a sense of in-between: "The brilliance of ambient rhetoric is to make it appear as if, for a fleeting second, there is something in between" (50). According to Morton, the notion of there being an inbetween is "sheer nihilism" (54) perpetuated by the "trope" of Merleau-Ponty's chiasm, which intertwines "what is sensed with the one who is sensing" (69) and hence contributes to what Morton calls the "beautiful soul syndrome," a "subjective form of ambience" that results from "the collapse of aesthetic distance" (164).

Morton's forthright attack on "ecomimesis" is not without significant shortcomings. It should be noted that Morton's criticism of nature writing is part of a larger commitment to an ideological dis-ease with contemporary theories of relationality. His suggestion that the term intersubjectivity, popularized by "phenomenological rhetoric," should be replaced by the word "interobjectivity" (106) resulted in comparisons between his book the then emerging philosophy of Object Oriented Ontology, which Morton has since associated himself with. "OOO" has adopted a critical - and sometimes openly hostile - theoretical position with respect to the relational theories that inform much contemporary critical theory, ¹⁹ including those I draw heavily from in this dissertation. Morton's provocative, often humorous, and sardonic treatise barely disguises his visceral animosity toward major tenets of phenomenology, complex systems theories, autopoiesis, and other philosophies that do not draw clear distinctions between subjects and objects. Morton piles these together into a single monolithic ecophilosophy that, in the later chapters, turns out to be deep

ecology. But what does he offer in its place? This is where Morton's entire project deconstructs itself - with much help from the author himself.

In contrast to deep ecology, Morton proffers what he calls "dark ecology," "a perverse, melancholy ethics that refuses to digest the object into an ideal form" (195). In his words:

We should be finding ways to stick around with the sticky mess that we're in and that we are, making thinking dirtier, identifying with ugliness, practicing "hauntology" (Derrida's phrase) rather than ontology. So out with the black clothes, eyeliner, and white makeup, on with the spangly music: dark ecology. (188)

In the pages that conclude his book, Morton hardly develops his theory of dark ecology. Instead, he simply opposes the term to the "new organicism" of relational philosophy (191). Dark ecology is trumpeted as a "halting" of the ambient sounds of ecomimesis by "the screeching of the emergency brake" (196). It also helps us all get "over the dilemma of the beautiful soul, not by turning the other into the self, but perversely, by leaving things the way they are" (196). Most remarkably, in the very last two paragraphs of *Ecology Without Nature*, Morton suddenly admits that "I long to characterize what I am aiming for as 'really deep ecology'," which, simply put, means "hang[ing] out in what feels like dualism" since taking "a more nondual approach" to questions about our ecological relationship with the world would be metaphorically equivalent to jumping down into the mud rather than trying to pull the world out of it (204-5).

How do we do this exactly? "In a truly deep green world, the idea of Nature will have disappeared in a puff of smoke, as nonhuman beings swim into view" (204). The problem with this conclusion, of course, is Morton's assumption that all the theoretical perspectives he attacks buy into the same monolithic view of Nature. I contend that they do not. Even constructed views of Nature differ widely, with self-identified deep ecologists conceiving of it in ways very different from wildlife management experts or evolutionary biologists. As I discussed earlier, Aristotle's term *phusis* is inadequately translated as "Nature" just as *mimesis* is inadequately translated as "copying" or "imitation." Morton ignores how theories of relationality like those of Merleau-Ponty enabled "nonhuman beings to swim into view," that

objects were perceived as having an ontology long before OOO entered the philosophical *agon*. ²⁰ Morton way too quickly seizes upon the conventional definitions and stereotypes of the concepts he rails against in his book while mimicking popular styles (dark eyeliner, spangly music) seen as "dark" or provocatively punk. His desire to provoke in this book, I submit, exceeds his commitment to critical analysis and consideration. As I hope I have shown, there is much more to the concept of mimesis than the reductive definitions that come together to inform Morton's straw man "ecomimesis." In the next chapter, I will delve more deeply into the widespread cultural prejudice against one of these definitions - mimesis as *imitation* - in an attempt to reveal how the denigration of what is an essential manner of learning about ourselves and the world we inhabit has done much more harm than good.

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¹ I would also like to add that I don't believe her interpretation of Plato and Aristotle delves much at all into their actual dealings with mimesis. What Sun seems to be doing here is taking a very reduced version of mimesis and using it to reflect their general philosophies. This is especially true in the case of Plato, where mimesis reflects his privileging of *eidos* over matter. What she doesn't attend to, surprisingly, is that he actually used that hierarchy to diminish mimesis. In the case of Aristotle: I suppose by securing mimesis so steadfastly in the realm of human aesthetics did in a sense anthropocentrize it in ways that, as I will show, much earlier understandings of the concept did not. However, reducing Aristotle's extensive treatment of mimesis solely to anthropocentrism, in my view, is an example of extremely selective reductionism. It's not that I disagree with Sun's very generalized reading of a conventionalized version of mimesis here. It's just that her reading does not directly attend to Plato and Aristotle's actual discussions of the concept.

² Stephen Halliwell uses this term to describe the enactive conception of mimesis he believes Aristotle was strongly inclined to, and which I will discuss in the following section. My use of the term dual aspect, however, will not be confined solely to the aesthetic context of Aristotles' discussion.

³ We should recall here that Merleau-Ponty describes the "fundamental and irreducible form" of mimesis as a "correspondence" between dual modalities - perception and motility - which translates itself into "an original" motor organization (CRO 146). As a function of the body schema "appropriate to the needs of expression," mimesis is what allows us to automatically regulate our bodily equilibrium in part by realizing that our body gestures are "analogous" to those of the people and other living beings around us (154). The motor organization enacted through this correspondence is, however, *original* - not a direct copy of an act, but more like a simulation of an act's intention. In other words, what is imitated here is not so much the action itself but the *expression* of that action, its total significance. The picture emerging here suggests that mimesis is the cognitive operation that enables our attunement to style through an "affective interplay between the 'mind' and the 'object'" that Sun ascribes to the allegedly anti-mimetic concept of *xing* (335). It is also clearly an intercorporeal operation in that it cannot occur in the absence of material bodies, both human and nonhuman.

⁴ For example, causal dependence, visual similarity, analogy, and behaviorial imitation or mimicry. See Halliwell, 153.

⁵ The term cited by Halliwell is *suntheorein*, whose two other uses in Aristotle confirm the force of the prefix for him: "to contemplate or observe *at the same time*." (181)

⁶ The current artistic trend of bioart similarly tries to evoke a more complex state of awareness by encouraging viewers to embody dual aspects of bioartistic exhibits. In some pieces, they become simultaneously viewers *and* participants, in others they experience an experiment by being both subject-as-experimenter and the object-as-experimented-on. This dual aspect evolves, according to Robert Mitchell, from bioart's ability to bring two media together: media-as-communication and media-as-

transformation. (See Introduction for Mitchell's *Bioart and the Vitality of Media*, U of Washington Press, 2010.)

- ⁷ They speculate that the original *mimoses* participated in Dionysian cult dramas and later became performers at banquets thrown by wealthy aristocrats at which they depicted scenes of life "as it is" that is, from the allegedly more realistic point of view of commoners (28-9).
- ⁸ See Halliwell, 17. Gebauer and Wulf tell us that *mimos* were actors who represented lift "as it was" that is, the everyday life of commoners and the banquets of rich men (29)
- ⁹ In their book *Cunning Intelligence in Greek Culture and Society* (Harvester Press, 1978), Marcel Detienne and Jean-Pierre Vernant argue that stochastic knowledges like *metis*, a concept that parallels mimesis in many ways, were ignored for centuries by ancient Greek historians and scholars due to the combined influence of Christianity and Platonic metaphysics, both of which promoted a view in which "human reason should appear even more clearly separated from animal behaviour than it was for the ancient Greeks" (317-18).
- ¹⁰ I draw here on Matthew Potolsky's description of this section of Plato's *Sophist* (22-26).
- ¹¹ As we will see in the next chapter, prior to Plato mimesis was a term used in relation to a performative practice and pedagogy. Plato basically *philosophized* it. Halliwell therefore refers to him (seemingly following others) as the founding father of *mimeticism* of the theoretical and aesthetic *tradition*. But this tradition clearly has roots in history long predating Plato's dialogues. As a coarse analogue, it would be possible to call Plato the founding father of rhetoric in that he was the first to record the word (*rhetorike*). But, of course, rhetoric as a practice in ancient Greece pre-dated Plato by many centuries. ¹²Havlock argues that Plato's rejection of mimesis and banning of the poets in the *Republic* stemmed from the philosopher's understanding of a shift in Greek literacy from oral to written traditions. ¹³ Quoted in Bjornar Grande, 8
- ¹⁴ Scapegoating violence is a central tenet to Girard's mimetic theory. He believes that proto-humans established culture and religion through ritual sacrifice, which deflected escalating in-community violence to a surrogate. For a good overview of Girard's theory see Garrells (1-2, 11-19). For an account of the literary, mythic, and religious framework that informs Girard's theory, see Gebauer and Wulf (Chapt 20, 255-266).
- ¹⁵ Girard tells us that "satanic" means "the power of *accusation*. 'Satan,' in the Bible, means first and foremost the accuser..." (Adams, 33).
- ¹⁶ Mana is a proto-Oceanic term that worked its way into multiple languages associated with the Austronesian language family. It originally was associated with the forces of nature thunder, wind, storms but in time came to represent a great supra-natural force. Horkheimer and Adorno use it as an equivalent for magic. When the magician claims that the tree is a site of magical mana, the tree becomes something more than itself, even other than itself. In this way do humans gain control of "nature": they who understand magic can control that in which it is invested.
- ¹⁷ As I noted in Chapter 1, in his 2009 article "Mirror Neurons, Embodied Simulation, and the Neural Basis of Social Identification," Gallese cites Merleau-Ponty's claim that the "comprehension of gestures come about through the reciprocity of my intentions and the gestures of others. . . . as if the other person's intention inhabited my body and mind his" a comprehension that is communicated, according to Gallese, "first and foremost" (523) through *intercorporeity*, the intentional attunement between bodies, which he argues subtends intersubjectivity. Of Merleau-Ponty's passage, which I only quote a part of here, Gallese writes: "These words fully maintain their illuminating power in the present century, even more so as they can now be grounded on solid empirical evidence" (526).
- ¹⁸ This example is drawn and elaborated on by Deleuze and Guattari from the German Baltic biologist Jacob Von Uexkull.
- ¹⁹ In his 2012 *Alien Phenomenology, or, What it's Like to Be A Thing* (U of Minnesota Press), the OOO rhetorician Ian Bogost adopts a similar tone in his attack of correlationism and other features of relational philosophies he conceives as obliterating objects.
- ²⁰ For one of many examples, Bernard Stiegler argues for an ontology of "technical beings" in his three volume work *Technics and Time*, the first book of which was published in 1994.

Chapter 3: Cultivating Experiential Knowledge: The Mimetic Dimension in Rhetoric

The Dual Denigration of Mimesis and Rhetoric

In the last chapter I explored the complex meaning of the term mimesis. In this chapter I look more closely at how mimesis - as both conventional representation and enactive expression - impacted the Western rhetorical tradition and still does. To do this requires us to consider in much greater depth a central significance of mimesis, namely the interrelated activities of repetition, simulation, and repurposing that are lumped altogether in its translation as "imitation." This term is one that must be carefully contextualized when used; otherwise, one risks conjuring the historical anathema against the allegedly lazy, rote, mindless monkey-see-monkey-do reproduction of facsimiles in a culture that has been tutored to prize originality and uniqueness and persecute plagiarism. The deeply entrenched prejudice against what is an essential learning behavior in humans and many other species has in recent times given way to more serious considerations of its biological and anthropological dimensions. In his introduction to the 2011 Mimesis and Science: Empirical Theories on Imitation and the Mimetic Theory of Culture and Religion, a collection of essays by scholars in multiple disciplines who respond in various ways to Rene Girard's theories of appropriative mimetic desire, Scott R. Garrels observes how the work of mimetic scholars in the humanities and social sciences have for long addressed "broad concerns" that empirical imitation scholars are just now beginning to catch up with (29). Fortunately, these scholars are now beginning to contribute to a "renewed view of imitation as one of the most compelling and overlooked capacities of the human species" (1). Increasingly, imitation is understood as a "complex, generative, and multidimensional phenomena" that may very well be the basis for how we understand ourselves and others, but for how we learn as well (1).

These complex and multidimensional phenomena have been ignored, Garrels tells us, because of "many enduring and deeply ingrained philosophical and conceptual biases concerning imitation, some dating back thousands of years (2). These biases have been well documented and often accepted as innovative steps in the forward-moving direction of progress. "All forms of imitation are to be despised!" proclaimed

one of the many futurist manifestos¹ published in the early 20th century as iconoclastic movements in art began to spread across the Europe and America, promoting an ideology lionized by the modernist poet Ezra Pound's statement "Make It New."² Pound may not have realized it, but he was in fact simply reproducing an old ideology. The Renaissance figure Leonardo da Vinci's forthright disapproval of all forms of imitation contributed to a burgeoning disregard for formal aesthetic practices associated with what the Romans called, in both art and rhetoric, *imitatio* (Garrels, 7). Conditions were created long ago for a tradition in which, as Stephen Halliwell complains, "the semantics of 'imitation' have been considerably narrowed and *impoverished*" so that its modern significance "tends almost inevitably to imply, often with pejorative force, a limited exercise in copying, superficial replication, or counterfeiting of an externally 'given' model" (14; *emphasis in original*).

While in other cultures overt imitation is considered a sign of respect, rigor, and even flattery, Western intellectual traditions have followed in the footsteps of Plato, whose attack on mimesis Garrels targets as "a primary source of our modern tendency to devalue imitation" (5). As mentioned earlier, Plato associated imitation with the making of images that were thrice removed from the epistemic eidos of which they were unreliable representations - shadows cast on the wall of the cave that passed themselves of as reality and confined people to mental slavery. His antimimetic position therefore went hand in hand with an anti-imagistic one. Eric A. Havelock, in fact, describes the general thrust of Platonism as "an appeal to substitute a conceptual discourse for an imagistic one." This conceptual orientation would have serious consequences for what Plato himself called rhetorike, specifically the "imitative kind ... of image-making art" practiced by the Sophists (qtd in Covino 34). In Plato's eyes, according to Gebauer and Wulf, "Sophistic thinking aims to produce images that the listener will regard as real, all of which takes place in the world of phenomena" and, like mimesis, belongs to a an increasingly obsolete oral culture (Gebauer and Wulf, 43, 45). In his Sophist, Plato labels the "production of images" by Sophists as *acquisitive* and compares it to hunting (265a-c), a metaphor which Per Bjonar Grande reads as a "manipulative way of learning and taking possession of other people" (12). Plato then immediately extends the metaphor to include commerce and contest (265b), that realm of persuasive communication practices that in *Gorgias* he

labeled "rhetoric." Tainted as it was by the execrable influence of Sophists, rhetoric would join mimesis and all other "imitative arts" as a cultural force against which philosophy must pit itself.

Aristotle, fortunately, did not follow suit. However, his reconceptualization of mimesis and rhetoric narrowed the scope of practice with which both were associated. Susan Jarratt argues that Aristotle mapped out "quite a different epistemic field" from the Sophists, placing rhetoric along with ethics and politics "against the background of his fixed vision of episteme" and thereby created a system that suppressed the positions the Sophists advocated, namely the primacy of human knowledge, possibilities of non-rational and emotional responses to the whole range of discourse types, and the integral relationship between theory and practice (xviii-xix). Ekaterina V. Haskins comes to a similar conclusion with respect to mimesis, seeing Aristotle's privileging of representational mimesis over the performative kind that so vexed Plato as a "disciplining" of rhetoric which curtailed the influence of "performance culture" upon public institutions, including civic education (31).

The experientially performative Sophistic dimensions that were excised in Aristotle's revamping of rhetoric along more conceptual lines did not, however, disappear from the rhetorical tradition. ⁴ They lived on through *imitatio*, ⁵ a practice developed in Roman rhetoric and historiography whose roots stem from ancient Sophistic training that did not encourage a separation of mind from body or rhetor from situation. In the last chapter, I showed how mimesis - even in the hands of its harshest critics - persists in revealing a dual-aspect dimension that opens it to multiplicity rather than narrows it to the singularity as expressed by the words "imitation," "copying," and "rote learning." In this chapter, I will ally this broadened understanding of mimesis with an equally broadened account of key aspects of imitation - repetition, simulation, and repurposing - and reveal how these basic behavioral capacities help situate rhetors and composers in the material contexts of their situations. By continuing to draw on key components of Maurice Merleau-Ponty's perceptual phenomenology, I will show how imitative mimesis fits with propositions made recently by some materialist rhetoricians who conceive an originary rhetoricity subtending the symbolic orders upon which so much of the traditional canon draws. I will then offer an account of imitatio that shows how from the start it has subscribed

to experiential modes of learning and communicating overlooked by scholars and critics alike. In this sense, *imitatio* – which is the formal rhetorical and aesthetic rendering of the Greek word mimesis in Latin – has its philosophical roots in perhaps the first formalized account of experiential learning in Western Culture. This will be followed by an elaboration of *embodied repetitio* – a concept I construct that aligns repetition in rhetoric and general language use with mimesis conceived phenomenologically – that is, as expressive of enaction. I will then turn toward contemporary rhetorical pedagogy by drawing on the work of Robert Terrill, a communication scholar who revived *imitatio* for a 2011 article published in *Rhetoric Society Quarterly*. Terrill's article will help me to sum up this chapter's focus on mimesis in rhetorical pedagogy and segue to the next chapter in which I explore that pedagogy in the context of multimodality.

Imitating *Phusis*: Mimesis and Material Rhetorics

The rhetorical scholar Jay Dolmage claims that Western rhetoric has for long participated in a tradition that "lifts discourse from its corporeal hinges" by overlooking its embodied and thoroughly "phenomenological importance" ("Metis," 1). Where Dolmage draws on the Greek concept of *metis* to restore to rhetoric its phenomenological importance, I draw on mimesis as read through the phenomenology of Merleau-Ponty. ⁷ I am not the first, though, to use phenomenology as a way to reenvision rhetoric. In her 1998 Toward A Phenomenological Rhetoric, Barbara Couture ambitiously promotes what she terms as *phenomenological rhetoric* as a "sea change" to the "valued rhetorical practices" of argumentation (6, 182) that have, in her view, incorporated narcissistic and fetishistic behavior that stem from the belief in a separate, coherent, unified self (58). Arguing that "we need to return to the possibility of universal meaning," Couture offers phenomenology as a way to transcend the "dichotomous thinking" and "polar tensions" brought on by deconstruction, poststructuralism, and other relativisitic philosophies that she, along with Ann E. Berthoff and others, claim have worked its way into rhetoric (28). She argues that the idea of shared universal truth is manifested in how "phenomenology accounts for consciousness as it is constitutive of both meaning and the implicit object of meaning" (64). Since all of humanity is concerned with making meaning, truth exists

phenomenologically - that is, not in ourselves or in the world but "in the dynamic of our engagement with the world," which is itself, as Merleau-Ponty has said, "meaning" (62, 65).

Although Couture draws heavily on Merleau-Ponty, her overriding commitment to rescuing truth from relativizing poststructuralists tends to prevent her from attending to the *material role of the body* in his phenomenology. This dissertation therefore seeks to fill the gaps I see in Couture's phenomenological rhetoric. While I am not concerned with resuscitating universal truth, I do believe that we need to attend to *materially enacted meaning* in our composing and communication practices. My phenomenological approach to rhetoric actually has less in common with Couture's than it does with what has become known in recent times as material rhetoric. There are echoes of Merleau-Ponty, I feel, in Nathan Stormer's description of rhetoric as "express[ing] materiality: it is a way of incarnating ourselves in the world . . . ("Recursivity, 29). Similarly, Thomas Rickert argues for "a richer, more dynamic, and materialist understanding of rhetoric that declines to zone rhetoric within symbolicity," one whose persuasive aim is not to conduct "a shift in the mental states of subjects but something world-transforming for individuals and groups immersed in vibrant, ecologically attuned environments" (xv). "The big story," though, as Rickert puts it, "is that rhetoric is not solely human doing, that it is worldly, and that world is simultaneously one of meaning and of meaning's withdrawal" (163). While Rickert conceives meaning primarily through a Heideggerian lens (as seen here with the reference to its withdrawal), I approach it through one crafted by my reading of Merleau-Ponty: meaning arises through our *bodily* interactions with situations, 9 one important dimension of which is, for humans at least, fundamentally mimetic and hence rhetorical.

In Chapter 1, I looked at how certain aspects of Merleau-Ponty's theory of adult imitation were demonstrated in his study of the brain-damaged World War I veteran Schneider. In what he calls "normal imitation," human beings are so attuned to the situations they are enmeshed in that they automatically shift from *actual* (perceptual; affective) experience to the *virtual* (conceptual; symbolic) manifestation of that experience, over and over - a capacity lost to Schneider. I see this capacity as being akin to what Rickert calls *ambient attunement*: a recognition that "even if symbolicity

remains ascendant, it stays receptive to its material dimension, and not just receptive but engaged, and not just engaged but enmeshed" (165). I believe that, in practice, ambient attunement is enabled by what Merleau-Ponty describes as "mimesis in its most fundamental form": the correspondence between perception and motility that enables action. Gebauer and Wulf offer a similar (materialist) account of mimetic representation not as an "act of an autonomous mind but a product of practice in the formation of materials, painting or writing" (21) which Aristotle and others believe are impelled by the productive "force" of *phusis* that, though mimesis, speaks to an underlying "similarity in the processes of creation" (55). As I noted in the previous chapter, what is being "imitated" is not an object or thing (*natura naturata*) but the poietic process which enacts it (*natura naturnas*) (Gebauer and Wulf, 71).

When we put mimesis and rhetoric back into contact with their material base, we discover that both are intimately linked as processes of natura naturans, the "naturing" ¹⁰ of *phusis*. The hermeneutical philosopher Hans Gadamer, writing in 1969, described rhetoric as a dimension of "the universal phenomenon of human linguisticality" that builds "on a natural power that everyone possesses to some degree" (20). Far from being a "theory of forms or speech and persuasion," rhetoric according to Gadamer develops from "a native talent for practical mastery, without any theoretical reflection about ways and means." Theory, hence, is "subsequent to that out of which it is abstracted; that is, to practice" (20-1). In 1980, the classical rhetorician George Kennedy argued that rhetoric did not "begin" with Plato's Gorgias and or even with Aristotle's Rhetoric; rather, it extends back further than even its earliest instantiations (observed by Aristotle) in Homeric poems, Greek drama, and other prose writing (3). Kennedy, in fact, goes even further than Gadamer in pushing the definition of rhetoric beyond the concept of skill, technique, and the "art of persuasion" by describing it as "a natural phenomenon: the potential for it exists in all life forms that can give signals" (4). As a "phenomenon of nature, rhetoric is prior logically and historically to human speech," which Kennedy argues developed from animal communication, specifically that of primates (216). 11

Gadamer's and Kennedy's postulations that rhetoric is a phenomenon of "nature" were novel at their time. Recent developments in material rhetoric 12 basically pick up where they left off. In her 2010 book *Inessential Solidarity*, Diane

Davis seeks "to expose an originary (or preoriginary) rhetoricity - an affectability or persuadability - that is the condition for symbolic action" and is irreducible to "epistemological frame-ups" (2; emphasis hers). What is interesting for our purposes is that Davis compares the "constitutive persuadability and responsivity" of this originary rhetoricity to "constitutive mimesis" as described by the philosopher Phillippe Lacoue-Labarthe, an engaged entrainment with others - a "mimetic rapport" achieved through "mimetic identification" - which, in humans, "precedes understanding" and manifests itself (as Merleau-Ponty noted) in infant imitation of their mothers and other adults (24-5). In describing the "suggestive influence" of an originary persuadability, Davis draws on parts of Sigmund Freud's work which seems to offer a "new version of 'the pathic' part of ancient rhetoric," one that does not involve an emotional appeal but rather - and here she borrows a term by Borche-Jacobsen - a kind of "mimetico-affective contagion" indicative of the absence of any proper subject - including the subject of representation (33).

I want to explore Davis's comparison of an *originary rhetoric* to what seems to be a closely related *originary mimesis*. To begin, it is important to note Aristotle's belief that imitation is not just a skill but an actual "instinct of our nature": "The instinct of imitation [dia mimesos] is implanted in man from childhood" he tells us in his *Poetics*. "He is the most imitative of all living creatures, and through imitation learns his earliest lessons" (IV, 2-6). It is important to note how Aristotle in this passage equates imitation with an incipient pedagogy ("learns his earliest lessons"). I will return to this equation in the next section. For now, though, I want to suggest, following Halliwell, that for Aristotle mimesis is not necessarily confined to or determined by human intention. Mimetic likeness, rather, "entails an intentionality that is ultimately natural in origin but becomes embodied in culturally evolved and institutionalized forms" (156). It seems that for Aristotle the creative impulses that give rise to art and other forms of creativity are - like the body is for Merleau-Ponty very much rooted in worldly processes (phusis) which we intentionally attune ourselves to through imitation. I believe that Merleau-Ponty provides a framework through which this "instinct" might be better understood. As the fundamental correspondence between perception and motility that enables a motor organization (CRO 145), the ability to imitate "is built into my bodily structure and is its inseparable correlative"

(PP 164). Even when imitation becomes free of motility and allows us to experience objects "in themselves," as in the conscious production of art, the "primary sphere in which meaning is engendered . . . is motility itself" (PhP 164). Merleau-Ponty's observation that because the body schema is an "open system" whereby different motor tasks are instantly transferable in the act of imitating, a subject can lose "his separate reality in the other" with whom he becomes identified (164).

Merleau-Ponty's carefully considered theories of imitation - informed as they were by studies of neonate imitation and childhood development - are bolstered by recent studies in cognitive neuroscience. These studies, I believe, also lend support to Gadamer's, Kennedy's, Rickert's, Davis's, and most recently Marilyn Cooper's proposition that, as she puts it, "persuasion is the fundamental mode of our interactions with all kinds of others and thus that being is inescapably rhetorical" ("Rhetorical Being," 1). The discovery of the Mirror Neuron System in the 1990s sheds light on how identification is enabled by this "open system" that Merleau-Ponty calls the body schema. The same neurons in the pre-motor cortex are activated when a subject both observes a goal-directed motor act and performs a similar act, meaning that the observed behavior is pre-reflexively understood (Gallese, "Two Sides," 8). This claim is substantiated by studies conducted on infants, many of whom can imitate adults within an hour of being born (57) and replicate their mother's gazes in a mother-baby-object triangle (Meltzoff, 60). These studies tell us that "imitation operates prior to language and is a primary precondition for the genesis of language and symbolic skills" (69). To imitate a facial gesture that she sees, an infant does not simulate the gesture internally as if there existed an internal model or blueprint of "smile" that is then rendered on the surface of the infant's face. Rather, "[t]he required model is the action of the other"; thanks to the activation mirror neurons and other structures of the body schema, the infant's body "is already in communication with the other's body at prenoetic and perceptual levels that are sufficient for intersubjective interaction" (Gallagher, 223). Neonate imitation is perhaps the first instance of experiential learning in our lives by virtue of its being the first social action we engage in. Indeed, as the biological neuroscientist Francisco Varela asserts, at this stage "the mind" is fundamentally intersubjective and infants' actions are not

intended to strengthen individual personality but to build relationships with other people (Poerkson, 47).

It is in the process of building these relationships intersubjectively that we see how imitative behavior reflects an underlying rhetoricity or persuadability to intentional actions. The "mimetico-affective contagion" to which Davis compares originary rhetoricity seems to be the basis of what cognitive psychologists call entrainment or what is known more popularly as the "chameleon effect." Often referred to as "unconscious mimicry," entrainment might be thought of as our intentional attunement to others and to situations. In the last chapter, I referenced Anna Gibbs's example of a how a baby's squeal of delight is "translated" into her mother's dancing shimmy (195). Although the neuronal mirror systems of both subjects are activated in similar ways, the mother's reaction does not "mirror" the baby's action - since she does not herself squeal - but instead is in some way congruent with the action, including complementary or modulating responses that Vittorio Gallese argues are better thought of as empathic attunement instead of "contagion" ("Intentional Attunement," 151). There is clearly a rhetorical dimension to this interaction in that the infant increasingly "knows how to solicit the mother's attention" while the mother's expressive, patterned, repetitive way of speaking (or "motherese") "seems to be designed to capture the babies' attention and to meet and match [the baby's] preferred sounds and movements" (Gibbs, 197). This imitative correspondence reveals an underlying, very reflexive persuadability: both subjects seek to influence while simultaneously being influenced by the other.

What Gibbs calls "mimetic communication," Gallese calls "embodied simulation" that results from "intentional attunement," what Merleau-Ponty calls "they system 'me-and-other'" that is emerges from the "foundation of mimesis" in our sensory-motor apparatus (CRO, 124) - these are all correlates to mimetico-affectivity that Davis draws on in describing originary rhetoricity. This phenomenon is at play in all of our social - that is, rhetorical - situations. It is what is operative in Thomas Rickert's example of how symbolicity remains always receptive to its material dimensions when he asks readers to imagine a group of people joining in a circle. The act of doing this "works on two levels": the level of conceptual symbolicity and at the level of the "material movement of bodies that invites the people to share [entrain,

"imitate"] a rhythm and complete the form" that has emerged in this particular social situation. There is in this formation an "affective pressure [that] is not solely symbolic" and for which people who "fall out" with the group dynamic "can pay high prices." In entraining with others, there is a "fittingness" that operates congruently with symbolicity that "is of itself persuasive here" (165).

This fittingness is akin to what Merleau-Ponty calls the *style* that we tap into "in an almost imitative way" when attuning ourselves to the intentional dynamics of certain situations. This is accomplished affectively and intercorporeally. "When I witness the setting in of the behavior of others," he tells us, "my corporeality becomes a comprehending power of their corporeality . . . because my body is capable of achieving the same goals" of those sharing the same space (CAL 42). When we integrate ourselves into a social situation, our bodies in a sense *persuade* others to accept us as we attempt to assimilate to the group dynamic. We automatically tap into what is familiar in the situation – its style – and in doing so the group dynamic is transformed. This transformation is what Merleau-Ponty calls *expression*. What is expressed is the group transforming and transformed through our integration with it. It is fundamentally *mimetic* in that we "mimic" its style and *rhetorical* in that our mimicry influences others to conform or not to the transformation we bring to the collectivity.

Rethinking Imitation in Rhetorical Pedagogy

Although nearly every composition and technical communication textbook currently on the market provide sample academic essays with the hope that students will model them in their own writing, the term "imitation" – still associated with rote repetition and mindless regurgitation in the service of acquiring skills – is generally avoided. When it does appear in scholarship, it is treated with no small degree or skepticism. One example would be Richard Boyd's 1991 critique of David Bartholomae's suggestion that students should "mimic" the distinctive registers (the styles and conventions) of academic discourse communities to which they acclimatizing themselves. In his essay "Imitate me; Don't Imitate Me: Mimeticism in David Bartholomae's 'Inventing the University," Boyd identifies Bartholomae as a pioneer of a group he calls "advocates of mimeticism" who outwardly promote empowering students by immersing them in "a

privileged discourse" (336) while invisibly denying students entry into this so-called privileged academic community. Boyd perceives a double-bind in this approach because the teacher "does not ultimately wish for a perfect act of emulation" by students since it would introduce "interchangeability" between model and subject that would undermine the teacher's "oposition of superiority" (341). Hence there is a double-bind in this mimetic pedagogy which manifests itself in the instructor who "demands and forbids imitation since he or she can never allow the student to become a perfect mirror image and thus the perfect equal of the teacher" (341). Boyd also includes among the advocates of imitation one of Bartholomae's most adamant critics, the expressivist theorist Peter Elbow, for his defense of an "emulation or participation model of teaching and learning" in which students' identification with the teacher can result in a "love" by what is being taught (qtd page 338). In order to counter the double-bind of this *imitate me/don't imitate me* pedagogy that ultimately seeks to preserve the teacher's position of privilege, Boyd argues for - but does not develop -"an instructional context that facilitates [students'] understanding of the working of mimeticism in the educational process" and therefore preserves "the social and political pasts that they bring to the university" which mimeticism seeks to replace (343).

While Boyd touches on some problematic dimensions of Bartholomae's own discourse – certainly the former's use of the word "privileged" might be contested – his critique is not immune to interrogation. His belief that *all* instructors of composition do not want students to share the "power" that endows them with privilege (I suppose this applies as well to the legions of contingent faculty teaching without entitlements) is a sweeping generalization and overblown assumption. It also should be noted that his critique is informed entirely by Rene Girard's theory of mimetic desire in which a neophyte subject is ensnared with such force that he or she "sees through the eyes of a mesmerizing other who directs all the desires and opinions of the subject" (339). In the process, the subject "is also learning to disdain his or her old self" by surrendering and replacing it with those believed to be possessed by the model (339). It should be noted, however, that Boyd himself is imitating a model here – Girard's – and is certainly reading Bartholomae's alleged advocacy of imitation through the lens provided of that largely anti-mimetic theorist. In doing so, he

subscribes to assumptions built into Girard's theory - including positing of a self-aware and self-preserving subject or "self" 13 which, when asserted with force, will almost certainly marginalize and brand as negative the intersubjective/intercorporeal dimensions of communication that I associate with mimesis.

Throughout the rest of this chapter, I will offer an alternative pedagogy of imitation, one which is not constrained by an abiding investment in the nebulous concept of power. I do not wish to suggest that Boyd (or Girard for that matter) is missing the mark in his critique of imitation; indeed, as I pointed out in the last chapter, there is indeed "bad" side to mimesis that we need to acknowledge and contend with. But we also must attend to what is lost in the wholescale dismissal of mimetic behavior since that, too, can be "bad." I will begin by looking at educational practices popular in Athens prior to Plato, focusing especially on ancient Sophistic rhetorical training described by Debra Hawhee in her 2004 book *Bodily Arts: Rhetoric* and Athletics in Ancient Greece. As Hawhee and others note, Sophistic pedagogy was highly mimetic in its emphasis on exercises based on imitation and repetition, which derived from athletic training regimens with which it shared pedagogical space. Mimetic education in these ancient gynmasia did not stem from a desire to reproduce models; rather, it shaped the process by which young learners bodily absorbed knowledge which would help them develop skills necessary for active citizenship in Greek society. As we will see, such knowledge was acquired through multiple perceptual modalities in ambient, multimodal environments.

In the previous section, I made a case for conceiving a relationship between mimesis and rhetoric at the mostly unconscious "mimetico-affective" level of communication. I now want to show how that relationship manifested itself in ancient Greek pedagogy, a significant dimension of which was invested in the intersections between athletics, rhetoric, and musico-poetic practices known as *mousike*. Although the word "rhetoric" first appeared in Plato's *Gorgias*, Aristotle traces the beginning of the study of rhetoric back a century earlier, and frequently cites examples of rhetorical usages in orally performed Homeric poems and in Greek drama (Kennedy, 3). Gebauer and Wulf argue that a key characteristic of the oral poetry of ancient Greece was a two-sided mimetic process – psychological and physical – which combined "indicative behavior" (physical representation) with "emotional imitation"

(emotional expression). This intense form of identification, being both emotional and physical, was not the result of one-way transmission but, rather, emerged through "the mutual interaction of the singer with the public" (51). Rhetoric conceived in this mimetic manner is reflexive or - as Merleau-Ponty would say - *reversible* in that the poet/rhetor simultaneously *touches* the audience and *is touched back* by the audience, and the performance/rhetorical situation is enacted through this mutual reflexivity. They note that this identificatory "contagion" that "grips and involves those present" involved a (clearly multimodal) smorgasbord of "[s]poken and heard sounds, rhythm, schema, melody, bodily movements, and shared participation" that was not unlike the choreographed gymnastic exercises whose origins "presumably lie in the teaching of rhythms designed to support speech" (47).

Hawhee reaches a similar conclusion, suggesting that the "decidedly corporeal style" of ancient Sophistic rhetorical training "derived from athletics and early education a style of training grounded in imitation and based on . . . the three Rs of sophistic pedagogy - rhythm, repetition, and response" (135). Because it was a "primary mode of learning" for the ancient Greeks, mimesis, which Hawhee understands as imitation, was an "element critical to sophistic pedagogy" (148) that took place largely in the gymnasia where young men and boys were simultaneously instructed in both rhetoric and athletics - specifically wrestling and grappling, with which rhetoric was closely identified. 15 Students learned in an environment that might be described as multimodal - a "network of objects, people, and practices and their attendant sounds and smells [that] comprised a distinctive material setting for a highly textured, bodily pedagogy" (128) - through three mimetic "modes of learning that comprise[d] the sophistic method of rhetorical training" (141). The first, rhythm (rhythmos), Hawhee interprets as a specific type of movement, one that "combines fixity with variability" by producing "distinctive movements within a generalizable direction" (142). The second, repetition, allowed the body to acquire rhythms so that "knowledge of fundamentals becomes bodily rather than conscious, and habituation ensues" (142). Third, responsiveness, shaped exercises that took on a sort of competitive collaboration since learning did not occur in a vacuum but required another, an opponent, with whom one's engagement demanded that new moves variations on the rhythmic themes to which one's body is attuned - be generated in

relation to those of the other (143). ¹⁶ This mimetic pedagogy applied to rhetorical debates just as much as to grappling, wrestling, and other artistic and athletic practices that took place within the walls of these gymnasia. As Hawhee describes it:

From this spatial intermingling of practices there emerged a specific syncretism between athletics and rhetoric, a particular crossover in pedagogical practices and learning styles, a crossover that contributed to the development of rhetoric as a bodily art: an art learned, practiced, and performed by and with the body as well as the mind. (111)

I see mimesis as a foundational force in this "crossover." Hawhee discusses a passage by the pedagogue Isocrates in which a teacher is expected to "provide such an example of oratory that the students who have taken shape under his instruction and are able to imitate (*mimesasthai dunanemenous*) him will, at once, show in their speaking an unsurpassed degree of grace and charm" (150). She points out that the passive form of "taken shape" (*ektupothentas*) in this sentence – a Greek verb associated with sculpting – "thwarts the notion of a 'sculptor'" by insinuating that the shape "emerges under the teacher's instruction, or in a particular milieu – that is, out of a relational, associative dynamic" (151). 17

Where Boyd turns to Girard in offering a stinging critique of "mimeticism" in composition pedagogy, I turn toward the ancient Sophists to find one that I find of great potential benefit and which I will continue to develop by turning now to the second historical instantiation of this pedagogical praxis: the rhetorical theories and methods associated with *imitatio*. I will begin by showing how conventional stereotypes of *imitatio* not only fails to capture *but actually conceals* the well-documented history of clearly embodied practices. After reviewing this history, I will consider *imitatio* in terms of Merleau-Ponty's phenomenology, specifically his concepts of style and expression. I will then, in the last section, take a cue from the rhetorical scholar Robert Terrill in describing how a revamped version of this tradition can be of benefit to current composition and rhetorical pedagogy.

Undoing the Stereotype of *Imitatio*

Imitatio, broadly defined, may be thought of as the Latin formalization of the Greek *mimesis* into a specific practice associated with the arts - painting, literature, drama -

but also with rhetoric. Although *imitatio* and *mimesis* are frequently used interchangeably, in this dissertation the former will be denote a formal praxis that involved the emulation of rhetors and the repurposing of rhetorical forms, especially those that were held to be of great effect. From the height of the Roman Empire (where this Latin translation of mimesis first took hold) up through the High Renaissance, *imitatio* stood for a tradition that advocated the imitation of role models and the ability to make something new out of them (Potolsky, 50). Although Aristotle's dictum that artists should follow the processes of "nature" were adhered to in a general way, there was a sense that "raw nature is too wild and unruly for proper imitation" (50). In his 1711 "An Essay on Criticism," for example, Alexander Pope suggested that the way to nature was through established artistic traditions and conventions: "Learn hence for ancient rules a just esteem; / To copy nature is to copy them" (qtd p. 51).

The established "ancient rules," of course, were those of Classical Greece and Rome. The Romans began the tradition by imitating Greek art. Virgil imitated the pastoral poetry of Theocritus; Horace imitated the odes of Pindar; Ovid rewrote the Greek myths; Seneca retold the tragedies of Sophocles (52). In the Middle Ages, imitatio seems to have been played a central role in what Mary Carruthers identifies as the cognitive craft of "monastic rhetoric." Although she associates this craft with mneme, the art of "memory," which she distinguishes from an aspect of mimesis narrowly interpreted in terms of "realism," her description of creative thinking "learned by a method of apprenticeship based upon imitating examples, [with mastery coming] only to a few and only after long discipline and continual practice" (2-3), clearly corresponds to the practice long associated with *imitatio*. It is wrong though, as Michael Potolsky argues, to adopt the stereotype that emerged from this tradition of *imitatio* as a "mere defense of rigid conformity or deference to the past" (53). In fact, as many of us know from exposure to political satire and parody, imitation can be used to subvert rules and mock established role models. Indeed, there emerged in Roman dramaturgy a behavioral aspect of *imitatio* that was reflected in Cicero's association of mimesis with comedy, a representation of "life" that may in some ways be accurate but not necessarily in a realistic manner (Hallowell, 287).

The most explicit discussions of *imitatio* in Roman discourse can be found in rhetorical manuals. Nearly all the major orators of this period discuss imitation, but rarely in the narrow sense of repetition; rather they adopt a position advocated explicitly by Horace, that *imitatio* is a critical practice that demands the refinement of skill and careful judgment (Potolsky, 56). The 5th century Greek orator Dionysius of Halicarnarssus argued for a practice of imitation that was closer to emulation than to copying since copying ran the risk of having something seem "labored or unnatural" (qtd, 56). A century later the rhetorician Quintilian argued that rhetors need to be aware of the "things that are not imitable" in speeches deemed worthy of imitation, namely "talent, facility of discovery, force, fluency, everything that art cannot supply," and therefore should think of themselves not as followers but as rivals of those emulated (qtd, 57). 18 One of the most important discussions of Roman *imitatio* is to be found in Seneca. In *Epistle 84*, he tells aspiring orators that good imitation both resembles and differs from its sources, as a child does a parent: "I would have you resemble [the orator being emulated] as a child resembles his father, and not as a picture resembles its original; for a picture is a lifeless thing" (qtd 58).

The picture emerging of *imitatio* here is hardly reflects the intention to reincarnate that which is being emulated. A boy can physically resemble his father because of genetic similarity, but he can resemble his father in attitude, accent, disposition, and other ways cultivated by their having shared similar experiences. In Chapter 1 I referred to an example recounted by Merleau-Ponty in which a boy learns how to use a pencil not by copying his father's actions but by attuning himself to a certain intentional style that emerged from an ensemble of the father's skilled hand, the pencil, paper, table top, gripping, holding, moving, making, and so on. The boy's process of accomplishing the same result of his father is in a sense a fundamental form of *imitatio* as described by Seneca: he "resembles" the father by learning how the action he perceives expresses an intention, and it is *that* which is imitated in this situation as in all situations. This example also aligns with Vitorio Gallese's description of mimesis as intentional attunement enacted through the embodied simulation of another's actions and mimetico-affective entrainment that Diane Davis likens to originary rhetoricity.

The ancient rhetoricians were well aware of the affective dimensions of rhetorical situations and the practice of *imitatio* was guided by formal techniques designed to exploit affectivity. We see these at play in the so-called "rule of propriety," the imperative to make a speech "fit the occasion" (what the Greeks called to prepon), advocated by the tradition's pioneering figures including Dionysius of Halicarnassus. An important rhetorical convention at these times was a speaker's ability to "appropriately" recount an historical event in such a way that it moved audiences toward adopting the speaker's viewpoint. Vivienne Gray tells us that in Dionysius's hands, mimesis becomes a "technical term" in historical theory and is achieved by observing the "rule of propriety of argument in composing speeches" of a historical nature (469). It is vital to understand the very different approach to his history Dionysius and other ancients took to history than we do. The law of propriety required public speakers to recreate historical events based *not* on the collection of facts or empirical data - on accuracy - but through the expression of their physical and emotional tenor as imagined by the rhetor/historian (469). Skillful adherence to this rule required speakers to carefully cultivate "observation of what men do in real life" (470). Dionysius believed that rhetors should "imitate" the speech of men as shaped by the historical experience by recounted. For example, since men in real life, according to Dionysius, do not employ "the same order of words" for different kinds of emotional events - tragic, celebratory, sedate, and so on - it is expected that the rhetor "not employ the same order of words for all events" (qtd p 470). The rule of propriety ensures that the rhetor/historian adapts the argument and style to the occasion being described. The style of the composed speech enacts the style of the experience.

What emerges in *imitatio* is a rhetoric that situates itself in the experience the rhetor seeks to recreate on the spot, blending the re-enacted occasion with the actual one at which he is speaking. One Greek rhetorician associated with *imitatio*, Longinus, ¹⁹ praised the speeches of Lysias because they captured (again, "imitated") the natural way of speaking employed by the ordinary man. Lysias in one speech produces "the original type of young, ordinary, retiring citizen, differing in no way from the well known reality" (qtd in Gray, 472). The key phrase here is "well known reality." What is significant is not so much the "type" of character being represented

but the situation being expressed, for it is the shared experience of this reality that allows for identification. After all, as Merleau-Ponty has shown, people identify with situations just as much as they do with other people. Hence "the good poet and orator," according to Longinus, "must be an imitator of *the events* he describes" (qtd 472; *emphasis mine*) and points to the technical use of mimesis in a speech by Meidias Demosthenes, which relies on stylistic features like asyndeta and repetition to mimic the repeated, abrupt, and sharp violence of the blows by an aggressor. This mimicry is captured even in the English translation:

. . . by his gesture, his looks, his voice, when he strikes to insult, when he strikes like an enemy, when he strikes with his fists, when he strikes you like a slave. (qtd. 474)

The rhetorical style here does not just represent the tumultuous person "he" is but how he is in this violent situation. The tumult of the moment, the event, is expressed through the language used to describe the actions of the person. What is virtually rendered is made materially palpable, an embodied simulation of an event felt by rhetor and audience alike. A similar use of mimesis is noted by Duris of Samos in the writing of Homer. Writing several centuries before Dionysius, Duris describes as mimetic Homer's use of long syllables, one or two syllable words, and other rhythmical devices to "imitate" the laborious efforts of Sisyphus. While these devices contribute to a representation of the character's presumed emotional state, they also express the material context - including the weight of the ponderous boulder - in which Sisyphus is situated. The role played by the nonhuman components of these events were preserved by the dictum that rhetors "appropriately" recount events. Dionysius used the word mimesis to describe how Homer's language simulated an act of releasing water from a clog. Not only is the swinging of the hammer "imitated" (by balanced phrases and near rhymes), but so are the large rocks blocking the water's path, the running-over flow, and finally - thanks to a series of dactyls and short words - the release and gradual acceleration of the flow once the obstruction has been cleared (Gray, 475-6).

Like Aristotle, Dionysius believed that human beings were mimetic by nature and that language was rooted in a mimetic instinct. He observed how eyewitnesses literally "become mimetic of the things being narrated" (mimetikoi ginontai ton

apangellomenon), and that good speakers naturally shape discourse to express the qualities of the event (Halliwell, 294). Recent empirical studies indeed suggest that people "become mimetic" of the situations they encounter through both spoken and written discourse. These studies reveal how neural structures that preside over action execution are similarly activated when reading or listening to action-related sentences. Brain-imaging and fMRI studies show that when listening to sentences describing actions performed with the mouth, hand, and foot, different sectors of the premotor cortex in listeners' brains are activated in ways that "correspond, though only coarsely, with those active during the observation of hand, mouth, and foot actions" (Gallese, "Intentional," 139). In the recognition of emotions displayed by others, "the sensorimotor system appears to support the reconstruction of what it would feel like to be in a particular emotion, by means of simulation of the related body state" (141). Intriguingly, this is accomplished to varying degrees not only by seeing a physical performance but by hearing and reading language that conveys action and emotion. The rule of propriety in rhetorical *imitatio* was meant to maximize the effects of those features of communication that allowed for greater audience identification.

This mimetico-affective "contagion," which can now be mapped neurologically, does not just allow for persuasion to occur; it *is* persuasion itself if you believe, as Marilyn Cooper does, that "persuadability is not just the condition for rhetoric . . . it is the condition for the existence of all actual entities, and thus that being is rhetorical" ("Rhetorical Being," 6). When mimesis is conceived in terms of expression, not just representation, the role played by affectivity in communication links that communication with our being-in-the-world. Merleau-Ponty tells us that the "disclosure of an immanent or incipient significance in the living body extends . . . to the whole sensible world, and our gaze, prompted by the experience of our own body, will discover in all other 'objects' the miracle of expression" (PP 230). The cultural ecologist David Abram, drawing on this intercorporeal dimension of expression in Merleau-Point, points out how the actual *sounds* of words betray how language is "not a purely mental phenomenon but a sensuous, bodily activity born of carnal reciprocity and participation" with the surrounding landscape (82). The English words that describe surging water - rush, splash, gush, wash - show how "our discourse has surely

been influenced by many gestures, sounds, and rhythms" and suggest that language "arises from the perceptual interplay between the body and the world" (82). In short, its mimicry of the world, language expresses that world's being along with our being-in-it.

The emphasis on rhetorical appropriateness as a means to enacting a felt experience by re-enacting an "event" was one way the ancient rhetoricians sought to harness this natural perceptual interplay for persuasive purposes. But imitatio's rule of propriety was also, as is the case with anything mimetic, a double-edged sword. Because it sought to express events so that they came alive, so to speak, through language, the school became increasingly associated with realism, an association we see in the distinction Carruthers makes between mimesis and mneme (4). Although we can appreciate how the law of propriety was often enforced to combat the stylistic excesses and "artificiality" of that was encroaching on discourse through the increased use of "written language" (479), we cannot ignore its resemblance to a sentiment expressed centuries later by Thomas Sprat who, writing on behalf of the Royal Society, longed for a scientific language that opposed the "[o]rnaments of speaking [that] . . . Poets began of old to impose the deceit" and which would separate "the knowledge of Nature, from the colours of *Rhetoric*" among other influences (qtd in Covino, 6, 63). 20 Indeed, the ideologizing of "appropriateness" in language use can result in a narrowing of the scope of its mimetic dimensions even when, paradoxically, it is in the service of mimesis.

Still, we should not let our opinion of the formal "rules" exacted by ancient rhetoricians obscure our awareness of that which the rules were meant to elicit. Conceiving of *imitatio* in terms of Merleau-Ponty's phenomenology is helpful in recovering the enactive and embodies dimensions of mimetic expression in rhetoric. Expression in language and literature, he tells us, brings "to life in an organism of words . . . opening a new field or new dimension to our experience" (PhP, 212). This meaning is only partly conceptual since it derives from a more "immanent" gestural one which "presents thought as style, an affective value, a piece of existential mimicry" (9). What he describes is an intentional *feel*, an embodied attunement to situations whose significance or "meaning" is enacted in rhetoric in the moment of its

recounting. At the heart of *imitatio*'s rhetorical project lies an awareness that meaning is immanent in experience itself.

Embodied Repetitio: Binding the Body with the Mind

Although in rhetoric the Latin *repetitio* signifies a figure of speech that uses a certain form of phrasal repetition (specifically anaphora and epanalepsis) to help make a point compelling, repetition itself manifests itself in a variety of ways across the rhetorical spectrum. ²¹ As noted earlier, it is one of the three R's that Debra Hawhee identifies as the core of Sophistic rhetorical training. Like its sibling "imitation," the word "repetition" also has pejorative connotations because of its association with mechanized rote performance. As we all know, so-called "rote learning" has been largely criticized in educational fields as productive of mindless automatons who will conform to and hence perpetuate the dominant status quo. But does repetition deserve this reputation? It is notable that one of the first proponents of early education, the Roman rhetorician Quintilian, taking a cue from Dionysius, stressed that repetition sharpened memory but opposed this practice to rote imitation, which he believed made people lazy. 22 Perhaps we should have a phenomenological theory of repetition to accompany the version of *imitatio* I present above, one that attends to its embodied dimensions that hence might be called *embodied repetitio*. The Chilean biologist Humberto Maturana picks up on these dimensions when warning educators against devaluing the practice of repetition to an "avoidably boring routine behavior" and thereby giving it "an additional significance that it does not deserve" (Poerksen, 27). Maturana recognizes that "even simple repetition" can improve understanding, sharpen the vision, and produce new insight:

All of a sudden we find it easier to solve the equations before us; all at once our muscles change after we have dropped the ball into the net a few hundred times; our shots have become more precise. (27).

"Intelligence," according to Maturana, "manifests itself in the possibility of varying one's behavior in a changing world" (31). The extent to which this intelligence is **bodily** is revealed by his example of dropping a basketball into a net: the repeating of an action changes the muscular exertion required to perform it, refining our conceptual ability to tackle the equations we are faced with. Repetition builds up our

experiential knowledge base and yokes it with conceptual thinking. Body *and* mind, the physical *and* the mental, are one - an understanding not lost on ancient educators of athletics, rhetoric, and other arts.

As an aspect of mimesis, what I am calling *embodied repetitio* was also not lost of the rhetorician Kenneth Burke. For Burke, mimesis describes the "two way relationship between the mental and the physical" that manifested itself in what he called *prayers* - the "substantiation of an attitude in a bodily act" (Attitudes, 322). "Any mimetic act," he wrote, "is a prayer" and "all mimetic procedures, in the dance, the plastic or graphic arts, music, and verbalization are aspects of 'prayer' . . . and have a great deal to do with the building of character." This is as much bodily as it is mental in that "mimetic expression" is, in Burke's view, a correspondence between "visceral expression (in glandular and nervous actions)" and the "state of mind" in a particular situation; one's "attitude," hence, emerges from this mental/bodily correspondence (322). Recent studies by Harvard psychologist Amy Cuddy and her associates²³ provides some empirical support for Burke's mimetic theory here. Cuddy et al., reveal that the bodily adoption of nonverbal poses associated with social power (or the lack thereof) triggers the hormonal release of testosterone and cortisol in both men and women, impacting the endocrine system within just two minutes of making such poses. In a widely popular TED Talk, Cuddy describes how the physiological effects of adopting conventional "power poses" can help transform a person's attitude toward themselves and their immediate situations within minutes, and by repeating such poses on a regular basis can alter their body chemistry in such a way that they are able to adapt more easily to complex social situations. By imitating body language associated with a culturally dominant or powerful stature and repeating those imitations over and over, Cuddy says, one can "fake it until they become it." Consciously²⁴ and guite simulating the bodily attitude ("praying") that one wishes to adopt dramatically transforms her mental self-conceptions and social behavior.

One might argue that "becoming" the kind of person whose postures and attitudes are simulated is akin copying a predetermined formation. But, again, we need to attend to the dual nature of mimesis: its familiar style ultimately expresses something new, variations of a theme that can be transformative. Jane Bennett's reading of Giles Deleuze and Felix Guattari's notion of "mimicking the strata" of the

Body without Organs (BwO) helps us here. Bennett describes the BwO as a "multispecied and ongoing project of becoming in which new links are forged among 'things, plants, animals, tools, people, power, and fragments of all of these'" (Enchantment, 24). In its attempt to deterritorialize the space of the "organism" - the dominant form of organization of bodily experience - BwO manifests itself through disruption of its usual habits of posture, movement, facial expression, voice, etc. These habits form the "strata" that organizes your body. To play the game of becoming a body-without-organs is to twist and tweak those usual habits. (25)

One way to enact such a disruption, Bennett tells us, is to "mimic" the strata by using "the organism as a model, but a model stretched by means of parody." She describes the method of this mimicry as placing "organism-strata alongside slightly altered copies of them," and then composing yourself in a way "that's almost like your usual way, but with a twist" that involves "repeat[ing] yourself but with a difference" (26). Such a "meticulous relation" with the strata allows for "a temporary escape from it," resulting in a flight of the "very forces that form the body as organism" in the first place (26). Transposed to real-world experience, this is not far from the conscious method advocated by Cuddy in which a person "fakes" - in a sense, parodies - an organizing model of power to the point of becoming it, but not necessarily to the point of complete replication: "To become is not to achieve a final state of being," Bennett says of this practice, "it is to give more of a chance to that which rumbles in you, but [which] you are not" (26). This which rumbles expresses itself through the conscious imitation of organizing models and conscious repetition of habits.

In language evocative of the sound effect that were so important in the practice of imitatio, Bennett places a high premium on the onomatopoeic words that harbor "cries, moos, meows, buzzes, mutterances, laughter, etc," since they contribute to what she calls language's *sonority*, the "spell-binding effects of stories told aloud, the enchanting power of chants" which Bennett associates with mouth, tongue, and body and reads as disruptive of the hegemony of meaning (155-6). Even words whose sounds do not directly correspond to active occurrences in nature can, through repetition, bring forth sonority. She cites Deleuze and Guattari's observation that children's "well-skilled" repetition of words, even the phrase "end of the month" which Kafka repeated incessantly as a child, releases languages sonorous dimension

and distracts people from the meaning of what is being said by propelling them toward other meanings, including "idiosyncratic associations and thoughts" (154).

Correspondingly, Merleau-Ponty claims that when a text is read to us, "provided it is read with expression, the words fully occupy our minds," fulfilling our expectations and possessing us to such an extent that the "end of the speech or text will be the lifting of a spell" (PhP, 208). It is not because of the representational quality of words but, rather, the *style* - the *sonority*, the *resonance* - evoked by their articulation to which readers and listeners are so attuned that they "reach back for the word as [their] hand reaches toward the part of my body which is being pricked" (PhP, 210).

I have claimed more than once in this dissertation that mimesis is productive of difference. I believe that repetition conceived mimetically as embodied repetitio helps to support that claim. For instance, Gebauer and Wulf assert that an actor's repetition of pre-existing motor schemata embedded in the language of a script allows him to constitute "something of his own, which must by no means correspond to prior realizations of the schemata." Similarly, the repetition of a gesture in a certain situation "gives prominence to qualities that originally played no special role in the action being imitated, qualities of time and space, of rhythm, of the execution of the movement" (316-17). When an actor, for example, points skyward during a performance, the pointing may resemble all other pointing gestures experienced previously by both him and his audience but that particular pointing is nonetheless expressive of meaning in that particular situation. In other words, this gesture, despite its resemblance to all other instances of pointing, is nonetheless unique in it both significance and circumstance. Similarly, the multimodality theorist Gunther Kress shows how the production of difference through repetition can enhance learning in a traditional science classroom. The teacher has drawn a diagram on a blackboard that illustrates how blood circulates among organs in the human body. The general mapping of the process represented by the diagram - which is what students record in their notebooks - does not tell the whole story here. That story is told most fully when the teacher "overlays" the diagram with a sequence of gestures which serves as a "tangibly, mimetically witnessed movement of the blood from organ to organ [that is] physiological felt by the onlookers, mimetically experienced in their bodies, and then gone . . . " (86). Gesturally "restating" what is being shown visually and

explained verbally, there is "a kind of repetition" that intriguingly "is not experienced as a repetition" but which nonetheless "allows different students to engage with 'the same' issue via routes which may be affectively, sensorially, or culturally more congenial to them. At the same time it affords a fuller exploration of the topic at issue" (169).

Clearly, we as educators need reconsider whatever assumptions we hold about repetition and imitation and rediscover what the Greek and Roman pedagogues knew well: that both are essential ingredients in learning and rhetorical performance. From their perspective, to strive to be completely original in the composition of a text or performance would be a futile attempt, pitting the rhetor not just against the traditions in which he or she is composing but against the natural world to which we are all mimetically connected. It is therefore important for scholars to continue the recovery efforts of concepts and traditions that are marginalized or unduly stereotyped by dominant paradigms. Doing so can enrich our own approaches to the teaching of rhetoric and composition, as I hope the next section demonstrates.

Imitatio as a model for a "Mimetic Pedagogy" of Rhetoric

In his 2011 article "Mimesis, Duality, and Rhetorical Education," Robert Terrill revives *imitatio* as a rhetorical pedagogy - he calls it "mimetic pedagogy" - as a way to cultivate a sense of engaged, articulate, resourceful, and sympathetic citizenship in students. Of particular interest to Terrill is *imitatio*'s inherent duality, which he believes can help to break the "third wall" of the rhetorical classroom, "producing an interactive space in which the world outside the classroom necessarily impinges on the education and practice within" (301). When one emulates the work of an exemplar, he or she "tries on" another self and inhabits another's point of view. This is not a parroting of the language of another, he argues, so much as it is a dialogue with that person and with that person's world. Such a mimetic pedagogy is important because it "fosters an understanding of the self as an inherently doubled product of the ongoing dialogues that characterize a democratic culture" (310). In doing so, it disrupts notions of transparency and authenticity associated with a "discourse of sincerity" that Terrill believes emerges from the notion of a central self whose utterances fundamentally adheres to a "real me" (299). *Imitatio*'s insistence that one does not

produce facsimiles of, say, Demosthenes but instead *speaks as effectively as*Demosthenes, ultimately aims to "sustain the otherness, the strangeness of the model, maintaining the gap between student and model" which prevents the collapsing of one into the other (303).

We see in Terrill's description of *imitatio* many of the themes pointed out above and in previous chapters - its dual-aspect, its potential disruptiveness, its production of difference - and get an idea of their importance to the contemporary classroom. But I think instructors who follow suit might want to point out to students how mimetic pedagogy has its roots not in Greco-Roman rhetoric but, first and foremost, in the experiential knowledge of the body and a learning process that reaches back to our first years of life. Merleau-Ponty describes language acquisition as a phenomenon of identification through role-playing: "To learn to speak is to learn to play a series of roles, to assume a series of conducts or linguistic gestures" (CRO 109). He notes evidence that if a child up to two years of age "does not have a linguistic model to imitate" - as is the case with children reared in isolation - he or she will never speak like those who grew up in environments where they could identify and assimilate themselves to those around them (109). This role-playing that is essential to our knowledge of others and hence of ourselves remains an important form of identification throughout our lives. *Imitatio* simply formalizes this vital knowledge work in the service of communication and civic engagement. Haskins believes that Isocrates, Plato's contemporary and pedagogical rival, emphasized the repetition and recitation of epic poetry and other texts because he believed that "by identifying with what fictional and historical characters say and do, a student grasps the repertoire of social roles and the range of situations more fully than does a person who receives lessons in moral philosophy without 'living' its principles" (21). Indeed, because imitatio is open to the language of others - as Terrill puts it - it resists "discourses of monologic sincerity with ways of speaking that acknowledge and deploy a doublevoiced multisperspectivism." It also cultivates habits of mind given to repurposing by inviting students to see themselves as enfolded in a culture that "constantly is being remade through the discursive intermingling of past form and present circumstance" $(312)^{25}$

Being able to identify the situation of multiple stakeholders through roleplaying, and then repurpose the discourses of those stakeholders, is vital to understanding how to construct an effective argument. Bryan Garsten writes of how Cicero, in *De oratore*, has the character Marcus Antonius (a great orator of the Roman courts) describe his first meeting with a client prior to a legal case. He makes his client respond to this opponent's case, a process that involves playing three roles [personas]: "my own, that of my adversary, and that of a juror" (gtd 161). By role playing himself, Garston tells us, Cicero's Antonius sharpens his sense of the best argument to make by partially adopting the point of view of all parties in the dispute. Doing so allows an orator not only to feel the emotions the he wants his jury members to feel, but to emotionally identify with the client he is defending: "[W]e cannot, even if we are defending total strangers, keep on regarding them as strangers" (qtd 161). Such identification with what Garsten calls, following Seyla Benhabib, "the concrete other" (actual individuals, not "the generalized other") does not stop with the individuals but extends to their "concrete situations" - their histories, identities, commitments, and needs (198). Persuasive rhetoric ultimately is concerned with the latter, the contexts in which individuals are situated, and ultimately strive not to change the minds of people (which many will resist anyway, p. 4) but rather influence situations by "looking for deliberative pathways" through language and beginning their argument "inside the framework these pathways provide" (141).

Again, the strategies formalized under the aegis of mimetic rhetoric are rooted ultimately in the experiential knowledge our bodies are constantly in production of. We do not consciously seek to identify with others because we think it will help us in some way. As brain researchers are fond of saying, we are "wired" that way - and this wiring may very well be the seat of the kind of innate rhetoricity at work in the example Rickert gives of an individual joining a circle of people. The neuroscientist Marcel Kinsbourne believes that "a core predisposition of the human brain to entrain" with others generates natural persuasive capacities that all humans share. Adopting shared rhythms of behavior at the largely unconscious level of human interaction is "more innately compelling than reasoned argument in inducing two, or many, to adopt the same point of view" (172). Although he does not use the term "rhetoric," it is precisely rhetoric that is at work in this phenomenon:

Entraining is compelling for people generally. I suggest that when one entrains in another's point of view, one is half persuaded simply by doing so. Being persuaded by the other is not just an exercise in assessing the merits of their case. Rather, being persuaded is as much emotional as it is cognitive, and the mere fact of entraining is a step toward accepting the other person's point of view. (170)²⁶

In Chapter 5, I will argue for a broadening of rhetoric beyond persuasive argumentation so that it attends to multiple facets of communication that argumentative models rarely take account of. For now, though, it is worth conceiving argument as an outgrowth of intersubjective and - first and foremost - intercorporeal entrainment. At the basic level of experience, our bodies move in accordance with the bodies it interacts with. This movement remains a vital force even when we "argue" with people in social and academic contexts where conceptual knowledge plays a constitutive role in communication. As the rhetorician John Gage puts it, arguments engage our "ability to move into different positions," 27 including positions that may not be the socially "acceptable" version so many of us initially adopt (here Terrill's point about imitatio's disruptiveness resonates). Argument is more than debating for the sake a winning a forensic contest by proving to audiences that your make the strongest case. David Lynch, Diana George, and Marilyn Cooper value it as a "crucial social responsibility that is not just a matter of winning or losing but a way to connect with others which may lead to change, not only in the world but also in ourselves" (84). Hence, "agonistic positioning" generated through argument is simultaneously confrontational and cooperative (63). Debra Hawhee describes how in ancient rhetoric agon was conceived as not just an actual space for competition for a prize (a better term for which is athlios) since what matters is not the outcome but the process that leads to it. As a space she calls the "shared between" (which in ancient gymnasia literally infused athletic with rhetorical training), agon, for Sophists, was what *produced* rhetoric as a "gathering" of cultural, bodily, and discursive forces (40). Inhabiting this space required "a particular modality of knowledge production knowledge held and made by our bodies" (40, 43). In other words, it is experiential knowledge work that produces the rhetoric in which our arguments are steeped.

Re-envisioning argument as ultimately rooted in *in-between* spaces may sound somewhat unorthodox but in fact is quite intuitive. When Scott Marratto, following Merleau-Ponty, describes a "two-sidedness" to our perceptual experience where the body is both subject and object (Marratto, 85), he is speaking to the potentiality that cognition is fundamentally *reflexive*. This reflexivity requires us to attend to the reversible relationships between our bodies and the situations they are enmeshed in. Merleau-Ponty asserts that the actual experience he has of his own body "runs counter to the reflective procedure which detaches subject and object from each other," turning the body into a conceptual thought or idea that suppresses the experience of the body in reality (PhP, 231). On the other hand, "true reflection," which is generated from our material rootedness in things, makes Merleau-Ponty realize that "I am an intersubjective field, not despite my body and historical situation, but . . . by being this body and this situation, and through them, all the rest" (525). True reflection occurs at the conjunction of body and mind and reveals our reflexive relations with others.

Barbara Couture describes phenomenological reflection as a "perceptual state of attention" and notes its importance to rhetors (as Cicero's example illustrates) who must attend "both to their particular experience of the world and to their process of interacting with others in order to accommodate others' perspectives on shared phenomena" (114). She believes it is time for rhetoric to move beyond traditional models of argumentation since they cannot teach us "how to accumulate, build, and synthesize a worldview from the particular positions that it encourages us to hone and defend" (111). I will come back to this point in Chapter 5. But for now I would like to conclude by suggesting that students would indeed benefit from a more reflexive approach to rhetorical engagement, one that stems from their own bodies-in-theworld even while that engagement is formalized by models bequeathed by textbooks and tradition. Earlier in this chapter I described Richard Boyd's call for students in university composition courses to study the *dangers* of mimesis - using Rene Girard's theories as their framework - in order to resist the double-bind he sees David Bartholomae's advocacy of discourse mimicry of ensnaring them in. Perhaps it would be worth introducing students as well to the other dimensions of mimesis that this dissertation is most concerned with. I therefore believe that a multifaceted

phenomenological account of "imitation" can help us think not only about how we and our students might go about composing arguments, but how those arguments speak to dimensions of our experiences we are *so* familiar with that we often do not recognize that familiarity. Attuning students to what Merleau-Ponty terms the *style* inherent in making arguments reveals a vast experiential dimension to rhetoric that few, if any, would have ever considered "rhetorical." This is wonderful way to enhance how students think about rhetoric - by revealing how they experience it on a daily basis - and one that can be profitably accomplished in classes informed by what I call mimetic multimodality, which is the subject of my next chapter.

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¹"Futurist Painting: Technical Manifesto," April 11, 1910. Quoted in Halliwell, 370.

² In an artful critique of a book about Ezra Pound published in *New Yorker* magazine's website, Louis Menand deconstructs what he calls "the Pound error," revealing how the "It" in "Make It New" is the "Old" from which Pound cannot extract himself: "A great deal of Pound's poetry therefore takes the form of translation, imitation, allusion, and quotation. He is trying to breathe life into a line of artistic and intellectual accomplishment, but it is a line of his own invention—a 'tradition' that includes, among others, John Adams, Confucius, Flaubert, the Provençal troubadours, and Benito Mussolini. Not, prima facie, a canon. This means that to understand what Pound is doing you often need to have read the same writers, studied the same languages, and learned the same history that Pound read, studied, and learned (or rely on the commentary of a person who has)." (June 9, 2008.) Accessed: July 20, 2014. Available: http://www.newyorker.com/arts/critics/books/2008/06/09/080609crbo_books_menand?curre ntPage=all

³ Quoted in Berman, 73. Hence, Berman tells us, Plato had to attack poetry, mimesis, and the whole Homeric tradition that involved identification with other people and things and therefore, in Plato's view, the surrendering of one's own identity.

⁴ "Excised" may be too strong a word here since Aristotle did recognize the strong pull of emotion in persuasion. But *pathos* in rhetoric was seen as a means to an end, a specific kind of "appeal" in the service of a larger argument whose main thrust should be accomplished through *logos* (logic, rational appeal, and the stuff of theoretical knowledge that Aristotle prized most highly) and *ethos* (appeal by way of character, a form of practical knowledge that Aristotle valued less than theoretical knowledge but more than the productive knowledge of the arts, including mimesis and rhetoric itself).

⁵ You will notice that *imitatio* will always be italicized in this dissertationwhereas mimesis is not. I do this mostly to distinguish it from instances when I use the visually similar imitation. *Imitatio* is the Latin translation of mimesis and stands for a school that became dominant in rhetoric and aesthetics during the Roman Empire and continued to exert force throughout the Middle Ages and into the Renaissance as well. ⁶ Chris Drew describes the pedagogy of sophistic training as a form of experiential learning in "Sophistic Training and Experiential Learning: A Methodology of Mind-Body Syncretism" (*Pedagogy*, 7:2, Spring 2007, pp. 303-8)

In earlier drafts of this dissertation, in fact, *metis* played a significant conceptual role. I even called my theoretical approach "mime[ti]sm," a combination of *metis* and mimesis (here I played on the fact that in the word "mimetism," an alternative translation of mimesis, one can see the spelling of "metis"). My research has convinced me that *metis* and mimesis are deeply related concepts and tracing the contours of that relationship was one of my original ambitions. Alas, time constraints and other commitments as a graduate student prevailed on me to narrow the scope of this project, so I reluctantly jettisoned *metis* with the ambition of returning to its conjunction with mimesis and experiential knowledge in other venues.

⁸ Where Couture wants to erase the dichotomy between competing truths, Stormer goes a step further, diluting the essential *humanity* of rhetorical action which historically has been dependent on matter imagined as exterior to who or what is acting: "the capacity to act rhetorically is not because we're human but because we are material" (226, "Encomium").

¹⁰ The philosopher Baruch Spinoza famously described *natura naturnas* as "nature naturing."

¹² Occasionally I use the term "rhetorics" to indicate that there are multiple forms of rhetoric to be drawn from. Although I use rhetoric in the singular here, I do not believe there is one monolithic Material Rhetoric. Rather, the term stands as a category for several rhetorical approaches that take as foundational conditions of materiality. It is common in my field to use both phrases interchangeably. ¹³Boyd's language suggests that the "self" is a distinct entity against which mimetic models are posed - a subject. Francisco Varela describes the "self" as "transient, non-localizable, relationally formed" and describes Marvin Minksy's argument (in his book Metropolis) that we should hold onto an essentialist idea of an autonomous self in order to safeguard the conceptual foundation of ethical behavior as "utter nonsense" and an "inane waffle" (Poerkson, 48). This "view of the mind of an ethical actor [as being] anchored inside that individual contracts empirical data" which reveal that "the mind we ascribe to an individual is . . . already of a collective, intersubjective nature" (47).

¹⁴ The concept of reversibility is complex in Merleau-Ponty but I will here provide one simple example. When Merleau-Ponty touches his right hand with his left one, the body registers a "double sensation" that briefly disrupts the ordering of experience into subject and object. Is the left hand that feels the touching the "touched" or the "touching"? (PhP, 106). This kind of reversible relationship that the body knows well and has learned to negotiate is central to a larger ontological concept he develops of "flesh," the worldly fabric or web in which all things are enmeshed. Hence, reversibility can be applied to many situations. When a rhetor gives a rousing speech, she "touches" audiences while simultaneously being "touched" back by their rousing responses. Hence the audience influences the rhetor just as much as she is influencing them. The rhetorical situation is shaped significantly by rousingness, a product of reversibility (or what I will call later reflexivity).

¹⁵ In ancient Greece, debate was considered a kind of sport. A popular form of debate, *eris*, can be translated as "wrangling" or "strife." The goal of such arguments was to defeat your opponent, to in a sense "pin him down" as one would an opponent in wrestling. Protagoras was apparently guite interested in the relationship between athletics and rhetoric. Hawhee tells us that there is an agonistic metaphor in the treatise in which he famously declared "Man is the measure of all things," kataballontes, which suggests the act of throwing over, as in wrestling. In addition, he wrote a treatise translated as "On Wrestling" (Peri Pales) "wherein he appears to have demonstrated how the art of rhetoric could be of use in the art of wrestling" (36).

¹⁶ This rhetorical pedagogy embodied "two central concepts" - kairos and metis - "at the heart of which" was the notion of bodily transformation (86): kairos represented the "nowness" of time that pervaded repetition and the difference it produced in the encounter with the immediate; metis (and here Hawhee references Empedocles) was the intelligence that emerged from the encounter with the immediate, an encounter that was "more than perception - mind meets and (masters) matter," but instead was a "bodily production, a mutually constitutive struggle among bodies and surrounding forces" (145).

⁷ I am reminded here of what the rhetorical scholar Joseph Dunne refers to as the "unofficial" or second kind of techne he finds in Aristotle (a version of techne that is also of great importance to Martin Heidegger). Unlike the first or "official" version of techne associated with the "reason" of episteme that conceives of a maker (technites) as hylomorphically imposing a form on matter (249, 251), this second "unofficial" techne in Aristotle presents the technites as "intervening in a field of forces, or as immersing himself in a medium" where the materials were in more or less in "capricious motion," requiring the maker to adopt a strategy that was less involved "in imposing a form on the material than in turning some of the energy in the material to his own advantage" (254, 256). This required a responsiveness to, an "outwitting" of, both matter and situation of the kind Hawhee identifies in wrestling which drew on the practical intelligence of *metis* (256).

18 It is unclear from my source is these quotations are Quintillian's or the sources Potolsky cites here:

Russell, D. A. and Winterbottom, M. (eds) Ancient Literacy Criticism: The Principal Texts in Translation, Oxford UP: 1972

⁹ One major distinction that can be made between Heidegger and Merleau-Ponty is that the latter puts by far more emphasis on the body as a sensorimotor subject. In Heidegger, the body tends to be absorbed by the "world" in which it dwells, and it is this world that is central to his phenomenological analysis; for Merleau-Ponty, on the other hand, the body is our "primary medium for having a world" and the body is at the forefront of his phenomenology - which is a phenomenology of perception.

¹¹ Kennedy argues that rhetorical ingenuity derives from instincts of self-preservation and manifold emotional reactions and is evident in the "cunning" observed in animals when faced with a threat or seeking to gain an advantage (26).

²¹ This statement can be found at the *Repetitio* entry at Brigham Young University's impressive online catalogue of the Western rhetorical tradition, *Silva Rhetoricae* (The Forest of Rhetoric). Accessed: June 29, 2014. Available: http://humanities.byu.edu/rhetoric/Figures/R/repetitio.htm

²² See Russell, D. A. (2001). *Quintilian: The Orator's Education, Books I through XII*. Cambridge, Massachusetts: Harvard University Press. pp. 323-7, Book X

²³ Cuddy is listed as the second author (after Dana R. Carney and before Andy J. Yap) of the 2010 article published in *Psychological Science* called "Power Poses: Brief Nonverbal Displays Affect Neuroendocrine Levels and Risk Tolerance" (21:10), 1361-1368. She has popularized this theory. Her TED talk at TEDGlobal 2012 currently ranks as the fifth most viewed video on the TED website (out of more than 1,600 talks), viewed by over 12 million people. This number, of course, does not include views of the video on sites like YouTube. (http://blog.ted.com/2013/12/16/the-most-popular-20-ted-talks-2013/) ²⁴ Burke's likening of mimetic expression as secular prayer, like Cuddy's power poses, operate largely in the realm of conscious intentionality: one must consciously decide to adopt certain behaviors with the purpose of succeeding in certain situations. Noting Burke's "absolute faith in the power of reason" (33), Davis turns to Sigmund Freud's psychological theories, which reveal that "suggestive influence is less rational, less manageable, less consciously *correctable* than Burke allows" (33; italics in original), and it is in her reading of Freud that she draws on the concept of mimetico-affective contagion. While that may indeed be true, we should not lose sight of how mimesis operates at all levels of human experience, including the conceptual and "rational" levels of consciousness.

²⁵ One excellent example of this is the writer Montaigne, whose *Essays* "quite specifically call on the readers' mimetic capabilities, without which the writings remain mute" (Gebauer and Wulf, 94). The author weaves into his prose a wide variety of other texts, but he quotes falsely and disguises quotations so that in both form and meaning they differ from the original meaning. The writing subject plays with his readers, hiding from them, changing his position, melting into the context of the work itself so that theme becomes a reference point for the author and vice versa; in other words, not only does he play with previous texts but he plays with the reader as well to the point where it becomes difficult to distinguish between the I that is the author and the I that is the theme as well (95). His essays, say Gebauer and Wulf, offer a version of mimesis that "give rise to a new intertextuality" while simultaneously conveying to readers a sense of their own relativity, the "relativity of the I" (98-9). ²⁶ Kinsbourne notes how the patterns of limbic system activation at in a baby's imitating of a parent's smile do not differ widely from those in the Heil Hitler! cheer and salute (171). Clearly, applications of this theory to the practice of rhetoric need to attend to these ethical dimensions. Marilyn Cooper's neurophenomenological account of the emergence of rhetorical agency coded as responsible offers a useful model. In her 2011 article "Rhetorical Agency and Emergent and Enacted," Cooper describes responsible rhetorical agency as an awareness by rhetors "that everyone acts out of their own space of meaning and to affirm one's own meaning as absolute truth is to negate the other person" (442). Being responsible requires acknowledgement of and respect for the difference of "concrete others" with unique dispositions that have been shaped by habitual patterns of experiences (432).

²⁷ Quoted in Lynch, George, Cooper, "Agonistic Inquiry," 69.

¹⁹ "Longinus" is the name given to an unknown rhetorician who may have lived in the first or second centuries A.D. Because one medieval copyist attributed his most famous work, *On the Sublime*, to "Dionysius Longinus, "some scholars believe the work may have been written by Dionysius of Halicarnassas. Another candidate is Cassius Longinus, a Hellenistic rhetorician.

William Covino suggests that underlying this desire was the same kind of "associational thinking" that was central to the "magical composing imagination since antiquity" that they were eager to stamp out (68). He provides as an example John Wilkin's influential 1668 Essay Towards a Real Character and a Philosophical Language, which called for a language in which "the Names of things might consist of such sounds, as should bear in them some Analogy of their natures; and the Figure or Character of These Names should bear some proper resemblance to those sounds. . . But how this can be done in all the particular species of things, I understand not" (qtd in Covino, 67).
This statement can be found at the Repetitio entry at Brigham Young University's impressive online

²⁸ In a note he wrote to himself in December, 1960, on the draft of his last work, which was published in its incomplete form after his untimely death five months later (and posthumously titled *The Visible and the Invisible*), he described a phenomenon that clearly has a mimetic dimension. The "specular image, memory, resemblance," specifically the "resemblance between the thing and the thing-seen," are fundamental structures "that are immediately derived from the body-world relation." He tells himself to "[s]how that our whole expression and conceptualization of the mind is derived from the structures: for example, *reflection*" (271).

Chapter 4: Bodies as Media in Multimodal Ecologies

From Mimesis to Multimodality: Toward a Theory of Multimodal Rhetorical Praxis

I have shown how mimesis, relieved of its conventional association with direct reproduction, helps us conceive of our bodies' immediate relationship with our material as the basis of experiential knowledge work - a type of work that has been historically marginalized. I have at times noted how this work is produced across "multiple" sensory and perceptual modalities that are steeped in our sensory-motor body schemas. In this chapter, I will develop this dimension of mimesis, arguing that, at the primary level of the body, experiential knowledge is acquired multimodally. I will therefore emphasize the *cognitive* dimensions of multimodality upon which our communicative acts are based. As noted previously, in Rhet-Comp and Tech Com, multimodality tends to emphasize how communicative modes - specifically writing, speaking, and visual design - are shaped by what Gunther Kress calls the "socialsemiotic" forces of culture. While Kress, as I will show, does not ignore the body's role in the production of meaning, this emphasis on the social forces of semiosis ultimately attends to how culture shapes communication. While knowledge of these forces is vital to effective learning and communication, it does not quite capture the whole story. We learn and communicate first and foremost at the affective level of bodily engagement with the situations we inhabit. At this level, culture is not always the primary shaping force of our knowledge work.

We might recall how Merleau-Ponty describes as mimetic the body's sensory-motor apprehension of experiential data and its "translation" into meaningful action (CRO 146). This primary level of perceptual apprehension gives rise to human communication, and childhood sociability is generated "on the foundation of *mimesis*" (154; *emphasis his*). What he describes as the "power" of mimesis manifests itself through "sympathy" or, following Henri Wallon, "syncretic sociability" (124, 125-6). It is the schematic operation which "translates" the smile, yawns, and other expressive actions that "all have in common a *certain style* of action, a certain *gestural* meaning that makes of the collection an already organized totality" (118; *emphasis his*).

Because global identification arises from a "coupling" - Merleau-Ponty cites Husserl

here - between the body schema of the perceiver with the body schema of the perceived, there arises a kind of attunement (a sense of the familiar, that "certain style") wherein "the other's intentions somehow play across my body while my intentions play across his" (118-119). These intercorporeal transactions which allow for global identification and communication are not generated by a single perceptual modality but through multiple ones: kinesthetic, introceptive, cenesthesic, tactile (116-117). These perceptive modalities altogether enact the "world" in which we are situated.

It makes sense, then, that the cognitive operation linking perception to action and action to meaning that Merleau-Ponty identifies with *mimesis* is called *multimodality* by Vittorio Gallese and George Lakoff in their 2005 article on the role of the sensory-motor system in conceptual knowledge. According to them, multimodality is a key characteristic of the sensory-motor system in that an action activates

circuitry across brain regions [that] links modalities, infusing each with properties of others. The sensory-motor system of the brain is thus "multimodal" rather than modular. Accordingly, language is inherently multimodal in this sense, that is, it uses many modalities linked together - touch, hearing, motor actions, and so on. . . . Language exploits the pre-existing multimodal character of the sensory motor system. (2).

In other words, our communication practices, including language, are shaped by the interaction of neuronal clusters activated through our own bodily interactions others, generating the data of everyday experience. Significant segments of these clusters form the mirror neuron system. This system is clearly mimetic in that neuronal patterns activated when a person performs an action are *simulated* when the person observes the same action performed by another or, more coarsely, even *imagines* that action being performed. This multimodal system allows for *embodied simulation* that is "automatic, unconscious, and noninferential in the observer of actions, emotions, and sensations carried out and experienced by the observed" (131).

As also noted previously, like Merleau-Ponty, Gallese too relates his interactionist, multimodal account of the development of human sociability to the concept of mimesis. In "The Two Sides of *Mimesis*," he contends that at the moment

of birth "humans are engaged in interpersonal mimetic relations" that occur in a shared "we-centric" space (11). These bodily "instantiations of unconscious mimesis" (9) are rooted in the sensory-motor system whose root neuronal operation integrates three modalities of human experience: doing, perceiving, and imagining. This cognitive multimodal model subtends what I call the "Big Three" model that largely conceives multimodality in terms of print, oral and visual composition. I should point out that Gallese and Lakoff are not alone in proffering cognition as fundamentally multimodal. Shaun Gallagher believes that perception is "intermodal from the start" (Gallagher, 3) in that our vestibular, proprioceptive, and visual systems are integrated through connections made by intermodal neurons, including mirror neurons (81); activations in these neural regions correspond to meaning that is "simultaneously shared in the modalities of observation (of others) and action capability (of my own)" (128). What Anna Gibbs refers to as "cross-modal" translation between a mother's shimmy and her baby's squeal is articulated by Gallagher as a "natural intermodal" coupling of self and other" that occurs immediately, experientially, because of the innate visual-proprioceptive/sensory modal linkage (81, 82; emphasis his). Elsewhere, Gallagher and Andrew N. Meltzoff contend that this coupling involves an innate "supramodal perceptual system" that allows an infant to immediately recognize "a structural equivalence between itself and the other person" that enables imitation (Gallagher and Meltzoff, 223).¹

Imitation as *mimesis*, *mimesis* as multimodal: this conceptual linkage that is rooted in our everyday bodily engagement with the people and things of this world is just beginning to seep into the predominantly social-semiotic account of multimodality that in recent years has begun to inform pedagogical approaches to technical communication and composition. In the pages that follow, I will attempt to broaden the social-semiotic account of multimodality that has been pioneered by the theorist Gunther Kress so that it takes into account the prereflective, tacit, pre-social multimodal functions of the body schema. I am not, however, the first to attempt this. At the 2013 Eighth Congress of European Research in Mathematics Education, Laurie D. Edwards, Francesca Ferrara, and Ornella Robutti proposed a way of "synthesizing" the term mode or modality in a way that is helpful for analyzing mathematical thinking.² They argue that the integration of the neural multimodality of Gallese and Lakoff into

the predominantly social-semiotic modes affords "a broader definition for modality that . . . goes beyond the notion of semiotic mode, and synthesizes the sensory and neurological meanings as well: modalities are the cultural, social and bodily resources available for receiving, creating, and expressing meaning."

I will take a similar route in the chapter. Working within the phenomenological framework I have been constructing of mimesis, I will argue for a cognitive account of multimodality as a means of balancing out the current cultural account, and I will argue why this is pedagogically important. I will begin by revising the history of pedagogical multimodality by going back more than three decades before the New London Group popularized the term in 2000 to Robert McKim's cognitive theory of multimodal integration, a concept that informed a multimodal course he helped develop for Mechanical Engineering students at Stanford University in the 1970s. I will then take on the strong orientation toward digital technologies in current multimodal pedagogy by arguing for an expanded concept of media - and hence of multimedia one that resists, in some pedagogical contexts at least, the recent call for a distinction between multimodality and multimedia. I will argue that at the level of cognition, of learning and inventing, the blurring of the boundaries between what are considered modes with what are considered media can prove to be pedagogically compelling. I will then consider how the work of Gunther Kress, despite its complex classification system and emphasis on social and cultural semiotics, actually facilitates the expansion of multimodality to include its cognitive dimensions - dimensions that he at several points associates with the concept of mimesis. I will conclude this chapter with a case study conducted in the late 1990s by two researchers in technical communication, Christina Haas and Stephen Witte, which nicely demonstrates how the cognitive account of mimetic multimodality I develop in this chapter can be applied to real-world application. This final section will segue to the following chapter which will be devoted entirely to pedagogical applications of this approach in the fields of Rhet-Comp and Tech Com.

From a Communicative to a Cognitive Account of Multimodality

Although the term multimodality is supposed to reflect an increasing awareness that, as Gunther Kress puts it, the focus on writing and written communication "has

dampened the development of all kinds of human potentials . . . cognitively and affectively" in traditional classroom environments ("Visual and Verbal," 75), in practice students rarely attend to the cognitive and affective dimensions of multimodal composition. This could be due in part to the general textualization of the term, one that emerges from a puzzling classification schema that appears in the introduction to Multiliteraries: Literacy Learning and the Design of Social Futures, an influential collection of pedagogical essays published by the New London Group (NLG) in 2000. Editors Bill Cope and Mary Kalantzis subdivide "meaning" into six modes: linguistic, visual, audio, gestural, spatial, and multimodal. Of all these modes, they tell us, "the Multimodal is the most significant, as it relates all the other modes in quite remarkably dynamic relationships" (28). Despite this statement, I find it a little odd that the multimodal is listed here as a separate category, one of the six, when in fact it seems to be a key characteristic to meaning itself. Cope and Kalantzis recognize this when they observe how in "a profound sense, all meaning-making is Multimodal" (29). But when they break down the Multimodal into two categories hybridity and intertextuality - their focus shifts away from cognition to the resources that are drawn on in the composition of "available designs" (30). Although they recognize that people inhabit multiple lifeworlds, providing multiple layers to everyone's identity (17), and note how the human mind is embodied, situated, and embedded in social, cultural, and material contexts (36), the metalanguage they develop for rethinking and revising our literacy practices are meant to elaborate their concept of Design, which has a production-heavy emphasis and, therefore, unduly emphasizes the written, spoken, and visual media platforms that have the most popular currency in contemporary culture. The NLG's popularizing of the term multimodality has had far-reaching effects. Not only have teachers across the K-16 spectrum begun to move away from the long-standing assumption that students should be enculturated to a monolithic (and primarily linguistic) literacy, many educators are designing assignments that appeal to multiple learning styles and incorporate marginalized literacies into their curricula.

So considerable has the influence of the NLG been that the group is assumed to have actually coined the word multimodality around 2000.³ But that is not quite the case. In fact, as a pedagogical term, multimodality has a longer and largely forgotten

history - one that dates back to at least 1972 when it showed up in Robert McKim's textbook *Experiences in Visual Thinking*. A professor of Mechanical Engineering at Stanford University, McKim developed this text as part of a course he helped to create a decade earlier that emphasized visual and kinesthetic properties of learning for mechanical engineers. McKim's course influenced the creation in 1988 of a similar course, ME 313, then called "Ambidextrous Thinking," which has since morphed into "Human Values and Innovation in Design." 4 The 1988 course was created by Rolf A. Faste, a pioneer in human-centered design, to meet the needs of incoming Masters students in the programs of Mechanical Design, Manufacturing Systems Engineering and Product Design, and it served as an introduction to "the unique spirit and tradition of the Design Division of Stanford's Mechanical Engineering Department" (Faste). 5 Faste credits McKim with the course name. McKim subscribed to the then popular theory that the right and left sides of the brain served different primary functions, and that creativity emerged from the brain's integration of those functions. More importantly, though, the course philosophy was informed by a commitment to the idea that "[b]rain-body functioning should not be and [sic] issue of either/or but rather both/and," and the course was designed to break down the artificial boundaries that separated the two. Students practiced rapid sketching and free-hand drawing for the first two weeks of the class, and as the quarter progressed approached problemsolving using a variety of techniques that included improvisational drama, athletic visualization techniques, story boarding, and mind mapping; they were even introduced to subjects like lucid dreaming, theta-wave bio-feedback, yoga, the role of posture, and even focused humming and jazz dancing. Most importantly, the course sought to instill in students a complex awareness as well of how our brains and bodies interact in the process of thinking and designing.

Although McKim does not label his entire pedagogy multimodal, he does use that word to describe a memory retrieval technique that he likens to Marcel Proust's multisensory remembrance of past things, which resulted in the inspiration to write his most famous novel (98). This technique requires an imagination that does not rely solely on visual imagery. "In our culture, we unfortunately tend to repress much sensory experience," McKim writes. This is unfortunate since the "feelings that accompany the nonvisual senses are particularly intense" (98). To illustrate for

students how the body absorbs information about an experience that needs to be recalled, he quotes the German *Gestalt* psychotherapist Fritz Perls, who tells us that imagining or recalling something like a landscape "requires more than just visualizing pictures":

[Y]ou must do more. You must walk in, climb the trees, dig the rich brown earth, smell the blossoms, sit on the shadowed grass, listen to the birds singing, throw stones in the stream . . . This sensomotoric approach, especially that of touching . . . will develop your sense of actuality and will bring about that eidetic memory (identity of perception and visualization) which in dreams themselves is always present. (gtd 98)

This multisensory recall - in many ways evocative of *imitatio*'s attempt to enact actual events that could be experientially *felt* by audiences - McKim calls *multimodal assimilation*: trying to bring to consciousness sensory experience that has been acquired by the body and, in a sense, stored by the body's unconscious memory (98). These "sensory modes" are not static; they are constantly engaged in what McKim calls *operations of thinking* that occur below the level of conscious awareness. These operations are vital to how we learn, and yet

[w]hen thinking is taught in the classroom, conscious modes of thinking are stressed and subconscious modes are rarely even mentioned, much less encouraged. One purpose of this book is to point to this educational oversight, and to suggest ways in which you can become aware of and utilize thinking that occurs below the threshold of your normal waking consciousness. (4)

Writing nearly thirty years before the New London Group popularized the term in the fields of literacy and composition studies, this professor of mechanical engineering at Stanford University employs *multimodality* in ways that, I believe, is theoretically richer than the New London Group's. Where the NLG emphasizes a *design account* of multimodality, one that attends mostly to the social and semiotic dimensions of composing, McKim provides a more *cognitive account* that clearly attends to the body's role in the making of meaning that subtends our designing practices. His account clearly puts him in the general range of Gallese and Lakoff's description of the cognitive operations of the sensory-motor subject and Merleau-Ponty's phenomenology of the perceptive, living body. Below I will develop this cognitive

account of multimodality further by re-envisioning the relationship between modes and media - and hence between multimodality and multimedia - within the framework of mimesis.

Mimetic Modalities and Cognitive Multimedia Ecologies

One of the challenges I face in advancing a cognitive account of multimodality is the widespread attribution of that word to digital technologies or multimedia. Clair Lauer notes that in the field of rhetoric and composition, multimodality and multimedia "are not only defined similarly, they are often used interchangeably" (229). Indeed, that seems to be the case. In the first chapter of Multimodal Composition: Resources for Teachers (2007) Pamela Takayoshi and Cynthia L. Selfe focus almost exclusively on how our "communication modalities" - moving and still images, animations, sound, color - are "increasingly depending on digital communication networks" and, hence, require us "to make informed and conscious choices about the most effective modality for communicating in particular rhetorical contexts" (9; italics in original). Of the five reasons they give in support of the attention teachers must give to multimodal composing, three are explicitly related to digital technologies and all five reflect rhetorical approaches to the affordances these technologies offer us. Elsewhere, Selfe argues for an expanded semiotic theory that goes beyond the privileging of print and takes "advantage of multiple expressive modalities" enabled by video and audio editing systems, conferencing software, electronic white boards, digital video cameras, digital audio recorders and multimedia sites like MySpace and Facebook ("Movement," 637, 639).

While I agree that the new "digital composing environments" (Takayoshi and Selfe, 1) are important spaces students should learn to communicate effectively in, in this section I want to focus on how certain expressive modalities are enabled first and foremost by the human body that is situated in these environments. One way to do so is to integrate into the concept of multimedia the *medium that is the body itself*, which Merleau-Ponty asserts is "our general medium for having a world" (PhP, 169). Technologies play an important role here, but only insofar as their use corresponds to the intentional acts of our bodies. We cannot separate, he tells us, the skilled organist from the organ he has habituated himself to since "so direct a relation is established"

that the organist's body and his instrument are merely the medium of this relationship" (168). If it is true, as Gallese and Lakoff argue, that the sensory-motor system of that organist's body is multimodal, then "the medium of his relationship" with his instrument must in some way be multiple. Hence, at the most fundamental level of perception – at the level, that is, of mimesis – terms like *multimodal* and *multimedia* are less distinct and easy to separate from each other. In this section I consider the nexus between these two concepts, for it is from this overlap that their difference inevitably springs.

While we are not accustomed to thinking of our bodies as a "platform" of media, such an idea is not alien to the media theorist Jussi Parikka. In Parikka's hands, the term *media* is not limited solely to conventional technologies; rather, media "are a contraction of forces of the world into specific resonating milieus: internal milieus with their resonation, and external milieus affording their rhythms as part of that resonation" (xiv). In other words, media is not a thing separate from the mediator, and all acts of mediation resonate with the forces it both generates and is generated from. In this configuration of the term, media bears a close relationship to phusis (see Chapter 2) in that "we do not so much have media as we are media and of media" (xxvii; emphasis his). Like animals who "live in and of media" in that their worlds are "formed of the constant interactional sensing, movement, and memory of their surroundings," so too do we inhabit a media environment that "is constituted of our ethological bodies interacting with bodies technological, political, and economic" (xxvii). This conceptualization of media as a milieu or *Umwelt* in which we are bodily enmeshed is not a far cry from Merleau-Ponty's claim that each object we encounter his example is a fireplace - becomes integrated with our body schema in that it, too, is a "system of equivalences not founded on the recognition of some law, but on the experience of a bodily presence" (PhP, 215). Elsewhere, Merleau-Ponty describes the body as "a thing among things; it is caught in the fabric of the world," and objects, technologies, nature are simply "an annex or prolongation of [the body]; they are incrusted into its flesh . . . [and consequently] the world is made of the same stuff as the body" (E&M, 163). Our intercorporeal attunement to our situations, our ability to recognize and interact with the things we encounter, is enabled though our

enmeshment in a network of forces that Aristotle and the Greeks called *phusis* and Parrikka calls *media*.

As I have argued throughout this dissertation, the actions generated through our bodily engagement with the multiple "media" of our worlds occur through mimesis. In Chapter 1, I describe the "great phantom" that Merleau-Ponty appropriates in relation to Diderot's mimetic theory of character development. To a large extent, the actor develops a character by relying on a "special operation of a prelogical character" (which seems similar to what McKim calls subconscious operations) rather than through "conventional imitation" (EO, 50). He or she seeks to imaginatively inhabit that character's world and allow its sundry forces to materially shape the character. Once developed, the character expresses not only a unique identity but the world in which that identity is situated. This in a sense requires an engagement through multiple sensory and communicative modalities with the "media" that constitute that character's subjectivity and world. Habits, vocal accents, attire, stride - these identity markers that we all have do not emerge in the vacuum of a solitary self. Like the power-poses I refer to in the previous chapter, the actor bodily "fakes it until he or she becomes it." To accomplish this, the actor does what the brain-damaged veteran Schneider is unable to do due to his permanent injuries: enacts a virtual meaning from the actual experience. That is, he or she generates action through perception that becomes meaning. Because of the way our body schema is structured in relation to both ourselves and the world, this "existential operation" is something which we all do on a regular basis: "the actor's art is therefore only an extension of the art which we all possess," the only difference being that for the actor it is "a much more complex case of such an operation" (53, 52).

This "art" is simply what Gallese identifies as mimesis: an embodied simulation of the multiple forces at play in the situations we enter and attune ourselves to. In doing so, we in a sense "imitate" certain processes of *phusis* or what Parrikka calls "the technics of nature." This latter phrase, according to Parrikka, "refers to the way in which it is not only humans who fabricate artifacts to establish relations with the world; the whole of nature can be seen as a dynamic process of relations, perceptions, durations, and cohabitations that is creative" ("New APPS Interview"). Just as nature is not an "extension" of the human, neither are media. Rather, "media are extensions

of a variety of affordances of nature: of different materials, of different ways of sensing, thinking, memorizing" ("New"). 10 Considered within this expanded view of media, Merleau-Ponty's account of the "intentionality which links our body to the world" (53) might be thought of as an *intercorporeal interface* - one that is enabled through mimesis and allows for what Anna Gibbs describes as *mimetic communication* between our bodies and the world at all levels of experience: affective, productive, conscious. Because mimesis "produces the virtual by enabling ensembles of these disparate media," Gibbs argues that the body "is not so much a medium as a series of media, each of which connects in its own way with technological media, including writing" (201).

A similar perspective of body-as-media / media-as-body has recently been advanced as a pedagogical framework for multimodal composing. In the introduction to their 2012 *Composing (Media) = Composing (Embodiment)*, a collection of essays on composition theory and multimodality, Kristin L. Arola and Anne Frances Wysocki argue that the integrated disciplines of Rhetoric and Composition are currently trying to work with "a historically situated—mediated—sense that we are fragmented between a perceiving and a perceived body, between a potentially expressive mediating body and a body that exists only in mediation by others" (13). Offering Merleau-Ponty's claim that the body is one's primary medium - "taking medium here in its grounding sense of that which is between, in the middle" (3) - Arola and Wysocki advance a view not unlike Parrikka's: media should be thought of not as a carrier of messages but as a living environment in which we are "always already embedded embodied—in mediation" (4). While this is a step forward for multimodal pedagogy, it is also ironically a giant step backward in time to the Sophistic rhetorical training that occurred in ancient Greek gymnasia. Let's briefly revisit this ancient pedagogy within the context of an entwined multimodal/multimedia theory to see how it can shape contemporary approaches to multimodal pedagogy.

Multimodal/Multimedia Ecologies for Sensory-Motor Subjects

As described in Chapter 3, the Sophists who infiltrated the gymnasia of Athens at the start of the Classical era conceived of the *agon* as both an actual place (a site of contest) and a virtual space that produced rhetoric as a gathering of forces, cultural,

bodily, and discursive (Hawhee, 16). Unlike the staid Academy later established by Plato where students studied mathematics and contemplated (Plato's) philosophy, the gymnasia that became the classrooms of the Sophists were a "network of forces" (128) in which young men engaged with multiple media - wrestling, rhetoric, music, and other bodily arts - that engaged multiple perceptual modalities. "This network of objects, people, and practices and their attendant sounds and smells," Debra Hawhee tells us, "comprised a distinctive material setting for a highly textured, bodily pedagogy" (128). The rhetorical and athletic training was mediated through mimesis ("mimetic learning happens through a relation with someone or something else, an observation and repetition of another's actions and practices" [148]) and the "habituated practices" resulting from their overlap

likely produced a set of linked habits - the habits of discursive moves and wrestling moves, the habits of competing, pushing, developing, responding - linked if not in the mind, then certainly in the body. (128)

One is reminded of Merleau-Ponty's claim that "habit has its abode neither in thought nor in the objective body, but in the body as mediator of the world" (PP 167). It is habituated knowledge gained by experience and not conceptual wisdom acquired through study that allows the experienced organist to play a variety of different organs; because his body has "incorporated" the relevant directions and dimensions of the general instrument, he can settle into the organ "as one settles into a house" (168). Such an understanding of experiential knowledge was not lost of Plato's contemporary (and rival) Isocrates, whose school of rhetoric sought to cultivate practical wisdom (phronesis) in students through the mimetic pedagogy of ethismos, "habituation" (Haskins, 16). Albeit in a more formal manner than his Sophistic predecessors, 11 Isocrates subscribed to the ancient pedagogy mousike - the musicopoetic subjects Plato attempted to replace with philosophy - which refused to separate the "twin arts" of gymnastics and philosophy; like body and mind, these two educational disciplines were "parallel and complementary" (gtd in Haskins, 15). In short, the body served as the primary medium for learning for the ancient Greeks; learning was achieved through multiple experiential modalities which linked that medium with the multiple media that constituted *phusis*; ¹² and that linking was

enabled through a process of rhythmic, repetitive, responsive habituation that the Greeks associated with *mimesis* (see Hawhee, 135, 148-151).

Although ostensibly designed to create a strong athletes, effective rhetors, philosophical thinkers, and civic leaders, this training regimen seemed to position young men¹³ not simple as "students." In a larger sense, the knowledge-making process exploited the fact that they were also sensorimotor subjects. I borrow this term from Scott Marratto, who uses it to describe Merleau-Ponty's description of painters like Cezanne. As Marratto observes, Merleau-Ponty's painter (as a sensorimotor subject) is "autofigurative" in that he is "a kind of point of passage, or translation, where all of the elements of the art of painting can come together," which is true of the subjectivity of perception in general (105). While the painter has "resources" to draw on - cultural traditions, established styles, personal histories, skills and techniques, materials like oils and brushes - he or she does not draw on them "knowingly." Rather, "the know-how arises from within the sensorimotor dynamics of the activity" itself, generated less by knowledge than by expressive movement (104). In this sense painting does not reproduce what the painter sees or even the subjective experience of seeing; instead it expresses the "voice" of things, it is, as Merleau-Ponty puts it, "the language of the thing itself that springs from its configuration" (qtd 104). There is clearly an overlap here of perceptual and sensory modalities with the various media afforded by the activity of painting. The medium of the painting intersects with the medium of the sensorimotor subject that itself intersects with the medium of each of the resources drawn upon. The sensory mode of seeing intersects with those of hearing and listening; the communicative medium of speaking, of language, intersects with that of painting; the conscious or conceptual mode arising from the act of painting intersects with the largely unconscious mode that is the action of painting itself; and, of course, the body schema of the painter intersects with the larger corporeal schema of the situation and thence of the world.

When Isocrates writes of how the ancient teachers invented and bequeathed an education made up of "twin arts - parallel and complementary" - philosophy and gymnastics (qtd in Haskins, 15) - he is pointing to an underlying philosophy of mind that might also be called a philosophy of *body*. What we some call "higher-level thinking" is not *(meta)*physically divorced from bodily action. Multiple perceptual and

cognitive modalities are engaged with multiple expressive and communicative media. At the base of all this is the correspondence between perception and motility that generates an original motor response in the sensorimotor subject, what Merleau-Ponty calls mimesis. This "correspondence" should not, however, be conceived as a transmission, as if perception "signals" motility to combine with it to produce action. It is better to think of this process as a dynamic interface - one that is multimodal or even *inter*modal¹⁴ -- that is always-already engaged in the generation of phenomena. Merleau-Ponty believed that perception is originally synaesthetic but that scientific knowledge has made us "unlearn" how we really see, hear, speak, and feel by dividing the senses into separate modalities (see Marratto, 69). Indeed, studies of macaque monkeys reveal that mirror neurons fire not only at the sight of an action but at the sound of it, enabling a "multimodal representation of action this is not linked to the visual channel only" (lacoboni, 92). Studies in transcranial magnetic stimulation, or TMS, similarly reveal that the tongue muscles in human subjects listening to a speech were more excited by words that required strong tongue movements to pronounce than by words that were less strenuous to pronounce (92).

Clearly, mimetic identification is not something that you can control by banning wayward performers and rhetors from an orderly society; it is a bodily and neurological operation enabled by what Gallese and Lakoff call "multimodal integration": "sensory modalities¹⁵ like vision, touch, hearing and so on are actually integrated with each other and with motor control and planning" (5). David McNeill, a researcher in psycholinguistics at the University of Chicago, offers a similar model (and one that nicely complements Merleau-Ponty's claim that speech is primarily gestural), theorizing that speech and gesture arise through the interaction of *opposite* neurological operations and dialectically "co-occur" as two modes of representation (imagistic and linguistic) that blend together as one. ¹⁶ Like the painter, we are all sensorimotor subjects whose multimodal body schemas are linked – *interfaced* – with multimedia ecologies to which we attune ourselves whenever we perform an action, including those with the explicit purpose of communicating with others. At some level, the ancient Greek teachers seemed to understand that conceptual thinking was best achieved through body-engaged experiential learning practices.

The Affective and Synaesthetic Modes of Mimetic Cognition

Examining the role of experiential knowledge work in learning and communication requires that we look at past practices - ancient Greek education, *imitatio*, etc. - and recover those experiential dimensions that have been marginalized through the development of theories that have privileged conceptualism. But we also need to look at more recent theories - many of which provide us with the tools that make recovery efforts possible. One theory of importance here is *affect*. Like the concept of mimesis that I have been developing throughout this dissertation, affect places emphasis on bodily experience and how knowledge is constituted experientially through our material interactions with people and things. In the next section, I show how affect plays itself out in the multimodal pedagogy of Gunther Kress. Here, though, I would like to provide a context for how affect relates to mimesis.

As I mentioned in Chapter 2, Mark Hansen, a theorist of media and technology who draws on phenomenology and cognitive science in his work, argues for a movement away from discursive theories he calls "epistemological embodiment" to more materialist theories he designates as "phenomenological embodiment" (27). Such a shift should be accompanied by a philosophy of mind informed less by semiosis than by mimesis - specifically the "corporeal mimesis" he derives from Walter Benjamin's mimetic theory (also discussed in Chapter 2). Hansen discerns in Benjamin's description of the poet Baudelaire how the cultivation of a "tactile unconscious" allows for "bodily attunement" that allows him to absorb the "shocks" of everyday living without recourse to conscious processing (Embodying, 248). This attunement "transforms the poet's body into a medium," and this corporeal engagement with the material space of his immediate situation channels "the energy of shock into mimetic, psychologically rooted creative activity" (249). Elsewhere Hansen turns toward Brian Massumi's affect theory as way of illustrating how bioart something I will come back to in the next chapter - affords all of us who engage with such exhibits the opportunity to absorb similar kinds of "shocks" Baudelaire was apparently so adept of absorbing. In such exhibits, what we often "see" cannot quite be fully articulated in terms of the visual experience alone. That is because

[a]ffectivity becomes the very medium of the interface with the image. What this means is that affectivity actualizes the potential of the image at the same

time as it virtualizes the body: the crucial element is neither image or body alone, but the dynamical interaction between them. (*New Philosophy*, 130). As we will recall, this interaction between actual and virtual is denied to the braindamaged veteran Schneider who cannot, as Merleau-Ponty shows in his *Phenomenology of Perception*, immediately engage in the kind of "normal imitation" we all do naturally when asked to perform even a simple task like a salute. That is, he cannot apparently *interface* his sensory-motor system with a consciously evoked image of an act he himself had performed automatically countless times. His injury has resulted in the loss of a capacity to synthesize perceptions into a synaesthetic whole.

The division of our sensory perceptions into the Big Five - sight, smell, hearing, taste, and touch -- has contributed to an impression that our sensorimotor system can be empirically divided into parts and processes that "work together" while also being distinct. 17 Models like this one are helpful in developing conceptual knowledge necessary for scientific research of the kind that has, for example, resulted in the expansion of the life spans of humans in developed societies. But when the body is rendered as an object, which is often the case in scientific discourses, the vital experiential dimensions are often collapsed. Affect theory not only puts those dimensions front and center, it revitalizes the body as a subject while interrogating the clinical models that objectify it. Hansen notes how Massumi manages to encompass "all the sensory modalities of bodily life" by simply broadening "vision the perceptual sense associated exclusively with "sight" - so that it more closely reflects the fundamental synaesthetic operation of perception itself (*New Philosophy*, 110). In Massumi's account, "optical vision derives from proprioceptive and tactile 'vision'" (110). In this synaesthetic sense, we "see" with our bodies and not just with our eyes.

While hard to conceptualize within the predominantly empirical framework that has informed the curricula of the educational system we have grown up in, we actually *experience* this phenomenon every waking moment of our lives. Some people like Daniel Kish, a nonsighted man who developed a system of echolocation which allows him to "see" as he rides his bike and walks the crowded streets of Long Beach, California, actually *inhabit* a world in which a synaesthetic account of multiple and overlapping senses is more applicable than the Big Five model in which the separate

senses simply "work together." Kish serves as a fine example of Hansen's claim that "affectivity infiltrates perception in a way that renders the latter . . . bodily and that reveals the full richness - the multimodality or, as we might say, high bandwidth - of embodied perception" (*New Philosophy*, 227). It is not uncommon to think of Kish's development of a sophisticated echolocation system as an extraordinary feat by a gifted individual, or to consider the experiences of actual synaesthetes a neurological disorder or "condition." But I think it is more helpful to consider these occurrences not as anomalies but as *exemplifications* of an innate skills-set we all have - namely, the capacity to simultaneously experience multiple media multimodally. In the case of Kish and many others, a particular disability simply creates conditions for the finetuning of an ability inherent in us all. We need to extend this logic to the pedagogical realm.

While it may indeed be helpful for students to distinguish, as Clair Lauer does, ¹⁹ between multimedia and multimodality in production-based contexts, in process-based contexts where cognition is understood as embodied, extended, and situated, students would benefit from an understanding of the two as fundamentally interrelated at levels we only become conscious of under rare or remarkable circumstances. As I have pointed out repeatedly in this dissertation, such thinking, while unconventional, is certainly not new. It is also reflective of significant recent currents in scientific and philosophical thinking which seeks to move beyond subject/object dualism by attending to the relationality of things. Being able to discern, say, form from content can be helpful in creating useful ways to think about doing something; but an overemphasis on the distinction can impoverish how we experience the things we do and limit the ways we do them. Merleau-Ponty tells us that form and content cannot exist separately from each other, that what is presented cannot exist separately from the way it is presented (WP, 72, 75). Similarly, the cognitive psychologist David McNiell tells us that the meaning of something being spoken about by a person may not be fully "realized" until the final moment in which it is expressed since that moment results from a synthesis of speech and gesture. "This is an act of communication," he notes, "but also of thought" (246). Both are multidimensional since some dimensions of thought are presented in gesture (this need not be a literal gesture but a kinesic form, an internal "growth point" or rough mental

from which an actual gesture arises) while others are presented linguistically (246). Observations such as these should inform our approaches to teaching multimodal composing in the classroom, the subject of my next chapter. For now, though, I would like to provide one example of how the form of cognition I am describing here - one that is mimetic and multimodal - can be discerned in the problem-solving thinking of an important thinker: the 20th century physicist Albert Einstein. Need to come back to affect.

Albert Einstein: Multimodal "Sympathy" and the Materiality of Conceptual Thought

As I hope I have made clear by now, at the fundamental level of cognition the media that constitute our communicative acts cannot be separated from our perceptual modalities in the enactment of meaning. Mimesis provides a useful framework in which to conceive this relatively complex concept. We should recall how it is from the "foundation of mimesis" that Merleau-Ponty believes the "system me-and-other" emerges and manifests itself through sympathetic behavior (CRO 124, 125-6). Indeed, as Eric A. Havelock points out, the early uses of the term in Greek culture "refers to 'sympathetic behavior,' not to abstract copying or imitation, and in great many cases this behaviour is physical, a matter of speech, gesture, gait, dress, and the like" (qtd in Haskins, 10). This behavior that resulted in the contagion of *sumpaschein*, ²⁰ of course, was a manifestation of a way of thinking. This is what probably so alarmed Plato since it ran contrary to his commitment to epistemic knowledge that could only be acquired conceptually through rational analytic reflection. But the body's expressive insistence on playing a major role in the making of meaning can never be completely repressed. Albert Einstein wrote of how he liked to be "sympathetically in touch with experience" when thinking about phenomena (qtd in John-Steiner, Notebooks, 16-17) and in his famous letter to Jacques Hadamard described the important role visual and kinesthetic imagination played in his extremely abstract conceptualizations:

The words of a language, as they are written and spoken, do not seem to play any role in my mechanism of thought. The . . . ²¹ entities which seem to serve as elements of thought are certain signs and more or less clear images which

can be voluntarily reproduced and combined. . . . The above mentioned elements are, in my case, of visual and some of muscular type. Conventional words or other signs have to be sought for laboriously in a secondary stage, when the above mentioned associative play is sufficiently established and can be reproduced at will" (qtd in McKim, 11)

It is remarkable to hear from so abstract a thinker as Einstein that certain of his "elements of thought" were not only of a visual but a "muscular" type. Vera John-Stiener calls such polysensory thinking that is related to muscular movement "enactive representation" (Notebooks, 16) and in studies of the notebooks and other material of pioneering scientific thinkers reveals that Einstein was not alone in his reliance on kinesthetic and visual modes of thought. Elsewhere she notes how many 20th century physicists relied on "diverse modes of thought" (multimodality) and sought out "multiple representational modes" (multimedia) in the midst of a major paradigm shift (Creative Collaboration, 45). She cites Vivian Gornink's observation that "[w]hatever a scientist is doing - reading, cooking, talking, playing - science thoughts are always there at the end of the mind" (qtd in Notebooks, 203). Often what Gornink calls the "crucial flash of insight" that so many scientists and other thinkers report as groundbreaking moments in their thinking emerge from the unconscious periphery and not from the focal point one's conscious mind is set to. This periphery is not some purely mental space; it is generated by the body's engagement with the very real, very material world in which it is acting.

For example, after much mental deliberation concerning the paradoxes that emerged when trying to theorize the velocity of light as it traveled through space, Einstein reached his solution not by working out equations on a chalk board but by simply glancing at the famous clock tower in Bern, Switzerland, while riding in a street car one evening. "A storm broke loose in my mind," he wrote later, which caused him to replicate the situation as he perceived it at that moment by imagining a number of clocks ticking in different locations in space – a dynamic image that paralleled time with space and quickly led him to the theory of relativity. ²² Prior to this flash of insight, Einstein had considered the time/space conundrum in various ways. Working through complex mathematic equations was one of them. But as he would later write, "the germ of the paradox of the special relativity theory" that suddenly sprouted in

the trolley car that evening was actually embedded in an image he visualized of himself riding through space astride a light wave and looking back at the wave next to him (John-Steiner, *Notebooks*, 85)²³ This *virtual* representation Einstein had imagined using the material of daily life (riding a vehicle astride another object) only attained its full significance in the moment *when he was actually riding a vehicle* and paying attention to the objects it passed (like a light beam) and which included Bern's now-famous town clock.

Such *mimetic* reciprocity between the conceptual/virtual and the experiential/actual that Schneider's brain injury had blocked was a major force of Einstein's intellectual processes. Gebauer and Wulf assert that "the often unconscious blend of doing and knowing found in mimesis designates a particular type of thinking or a faculty, which fuses the practical and technical skills we gain through experience with our theoretical abilities to recognize and evaluate" (3). As a result, the concept of mimesis

implies a resistance to splitting the human spheres of experience, action, and symbolic production into two parts, one practical and the other theoretical. . . . The history of mimesis as a whole makes reference to the mutual interpenetration of spheres, to a nonrecognition of the split, to symbolically constituted worlds (3).

A mimetic approach to multimodality, then, would resist its absolute distinction from multimedia - at least in certain contexts, most notable those that attend to the cognitive dimensions of doing and knowing, or experience, action, and symbolic production. It is striking then, how students in university classrooms continue to learn static forms rather than the variety of ways such forms become realized by those who helped create them. How many students in the science, for instance, know what $E=mc^2$ means but not how $E=mc^2$ was arrived at? This disconnect between conceptual knowledge and experiential knowledge has impoverished education for too long.

We need to bring to the forefront of students' awareness the interface that we all cognitively and bodily have with the world we are enmeshed in, the situations we move through, and the things we interact with. In the last chapter, I showed how recent theories concerning the materiality of rhetoric are moving the field in a direction that allows for a broader account of rhetoric - one that places greater

emphasis on the experiential dimensions of thinking and communicating. This is important for composition and technical communication since a largely transmission-based, conceptual version of rhetoric informs so many writing and communication programs. Changing how we think about and teach rhetoric, however, is not enough. As I have been arguing, we need to rethink standard versions of multimodality since multimodal composing is becoming increasingly popular in these programs. I now turn to the work of the renowned theorist Gunther Kress, whose work in multimodality never strays too far from the world in which we all compose and communicate.

The Role of Mimesis in Gunther Kress's Pedagogical Multimodality

Anyone who writes about multimodal pedagogy cannot ignore the work of the pioneering figure Gunther Kress, currently a professor of semiotics and education at the University of London's Institute of Education. While a complex thinker, Kress's advocacy of the need for educators of all disciplines to adopt a multimodal approach to teaching and learning is based on some fairly simple observations. For example, in an essay published in the 1998 collection *Page to Screen* in Kress compares a page from a 1936 science textbook to one from a 1988 textbook, rightly pointing out that in the older textbook the "major meaning was carried by language alone" while in the more recent one "the main meaning is carried by the images" (64). While his conclusion that the older book "was read from beginning to end" whereas the new one "is not read at all, it is used" (65-6) is an assumption (the new book may indeed be read from beginning to end and the older one may indeed have been used in certain contexts), his observation certainly points out an important historical shift in convention that is central to his point that visual modes of representation in modern Western societies can no longer be thought of as mere supplements to print texts.²⁴ Observations such as this one have resonated widely with compositionists who are now integrating visual rhetoric into their writing classes.

Less known by compositionists, however, and hence less resonant in the discipline, is his observation that since "the body is coming to be used as a medium of communication, so aspects of bodily motion are increasingly used as modes of representation and communication" (58). Although sometimes limited by a tendency at to treat that body as the sole site of agency, as if it were disconnected from the

situation in which it is moving, ²⁵ Kress nonetheless moves us in an important direction with this remark - and in this section I will trace the contours of that direction within the theoretical framework I have developed thus far in this chapter. I should note, though, that his nearly trademark emphasis on the "social-semiotic" dimensions of modes/modalities tends to privilege culture as a monolithic force in the production of meaning. While he acknowledges that "material qualities" inhere in material substances, once that material is appropriated by a culture those qualities "become part of the cultural and semiotic resources of that culture and [are] available for use in the making of signs" (*Multimodal*, 69, 111). A theorist like Bruna Latour might point out that this conventional notion of what constitutes the "social" tends to instrumentalize nonhuman actants, transforming them into available resources (what Heidegger called *bestand* or standing reserve) for their "use" by humans.

As a result of this conceptual tendency, along with his development of an extremely complicated classification scheme that would make tough reading even for Aristotle, Kress offers definitions of key terms that seriously limit their "use" in discussions of multimodality that do not conform to their designated locations within his complex framework. One key term, *mode*, is defined by Kress as "a socially shaped and culturally given semiotic resource for making meaning"; food, clothing, furniture, and so on, all have meaning "due to their social making . . . and the regularity of their use in social life" (Social-Semiotic, 79). Media, on the other hand, he defines as "the material resources used in the production of semiotic products and events, including their tools and the materials used" (Multimodal, 22). A medium is a thing "separate" from a mode even though in "design and production, they are hard to separate" (6-7). Although he insists that "media are socially formed," he recognizes that "the fact of their existence can be considered pre-semiotic"; however, culture usurps these since "certain of their pre-semiotic characteristics will place constraints on their semiotic potential" once they are transformed or "socially (re)produced" (69). Kress's tenuous distinction between modes and media often collapses in his repeated attempts to define and illustrate them - he describes both, for instance, as "resources" - and the time and space he devotes to qualifying these definitions testifies that he is aware of an underlying ambiguity. While making for a difficult read, this ambiguity nevertheless provides an entrée to a richer understanding of how multimodality is inextricably

woven into the multiple media from which it can only be separated within certain well-defined contexts.²⁷ That entrée is widened considerably with reference to mimesis.

Fortunately, I do not need to spend much time here developing the connection between mimesis and multimodality in Kress since he does that himself. As noted previously, in his 2010 book *Multimodality: A Social-Semiotic Approach to* Contemporary Communication, Kress credits the anthropological scholarship of Christophe Wulf and "his work on mimesis, in particular" as pushing him to become clearer in his own interests in meaning and learning, "especially in relation to 'the body'" (iv). In an interview at Florida State University in 2012, Kress said that we need to "extend the notion of mimesis" so that "we can understand a whole range of ways that humans instantiate knowledge," specifically in how tacit knowledge at play in our "engagement with the world and the transforming and shaping of one's identity."28 Clearly Kress is aware not only of recent recovery and revisionist work about *mimesis* but also its relevance to multimodal theory and pedagogy. Not only does his description of *mode* as answering the question "How is the world represented and how do I aptly represent the things I want to represent in this environment?" (114) place *mode* squarely within the realm of mimesis (if we adhere to the conventional association of mimesis with representation), his emphasis on the materiality of modes (in order "to move away from abstractions" like the "linguistic system" and "grammar" so that we can more profitably "link the means of representation with the bodilyness of humans . . . and the possibility of seeing meaning as embodied . . . " [83]) nicely approximates the account of mimesis I have been developing here. Finally, Kress's increasingly expanding theory of semiosis as "forms of meaning-making which are founded as much on the physiology of humans as bodily beings" as they are on the "meaning potentials of the materials drawn into culturally produced semiosis" (Multimodal Discourse, 28) contributes the kind of balancing act I am trying to pose via mimesis interpreted phenomenologically - between conceptual and experiential knowledges.

In the last chapter I referenced Kress's example of mimesis in how repetition operates gesturally in a science classroom. The teacher has drawn a diagram on a blackboard that illustrates how blood circulates among organs in the human body.

When the teacher "overlays" the diagram with a sequence of gestures in explaining the process, he enacts a "tangibly, mimetically witnessed movement of the blood from organ to organ [that is] physiological felt by the onlookers, mimetically experienced in their bodies, and then gone . . . " (Social Semiotic, 86). This mimetic moment is enacted multimodally and mediated by multiple media. The visual, verbal, and gestural components of the explanation altogether allows for "different students to engage with 'the same' issue via routes [i.e., media] which may be affectively, sensorially, or culturally more congenial to them. At the same time it affords a fuller exploration of the topic at issue" (169). From a neuroscientific point of view, the gestural dimensions of the teacher's explanation are simulated neurologically by students' mirror neuron systems; Kress tells us that such physiologically felt moments, mimetically experienced through the bodies of students, are also of significant educational value. But it is not so much what the teacher says or what the diagram illustrates that matters here. It is the *style* in which the information is conveyed that facilitates learning - a facilitation that occurs unconsciously at that bodily level of learning Kress helpfully associates with affect. Communication is not only conscious. In a world that is "mediated and made accessible through the semiotic categories that culture provides," Kress asserts, "[a]ffect is inevitably part of such a mediation; it must have a central place in the theory of meaning," and doing so requires us to "erase the boundary between affect and cognition in this frame" (Social Semiotic, 109; italics in the original). It is this type of experiential learning is what McKim and his colleagues at Stanford University sought to attune students to through their innovative approaches to learning that resulted in the ME 313 "Ambidextrous Thinking."

I believe that an expanded *cognitive* account of multimodality - enabled in this dissertation through the conceptual lens of mimesis - can explicitly integrate experiential learning and knowledge into the rhetorical pedagogy that informs so many programs in composition, technical and professional communication, and in communication generally. Nathan Rivers, a scholar who advocates more collaboration between the fields of technical communication and the cognitive sciences, offers one example of how to do this by defining a rhetorical situation as "any moment of mind extension, of augmenting human cognition artifactually and environmentally" (422).

Affect, Kress suggests, seems to enable the extension of cognition in such situations. A multimodal project such as a museum exhibit, he tells us, must attend to affect if it is to rhetorically engage viewers. Because "rhetoric goes to the initial conception of the exhibition and from there to the overall 'shaping of the exhibition" in terms of the multiple media²⁹ employed - objects, lighting, captions, space - "the question of affect has to be addressed in the case of the exhibition: the wrong affect will 'turn off' potential visitors" (Social Semiotic, 177). What the exhibition designers must tune into consciously we are all attuned to unconsciously in our daily activities. Paul Prior and Jody Shipka, noting theories developed by the Vygotsky school, 30 observe that when we sit at a table that table's "meaning" is never singular; for each table we encounter we "sense" its multiple referents, metaphorical extensions, and individual subjective versions - warmth, family conflict, etiquette, and so on - and we unconsciously situate ourselves into those which are (rhetorically) appropriate to each specific situation. This "sense," which I see as mimetic, they describe as a "chronotopic³¹ interface of the embodied and representational, the social and the personal" (208-9). As I will discuss at some length in the next chapter, our learning and communication practices can be greatly enhanced by cultivating an awareness of the situations we mimetically interface with as fundamentally rhetorical.

As noted above, Kress's social-semiotic definition of *mode* would present more difficulty if Kress himself did not provide the opportunity to move beyond that classification. Fortunately, across the corpus of his work he provides many of such opportunities. Clearly, affect is one of them. But a semiotic mode also offers many *affordances*, ³² allowing for the "linking" of entities - "humans with humans, with places, objects; objects with processes; processes linked with processes" - many of which "involve reciprocal actions between the participants" (119). Although linked events, objects, and phenomena only take on full semiotic significance "as a result of social decisions and judgements" (120), his awareness of their affordances certainly takes into account "a whole range of ways that humans instantiate knowledge," including bodily knowledge obtained mimetically through one's "engagement with the world and the transforming and shaping of one's identity." ³³ The human experience with the mode of color, for example, certainly offers "semiotic possibilities of a

specific kind" (cultural associations with green land or blue sea, pink for girls and blue for boys, etc), but it also offers

a specific sensory appeal, via sight and its physiology, and via both the physiological/experiential meanings of colour for humans as biological/physiological beings and the cultural/experiential meanings of colour - the meanings deriving from specific cultural and physiological/experiential/emotional effects (*Multimodal Discourse*, 27).

In less convoluted terms: the conceptual meanings we arrive at within cultural contexts arise from our embodied interfacing with situations through their material affordances. To truly understand how color operates in our lives we need to attend to its affective dimensions. We therefore need a "new theory of semiosis," Kress tells us elsewhere, that offers an account for "the processes of synaesthesia, the transduction of meaning from one mode in meaning to another semiotic mode, an activity constantly performed by the brain" ("Visual and Verbal," 76). In moments like this, it becomes difficult to subscribe to the distinction between mode and media that Kress has gone to such pains to sustain.

It is apparent here that Kress is operating on the same assumption as Merleau-Ponty - that perception is fundamentally synaesthetic. Unfortunately, because "synaesthetic activity has been suppressed in institutional education, due to the social and cultural dominance of language in the written mode in the public domain," Kress looks toward multimodality as a means of tapping into the marginalized "cognitive and affective potentials of individuals" (76). The anthropological model of mimesis offered by Christopher Wulf (whose book on mimesis, co-authored with Gunter Gebauer, informs much of this dissertation) has helped Kress become "clearer" on his understanding of how meaning and learning is instantiated by the body is important here. Indeed, Anna Gibbs compares mimesis to affect in that neither is a "property" of the body or the individual; mimesis, Gibbs tells us, should rather be thought of as a trajectory which makes use of "vision, hearing olfaction, morphology, or behavior, or several of these" in operations whereby one responds to the other, "a borrowing of form that might be productively thought of as communication" (20, 19). Although repressed by formal educational models, we all engage such cognitive and clearly synaesthetic processes daily when our bodies help us navigate what Kress calls the

"multimodal ensembles" of our immediate situations. Even a mundane act such as crossing a busy street requires us to make a multimodal ensemble out of the many resources available - an especially powerful operation for disabled people (*Social-Semiotic*, 161) which I noted earlier. This means that "[s]treetscapes constitute both curricular and pedagogies" (168) in that the cognitive operations our bodies engage when crossing a street are the same ones generated when we observe the science teacher gesturing in front of a diagram representing blood circulation - also a multimodal ensemble (168). It goes without saying that the affective, physiological, *mimetic* dimension Kress assigns to the classroom example (86) is operative in crossing the street and all our other daily activities.

Does the picture emerging here not in some way resemble Aristotle's claim that when we create something – a painting, a composition – we *follow the process of nature* (*mimeitai ten phusin*?). Is not "nature" the ultimate multimodal ensemble that we navigate mimetically? If so, then I believe that the composition theorist Byron Hawk may want to rethink his assertion that traditional formalist, expressivist, and audience-based rhetorics are grounded in a "positive, mimetic epistemology" – one he opposes to the "holistic model" offered by Paul Kameen, which draws heavily on Coleridge's theory of intuition. As Hawk describes it, following Kameen, Coleridge "wants to move away from the examination of things, which leads to dead classifications, toward relations of things, which leads to a continuous transition and reciprocity" (104). In Coleridge's words:

[A]s soon as the mind becomes accustomed to contemplate, not things only, but relations of things, there is immediate need of some path or way of transit from one to the other of the things related; - there must be some law of agreement or of contrast between them; there must be some mode of comparison; in short, there must be Method" (qtd 104-5)

As described by Hawk, Coleridge's "method" sounds a lot like mimesis both in the phenomenological sense, in that "[m]ethod begins in embodiment," as well as in the Aristotlean sense, in that it must theoretically be "representative of the relations in nature and continuously progress and change with them" since it is the "relations in nature, not subjective genius, [that] drive intuition" (Hawk, 105). Since method is "multiple and situational," compositional practices like writing require "being open to

the multiple paths that can emerge out of any given rhetorical situation" (47). Writing about ships, Hawk says, requires knowledge of the oar, the stars, the helm, the sail, the artillery, and so forth. In other words, to write adequately about ships the writer must attune herself to the multiple affordances in the multimodal ensemble that emerges from the semiotic domain of certain "ships." In tracing the linkage of *ship-oar-sail-stars-etcetera* she learns the concept *ship* in ways that are not transmitted through a Wikipedia entry. In other words, she slips into the mimetic phantom that enables *ship* to be virtually *experienced*, not just conceptualized. The Wikipedia page is just *one* of multiple media she engages with in the process of learning, none of which are easily separated from the perceptual modalities that enable her to achieve a more complex awareness of all that constitutes a certain kind of ship.

In this section I have tried to show that despite Gunther Kress's separation of mode and media, his attention to mimesis and to the phenomenological body, to affect and to affordances it responds to, ultimately prevent the kind of clear distinction his initial definitions attempt to designate. The result is an ambiguity that yields a richer theory of multimodality that can certainly contribute to rhetorical theory and composition pedagogy. Admittedly, this chapter has been, like the ones that have led up to it, very theoretical in scope. It is time now to consider how the theory makes for praxis. The next and final chapter of this dissertation will be devoted entirely to classroom pedagogy and to the design of curricula that puts that pedagogy to work. But first, as a means of seguing to that objective, I want to look at a real-world example that I feel illustrates the multimodal/multimedia nexus I have developed here quite effectively. It is to this example that I now turn.

"Embodied Practice": Putting it All Together

In Chapter 2 I noted how the parent term of mimesis, *mimos*, originally denoted both performer *and* performance, comparing that dual-meaning to Yeats' famous observation of the impossibility of separating the dancer from the dance. In a 2001 article published in the *Journal of Business and Technical Communication*, Christina Haas and Stephen P. Witte set the stage for a case study they document with an epigraph quoting the composer Franz Liszt: "*Le concert*, *c'est moi!*" With this declaration, the authors tell us, Liszt "was not only declaring that music is inseparable

from its performance but that differences in bodily manipulations of musical instruments yield different music from the same score, a discovery that Liszt repeatedly capitalized on in his own concerts" (413). 34 This act of remediation is *imitatio* at its best: the style ("the same score") that the pianist taps into yields an expression that is "different" from earlier performances, shaped as it is by the forces at play in that *specific situation* in which the performer is immersed and hence "representative" of - that is, he and his score and his re*mediat*ion of it bring to full *expression* all the forces at play on that particular occasion. The medium of expression here is not just Liszt; it includes the concert and all that constitutes it, including that particular audience in that specific location and that certain occasion. Hence, that unique expression is enacted across multiple media through the engagement of multiple sensory and perceptual modalities.

Haas and Witte extend Liszt's performative remediation to writing and other means of communication, which they describe as an "embodied practice" since its "recurrent nature, its goal directedness, and its intimate linking with technologies and with knowledge are always enacted in part through bodily and sensory means" (416). Because embodiment "signifies a unification of mind and body," they argue that "the possibility of abstracting the body as an analytic category" (of the kind found in social theory, literary theory, and cultural studies) is denied by "studies of everyday human acts such as situated writing." The authors claim that studying the embodied, situated nature of writing "is one appropriate and useful way to pursue research on technical communication and other kinds of literate performances" (417). In addition, the case study around which their article is built helps to illustrate the mimetic approach to multimodality and multimedia I have been developing in this chapter. Intriguingly, although they do not explicitly frame their study as multimodal, in their conclusion they tell us that

[w]e believe that a multimodal approach . . . and explicit attention to writers' embodied practices will illuminate some thorny issues within writing studies - issues that have to do with the nature and development of specialized knowledge and expertise, with the interrelationship of complementary (or conflicting) representation systems, and with the nature of power in collaborative work. (448-9)

As I argue below, their use of the term multimodal here cannot easily be dissociated from the term multimedia in that the "multiple systems of representation" (444) that emerge through the interactions of participants "entails the distribution of cognitions" in which knowledge, expertise, and other cognitive acts are "shared - 'stretched over' . . . [and] across individuals, organizations, tools, technologies, and systems of representation" (425, 430).

In their case study, Hass and Witt study the joint production and revision by two organizations of a lengthy, 15-chapter standards document. This document would "standardize procedures and products related to the infrastructure maintenance and expansion of a small but rapidly growing city in northeast Ohio"; not only would it mediate the work of people in various city departments (water, planning, engineering, wastewater, etc.), it would "mediate the work and interactions of a wide range of persons and companies doing business with the city for many years to come" (418). The first organization is a large engineering firm made up mostly of civil, mechanical, and environmental engineers; these "consulting engineers" are responsible for developing the initial drafts of the document sections, gathering input from city personnel, and revising the standards document. The second organization is the city itself, specifically the employees who work in the engineering department under the guidance of the city engineer; these "city employees" collaborated with the consulting engineers on developing this document that would become a reference for anyone involved in city maintenance and expansion (419). The document contains a range of representational systems - charts, timelines, maps, sketches, tables, verbal texts, and technical drawings - each of which, the authors argue, "requires distinct embodied production processes using different material and computer-based technologies" (418). The focus of their study, however, attends to another dimension of embodied, thoroughly experiential knowledge that emerges during the joint meetings of these two teams and which expressed itself in ways that none of the participants were conscious of. The expression of this knowledge that was enacted during their meetings significantly (re)mediated the writing and design of the specs document.

In order to illustrate how "embodied practice" came to bear on the project, the authors focus on one small subsection of the standards document - a spec and drawing concerned with channel easement - and carefully analyze approximately six

minutes of a videotaped discussion between the consulting engineers and city employees that took place in a meeting room in February 1999. They note that the issue of channel easement is especially relevant for their purposes since it "brings the phenomenological, material world - with all its unpredictability - directly into the writing process" (424). Because so much of the city employees' work is on-site or "in the field," their knowledge of the channel easement is "embodied," that is experientially acquired. This is contrasted with the largely conceptual knowledge possessed by the consulting engineers who have less experience with the material conditions of that specific easement:

Whereas the consulting engineers often represent what they do as practical or applied science, their knowledge differs in significant ways from the knowledge of those who must work with and within the material structures that engineers design (e.g., a wastewater lift station) or specify (e.g., a channel easement). In short, although the consulting engineers do not deal every day with such material structures, the city employees do. Therein lies the difference in the knowledge the respective groups bring to the channel easement discussion. (435)

It is the *experiential* knowledge - "the practical and applied knowledge that derives from the work within such material structures" - that they call "embodied knowledge," and this kind of knowledge is what the city engineers "repeatedly access and activate in their reading and revising of the spec and drawing" of the channel easement during this particular meeting (435). Their study reveals how this embodied knowledge materially expresses itself and, in doing so, enacts an alternative representation system to the official ones (the text about and the drawing of the channel easement) produced by the consulting engineers in the room. This concern with how situated cognition and embodied knowledge manifests itself through the *representation* of a certain material reality aligns their study with key characteristics of *mimesis* even though that term appears nowhere in their article.

The six-minute segment of the meeting studied by Haas and Witte involves a disagreement between the consulting engineers and the city employees regarding the accuracy of a drawing and its textual description prepared by the consultants. The disagreement stemmed from the term *top of the bank*, which appears three times in

the initial draft and was "apparently deployed to overcome the inherent difficulty of materially fixing a channel easement as compared to fixing engineered structures on the basis of, for example, surveying stakes" (436). Although the term is proffered as nonambiguous, the city engineers quickly point to the need for some kind of "legal definition" of that term (436). Haas and Witt trace their concern to a knowledge base informed though actual experience, which the consultants - operating outside the material conditions of the city and its channels - do not have. For the city employees, "materially ungrounded verbal constructs such as top of the bank have the potential to problematize the relationship between property owners or residents and the city itself" - a problem that the city engineer, the engineering assistant, and the utilities manager must contend with frequently (438). As one participant insisted, there must be "some type of formula for establishing" the top of the bank or a "common point" for deciding its location (438). As the authors studied the taped proceedings and transcripts from this meeting, they observed how the "city employees repeatedly drew on their embodied knowledge of antecedent and future states in critiquing the engineering firm's work in the channel easement subsection of the document, and they repeatedly voiced their concern that top of the bank be fixed or grounded in the material world" (439).

What the authors refer to as a "distribution" of the city employee's embodied knowledge - which they contend "permit[ted] the consulting engineers to revise the spec and the drawing" (436) - was accomplished not only linguistically but gesturally. These "embodied representations" played a "critical role in distributing the city employees' knowledge across all participants in the work group" (441). Purely indexical gestures made by city employees - that is, gestures that focused on the consultants' drawing projected on the screen, the official representation of the channel easement - emerged simultaneously with their vocal critique. Nonindexical gestures made by the city team, such as the widening of hands to suggest a future state where the width of the channel is legally and materially bounded in ways not represented in the drawing, emerged as a "new representation" in opposition to the official drawing and contributed to its revision by the consultants. The authors also identify 24 instances of the gesture of pointing, 23 of which were directed toward the screen on which the consultants' initial drawing of the channel easement was

projected. However, the actual objects at which members of the two groups pointed differed. Working with a model of the deictic gestures offered by David McNeill, the authors determined that of the 23 pointing gestures aimed at the screen, the four made by the consulting engineers "all had as their object the literal drawing on the screen"; of the 19 pointing gestures made by the city employees, on the other hand, twelve "seemed to have as their object an entity from the material world represented (for the city employees) by the drawing - a nonliteral object," such as a bank or a stream, which the city workers were familiar with from their on-site experience (443). The authors conclude that the focus of the consulting engineers during most of the meeting was on the document itself, not the material world it sought to represent visually and textually that the city employees - in an act of expert imitatio - made present through the gestural language of both body and speech. In fact, they believe that for the city employees "the initial drawing no longer exist[ed] though it remain[ed] projected onto one of the screens in the room" (442). Through their actions of "representing" the channel easement without recourse to their own set of visual and textual representation, their minds were situated elsewhere.

There is much to be learned from Haas and Witte's study of this six minute segment of the meeting between these two groups. This clearly multimodal ensemble is a rhetorical situation, an agon, in which the primary argument is enacted across diverse communicative media that are themselves generated on the basis of mimesis. The city employees' gestures - including the many pointing gestures - not only helped to enact a alternative representation system to the official one projected by the consultants on the screen, they seem to have emerged through a sympathetic entrainment, a syncretic sociability, physically (but quite unconsciously) enacted by the city employees' embodied simulations. These simulations even roughly "represented" certain dimensions of an absent agent - the channel easement itself and its network of material and social relations - that nonetheless came to serve as a third party to the negotiations. These unofficial representations, Merleau-Ponty might point out, allowed for the channel itself to express its own properties; that is, the world of the channel speaks through the language and gestures of those who perceptually inhabit that world, and it is made material through the communicative modes and media that become operative through their representational actions. I

think this case study nicely illustrates the how the term *media* is impoverished when its signification is associated solely with print and electronic modes of information delivery, and how - at the level of cognition and practice - its intimate relationship with our perceptual and sensory modalities warrant the case for thinking multimedia and multimodality *together*, first, before seeking to establish the difference that arises as a palpable production process begins to take shape.

As I noted earlier, this dissertation has maintained a strongly theoretical focus. Haas and Witte's case study helpfully serves as a segue to a "real world" account of how the mimetic theory I have used to re-envision rhetoric and multimodality can be applied pedagogically. This will be the subject of the next and final chapter.

¹ It should be noted that Gallese and Lakoff distinguish multimodality from supramodality in the following way: Supramodality refers to information that arises from "association areas" that are distinct from the sensory motor system and which integrates information from the motor system with information from sensory modalities. Multimodality, however, refers to what "is neutrally enacted using neural substrates used for both action and perception" and that the "modalities of action and perception are integrated at the level of the sensory-motor system itself and not via higher association areas" (5).

² This conference paper does not have page numbers. A pdf is available at the CERME 8 website: http://cerme8.metu.edu.tr/wgpapers/wg16_papers.html

³ Clair Lauer of Arizona State University, for example, attributes the coining of the term to the NLG. See "Contending with Terms," 227.

⁴Here is the current (March, 2013) description of the course: "ME 313: Human Values and Innovation in Design." "Introduction to the philosophy, spirit, and tradition of the product design program. Hands-on design projects used as vehicles for design thinking, visualization, and methodology. The relationships among technical, human, aesthetic, and business concerns. Drawing, prototyping, and design skills. Focus is on tenets of design philosophy: point of view, user-centered design, design methodology, and iterative design."

https://explorecourses.stanford.edu/search?view=catalog&filter-coursestatus-Active=on&page=0&q=ME313
⁵ Rolf A. Faste's article about the class was published in the *American Society of Mechanical Engineers in Innovations in Mechanical Engineering Curricula for the 1990s* (New York, November 1994), which is no longer in print. All further references to this text will therefore not be cited. A pdf (with no page numbers) of the article is available at the website for the Rolf A. Faste Foundation for Design Creativity here: http://fastefoundation.org/publications/
⁶ It is interesting that this clearly multimodal pedagogy stemmed from a dual-aspect theory of the brain, one that divided it into left and right sides. As I noted in Chapter 2, Aristotle was inclined to conceive mimesis as having two aspects, requiring an observer to enter a more complex awareness of the mimetic act by keeping both aspects conjointly in focus.

⁷ He quotes Ernest Schachtel on Proust: "In Prousts' account, visual sensations are far outnumbered as carriers of ... memories by those of the lower, more bodily senses, such as the feeling of his own body in a particular posture, the touch of a napkin, the smell and taste of a flabor, the hearing of a sound – noise or melody, not the sound of words. All these sensations are far from conceptual thought, language, or conventional memory schemata" (qtd 98)
⁸ Merleau-Ponty describes the body schema as a "system whose different introceptive and extroceptive aspects express each other reciprocally, including even the roughest of relations with the surrounding space and its principal directions" (CRO, 117). Hence, "[i]t is through my body that I understand people, just as it is through my body that I perceive things" (PP, 216).

While Parikka does not state that humans and animal "imitate" nature, it is worth noting that he cites Roger Caillois' "famous writing on mimicry and the praying mantis" as works that shaped his thinking of a "slightly alternative cultural history and media theory" (New APPS Interview: http://www.newappsblog.com/2011/03/new-apps-

<u>interview-jussi-parikka.html</u>. Accessed March 1, 2012.) He also discusses Caillois' work in his book, specifically in relation to digital gaming, on pages 105-110.

- ¹⁰ Parikka's book in a way brings us all the way back to Empedocles, who claimed that humans learned the technical arts by mimicking animals. Parrikka offers insects as a figure for thinking media as an extension of nature. He reverses the "insects as media" logic implicit in the popular swarm metaphor to "media as insects." Insects are an "invention" of nature that will outlast humans. They reflect those sides of our experience that are non-conscious: affect, instinct, and knowledge that stems from embodied relations with their milieu. See his interview with the New APPS blog for an overview of his book's themes: http://www.newappsblog.com/2011/03/new-apps-interview-jussi-parikka.html ¹¹ Although Isocrates identified himself with the ancient Sophistic tradition, like Plato he was appalled by the rigid formulae and deceitful trickery practiced by the multitudes of sophists of his time. His speech "Against the Sophists" captures his attempt to distance himself and his educational doctrine from their pandering activities. The Wikipedia webpage (accessed April 13, 2014) describes his speech here: http://en.wikipedia.org/wiki/Against the Sophists 12 Clearly, I'm using pairing phusis with Parrikka's broadened description of media. However, that pairing Hawhee borrows a term used by Democritus to describe the philosophy of mind that seems to have informed these ancient pedagogies. "Phusiopoiesis" derives from Democritus's statement that "Nature and instruction are similar; for instruction shapes the man, and in shaping produces his nature (phusiopoiei)" (qtd 93). Pedagogically, according to Hawhee, it "occurred in a tangle of dynamics and forces" (108) that included not only the immediate environment of the gymnasium as a "network of practices" (97) but the intimate, often erotic and painfully stringent relationship between instructors and students (100-108).
- ¹³ Apparently women did not enter these male-dominated spaces. We might conjecture that a handful of exceptional women might have participated in these bodily arts from time to time. However, no historical evidence exists to support that conjecture.
- Marratto notes that James J. Gibson refers to the phenomenon of synaesthesia as "intermodal" or intersensory (69)
- ¹⁵ Gallese and Lakoff note that there are other modalities involved in the "multimodality of actions" (such as the somato-sensory component, or what it *feels* like to grasp something), but they do not discuss them (4-5).
- ¹⁶ This theory has it correlates in composition theory. Kristie S. Fleckenstein, for example, invents the term *imageword* to semantically account for the dual logics operating in "ecological systems of meaning": image (an immersive *is* logic) is the incarnation of meaning in various modes and modalities and word (an emergent *as-if* logic) is the linguistic manifestation (*Embodied*, 33).
- ¹⁷ At the neurological level, this is called by Gallese and Lakoff "supramodality," in which each association mechanism is a distinct mental operation.
- There are many news stories and videos available online about Daniel Kish's incredibly accurate way of navigating complex landscapes. This ABC News video (accessed June 12, 2014) is one of them: http://abcnews.go.com/Health/video/blind-man-echolocation-13688305
- ¹⁹ "'Multimodal' is a term valued by instructors because of its emphasis on design and process, whereas 'multimedia' is valued in the public sphere because of its emphasis on the production of a deliverable text. Ultimately, instructors need to continue using both terms in their teaching and scholarship because although 'multimodal' is a term that is more theoretically accurate to describe the cognitive and socially situated choices students are making in their compositions, 'multimedia' works as a gateway term for instructors and scholars to interface with those outside of academic in familiar and important ways" (225).
- ²⁰ Halliwell associates this term with "sympathy," "fellow feeling," and "identification" (80)
- ²¹ The ellipsis here replaces a word that in some texts is rendered as "psychical" (for example, McKim, 11) and in others as "physical" (for instance, John-Steiner, 85). I cannot determine which is the actual term since both renderings are found in multiple texts where this phrase is quoted.
- ²² See Michio Kako's account of this experience ("The Theory Behind the Equation," posted October 11, 2005) at the Nova series webpage on the PBS website: http://www.pbs.org/wgbh/nova/physics/theory-behind-equation.html (Accessed April 1, 2014).
- ²³ The quotation comes from Kako's account (ibid). I cite John-Steiner since the general description of his visualization can be found on that page in her text; however, a readable, public-friendly interpretation of that visualization (using a police pursuit) is illustrated in Kako.

 ²⁴ Paul Prior cites this example in particular to illustrate his "sharp disagreement not only in terms of basic questions
- ²⁴ Paul Prior cites this example in particular to illustrate his "sharp disagreement not only in terms of basic questions of theory but also often in terms of readings of particular texts offered as illustrations" and cites examples of other texts from the same time period as Kress's first science text that do not conform to his interpretation. Kress's periodization of texts, he argues, "erases (or discount[s]) social and communicative hybridity," an approach that "could easily lead us to a multimodal replay of the orality-literacy debates of the 1980s" (26). This tendency by Kress

derives in part from a "remarkable theoretical claims are driven by an abstract theoretical commitment rather than by close and serious consideration of the actual semiotic landscape." Because Kress's "certain classifications" (a problem I have with Kress as well) limit the scope of interpretation of multimodal practices and their affordances, Prior advises us to look at the work of James Elkins, Elizabeth Rohan, and Anne Wysocki for "more complex" approaches to multimodal education. (26)

As I will show shortly, Kress does indeed stray from an anthropocentric account of agency. However, in many of his real-world examples he often invests full agency into the human textmaker. In his ESL Classroom article, his description of the work produced by children does not attend to the role played by material and other actants in the networked situation of the classroom (339-40). A multimodality theorist like Jodi Shipka, who I will discuss in the pages ahead, uses Actor Network Theory as a framework for classroom activities.

As opposed to, say, Bruno Latour's concept of "social" as a dynamic network of associations between human and nonhuman actants that cannot be reduced solely to human groups (ethnic, class, subculture, etc). Latour develops this perspective of "the social" across the body of his works, but it is perhaps most directly articulated in his 2005 Reassembling the Social: An Introduction to Actor-Network Theory.

²⁷ Because *mode* answers the question "How is the world best represented and how do I aptly represent the things I want to represent in this environment?" meanings are made material "with specific ontological effects according to the intentions of the rhetor and designer" (114). Clearly, I need to depart from this hylomorphic and culturally deterministic definition of *mode*. I will do so, however, by way of Kress himself. Fortunately, because Kress's classification system – which extends across several of his works – is so inordinately complex, it collapses under its own weight. Once the barrage of italicized terms designating categories, subcategories, and sub-subcategories recedes to the background – where it belongs – Kress's theories have much to offer the mimetic approach toward multimodality of the kind I develop here.

²⁸ A transcript of this interview was accessed on 29 July 2013 and is currently available at http://www.english.fsu.edu/rhetcomp/transcripts/kress_transcript.pdf

²⁹ This is not he term Kress uses. It is mine.

³⁰ This was an informal network of psychologists, educators, medical specialists, and neuroscientists associated with Lev Vygotski and Alexander Luria. The school spanned several cities in the former Soviet Union from the 1920s through the 1940s. In opposition to Cartesian dualism, they developed a philosophy of mind (loosely referred to as cultural-historical psychology) in which body, brain, and behavior were integrated.

³¹ The term "chronotope" is borrowed from Bakhtin and can be described as *time-space*: "For Bakhtin, the chronotope became emblematic of a fractured ontology – a complex fluid unfinalized and unfinalizable world—in which representational chronotopes (those on paper, in talk, and in the mind) co-evolved with embodied chronotopes, the actual concrete times[,] places, and events of life" (Prior and Shipka, 186)

³² The psychologist James J. Gibson developed his theory of affordances in the late 1977s as part of an "ecological" theory of (mostly visual) perception. An affordance is a property of an object that allows for an "action possibility." Such possibilities differ according to situations, both immediate and global. A window pane affords a human the opportunity to break through and escape from an enclosure while simultaneously denying such an opportunity to a fly. Hence the affordances of objects in a very real sense constitute our respective "worlds."

A transcript of this interview was accessed on 29 July 2013 and is currently available at http://www.english.fsu.edu/rhetcomp/transcripts/kress_transcript.pdf

³⁴ Haas and Witt here refer to Frank R. Wilson's *The Hand: How Its Use Shapes the Brain, Language, and Human Culture.* New York, Random House: 1998.

³⁵ They continue: "Unlike roadways, which are primarily or completely designed and constructed by people, channels are naturally occurring phenomena, such as streams and creeks of various kinds that can change through natural, but largely unpredictable, processes" (424).

This term evokes the theory of distributed cognition in which knowledge is seen as not confined to an individual but is distributed in her or his material and social environment. It is most dramatically developed by Edwin Hutchin's study of nautical navigation of an Iwo Jima amphibious assault ship in his 1995 book *Cognition in the Wild*. Applying what was then the dominant metaphor of cognitive science – cognition as computation – to a ship's complex navigation system, which includes but is not limited to the cognitive processes of humans, Hutchins shows how cognition is distributed among all entities, human and nonhuman, by virtue of their organization by cultural activity systems.

Chapter 5: Integrating Experiential Knowledge into College Curricula

It is now time to apply my phenomenological interpretation of mimesis to pedagogy. As I noted in the introduction, one key objective of this dissertation is to integrate experiential knowledge into the rhetorical theory that informs so many undergraduate programs in composition and technical communication. While I do not wish to collapse the distinction between these two different academic disciplines, it is important to recognize the role the rhetoric of persuasion plays in both fields and the significant pedagogical overlap between them. One reason for this overlap is purely logistical. Because Composition and Technical Communication programs generally are housed in English departments, it is not unusual for instructors of composition (and even literature) to teach courses associated with "Tech Com" (like, for example, undergraduate technical writing) and vice versa, allowing for significant pedagogical crossover between the two curricula. In Composition the market is currently flooded with textbooks that emphasize rhetoric as persuasive argumentation,² and this rhetorical orientation has worked its way into Tech Com. This is quite obvious from even a casual glance at the "Teaching Resources" currently available at the website of the Association of Teachers of Technical Writing (ATTW), which reveals rhetoric's central role in a variety of undergraduate technical communication courses offered at both the undergraduate and graduate level at numerous U.S. universities. In addition, many of the most commonly purchased technical writing textbooks explicitly designate persuasive rhetoric as a key or even primary context for technical communication.⁴

Rhetorical principles used in making persuasive arguments inform the instructional guidelines of Freshman Writing Programs (FYPs) across the United States. Many of these composition programs had adopted an institutional model of administration that conforms generally with guidelines established by the Council of Writing Programs Administrators (CWPA), a national organization for composition administrators, faculty, and graduate students. Although the CWPA recommends that students explore writing for different purposes and audiences across a variety of genres, such activities are generally ancillary to the privileged form of the academic research paper. This form is rhetorical in that it is widely conceived as an "argument," one that seeks to promote and defend a *claim* – formerly called a *thesis* – by appealing

to audience using reasonable evidence (*logos*), thereby establishing the writer's credibility (*ethos*). This form of "argument" may be conceived as both *classical* in its application of Aristotelian appeals in service of a purpose within an analyzable context and *neoclassical* in its approximation of the scientific method: the "claim" begins as a hypothesis; it is researched and then modified into a thesis-as-claim, which is then defended empirically by evidence that seeks to establish its validity. In the current paradigm as represented by the CWPA's national guidelines, rhetoric in undergraduate writing programs is generally articulated as persuasive argumentation and the thesis-driven research paper is its standard bearer for this type of communication. Because this form is directed primarily at academic audiences (or else it employs academic conventions such as proper citation and documentation styles), students are automatically oriented to adopt a deliberative or (perhaps less frequently) judicial position rather than take the kind of epideictic stance that was of such great import to ancient practitioners of *imitatio*. As a proper citation and documentation that was of such great import to ancient practitioners of *imitatio*.

The imperative to persuade and convince audiences that has become a central objective of so many composition programs is also at work in Tech Com. This results partly from the fact that most undergraduate Tech Com programs provide instruction to students who are majoring in non-"technical" fields, including the sciences and business or professional majors. It is for this reason that nearly all the Tech Com textbooks include chapters on professional correspondence (business letters, memos, emails), career documents (resumes, cover letters), business plans and proposals, grant writing, and reports. Even core topics like usability are broadly adapted to suit the purposes of non-technical majors. These genres are "technical" not because they deal with technology but because they deal with specialized discourses related to the private and public sectors. Hence, "technical" writing for many undergraduate programs means writing for professional purposes outside the academy. Because of the competitive nature of the professional and industrial sectors, students must know how to communicate persuasively - how to "sell themselves" to potential employers by convincing them not only of their qualifications, their professional ethos, but of their ability to participate in the "selling" of products, proposals, legislation, and so on. This orientation to industry makes persuasive rhetoric a particularly useful pedagogy. Where student writing in composition classes tends to be shaped by a privileging of the academic argument, in Tech Com their writing is often shaped by a pedagogy that privileges the reified formats associated with the professional sectors.

I believe that the current emphasis on persuasion and argumentation in Rhet-Comp and Tech Com serves to instrumentalize rhetoric by emphasizing outcomes that take the shape of forms - thesis-driven evidence-supported academic arguments, hierarchically structured technical reports, compelling grant proposals. These forms, like the eidos of Platonic metaphysics, contribute to the privileging of conceptual knowledge in the college classroom. While it is certainly necessary for students to learn how to use these forms so that they can successfully work within the structures of the professional environments they pay universities to help prepare them for, the curricular reification of forms in a sense metaphysicalizes them; they become ideal formats that are then applied across genres, hylomorphically imposed on the matter that is writing and creating a static cookie-cutter approach to communication that standardizes iconic representation and stifles innovative expression. Presentation software programs like PowerPoint, for example, can be employed in remarkably effective ways, but most people mimic the templated approach (text lists, bulletpoints, occasional pictures) that has become the norm and which even some textbooks even provide examples of. 8 As discussed in Chapter 3, even in its formalized rhetorical instantiation as imitatio, mimesis eschews rote mimicry. As Seneca proclaimed, a rhetor must resemble another as a child resembles a parent, not as a picture resembles its original (cited in Potolsky, 57-58).

I believe that students should be encouraged to think of forms and templates as helpful suggestions on how to structure a visual presentation. Because they are familiar, they serve as what Merleau-Ponty calls *style* that we tap into "in an imitative way" that helps guide us toward an original expression of meaning. The key, then, is to get students to think "outside the box," to tune into their experiential knowledge of all things related to, say, PowerPoint (presentations they have seen where it "worked," "made a difference," "hit home the point," as well as those where it was an obstacle to communication or just plain boring) as a way of moving beyond the conceptual structures (visual and textual hierarchies of information) built into the program's templates. It is not the templates we should imitate, it is the *style* of *presentations-using-PowerPoint* we know from experiences that we pick up on, again,

"in an imitative way," repurposing those templates so audiences will sense the familiar in our visual presentation but also be engaged by the innovative manner in which they are employed.

Later in this chapter I will reveal the theoretical parallels between the mimetic tradition and the currently popular pedagogy in multimodal pedagogy of repurposing through remediation and remix. But here I want to stress the importance of balancing material rhetorical approaches to learning with the conventionally persuasive ones that emphasize strategies for developing arguments. A material rhetorical model insists on the central role of the body in developing and refining our skills in learning, thinking, producing, and living. This is not an alien idea that we must think hard about in order to conceptualize. It is the kind of learning we engage in all the time but have taken for granted. In his 2011 book Being Alive, anthropologist Tim Ingold devotes a whole chapter to the significance that arises from the seemingly simple act of sawing through a plank of wood. He breaks down that significance into three "themes": the processional quality of tool use, the synergy of practitioner, tool, and material, and the coupling of perception and action (53). The sum of these themes is implicit in the action of sawing itself, which has the effect of bringing "together the resistances of materials, bodily gestures, and the flows of sensory experience, rhythmically coupl[ing] action and perception along the paths of movement" (16). 9 This movement reveals how cognition is essentially distributed in that the

entangled currents of thoughts that we might call "mind" are no more confined within the skull than are the flows of materials comprising corporeal life confined in what we call the body. Both spill out into the world. (16)

Consequently, the carpenter "who has a feel for what he is doing" is not separate from but *situated in* "a context that includes the trestle, the wood, and all the other paraphernalia of the workshop" (60, 58). "Mind," then, emerges as a kind of network with the body serving as a medium. This physical activity that the body engages is *experiential knowledge work* and as long as our living bodies move through the worlds we inhabit we are always producing, developing, and refining this knowledge.

As noted earlier, Merleau-Ponty calls our direct enmeshment in corporeal life *intercorporeity*. Through the perceptual interface of our body schema with our immediate situation "intentional threads" link our muscles and nerves with the tools

and other objects with which we interact (PP 121). The medium that is one's "vehicle of being in the world," the real *phenomenal* body is so "interinvolved" with a definite environment that "to identify oneself with certain projects and be continually committed to them" (94) is something we do automatically. Lakoff and Johnson tell us that conscious thought is just the "tip of an enormous iceberg" that floats on the ocean of what they term the cognitive unconscious: "It is a rule of thumb among cognitive scientists," they assert, "that unconscious thought is 95 percent of all thought - and that may be a serious underestimate" (13). It follows, then, that most of our knowledge is acquired unconsciously, and that conceptual knowledge - especially formalized conceptual knowledge of the kind we are supposed to learn in classrooms is the frosting the cake. As vital as this thin outer layer is, we cannot ignore the knowledge work we acquire through body-engaged (or what is more popularly known as *hands-on*) experience. Although much of it is unconscious, it is *still* knowledge work and any institution that is committed to enhancing knowledge in people - including university programs in writing and communication - needs to create conditions in order to maximize such work.

Even if it is true, as Lakoff and Johnson tell us, that these "other" complex forms of thought may not be accessible to conscious awareness and control (11), an understanding of cognition that extends beyond the conscious mechanisms of the brain and the purposeful actions of the mind needs to be made front and center whenever administrators and instructors set about establishing a meaningful curriculum. In doing so, we need to move beyond finite sets of product-based learning outcomes by attending not to what should be learned in our classrooms but how we learn, and how this learning situates us in institutional, cultural, environmental, and ethical contexts. This is why familiarity with the conceptual dimensions of mimesis that were known to the ancients can be of such import to current rhetorical theory. "If pedagogy is to accomplish a categorical integration of the individual and the world," Gebauer and Wulf tell us, "it must make sufficient room for the operation of mimetic abilities, which has the added benefit of avoiding desensualization and abstraction" (319). In other words, we need to descend from the high plane of conceptualism and root ourselves, first and foremost, in the material world that metaphysics has sought for so long to transcend but which our inherent mimetic abilities refuse to let go of. The

"sufficient room" Gebauer and Wulf call for, I believe, needs to take into account what Merleau-Ponty has called *bodily space*. The Greeks called this bodily space *hexis*, and it was indistinguishable from the habits and practices we perform with our bodies. When a man is doing something he is learning, Parmenides asserted, "the constitution of his limbs [*hexis*] is that very thing which thinks" (qtd. in Hawhee, 58). In a similar vein, M.A. Wright interprets a paraphrase of Empedocles by Aristotle in this way: "when men change their *hexis* they change their thinking" (qtd 58). ¹⁰ Bodily space is a fundamental site of cognition and an integral element of any learning environment. Students in our writing and communication classes – as in all classes in all disciplines – need to understand the vital role their experiential knowledge plays in everything they do. I believe that such an understanding will help them not only to become better thinkers but more attuned beings – attuned not only to the work they do but to the situations in which that work is done.

In Chapter 3 I matched up my phenomenological take on mimesis with material rhetoric as a means of reintegrating the body, and along with it experiential knowledge, back into rhetorical philosophy. In Chapter 4, I presented a mimetic theory of multimodality (and multimedia) that includes the body as a medium in the construction of knowledge. In this chapter I will consider how this all plays out pedagogically. I will begin by considering play - playing with, tinkering, fiddling with as an essential form of praxis that our programs in Rhet-Comp and Technical Communication needs to take seriously. I will make the case for a complete materialist overhaul of what we call information and, relatedly, data, arguing for a more data-driven as opposed to hypothesis-driven approach to research, that is, which is inventive and not simply a task students take on in order to write a "research paper." Drawing on the links I have made previously between multimodality and mimesis, I will then offer a way of expanding how we currently address writing in our classes in such a way that it is intimately connected to the related modalities of speaking, reading, listening, and writing called OVAL (an acronym for oracy, visuacy, auracy, and literacy). I will then consider how in multimodal composing the concepts of remix and remediation are, in addition to being contemporary instantiations of classical invention practices associated with mimesis and imitation, pushing composition and technical communication to adopt a more "real-world" approach to

learning and communication that begins not with forms and formats but with our bodily engagement with the material we later seek to formally structure for certain communications. I will conclude this dissertation by arguing that we need to rethink rhetoric beyond persuasion, and specifically the model of persuasive argumentation that informs – and, in my view, impoverishes – so many undergraduate composition programs. Drawing again on mimesis and multimodality as I conceive them phenomenologically, I argue that we balance the more traditional transmission-based, claim-anchored, symbol-oriented rhetoric of *persuasion* with a more reflexive, data-driven, affective rhetoric of *influence*.

"Tinkering" and "Fiddling": Enhancing the Bodily Space of Learning through Play

Aristotle believed that our life's long process of education begins with mimesis. He writes in his *Poetics* that "imitation [to mimesithai] and the joy derived from it are natural to human beings since childhood" (1448b2); 11 poetry, music, and other arts, he continues, gradually developed from humans' "natural instinct for imitation and for tune and rhythm" (1448b7). Ekaterina V. Haskins observes how the first stage of learning described in this passage - "our spontaneous identification with and mimicry of sights and sounds" that Aristotle links to joy [to chairein] - emerges not through contemplation but through play (27). For humans as well as for many animals, bodily miming has for long been a form of play - charades, for example. But as Johan Huizinga and many other scholars have argued, play is about much more than simply having fun or "clowning around." 12 In proffering a mimetic framework of cognitive and practical activity as a specific form of "praxis" through which "the world comes to be through our enactment" (37), the theological ethicist William Schweiker draws on Hans-Georg Gadamer's interpretation of mimesis (see Chapter 4) as spiel - "play" through which, in Schweiker's words, "the emergent power (physis) of reality or nature presents itself" (25). For Gadamer, all that constitutes the world, phusis, 13 is essentially mimetic, hence always in a state of "performative enactment that includes us, and hence is always already structured figuratively, at once ideal and real, intelligible and phenomenal" (26, emphasis in the original). ¹⁴ Where Aristotle tended to see mimetic play as a starting point the lifelong learning process whose ultimate

telos would be conscious learning and inferential thinking (Haskins, 27), ¹⁵ Schweiker, following Gadamer and other thinkers, takes a long-term view of mimesis "not as iconic copying but as the praxis of figuration through which we participate in a meaningful world" (24). ¹⁶ We are, through the playful art of practice, constantly engaged mimetically with our world.

Translated into pedagogy, mimesis as figurative praxis, as *play*, asserts that learning is primarily experiential. Similarly, Marilyn Cooper, in words that echo Merleau-Ponty's description of mimesis as a correspondence between perception and motility that generates an organized action, describes learning as essentially "a matter of gradual attunement of movement and perception that comes dominantly through practice, a lot of playing around with stuff" - stuff being pieces of wire or grass, string, words, cell phones, computer programs - "in any kind of production or invention" ("Being Linked," 28, 24). By equating the term practice with play, as Gadamer and Schweicker do, Cooper also touches on the mimetic dimension at play here. While in one strict sense of the word, practice is a term associated with the development of skills through mimetic repetition, as in "practice makes perfect," in other senses *practice* signifies situations in which the body becomes materially engaged in activities that generate knowledge. Traditional education has made much of the former formulation of mimesis. The emergence in recent years of experiential learning paradigms makes the time right to explore how knowledge work is conducted in terms of the latter.

Two separate studies by scholars in the fields of technical communication and engineering studies help to point us in this direction. The technical communication scholar Dorothy Winsor reveals how body-engaged practice is vital to the knowledge work of six engineering students whose internships at an engineering center for a large manufacturer of agricultural equipment she followed from 1999 to 2002. Winsor found that a primary mode of learning for these interns resulted from "their hands-on contact with the organization's objects, and their playing around with the tools available to them" (26). The formalized training sessions the interns received that were "very similar to school class work," while valuable in that "they conveyed a large amount of information in a compressed amount of time," were not their primary access point to what she describes as the "distributed cognition operating at Agricorp"

(12).¹⁷ Rather, the interns' knowledge developed through a "kind of learn as I go" manner, by "fiddling with" the software programs and other aspects of their company they were learning about. She likens the interns' use of the phase "fiddling with" to the engineering ethnographer Gary Lee Downey's similar study at an engineering firm where student interns described their learning of CAD systems as "playing with" the programs. Downey speculated that the word *play* suggested building familiarity with a program or machine in a way that differed from what we normally think of learning in school. "This kind of learning," Winsor tells us, having observed it as well in her own case study, "involved experiencing the machine rather than understanding it abstractly as the way to gain knowledge" (16). In other words, the most meaningful knowledge-work was experientially acquired by the intern's material engagement with things, not the abstract information conceptually transmitted through formal training and school work. The "meaning" of things - the tools, objects, people, company, professional field - was generated mimetically through body-engaged interaction with the material that constituted their work.

Huizinga believes that the most essential qualities of play emerge from our "faculty of repetition," which helps to structure play in such a way that "the elements of repetition and alternation (as in the refrain) are like the warp and woof of a fabric" (10). As noted previously, it was this faculty that the ancient Greek teachers of rhetoric and wrestling sought to cultivate with their mimetic pedagogy. 18 It is perhaps this faculty that allows for the "almost imitative way" Merleau-Ponty says we naturally adopt when acquiring new knowledge and habits through a "rearrangement and renewal" of our body schemas (PhP 382, 166). Even the simple act of reading a text is fundamentally embodied, he tells us, in that "patterns are formed as I look, and these are endowed with a typical or familiar physiognomy" (167) - a kind of intercorporeal attunement, I might add, not unlike that which allows a newborn to imitate her mother's smile. In the repetition of this act of looking at a text while reading, our body schemas tap into a "style" to which it has been attuned previously. This style threads its way across different perceptual modalities. "When I sit at my typewriter," he continues, "a motor space opens up beneath my hands, in which I am about to 'play' what I have read" (167). The "modulation" from the mode of visible space ("the reading of the word") to that of manual space ("the performance of the movement")

enabled by the body schema is a naturally occurring operation, according to Gallese and Lakoff, of our *multimodal* sensory-motor system.

The repetitive structure of play seems, then, to facilitate knowledge work. That Merleau-Ponty uses the verb "play" in describing the typist's modulation from reading to writing suggests this. Play is quite literally what the subject of his next example - the experienced organ player - does when he settles into the space of an instrument whose dimensions have been incorporated into his bodily space through habituation (PhP 167-8). It is that "performance of movement" we all engage in when we "think" through the knowledge we have acquired experientially. Merleau-Ponty gives to this practical, experiential knowledge a name: *praktognosia* (162). It is bodily knowledge that allows for imitation, the "knowledge in the hands" that allows the typist to "know" where the keys of a keyboard are as he knows where his own limbs are, "a knowledge bred of familiarity" (162). Without having to make use of any symbolic or objective functions, this type of practical, experiential, ultimately mimetic knowledge should be "recognized as original and perhaps as primary" (162).

For centuries, body-engaged experiential knowledge has been marginalized by the privileging of conceptual knowledge in Western education. But now that paradigm is shifting. I contend that multimodality is one site where this educational shift is occurring. Consider, for instance, the Situated Multimedia Arts Learning Lab (SMALLab) that was founded in 2010 at Arizona State University's School of Arts, Media, and Engineering (and which has since branched off as its own company). In this mixedreality "student-centered learning environment," students collaborate and interact with sonic and visual media through vocalization and full-body 3D movements in an open physical space. SMALLab aims to "cultivate the students' sense of ownership and play in the learning environment" (Birchfield, et al, 2). Created by an interdisciplinary team of researchers in education and human-computer interaction, SMALLab is an attempt to advance theories of embodied cognition¹⁹ in schools and other learning institutions such as museums. 20 Because cognition is "grounded in the sensorimotor" system," SMALLab's high-tech mixed-reality learning environments encourage students "to physically explore concepts and systems by moving within and acting upon an environment" (2). Multimodality is the term the authors employ to describe the "bodily kinesthetic modes of representation and expression" that are put into play in

the multimedia environments afforded by SMALLab (3). I would like to point out the difficulty in distinguishing between *modes* and *media* in their definition of multimodality:

By multimodality we mean interactions and knowledge representations that encompass students' full sensory and expressive capabilities including visual, sonic, haptic, and kinesthetic/proprioceptive. Multimodality includes both student activities in *SMALLab* and the knowledge representations it enables. (3) In the context of SMALLab environments, cognition is generated through multiple modes of perception and distributed across media that include the bodies of students and their sensorimotor systems.

The knowledge work students produce is called by the authors - appropriately, in my view - composition. In this scenario, composition is not limited to writing academic essays; instead, it refers to how students "compose new interaction scenarios in service of learning" though human-computer interaction tools²¹ and experiences" (4). Embedding physical interaction into objects for composition - which has a rich history in Human-Computer Interaction research and application specifically helps to advance what the authors call embodied multimodal composition by encouraging "composition, learning, and play" (5). Defining play as "the capacity to experiment with one's surroundings as a form of problem-solving," 22 the multimodal/multimedia learning space of SMALLab products affords students the opportunity to learn through a kind of unstructured "tinkerability." One such example is a "layer cake" used to teach geologic time. This game divides a classroom of approximately 25 students into four or five teams that together compose a layer-cake structure. The game can be structured in at least two ways: as completely open ended, as an "exploratory compositional process," or in a more goal-directed manner in which students collaborative reconstruct a layer-cake structure in reference to a "script" of geologic layers. In response to sonic and imagistic representations of certain geologic conditions, students use interactive devices to grab virtual rocks, fossils, etc., and place them in sedimentary layers projected on the floor of the SMALLab environment. ²³ Play is structured by the interaction network but is openended as well, since the play activity can take different forms according to the metarules set by the instructor (12).

SMALLab recognizes the importance of integrating experiential knowledge into educational frameworks. Even though it has long been hypothesized that "bodily kinesthetic modes of representation and expression are an important dimension of learning," the authors correctly note how these modes have been "severely underutilized in traditional education" (3). What makes SMALLab worthy of our attention is how it seeks to balance conceptual knowledge with experiential knowledge work. This is evident in, for one example, an interactive tool it developed to teach students about centripetal force. Operating the device allows "students to experience centripetal force kinesthetically" while providing the opportunity "to instruct and to reify the *concept* that objects released from centripetal force travel in a tangent at the point of release" (italics mine). 24 In the following sections I will offer a model that attempts to integrate experiential learning and knowledge into the teaching of composition and technical communication, balancing it with standard conceptual approaches that privilege persuasive argumentation and formats. Doing so requires broadening how we use and think about concepts such as information, data, research, and ultimately - and most importantly - writing, reading, speaking, and listening.

Body-Engaged Data-Driven Research: The Materiality of Information

In their article about SMALLab, the authors at one point use the word "information" in a way that I would like to flesh out and build on in this section. Because cognition is embodied and hence "grounded in the sensorimotor system," they write, perception and action are not "separate and sequential stages in human interaction with the physical world [but] occur simultaneously and are closely entwined" (2). Therefore we need to interrogate the conventional understanding of *information* of Western education:

Traditional didactic approaches to teaching strongly favor the transmission of conceptual structures [information coded as symbols, words, equations], and there is evidence that many students struggle with the process of translating these into spatial representations. By contrast, information gleaned from the SMALLab environment is both propositional and imagistic as described above.

(3)

The "above" here refers to their previous paragraph's description of multimodality, which includes *both* student activities *and* the knowledge representations they enable - doing and thinking combined into an integrated function. The significance that emerges when students in SMALLab materially "interact with computation using innovative multimodal interfaces such as 3D physical movements, visual programming interfaces, and audio capture technologies" is what these authors call *information* (3).

In conceptual knowledge frameworks, information is comprised of facts and details about a subject that is transmitted from a sender to a receiver. The Wikipedia page on information, for example, currently describes information as "the content of a message . . . [that] can be encoded into various forms for transmission and interpretation. For example, information may be encoded into signs, and transmitted via signals." The Latin informationem (nominative informatio) means "outline, concept, idea" and in Old French (informacion, enformacion) was associated with the act of advising or instructing. 25 Geoffrey Nunberg describes this conceptual account of information as "a kind of abstract stuff present in the world, disconnected from the situations that it is about" (111). It is against this conventional understanding of information as abstract and "disembodied" that Phillip Thurtle and Robert Mitchell pit their 2004 book Data Made Flesh. This collection of fourteen essays are meant to serve as a theoretical foundation for what the authors call "materialist information studies." Information, the editors argue, is fundamentally embodied, and each essay "focuses on those moments when information and flesh coconsitute one another" (2). Drawing from an account that first emerged in the 1950s at the Macy Conferences that foregrounds the "inherently contextual nature of information," Thurtle and Mitchell promote information "not as the coded 'content' of messages, but rather, as something that enables, and emerges through, communicative acts" (9). 26 Because communication occurs across an array of bodies - human, technical, cultural, environmental - information cannot be extracted from the embodied contexts in which it is enacted.

The composition theorist Kristie S. Fleckenstein offers a similar account of information. The model that conceives information abstractly conforms with the Cartesian model that separates mind from body. But a model that posits "mind" as somatic - "a permeable materiality in which mind and body resolve into a single entity

which is (re)formed by the constantly shifting boundaries of discursive and corporeal materialities" (286) - grounds information in the cognate body that is itself grounded in a material situation. Fleckenstein eschews the transmission model of sender/receiver of coded messages by comparing information to the mixing that goes on in a cell in which DNA, RNA, ribosome, proteins, and other material processes serve variously as sign, object, and interpretant: "Information does not exist in the gene or in the environment, but is constructed in the developmental context" (288). Writing somatically is her alternative to "the kind of disembodied writing privileged by the academy" whose insistence on maintaining "rigid boundaries" between genres, theory and practice, and other dichotomies "permeat[e] research methodology" (299, 303).

In this section, I contend that the form of the standard research paper that we are all taught in writing classes from middle school onward, and which serves as the basic structural model of this dissertation, contributes to a transmission view of communication by conceptualizing information as abstract symbolism. I contend as well that the privileging of this form and the manner in which it is taught is due to its approximation of the so-called scientific method. This hypothesis-driven method for making empirically-based arguments has for long been the ideal model for all academic writing, and this is the manner in which it is taught to undergraduates. After students become generally acquainted with a topic, they are asked to develop a hypothesis - more commonly called a "claim" in Rhet-Comp and Technical Communication - which they then seek to prove by accumulating data as evidence in support of that claim. With the hypothesis quiding the inquiry, data are then collected and composed into sets that either prove or disprove the hypothesized theory that allows for the establishment of the thesis, a kind of "Truth" whose successful transmission to audiences - frequently the grading teacher with a background in rhetoric - substantiates the argument and establishes the *ethos* of the arguer. This argument-based, hypothesis-driven format greatly informs not only the kind of academic writing emphasized in many freshman composition courses but also in undergraduate technical communication courses.²⁷

While it is unlikely that the standard argumentative research paper is going to go away any time soon, we can still broaden the genre in such a way that student writers can engage in more experiential knowledge work. I believe one way to do this

is to adopt a modified version of the kind of data-driven methodology many researchers in the sciences have turned to in recent years. According to K. Eric Drexler, a pioneering figure in molecular nanotechnology, scientists in a number of fields are now rethinking the standard scientific method. He attributes the first "break" with the prevailing view that "research must always be conducted as a hypothesis driven enterprise" to lessons learned by scientists working on the Human Genome Project in the 1980s. The methodology employed by these scientists was primarily *data-driven approach*. Data-driven methodology becomes "practical when experimental methods can amass enormous amounts of data, enough data to test more hypotheses than any mortal scientist could conceivably imagine." Poriven by powerful new data technologies – also known as Big Data – and new computational methods, scientists are increasingly advocating that "we collect data first, then see what it tells us." This is the opposite of the hypothesis-driven approach, according to which researchers "try to guess the truth, and only afterward collect experimental data to test whether the guess predicts the results." He explains:

The basic idea is that if we can collect enough data to form a large, rich picture — as in modern genomics, but not in old-style gene-by-gene investigation — then we are likely to learn something by looking at it. . . . But what does it mean to 'look at it'? For these methods to work, we must know enough about patterns (repetition, correlation, difference, functional correspondence...) that we can recognize some of them and separate the real patterns from the statistical illusions.

Drexler recognizes that the recognition of patterns can be seen as a hypothesis, but it is a "humble" one that carries with it "no pretense of vast insight."

If we divorce Drexler's description from the software technologies with which data-driven research is currently associated, we see that this kind of research is not new. In fact, I would argue that is precisely this method that – albeit belatedly – earned the renowned cytologist Barbara McClintock the Nobel Prize in Physiology and Medicine in 1983 for work she had done decades earlier on maize that led to her discovery of genetic transposition. It has been well-documented that McClintock's belated recognition stemmed in part from attitudes toward women that permeated the male-dominated scientific world of the 1940s and 1950s. But gender was not the

only thing McClintock had to contend with. In a 1973 letter to the British geneticist J.R.S. Fincham, McClintock claimed to have stopped publishing detailed reports of her findings when she realized the extensive "lack of confidence in the conclusions I was drawing from the studies" on the controlling elements in maize and their unique operations. In another letter that same year to maize geneticist Oliver Nelson she described how difficult it was "to bring to consciousness of another person the nature of his tacit assumptions" that had calcified into such a "fixity" about these elements that all she could do was "await the right time for a conceptual change." 30

The conceptual change she refers to here seems to refer to a scientific paradigm. It suggests that McClintock's largely data-driven approach - her search for emergent patterns - did not fit the scientific community's commitment to hypothesisdriven methodologies. Not only did her emerging methodology depart from the dominant paradigm, how she conceptualized data seems remarkably similar to recent revisions of information as described above. According to her biographer Helen Fox Keller, McClintock described the human mind as always "processing and integrating data far more complex than we can possibly be conscious of" (102). As the data McClintock accumulated during her six years of research on corn became so "complex" and confusing" she left much of it to be processed subconsciously as she immersed herself further and further into the material context of her corn plants. Although McClintock did indeed establish identifiable data sets that she presented formally along with her findings, these emerged from a much larger flow of information - what today might be called Big Data - that she could not possibly subject to analysis. But these large data flows were cognitively processed nonetheless, resulting in what she famously described as a "feel for the organism" - her code word for a "living form, an object-as-subject" (126, 199). 31 While she consciously focused on the fine stripes of recessive tissue of a segment of corn material, Keller tells us, "a prodigious amount of cognitive processing intervened between the spots of pigment she could actually see on the corn plant and the controlling elements she eventually came to write about" (126). As a result, the annual reports she wrote for the Carnegie Institute of Washington reveal "the unfolding of her theory as a hierarchy of hypotheses, each more abstract and further removed from the objects of perception than the one before, yet, in concert, providing an internal logic so compelling as to give anyone

who grasps that logic the sense of being able to 'see' the abstractions themselves" (126). In other words, McClintock's method of recognizing patterns as they emerged from vast amounts of data exemplifies Drexel's claim above that data-driven research produced "humble hypotheses" with no pretenses of vast insight. ³² In this sense, McClintock was indeed ahead of her time when it came to anticipating the current paradigm shift in scientific method.

I think McClintock's story might serve as model for how we address research in our composition and communication courses. Research should be, first and foremost, learning. In rhetoric, this is invention; the objective of persuasive argumentation, if it is to play a role, comes much later. Research that is conducted with the aim or proving or disproving a proposition may be a helpful heuristic in some circumstances, but we need to recognize how such an approach narrows the learning process. As I will discuss in the next section, students have been taught to read texts for conceptual information - ideas, arguments, facts - and to think of data in purely objective contexts. So narrow is their focus that they lose their attunement to the larger flow of information that gave McClintock not just conscious knowledge of the organism but a material *feel* for it - the data she encountered and processed were not abstractions but materially constituted. 33 We need to ground research first in the material world our students inhabit and in doing so demythologize the concept so many students have of "research." For many, this loaded term is associated with papers they had to write in high school classes on subjects they didn't care about. Writing "research papers" is part of the grind they must endure, another hoop to jump through in their educational experience. It is the result of a laborious attempt to find "sources" - facts, statistics, quotable things, "data," - that they can cite in their papers in support of their argumentative claim, which of course enhances their chances of getting an A in their English class. They hate writing them just as much as teachers hate reading them. We need to think strenuously about transforming our curriculums so that students can actually *learn* about the subjects they study rather than perfunctorily constructing claim-driven "arguments" about them.

I contend that part of our job as instructors of writing and communication is to inspire students to think differently about the meanings of concepts like information, data, and research. We need to remind them how for thousands of years before there

were libraries, before even there were cave paintings, human beings learned how to survive and set the building blocks of civilization by assessing and evaluating the "sources" at their disposable: which plants could be mixed with others to produce a certain medicine, which clay powders when mixed with so much water produced the best earthenware, which animals had certain vulnerabilities in certain situations, and so forth. The indigenous tribes who inhabit the Andaman and Nicobar islands collectively survived the massive tsunami from the Indian Ocean earthquake in 2004 that killed over 230,000 people in fourteen countries because their lives were steeped in generations of research – yes, *research* – which allowed them to read the material "data" all around them, including the behavior of animals and birds, and then literally "head for the hills" before the tsunami reached their coasts. This attentive attunement to the world all humans inhabit is the foundation of research and, hence, even of formal scholarship. Research is something we all do on a daily basis and mostly unconsciously: we enter a situation, collect information, analyze it, and act accordingly. It's a cognitive disposition in humans.

The developers of SMALLab recognize this. And while their innovative products offer fun and innovative ways of teaching students complex concepts by situating them in technically enhanced ambient environments, there are also the ambient learning environments that come to us all free-of-charge: the "real world." I would like to conclude this section by considering a multimodal, data-driven research project that I feel nicely demonstrates how experiential knowledge work is conducted by students in the material settings of this everyday world whose ambience emerges as they engage with the information they acquire for their final papers and presentations.

Karen E. Moynihan, an English teacher at Central Catholic High School in Lawrence, Massachusetts, had her students create a multimodal project that was initially inspired by her reading of Susan Orlean's book *The Orchid Thief*. To write her book, Orleans "immersed herself in orchid culture," hanging out with botanists, orchid lovers, historians, flower store owners and conducting standard research in multiple genres. Moynihan asked her students to do what Orleans did. Students would choose a collectible and do "real-life research" by immersing themselves "in a subculture and examin[ing] it from multiple vantage points," including the perspective gained through being - by *becoming* - the collector (69). The students came in with a variety of

objects—Depression glass, pipe sets, vinyl records, comic books, Barbies (70). After doing some traditional research on these items, they began to immerse themselves in the actual cultures - museums, yard sales, flea markets, specialty shops, talking with people and observing the activities that happened there (71). At the end, they produced a multimodal project that included the Big Three: writing (a creative nonfiction account of their experiences, including incorporation of research), visuals (images and graphic representations like pie charts and column graphs), and audiovisual representations (including videos) (73-5). The collectibles project was a great success. Moynihan describes students as "animated" when they presented or talked about their projects. "I'm glad I did these ridiculously uncomfortable things," one of them said. "I had never been pushed outside of my comfort zone," said another; "I actually [got] out there and engulf[ed] myself in the world of trains"; "it was so different from anything I had ever done in school" (75).

What Moynihan describes in her article is not just how a multimodal composition came to be; she describes bodies being affected by bodies, both human and non-human, in multiple ways, always effecting a transformation—a becoming of something new. One student attended a comic book convention. In doing so, this student became immersed in a collective, a complex ecology in which humans interacted with nonhumans and the meanings that became central to her observations were generated in various fields of interaction. She describes people "with lists," flipping through "boxes," haggling over "prices," faces that were "disappointed," "overzealous," "excited," all articulating around a central communicative mode: a comic (72).³⁴ The observer, enmeshed in this ecology of multiple modalities, reports not only of being "very interested" in what she encountered but being affected: "I couldn't believe I hadn't found this special club of collectors sooner." Another student reports on a Saturday afternoon she spent with her grandmother, a collector of Depression glass. Since "most of her collection was packed away," the afternoon was "spent unpacking the glass and setting it up for a photo session." The things which allow for their storage - boxes, wrapping paper - are not focused on by Moynihan, yet the role they play is none the less revealed in her narrative of this girl's experience: "With each piece they unwrapped, the granddaughter heard another piece of family history or the story of where and when her grandmother had acquired the piece" (72).

The granddaughter reported that "more importantly" than writing the research paper was the "bonding time" she got to spend with her grandmother. The girl's ensuing visual, written, and aural multimodal project emerged out of this complex multimodal ecology.

Moynihan describes how another female student added a DVD to a fifteen minute PowerPoint presentation she gave on her father's pipe collection. It showed images of the pipe "as well as an explanation of how to load a pipe with tobacco, tamp it down, light the pipe, and puff." This may seem an innocuous representation, but there is more: the actions required to prepare a pipe for smoking have been performed predominantly by men in a culture in which certain practices, and hence the objects associated with them, were segregated by gender. Unable to find a woman pipe smoker to interview, the girl asked her father to teach *her* how to smoke a pipe. "There she was on the DVD," Moynihan tells us, "smoking a pipe" (75).

Beyond this multimodal project's aural, oral, written, and visual representations, what we have is essentially a drive for data (see Chapter 4). Information is discovered but *enacted* as (female) fingers retrieve loose tobacco from a pouch, a pipe's cavity accommodates the tamping of that substance at a level commensurate with its circumference, flame ignites from a match or lighter and interacts with the tobacco so that smoke is produced, and hence the act of "smoking a pipe" emerges in this intercorporeal schema of multiply interacting modes. In the process, the human actor is transformed, becoming *more* than just a student-doing-multimodal-project to emerge as a haecceity, as *young-woman-smoking-a-pipe*. Multiple meanings emerge here, all dependent on the material modes (again, what Kress and Van Leeuwan call "media") of a truly multimodal ensemble - one that brings into contact or "conversation," among many other things, the body of a female teacher, the body of a female student, and the bodies of female humans in a culture where the set of artifacts known as "pipes" were historically segregated by gender (and oftentimes age).

It is not surprising to learn that Moynihan's initial promise to her students (made on the day she introduced this project to them) that "[o]nce you have done all the field work, the paper will write itself" (a cue taken from Jeffrey D. Wilhelm's mantra "You Gotta BE the book"), was largely realized. "[S]tudents found that once

they started to write," she tells us, "they couldn't get the worlds out fast enough" (74). That is because, like McClintock, in the process of immersing themselves in the world of that which they were researching, they developed not just conceptual knowledge but a *feel* for the objects they studied. It worked. For the writing component, Moynihan departed from the traditional research essay and instead asked them to write from a first-person perspective in the form of creative nonfiction, but with research "embedded" (74). As a result, students had a better feel for the writing itself since it, like their research, was not a separated out as a stage or component but was integral to the knowledge-making experience. "I had to write about both my research and my personal experience at the same time," one student wrote. "I had never been required to write about both in the same paper; it was always one or the other" (74). This integrative approach influenced what some students consider to be the hardest part of all: the writing. But as one student reported: "I learned that writing is very pliable... I feel like this paper, more than anything else I have ever written, has allowed me to grow as a writer" (74). The intrigue of discovery and, yes, even play that were components of their research experiences also facilitated their writing. "What surprised me about this paper was that I had fun," said another student. "[W]hen I started writing, trying to create a piece of creative nonfiction ended up being an interesting challenge. I was shocked!" (75).

Although Moynihan does not use the term "data-driven," her assignment is precisely that. The students took a grounded approach to research (as I did with this dissertation; see my section on my method in my introduction) in that they did not enter their project with any preconceptions or hypotheses. They simply immersed themselves in a series of situations that constituted the "world" of train sets, Barbies, pipes, and so on. The significance, the meanings, the theories emerged as they materially interacted with the data they encountered. Standard data in the form of quantifications and facts were not ignored (in fact, the students had several "library days" and produced pie charts, column graphs, and other visualizations for their final project); they were simply not *privileged* over the data and information derived from experience. By mimetically "becoming" like the subjects they studied - the pipesmoking woman, the comic book collector - a level of identification was reached that allowed for students to *feel* their topics in ways most students never experience when

composing standard research-based academic essays. Moynihan's multimodal project illustrates how immersive, body-engaged, experiential learning can support new ways of thinking about information, data, and research and literally transform the curriculum without jettisoning - in fact, *by building on* - traditional models of production and assessment. This is one high school English class students will look back on with appreciation.

The OVAL of Body Engaged Learning: Integrating Modalities

In the previous chapter, I criticize the New London Group's ambiguous treatment of the term multimodality, which on one hand they describe as central to all meaningmaking activity while, on the other, schematize it into two categories - intertextuality and hybridity - thereby limiting the scope of its multiple meaning-making roles. In this section I again seek to broaden that scope in order to argue that the mimetic interaction between listening, speaking, reading, and writing - an interaction that occurs always at the level of our sensory-motor system even if we are engaging in just one of these modes³⁵ - strongly encourages undergraduate writing instructors to think these four communicative modalities together, as a kind of multimodal ensemble, which the privileging of writing in the contemporary academy unfortunately resists. We should remember, though, that the current emphasis on writing is a relatively recent development. For more than 2,000 years, reading, writing, speaking, and listening altogether "were cornerstones of Western rhetorical studies" (Ratcliffe, 195). But in the 19th century a "new style" of education developed that saw the "study and analysis of written texts" begin to replace the "old" classical style that valued forensics, oratorical performance, debates, orations, and declamations (Selfe, "The Movement of Breath," 620-1). As a result of this pedagogical shift, by the end of the twentieth century "the ideological privileging of writing was so firmly established that it had become almost fully naturalized" (627).

Undergraduate Rhet-Comp and Tech Com curricula are very much entrenched in this now old "new style." Although composition theorists have for long recognized the overlap between these four modalities, the fact remains that the vast majority of undergraduate composition programs are writing-based. They are collectively called "First-Year Writing" (FYW) programs and their directors "Writing Program

Administrators" (WPAs). Similarly, many undergraduate Tech Com courses are listed and taught as "Technical Writing" even though the discipline calls itself Technical Communication. And while textbooks in Rhet-Comp and especially Tech Com devote considerable attention to public speaking and graphic design, it is writing that receives the most comprehensive and detailed explication. The pedagogical framework established by textbooks and programmatic assessment protocols structurally marginalizes the intricately related modalities of reading, speaking, and listening. Because multimodality insists that facility in communication requires literacy in all four modes of communication, it promises to restore a more integrated view of language that resonates with both the neurolinguistic theories I have drawn on³⁶ and the mimetic pedagogy of ancient Greek gymnasia as described by Hawhee and referred to previous chapters. In this section I argue that we need to bring all four of these communication modalities front and center in the "writing class." If it is true that our body schemas and sensory-motor systems are inherently mimetic and multimodal, then a body-engaged pedagogy that attends to the experience of communicating through listening, speaking, reading, and writing seems especially apt for this purpose.

To help me illustrate a mimetic-multimodal pedagogy that both embodies *and* integrates these four modalities. I will refer to this as OVAL, an acronym for the combination of *oracy*, *visuacy*, *auracy*, and *literacy*. ³⁷ I like the term OVAL not only since it is easy to remember but because its suggestion of circularity and connectivity suggests the mimetic interactivity between these four modalities that we know occurs neurologically when we engage with language. I begin by turning to the work of the late reader-response theorist Louise Rosenblatt, whose ideas on how readers "transact" with texts had considerable influence on compositionists in the 1980s. ³⁸ Although Rosenblatt eschewed the term "interaction" in favor of *transaction*, ³⁹ her theory supports what I see as an interactive mimetic coupling between text and reader that occurs during the event of reading:

In ecological terms, the text becomes the element of the environment to which the individual responds. Or more accurately, each forms an environment for the other during the reading event. Sharp demarcation between objective and subjective becomes irrelevant, since they are, rather, aspects of the same transaction - the reader looks to the text, and the text is activated by the reader. (18)

Rosenblatt distinguishes between *aesthetic* reading and *efferent* reading. Whereas efferent reading is concerned primarily with extracting usable information, aesthetic reading requires an acute sensitivity to how language operates. In aesthetic reading, the concept of transaction "emphasizes the [reader's] relationship with, and *continuous awareness of*, the text," including concentration on the words of the text, which is "perhaps even more keen than in an efferent reading" (69, emphasis in original). While I personally do not care for the terms aesthetic and efferent, I do believe that the kind of reading designated by *aesthetic* takes into account the *feel* of written language. In Rosenblatt's model, students who read aesthetically become especially attuned to language *as they read it* - and this includes spelling conventions, grammatical styles, and punctuation. Such close engagement with language can clearly support the acquisition and refinement of their writing skills as well.

In my view, reading aesthetically as described by Rosenblatt is reading mimetically - that is, reading with our bodies so that we experience the text and our specific interactions. Robert Terrill believes that an explicitly mimetic pedagogy encourages students to learn how to continuously "toggle switch" between "looking through" language and "looking at" language (304). 40 Rosenblatt argues that aesthetic reading asks students to "inquire more deeply into how the abstracting and conceptualizing activities involved in the use of language are related to the stream of feeling in which they are embedded" (43). This stream metaphor resonates with Keller's use of *flow* to describe the emergence of data from cytological world of corn plants in which McClintock was so palpably immersed. It also speaks to an account of information as bodily experienced in that "the reader's primary concern is with what happens during the actual reading event" in the flood of associations, feelings, attitudes, and other extra-textual information that is generated through what Rosenblatt appropriately calls an event (25; emphasis in the original). The manner in which readers attune themselves to this reading event is multimodal in that, as participants in this event, they manage to synthesize all these textual and non-textual elements into a meaningful structure by "listening to" while "looking at" both themselves and the language of the text (25, 18). Readers' listening and looking here

are more than just conceptual metaphors because through their transactions they actually "sense" what the "visual and auditory stimuli" of the text are enacting (21). The world that emerges from this *reading-cum-listening-cum-looking* event "becomes part of the experience which we bring to our future encounters in literature and life," creating what Merleau-Ponty calls a *style* that we will always mimetically attune ourselves to when encountering similar events. ⁴¹ What the brain-damaged Schneider was not capable of doing when asked to imitate a salute – to mimetically "slip into the phantom" of the virtual that is generated by action in the actual (see Chapter 2) – we all do when reading mimetically and aesthetically.

Rosenblatt's conflation of the visual act of reading with the auditory act of listening does what our sensory-motor body schemas do all the time as we experience the world. Because our educational systems classify reading as a distinct mode that is separate from listening, each of which is distinct from the modes of speaking and writing, it becomes possible to conceptually hierarchize them. Whereas what I call OVAL was once an integrated system for rhetorical invention, now, as Krista Ratcliffe points out, reading and writing are the dominant tropes, with speaking placing a respectable third and listening running at "a poor, poor fourth" (195). This slighting of listening is the result of several cultural trends: the gendering of speaking as masculine and of listening as feminine, the historical privileging of sight or "ocularcentism," the foregrounding of "speaking and writing as means of persuading audiences," and the appropriation of Western rhetorical theories to theorize writing (198-201). But even though listening has been displaced, claims Ratcliffe, it has not been erased (202) and rhetorical invention is one site she offers for its restoration in writing classes. 42 Cynthia E. Selfe reaches a similar conclusion about this currently neglected mode, showing how aurality - a term that blends listening with vocal production - "has *persisted* in English composition classrooms in the midst of a culture saturated by the written word" ("Movement," 618-19; emphasis hers). It exists in the metalanguage of writing through metaphors of "voice," genres such as "oral reports," even dissertation "defenses" (633-4). Selfe proffers an "expanded semiotic theory" that attunes students to the "sonic environments" (617) they inhabit primarily by attending to the affordances of digital media tools that many students have access to these days. Composition must move beyond writing to composing across a variety of

media: digital videos and audio podcasting, multimedia social networking sites, blogs and online correspondence - students must become aware of how to compose in "these new forms of expression" that are now standard features of social and professional communication (639).

I agree absolutely. But at the same time I feel it is important for students to see themselves as integrated in these new forms of expression, to conceive technologies as expressive not only of their persuasive purposes and goals but of broader intentional forces. That means focusing attention not only on the technologies that enable composing in digital media but on the cognitive situatedness of bodies in all acts of invention and communication. An OVAL-based pedagogy, then, would put the body front and center in its multimodal framework, perhaps by emphasizing the synaesthetic overlap between different modalities in language use that I describe in the previous chapter. We should recall Gallese and Lakoff's claim that language "uses many modalities linked together - sight, hearing, touch, motor actions, and so on" (2). Rosenblatt believes that speaking and listening, like reading and writing, are "interrelated aspects of an individual's transactions with the environment" (185). Therefore, to read aesthetically, one must in a sense *listen* "to the sound and rhythm" of the words in the inner ear, [pay] attention to the imprints of past encounters with these words . . . the chiming of sound, sense, idea, and association," all of which come together to constitute "the complex structure of experience" (26). The writer Margaret Drabble tells of how when she is writing she actually *hears* her own written prose: "I hear all my sentences out loud. . . . I hear it in my head to a very marked extent" (qtd in John-Steiner, Notebooks, 32). Later when she hears someone reading her book aloud, she finds it "odd" in how their voice differs in terms of accent and emphasis from her own imagined voice that she hears while writing (33). What this tells me is that when Drabble writes, she *listens* to her prose. Her prose, then, *speaks* to her in a voice that is at once her own but also, as revealed later, different from her own (33). This distinction becomes evident when hearing another voice articulating her own prose, indicating that Drabble's *hearing* of her own prose while writing is also a form of *reading* it - and more, even *revising* it.

I believe that we all engage to some extent synaesthetically with language, most certainly when we write. But this dimension is something that rarely if ever is

attending to in standard writing classes. Even rarer is the textbook that actually asks students to explore this vital dimension of communication that we experience constantly but neglect. That is because our textbooks attempt to teach students concepts - the formats and formulae, conventions and strategies - rather than attune them to the dormant literacies they already possess by virtue of being human beings who use language to communicate. The numerous anxieties and frustrations that so many students report, like "writer's block," often result from an overload of disembodied conceptual information that they try to impose hylomorphically on a situation that they should instead be asked to dwell in. Writing academic "papers," especially, has been taught to them in largely hylomorphic terms. Not having a *feel* for academic voice, academic style, academic structure, as David Bartholomae has famously pointed out, forces them to invent the university in trying to replicate the ideal "paper" for their freshman composition class. This is a huge burden to bear, and it is one reason why students experience anxiety about writing academic essays, developing writer's block, or end up writing "bullshit" papers which roughly follow the standard models they think their instructors want but lack any intellectual engagement and editorial attention.

The OVAL model offers instructors an alternative way to address writing and communication. It broadens the focus beyond abstract concepts like "paragraph structure" and "dangling modifiers," "claims" and "arguments," "audience" and "logos/pathos/ethos," and other conventions by putting attention on how we experience discourse. Because it grounds language in our multimodal sensory-modal systems, it encourages students to experience reading as seeing, writing as listening, speaking as writing, and sundry other combinations would be an innovative way to begin any class in technical communication and composition. Drawing students' attention to their listening skills would support and potentially improve both their speaking skills and their reading skills, which in turn might improve their writing skills.⁴³

Remix and Remediation as Contemporary Instantiations of Imitatio

OVAL might also be drawn on to round out theories of remix and remediation that have in recent years informed much pedagogical discussion in both composition and

technical communication. Is not Drabble's hearing of her own prose while writing a remediation of the print discourse she is in the process of producing in the same way that the person who speaks her prose aloud, and which she listens to, is a remediation of the produced prose? In this section, I would like to emphasize how the multimodal component to remix and remediation is fundamentally mimetic.

This is not hard to do. Kathleen Blake Yancey notes that remix - "the combining of ideas, narratives, sources - is a classical means of invention, even (or perhaps especially) for canonical writers" including Shakespeare, Coleridge, and Keats (5, "Redesigning," italics in original). Remix is a slightly more specialized articulation of the wider practice of remediation, through which "nearly every medium is re/mediated on another medium. . . . [so that] we create the new in the context of the old and based on the model of the old" (Yancey, "Postmodernism," 747). 44 As discussed at length in Chapter 3, the classical means of invention Yancey calls remediation has a name: *imitatio*, the Latin translation of mimesis. According to Matthew Potolsky, as the "skillful imitation of role models and the ability to make something new out of old traditions," imitatio "anticipates what literary theorists have called intertextuality, the notion that all cultural products are a tissue of narratives and images borrowed from a familiar storehouse" (50, 53-4). Just as the Renaissance scholar Erasmus's renowned *Adages* sought to provide available designs appropriated from classical sources so that the writers of his day might gain "sure footing in their own use of classical materials," so too do present-day sitcoms and popular music, hip hop, fashion, and numerous other forms of composing achieve their uniqueness in a way that can never be described as "absolute" because of the "creative use of existing ideas and conventions" (54). Writing as well about Renaissance instantiations of mimesis, Gebauer and Wulf criticize the totalizing restriction "to the mere reproduction of existing models" and argue that we need to "conceive this process of re-presentation as a process of creative transposition" (90). In writers like Erasmus, Montaigne, and Shakespeare, the new work "changes and supplements the model, bringing into existence something that did not previously exist" (91). In contemporary visual culture, this creative process of remediation can be observed - and possibly reaches its culmination⁴⁵ - in the electronic character of video images in which "[i]mages are mixed, come into relations of exchange with other

images, and are referred mimetically to still others" in a process that contributes to a "fundamental transformation of contemporary image worlds" (320).

We cannot ignore the importance of mimesis or its more formal instantiation as imitatio to any statement that includes the term transformation. The same goes for composing across multimedia. Kalantzis and Cope tell us that designing "is never simply a repetition of Available Designs" since every moment of meaning "involves the transformation of the available resources of meaning" (22). Composing in any medium, according to Kress, is a dynamic process of "transformative engagement in the world, transformation constantly of the self and that engagement, transformation of the resources for representation outwardly and inwardly" - a learning process Cooper links to the comics theorist Scott McCloud's observation of his young daughter's learning of an arts program by playing with tools not explicitly built into the program: "This ability to play with the new tools, to learn them from the inside, is our best hope of understanding them" ("Bringing Forth Worlds, 32). 46 Jody Shipka, who advocates multimodal frameworks for teaching composition, reflects on colleagues' comments about how her classes seemed more "fun" because of their emphasis on creativity. While her students' final products did not resemble familiar or traditional-looking texts, this framework still requires them to "conduct research, compose various kinds of written texts, and respond both purposefully and appropriately to different kinds of rhetorical situations" (Toward A Composition Made Whole, 107). In other words, traditional approaches to writing and communication are followed, in a sense "copied," but in a manner that transforms the final compositions into forms or designs we might deem original. Indeed, in Robert Terrill's appropriation of imitatio as a "mimetic pedagogy," students are encouraged to cultivate "habits of mind" that invite them to see how they are "enfolded in culture, and in turn understand that culture is constantly being remade through the discursive intermingling of past form and present circumstances" (312). In writing and composing, students are always already repurposing something whose familiarity enables them to transform it into an available design for others to repurpose.

What can be applied to classrooms can also be applied to the programs that help shape what goes on in them. Yancey describes how between 2005 and 2008, the graduate program in rhetoric and composition at Florida State University was

redeveloped in order to better prepare students for the twentieth-century. The framework was informed by the concept of remix. Although she makes it clear that this framework did not conform to the "Great Model" approach ("a method designed to re-create an exemplary program in a new location, a program perhaps lauded as ideal"), 47 she and her colleagues recognized that what made the development possible, at least in part, "was the set of practices and spaces already in place, practices and spaces permitting re-design and remix" ("Redesigning," 10). Recognizing how "across the country, many programs are incorporating digital technologies at least optionally," the redevelopment team - made up of both faculty and graduate students - researched existing models and then created their own version by "threading" digital technology, multimodality, and "electronic rhetoric" throughout the entire program (11, 7). 48 While the new, transformed model has "benefitted generally, in a remix culture, from programs that came before, both nationally and locally" (7), it has its own cutting-edge originality in that the cognitive and practical dimensions of the process itself, re-seeing and re-mixing of existing models, have been incorporated into the program: "if we value the opportunity to re-see and to remix, we need to build reseeing and remixing into the model" (11; emphasis in the original).

Yancey elsewhere provides an example of how remixing and reseeing can be applied pedagogically. Noting how portfolios of the kind required by most undergraduate composition programs are exercises in remediation in that they "refashion other media" that are embedded in similar contexts ("Postmodernism," 747), 49 she looks toward online digital portfolios as a remediation of traditional print ones. As opposed to print portfolio that "seems remediated on a book," has usually one reader, the teacher, and is public only "in the small sense: in the classroom" (748), the online digital portfolio links to "worlds outside the student's own purview to show multiple and complex relationships," and has a readership which "is multiple, as are the ways of processing the portfolio" (750). Unlike the one-time-deal afforded by most print portfolios, digital portfolios can span courses and be a continuous space where students compose, creating multiple iterations by "returning to the original, carrying forward some prose and reworking it, creating new images, raising new questions" (751-2). In this obviously mimetic process, the student actually "composes identity between, as it were, electronic drafts" - an important affordance of the

dynamic, interactive, ongoing project of maintaining a digital portfolio since "[i[dentity is itself a composition" (752, 757).

In addition, the digital portfolio lends itself well to what M. Ann Brady and Joanna Schreiber call "rhetorical performance portfolios" (343), a pedagogical concept that attempts to link directly work done in technical communication classrooms to the kinds of professional workplaces most students these days expect their university courses should be helping to prepare them for. Where Yancey focuses primarily on the representation of identity, Brady and Schreiber advocate portfolio development as a way for students to "embody - that is, to fully understand in the moment - their professional identities as technical communicators or the multiple roles they are capable of playing as they complete their education" (346). In addition to performing rhetorical memory work in which students produce "an inventory of past events intended as heuristics - as ways to invent content anew" (347), the authors advocate that students attend to their work "as affecting and being affected by others" (349). This involves participating in an on-going self-assessment that attends to "the role of emotion in work [as] a way to help students move from inventories to the invention of their professional identities" (349), very much embodying the performance that is otherwise represented by their portfolios. Their case study of one technical communicator, Brenda, who developed a professional portfolio in the form of a self-assessment in her place of employment, reveals how her attention to emotional dimensions helped her flesh out "the complexity of her work [that] was invisible to others in the organization" (354). While helping her develop an argument that rebutted criticism by one manager regarding her communication skills, her inventory of the many intricate details of her work, including the "affective nature" of much of her work, served as "an opportunity to invent a new organizational conception of what successful communication work could be" (355, 354).

As these examples illustrate, remix and remediation can help move composition and technical communication beyond the static forms and concepts that have for long informed writing pedagogy. Of particular import to this dissertation remix and remediation contribute to a mimetic model that can guide Rhet-Comp and Tech Com into the twenty-first century. Creating publicly-shared digital portfolios brings what is learned inside the classroom into the digital public sphere. Conceiving

of the portfolio as an embodied performance, a kind of ongoing play, helps students understand that identity itself is essentially fluid. As we have learned from *imitatio*, representations of identities are always being transformed, remediated, and remixed in order to engage new occasions and audiences. In this way does mimetic representation blend reciprocally with mimetic expression across multiple modalities and media, from the digital to the cognitive.

Beyond Argument: Toward a Rhetoric of Influence

I will conclude both this chapter and this dissertation with a consideration of how the mimetic-multimodal theory I have developed might be used to broaden the current rhetorical pedagogy that informs so many programs in Rhet-Comp and Tech Com. As stated earlier, that pedagogy very much emphasizes persuasive argumentation, a relatively linear transmission-based model in which rhetors are conceived as constructing arguments with the objective of persuading audiences to adopt a certain perspective or take some kind of action. In the classical model upon which this paradigm is based, rhetors draw from their conceptual toolbox a number of prefabricated devices - rhetorical appeals, enthymemes, anaphoras and epistrophes - to help them achieve the desired *telos* of the argument: a persuaded audience. Textbooks adjust this model to meet the demands of the academy, emphasizing formats and methodologies that promote a largely empirical research-based form of argumentation of the kind evident in the CWPA's and ATTW's modeling material. In this section I will argue for broadening this paradigm to include rhetoric conceived more generally, and much more experientially, as *influence*.

What I mean by a *rhetoric of influence* can be illustrated in example I borrow from the compositionist Byron Hawk. In his 2004 article "Toward a Post-*Techne*; or, Inventing Pedagogies for Professional Writing," he draws on Martin Heidegger's revision of *techne* to distinguish between "doing as action," which I associate with conceptual thinking and rhetorics of persuasion, with "doing as enaction," which I associate with experiential awareness and a rhetoric of influence. "Just being in a situation," he writes, "enacting what the body knows, doing what the body does, linking that body up to that context" of the situation is doing as enaction (387). He then provides a simple example to illustrate what he means by this:

[A]s a new professor I did not come into my department trying to immediately change things to the way I thought they should be. Rather, I did my best to integrate myself into the institutional and curricular structure. But in doing so, that situation is changed. Courses have happened that wouldn't have happened otherwise. Arguments have been made that wouldn't have been articulated. Advising practices have changed. Conversations have changed. The situation is becoming something other than (more than?) what it would have been in my absence. (387)

Hawk's example of what he calls post-*techne*⁵⁰ bears significant similarity to what Davis calls *originary rhetoricity*, the "suggestive influence" of an originary persuad*ability* which she likens to Lacouthe-Labarthe's "constitutive mimesis" and Borche-Jacobsen's "mimetico-affective contagion" (24-35, 33). By moving through our worlds and interacting with the people who inhabit them, things *happen*, arguments *are made* without recourse to conscious deliberation – a point demonstrated quite effectively, I feel, by Haas and Witte's case study with which I conclude the previous chapter.

I contend, like Davis and Rickert, that the conditions generated by our seemingly innocuous movement through the world - conditions that are central to Merleau-Ponty's phenomenology of perception - constitute a distinct form of rhetoric. I say *distinct* because it is not heavily Aristotelian rhetoric that has been handed down through the traditional canon - that is, a rhetoric of persuasive argumentation; rather, it is more like rhetoric conceived through a Heideggerian lens of *techne* (Hawk tells us that the "ic" in rhetoric "implies *techne*, or the combination of art and technique"), which "puts abstract, technical knowledge [transmitted conceptually] and lived, habitual knowledge [acquired experientially] on equal footing" (Hawk, "Toward a Post-Techne, 374). A similar balance is struck by mimesis, according to Kenneth Burke, who tells us in *Attitudes Toward History* that "in pronouncing the two 'm's,' with approval, the Greek philosopher did not merely *conceptualize*, but also *acted*. His word, you might say, would be more like a *dance* than like a *concept*" (243; emphasis in the original).

We have encountered this before in the parallel I made between the dualmeaning of *mimos* and Auden's question about how to separate the dancer from the dance. The same goes in for self and other in all our interactions, which Merleau-Ponty and Gallese both assert are intercorporeal *as well as* intersubjective. Intersubjectivity, according to Gallese, should be "viewed first and foremost as intercorporeity" since it is our *bodies* in interaction with the bodies of others, not their "selves," that leads to social identification ("The Two Sides of Mimesis," 13; emphasis in the original). As he has pointed out, from the moment we are born, our bodies, through our body schemas, are mimetically attuned to the intentions of others through embodied simulation, producing a "shared body state" (Gallese, "Intentional," 144). Rhetoric emerges from this shared space. For Burke, rhetorical communication is enabled not though some abstract spirit but though palpable substance. Our shared "consubstantiality" power the intentions (his word: "motives") that arise through our interactions. "In being identified with B," he writes in *A Rhetoric of Motives*, "A is 'substantially one with a person . . . [y]et at the same time he remains unique, an individual locus of motives. Thus he is both joined and separate, at once a distinct substance and consubstantial with another" (20-21).

In earlier chapters I referenced Gibb's example, drawn from Daniel Stern, of how difference is produced in moments of "cross-modal" imitation - what she calls "mimetic communication" between a mother's shimmy and her infant's cry. There is a rhetorical dimension to this interaction: where the mother, according to Gibbs, "is attuned" to the baby's actions, the baby "knows how to solicit the mother's attention" through actions which, in later months and years, are accompanied by language (197). This "affective attunement" facilitated by our "mimetic capacity for synchrony" with others (197) is not conscious persuasion so much as it is an embodied expression of influence. Similarly, and in language that echoes Hawk's distinction between *doing as action* and *doing as enaction*, the philosophy scholar Paul Dumouchel explains how

mimesis, unlike explicit imitation, of one person by another, is never something that one agent does to another, but something that people do to each other, something that always involves reciprocally more than one person. ... This reciprocal influence takes place at the pre-individual level. In this sense, mimesis takes placed at a level at which agents are not subjectively aware of the influence they exert on each other. (79).

It is interesting that Dumouchel attaches pedagogical significance to this preindividual mimesis by reminding us of how even explicit imitation that results from instruction, such as learning a craft or sport, "typically disappears into the experience of doing whatever it is that you are doing" (77-8). This language echoes Hawhee's description of ancient Greek mimetic pedagogy as habituation, when "knowledge of fundamentals becomes bodily rather than conscious" (142), a vital component in a rhetorical training that "exceeds the transmission of 'ideas,' and rhetoric the bounds of 'words'" (160).

A rhetoric that exceeds the bounds of words and transmission of ideas is what I am calling a rhetoric of influence. It springs from the domain of experiential knowledge and points to a bodily dimension of communication that, despite theoretical interest in recent years by rhetorical scholars, has not made a significant impact at the level of programmatic initiatives and curricula where persuasive argumentation continues to serve as the dominant model. At this level, it may be worth conceiving of the rhetoric of persuasion as an example of what Peter Brown calls *articulate power*, something that is "defined and agreed upon by everyone (and especially its holders!)"; but there is also *inarticulate power*, "forms of influence less easy to pin down" that are intangible or imponderable, sometimes even unacceptable or "difficult to understand" (qtd. in Covino, 2).⁵¹

In the realm of rhetoric, the late scholar Michael Calvin McGee calls the tradition that has commandeered rhetoric for centuries "idealist" and offers his "materialist perspective" as an alternative (19). Throughout much of its history, argues McGee, rhetoricians thought of writing, literature, and oratory as specialist "art" forms and appreciated the ability to persuade or inform audiences. Up through even the 1950s, persuasive oratory was a particular "art" form, and rhetoric - with its ancient literature consisting of advice - was conceived as a "body of principles" on how to become proficient in that art (20-1). This "artistic" idealism privileged rhetoric to such an extent that rhetoricians developed an "incredible sensitivity" to any description of rhetoric - likening it to a knack, for instance⁵² - that detracted from its artistic status as oratory of the "ethics of teaching students the techniques of persuasion" (21). Aristotle, he claims, did not speak from experience but, rather, "arrived at descriptions of internal motivations and mental processes by inference

from observing the function of Greek communication in societies," and his basic conceptual formula – consisting of a speaker, speech, audience, occasion, and purposeful change – resulted in a "product-model of rhetoric" (22). "Audience" for Aristotle, in McGee's view, was just a lump of clay, important "only in having properties resistant to the creative touch of the 'speaker'" (22). The result was a highly conceptualized account of rhetoric in which a "speech" and its canonical components (invention, disposition, style, memory, and delivery) are grounded in nothing more than a "mental process." In his materialist account of rhetoric, any "speech" is part of a larger phenomenon encompassing speaker, the speaking, the audience, occasion, and change all of which are grounded in "the moment of experience" (23).

I believe that we need to move in the direction McGee, Davis, Hawk, Rickert, Cooper, Brady, and an increasing number of other scholars are pointing to. We need to conceive rhetoric as being in a watershed moment, a paradigm shift, in which the traditional conceptual ("idealist," transmission-based, symbolic) account of its being the "art of persuasion" needs to be, at the very least, balanced with one that attends to its experiential ("materialist," reflexive, affective) dimensions. We need to recognize the limitations of the argumentative model. As the political theorist Hannah Arendt puts it, through speech and action we insert ourselves into a web of relations, "a medium where every reaction becomes a chain reaction and every process is the cause of new processes" (190). Within such fluid circumstances, the telos-driven objective for any action will always be tapered by an awareness of its inevitable "boundlessness" (190). Hence the doing of an action for Arendt is not a far cry from Hawk's account of doing as enaction in that action always "depends on the resonance which it finds in the medium of relations and the 'innumerable conflicting wills and intentions' into which it is inserted" (184).

Rhetoric could benefit from this notion of *resonance*, which Joseph Dunne describes as the degree to which one's "action strikes a chord in others who will cooperate with it and carry it along to completion." The power of action is not a property of the agent "as it is the whole constellation in which he acts" (93). It is time to acquaint students with a rhetoric that does not aim always for the human heart (*pathos*) and human mind (*logos*) with the end-purpose (*telos*) being to persuade. A

rhetoric reconceived as mimetic and multimodal - phenomenologically embodied and always-already engaged with material existence - contributes to a rhetoric of influence. I prefer the term influence because it allows us to retain rhetoric's traditional adherence to persuasion (as in "the speaker influenced him to change his vote") by subsuming that concept, hence freeing rhetorical action from its direct investment in appeals. Because it moves beyond a linear transmission view of communication, it opens rhetoric up to the very real role played by contingency and chance in communicative acts. It is entirely possible, for instance, for the unanticipated expression on the face of a single audience member to so affect a rhetor that the entire tenor of a speech may not be delivered as intended even though the linguistic utterances remain exactly as scripted. In this sense, the rhetor/audience distinction is blurred with the audience influencing ("persuading") the rhetor just as much as the rhetor seeks to influence the audience - a simple example of reversibility not unlike Merleau-Ponty's (subject) touching his own hand (object) and being touched back (neither/both). A rhetoric of influence can account for feedback loops in those complex ecologies we call rhetorical situations. It allows for rhetors to touch and be touched back by the "concrete others" who comprise a particular audience, allowing for the enactment of what Cooper calls "responsible rhetorical agency" ("Rhetorical," 441-2).

There are other reasons why I prefer *influence* to the term *persuasion*. First, it is less tied to the argumentative imperative assumed by some rhetoricians⁵³ that insists that all communication has some pushy persuasive purpose. While some scholars (Rickert and Davis, for instance) have attempted to broaden the term *persuasion*, it is nonetheless hampered by its etymology, which means to "strongly" [*per-*] "urge" [-*suadere*] to the point of "inducing [someone] to believe (something)." ⁵⁴ Armed with *logos*, *pathos*, and *ethos*, the rhetor marches into a sociopolitical *agon* with a hylomorphically constructed argument in hand, her ultimate goal or *telos*: to convince or persuade. *Influence*, on the other hand, retains a sense of movement – *in-* (into, in, on, upon), *-fluere* (to flow) – and allows us to move beyond the sense of *agon* as a site or argumentation to what Hawhee describes as an experiential encounter, a "gathering of forces – cultural, bodily, and discursive – thus complicating the easy portrayal of rhetoric as *telos-*driven persuasion" (16). As such, it promotes a pedagogy

that situates students in environments with which they gradually couple, learning by doing, by playing, by writing and reading and listening and speaking across multiple communicative media, unburdened by the imperative that their communications must ultimately serve to convince others to accept specific claims.

A rhetoric of influence, I feel, gives to the fields of Rhet-Comp and Tech Com the opportunity to take into account how our bodies influence and are influenced by the human and nonhuman bodies with which we interact as we move through the ultimately material worlds we inhabit. Its reflexivity opens us up to others in ways transmission-based persuasion does not by recognizing how communication emerges in the intercorporeal interface between bodies. This interface serves as a nexus for multiple sensory and perceptual modalities whose moments of integration generate significance, "meaning," thanks to the function that Merleau-Ponty described as mimesis - an ancient concept that I hope I have shown is as relevant today as it has been to so many teachers, rhetoricians, and philosophers throughout its long history. Putting our bodies at the center of any pedagogy, rhetorical or not, requires that we attend to the kind of knowledge generated in that nexus. I have termed this embodied, affective, materially engaged knowledge experiential and believe that it should play a much more integral role in how we teach writing and communication. Bringing to students' attention the existence of this knowledge - how it operates, how it is used, how it facilitates learning at all levels, including highly conceptual levels - is not so much a matter of instruction but of attunement. While to some this may sound like a radically new way to think about education, in many ways, as I have shown, it is quite ancient. As we move deeper into our so-called Information Age of technological sophistication, it is vital that we cultivate our innate sense of mimetic attunement with the world to which we are fundamentally anchored by our bodies' sensory-motor schemas and the knowledge generated through that attunement. It is, after all, the knowledge we acquire experientially that so often helps us to navigate our world's sundry conceptual complexities.

¹ Robert J. Connors provides a history of the discipline in his 1982 article "The Rise of Technical Writing Instruction in America" (reprinted in *Central Works in Technical Communication*, Eds Johndan Johnson-Eilola and Stuart A. Selber,

New York and Oxford: Oxford University Press, 2004. 3-19). This history documents the relationship between the emerging field of technical writing and the English departments in which so much of it took place. He concludes that as the 1980s open there will still be "arguments being made that the technical writing course should be taken out of the hands of English teachers, but these arguments are as old as technical writing instruction itself and will likely prove no more effectual now than they were in the 1920s," and he foresees with much accuracy how "technical writing will be an acceptable field of study for English graduate degrees in many schools by the end of the decade" (17).

For example, the popular textbook *Everything's An Argument* by Andrea Lunsford, John J. Ruszkiewicz, and Keith Walters is described as showing students "how to analyze all kinds of arguments — not just essays and editorials, but clothes, smartphone apps, ads, and Web site designs — and then how to use what they learn to write their own effective arguments" (Available:

http://www.bedfordstmartins.com/Catalog/product/everythingsanargumentwithreadings-sixthedition-lunsford. Accessed: June 27, 2014). The Allyn & Bacon Guide to Writing (6th ed. 2010), another popular textbook, is described as "widely praised for its groundbreaking integration of composition research and a rhetorical perspective to writing and reading" (Available: http://www.pearsonhighered.com/educator/product/Allyn-Bacon-Guide-to-Writing-The-Brief-Edition/9780205823154.page. Accessed: June 27, 2014). The 7th edition of Diana Hacker's classic A Writer's Reference (now co-edited by Nancy Sommers) includes a new sample argument paper that "shows students how to support an argumentative thesis, address counterarguments, integrate visuals, and document sources" (xviii; Boston: Bedford St. Martins, 2010).

³ Sample syllabi from instructors of technical writing and communication classes currently available at the ATTW website provide evidence of the dominance of rhetorical pedagogy in the field. The three syllabi offered for "Communication Theory" are explicitly rhetorical. The summaries of several syllabi for undergraduate "Technical Communication" also indicate rhetorical approaches that students took in those classes. (Available: http://attw.org/teaching/course-syllabi-and-materials. Accessed: June 25, 2014).

In the preface to his most recent edition (4th) of his widely-used textbook *Technical Communication Today*, Richard-Johnson Sheehan tells us that the book "is grounded in a solid core of rhetorical principles that have been around for at least two and a half millennia. In fact, these core principles hold up surprisingly well in this Information Age and are perhaps even more relevant as we return to a more visual and oral culture" (xxi; 4th ed. Pearson Education, 2012). In *Strategies for Technical Communication in the Workplace*, Laura J. Gurack and John M. Lannon describe technical communication to students as "persuasive and truthful" and lists *persuasion* as one of three "primary purposes of technical communication" (7-8; 2nd ed., Pearson Education, 2013). And Paul V. Anderson, in *Technical Communication:* A *Reader-Centered Approach*, describes the "two essential qualities" of effective technical writing as usefulness and persuasiveness (9-11) and returns to both qualities in many chapters (8th ed. Boston: Wadsworth Cengage Learning, 2014).

⁵ A good example of this can be found at the popular Purdue OWL website, which many university writing instructors send their students to for reference. "An argumentative paper," the website tells us, "makes a claim about a topic and justifies this claim with specific evidence. The claim could be an opinion, a policy proposal, an evaluation, a cause-and-effect statement, or an interpretation. The goal of the argumentative paper is to convince the audience that the claim is true based on the evidence provided." (Available: https://owl.english.purdue.edu/owl/resource/545/01/. Accessed: June 29, 2014).

⁶ I see the "current paradigm" as reflective of the WPA Outcomes Statement for First Year Composition. "Rhetorical Knowledge" is the first outcome described in this statement. It is defined as the student's ability to "focus on a purpose," "respond to the needs of different audiences," "use conventions of format and structure appropriate to the rhetorical situation," and other skills so that they meet the "expectations of writing in their fields. The statement emphasizes the importance of "the uses of writing as a critical thinking method"; "the interactions among critical thinking, critical reading, and writing; and that students should be able to "understand a writing assignment as a series of tasks, including finding, evaluating, analyzing, and synthesizing appropriate primary and secondary sources." (Available: http://wpacouncil.org/positions/outcomes.html. Accessed June 7, 2014). In addition, the WPA's current "Assessment Gallery" provides an idea of the extent to which persuasive argumentation has become the standard bearer for academic discourse in composition programs. The Assessment Gallery is a section on their website that provides model assessment protocols (called "assessment narratives") of student writing programs. One of these, Frederick Community College, identifies the purpose of students' composition as threefold: "informing, arguing, persuading." The narrative of Seattle University's Writing in the Disciplines (WID) assessment narrative draws on observations by composition theorists like Susan Peck MacDonald in its emphasis on "disciplinary argument" as the ideal to which they contrast "pseudo-academic writing." Since several departments stress the importance that its

students develop argumentative abilities, "faculty need to teach disciplinary methods of inquiry, research and argument in their sophomore- and junior-level courses through better assignments and instruction." According to faculty at Carleton College, writing skills that augur success include "writing thesis-driven arguments," an "essential aspect of college writing" that their assessment attends to. Stepping a bit outside the box is the University of Kentucky, whose narrative notes how its most recent learning outcomes "reflected the new emphasis on critical inquiry and experientially-based research and writing, a shift from its former and more narrow focus on argument and exposition." (Available: http://wpacouncil.org/UK. Accessed: June 7, 2014).

- ⁷ In Chapter 3, I describe how the "law of propriety" (*to prepon*) was applied to occasions in which the larger argument was promoted by the rhetor's evocation of an historical event. This evocation sought to "enact" the event as a felt experience. The occasion of the telling hence mimetically simulated the occasion being enacted, if only for a moment. I view these moments in which rhetors sought to palpably enact a historical event as epideictic in that they attended to the affective dimensions of those particular audiences on those particular occasions.
- For one example, see Chapter 11 of *The Essentials of Technical Communication* (Elizabeth Tebeaux and Sam Dragga, Oxford UP, 2010). In the section "Choosing Visuals to Enhance Your Purpose and Your Meaning" (258-64) a number of sample PowerPoint slides are given to illustrate the do's and don'ts of using this presentation software program. The examples, both good and bad, do not stray from the basic templates provided in the program, replicating bulleted lists, which conform to the "guidelines" given by the authors that presentations "must be simple, and they must be clear and easy to understand" (258). Richard Johnson-Sheehan's *Technical Communication Strategies Today*, Pearson, 2001) provides similar sample slides consisting of bulleted lists in which minor topics are bulleted under main topics (235-44). Mike Markel's *Technical Communication* (10th ed., Bedford/St. Martin's, 2012) provides a sample slideshow presentation that, while certainly well structured, is less beholden to built-in templates and widely employed conventions (611-20).
- ⁹ This citation, along with the indented one below, comes from Ingold's introduction to his book and not from the chapter in which the sawing action is described at length. I quote these lines because they provide a nice summary of the chapter's three themes.
- ¹⁰ The quote by Parmenides comes from Aristotle's *Metaphysics*, 1009b. The paraphrase of Empedocle's fragment by M.A. Wright is of a sentence from same passage in Aristotle, which Hawhee provides a direct citation of (57): "For Empedocles says those changing their bodily condition (*hexin*) deem to change their thought (*phronesin*)." Wright's paraphrase can be found on page 235 of his book *Empedocles: The Extant Fragments*, New Haven, Yale University Press, 1981.
- ¹¹ This and the following citation come from Haskins, 26-7.
- ¹² We are all *homo ludens* ("man the player") if you believe, as Huizinga does, "that genuine, pure play is one of the main bases of civilization" (5). If that is true, then mimesis is indeed as Rene Girard has argued, in his own way (see Chapter 3) central to the development of human civilization.
- ¹³ I retain the alternative English spelling *physis* in the previous sentence since it is embedded in a direct citation but use *phusis* in my own sentence to maintain consistency with my use of this term throughout this dissertation.
- ¹⁴ We should recall here that Gadamer also believed that rhetoric developed from a "native talent for practical mastery," "a natural power that everyone possess to some degree" ("On the Scope," 20-1) as I noted in Chapter 3.
- Please note that I am focusing here on one of the less well-known instances of non-aesthetic mimesis in Aristotle (I mention the others in Chapter 2) -- mimesis as applied to learning in general and not necessarily to the creation of art.
- ¹⁶ In addition to Gadamer, Schweiker look to Paul Ricoeur and Jacques Derrida as thinkers who "have reopened the discussion of mimesis and its problems" (22).
- ¹⁷ Agricorp is a pseudonym.
- ¹⁸ I should note that Huizinga does not associate this faculty with *mimesis* but instead with *methexis*, which he associated with identification and not mimetic "representation" (a footnote indicates that he is drawing on information from Jane Harrison's *Themis: A Study in the Social Origins of Greek Religion*, Cambridge, 1912, p. 125). The function of a cultic rite, for example, cannot be called mimetic because it "is far from being merely imitative; it causes the worshippers to participate in the sacred happening itself" (15). Clearly, Huizinga subscribes to an extremely narrow and conventional definition of mimesis here. As I have shown throughout this dissertation, mimesis has long been associated with identification Plato's great aversion to it, in fact, stemmed from this quality and I believe that Huizinga's definition of play conforms very much to many instantiations of mimesis that I have covered in this dissertation.
- ¹⁹ Embodied cognition argues "that perception, cognition, and action, rather than being separate and sequential stages in human interaction with the physical world, in fact occur simultaneously and are closely entwined" (Birchfield, et al, 2).

https://www.youtube.com/watch?v=16QEop2fF4Y

²⁰ SMALLab provides an overview of their history, team, and mission – replete with videos of their products in use by students – at their website: smallablearning.com.

²¹ The authors list novice level tools such as *Star Logo, Scratch*, and *Lego Mindstorms*, among others (5)

²² This definition is borrowed from J. Jenkins, et al. *Confronting the Challenges of Participatory Culture: Media Education for the 21*st *Century,* MacArthur Foundation, 2006.

²³ The product is described in great detail by the authors (10-12). A video demonstration may be found online as well and is currently (May, 2014) available at SMALLab's You Tube page:

This text comes from one of SMALLab's introductory videos on the YouTube page for Arizona State University's UTO Academic Technologies. See "Smallab Centripetal Force Lesson" (0:24/8:22) at https://www.youtube.com/watch?v=oFiXtcXRpVE.

²⁵ See the Online Etymology Dictionary entry on *information*: http://www.etymonline.com/index.php?term=information

²⁶ The Macy Conferences were a series of meetings held between 1941 and 1960 that brought together scholars from a wide variety of scientific fields and disciplines with the aim of promoting unity and communication between the sciences. The subject of defining information was especially important for the Macy Conferences on Cybernetics, which were held between 1943 and 1954, where much discussion focused on mathematical and nonmathematical definitions of "information." The authors credit N. Katherine Hayles fruitful exploration of these discussions in her book *How We Became Posthuman* (7, 9).

²⁷ For just one example, Mike Markel's widely used textbook *Technical Communication* includes an entire chapter that serves as a base for several genres of technical documents described later in the text. The chapter, "Communicating Persuasively," begins with this proclamation: "Technical communication, like any other kind of writing, calls for making persuasive claims and supporting them effectively" (183). The modified thesis, the *claim*, is "the idea you are communicating" and the "conclusion you want your readers to accept." It is supported by "right kinds of evidence," the "information you want your readers to consider," including commonsense argument, numerical data, examples, and expert testimony (189). (10th ed., Boston and New York: Bedford/St. Martin's, 2012).

²⁸ This quote comes from a passage Drexler provides on his blog from an article published in the magazine *Science* (11 April 2003: Vol. 300 no. 5617 pp. 286-290) by Frances S. Collins, et al.

²⁹ All references to Drexler's discussion come from an article posted on his blog Metamodern: The Trajectory of Technology called "The Data Explosion and the Scientific Method" (November 25, 2008). Accessed: May 5, 2014. Available: http://metamodern.com/2008/10/25/the-data-explosion-and-the-scientific-method/

³⁰ These passages from her letters can be found at the profile of Barbara McClintock on the National Library of Medicine's website. Accessed: May 5, 2014. Available: http://profiles.nlm.nih.gov/ps/retrieve/Narrative/LL/p-nid/52
³¹ Fleckenstein writes that McClintock's ability to "immerse herself in the material context of her corn plants" was made possible through a "deep reverence and capacity for union with that which is to be known." Her feeling for the organism "dissolves the boundaries between self and other, creating a being-in-a-material-place that comprises corn plants and scientist" (296).

³² McClintock's data-driven approach was so open, in fact, that some of the patterns that emerged from the multiple data sets she was working with, while not germane to the designated objectives of her experiments, were of great importance to researchers in other fields. For example, one data set involved the geographical distributions of particular chromosomal types. As with other data sets, "she began to discern patterns" that would make it be possible to trace the migratory patterns of the people who settled and traded in the Americans. Because corn is a crop and therefore dependent on human intervention, "the biological history of the maize plant would permit a reconstruction of the migratory history of humans" – a discovery that would be of great interest to anthopologists but not to cytologists (182).

Ruth Berman, a feminist critic of Western scientific traditions, describes McClintock's view of scientific work as "profoundly materialist." She argues against the proclamation by some of McClintock's admirers and detractors that the biologist was a kind of mystic because her methods and thinking did not conform to the "mechanistic mode." Mystics "pull away" from the material world in which McClintock immersed herself: "McClintock's knowledge flows directly from her daily contact and interaction with her maize plants. She knows – by sight, smell, touch, and a variety of conscious and nonconscious observations – all the details of all of her organism's daily lives. She immerses herself completely in her material, its changing environment, and the many stresses that affect it. This material communion includes careful observation, experiment, and analysis. This is *not* mysticism; this is complete materialism" (248-50; emphasis in the original).

http://www.australiacouncil.gov.au/ data/assets/pdf file/0003/36372/NRVE Final Report.pdf).

³⁴ It may be fruitful to think of these collectibles as things that "gather," as a bridge for Heidegger ("BDT," 150-2), and of the students' immersive experience as a way to "dwell" in a certain world so that later they may "build"—in this case, produce their multimodal project—from their locations in that world (157).

³⁵ Here I hope you will recall earlier references to theories in cognitive neuroscience that posit our body's sensorymotor system as inherently multimodal (Gallese and Lakoff, 2).

³⁶ Language is said to "exploit" that multimodality (Gallese and Lakoff, 2) while simultaneously allowing for a segregation from "the original multimodal perceptive world" even though, at the level of intercorporeal communication, we can never "annihilate the shared we-centric space" of that original world (Gallese, "Mirror," 529). ³⁷ This acronym is mine and I should perhaps explain the spelling of these terms. "Oracy" is a shortened version of what is more popular called "oral literacy." It was coined by the British education researcher Andrew Wilkinson in the 1960s and is discussed at length in the book *Oracy Matters: The Development of Talking and Listening in Education* (Eds. Maggie MacLure, Terry Phillips, Andrew Wilkinson, Buckingham, UK: Open University Press, 1988). Although in this text oracy includes listening, other scholars – for example, Cynthia E. Selfe – use *aurality* as a blended term for *both* skillful listening and oral production. Because orality is associated with the mouth and not the ears, I am reluctant to collapse it oral production into *aurality* or aural skills in *oracy* despite the close relationship between both modalities. The term *auracy* is mine and means aural literacy or literacy in listening. The term *visuacy*, for visual literacy, is relatively new with its first official instantiation apparently occurring in a report conducted on behalf of the Australian Government and released in 2008 by its Department of Education, Employment, and Workplace Relations. The report, composed by Diana Davis, a visiting senior professorial research fellow at Australian National University, is available online (accessed June 22, 2014) at this url:

³⁸ Although less common now, freshman composition courses in the decades leading up to the 1990s included reading and writing about literature. This was commonly the case with the second class of a two-semester sequence in freshman writing. Pedagogical theories about the teaching of literature and reading were seen as supportive of the English component of this general education curriculum. The work of Rosenblatt and other reader response theorists are featured in *The Encyclopedia of Rhetoric and Composition: Communication from Ancient Times to the Information Age* (Ed. Theresa Enos, Routledge Press, 1996).

³⁹ Following John Dewey and other pragmatist theorists of education, Rosenblatt felt that the term "interaction" unduly separates subject from object "because it implies separate, self-contained, and already defined entities acting on one another – in the manner, if one may use a homely example, of billard balls colliding" (17). I should point out, though, that her description of *transaction* very closely approximates how the term *interaction* is often used in phenomenology, cognitive psychology, and this dissertation: "'Transaction' designates, then, an ongoing process in which the elements or factors are, one might say, aspects of a total situation, each conditioned by and conditioning the other" (17).

⁴⁰ He borrows this concept from Richard Lanham.

⁴¹ You may recall from Chapter 1 how Merleau-Ponty illustrates style and expression through the example of the term "rogue." Before reading Stendhal, he has a general familiarity with what "rogue" is. As he reads about Rossi the revenue man, the "sedimented" knowledge of "rogue" that he began with breaks up, "the cross-references multiply," until there is an entirely new expression of rogue (PoW, 102).

⁴² She offers *rhetorical listening* as being, among other things, a "performance that occurs when listeners involve both their capacity and willingness . . . to locate identification in discursive spaces of both *commonalities* and *differences*" (204; emphasis in the original). This identification is a purely conscious act, the aim of a "strategic idealism" based on a desire for an intersubjective receptivity, not mastery" in engaging with others (205). While the ethical implications of this approach are admirable, ultimately rhetorical listening as described in her article is a highly conceptual endeavor unrelated to actual aurality.

⁴³ Rosenblatt describes aesthetic reading as less concerned "with the information being acquired than with the experienced meaning" (38) and with readers' "continuing awareness of the text" in terms of both signs *and* symbols (29). When students are encouraged to read not just for disembodied information but with an awareness of the material text in front of them, they will begin to notice how written language works. Marks of punctuation (semicolons, dashes, quotation marks) and grammatical structures (subordinate clauses, modification) do not always need to be learned conceptually by consulting writers' handbooks. By close, sensitive, mimetic/aesthetic readings of texts, students will begin to pay attention to things that often slip by, the so-called Lower-Order Concerns. Instructors can, using a handbook or a grammar website, explicitly teach students that, in MLA style, a full-stop is placed inside a closing quotation mark except when the citation is followed by a parenthetical citation, in which case the full stop come after the closing parenthesis. But students who are mimetically attuned to the material operations of language

can learn this on their own, experientially, by simply *looking at* and *listening to* the text while reading it. For example, "She... she said *what?*" can reveal how quotation marks, question marks, italics, and ellipses function in written discourse.

- ⁴⁴ Yancey's assertion references observations made by Marshall McLuhan and, later, by Jay Bolter and Richard Grusin in their book *Remediation* (Cambridge: MIT, 2000)
- ⁴⁵ In language that might remind one of the theories of Baudrillard, Gebauer and Wulf end their exhaustive study of mimesis with this comment about the "contemporary tendency for everything to be turned into an image," which speaks to the narrowing of the gap between empirical and mimetic worlds in visual culture that is itself one of twelve dimensions they identify with mimesis: "The ultimate result is that everything becomes art, becomes a play of images that no longer refer to anything, that no longer function as models, but are equivalent to nothing but themselves. The distance between the mimetic and the prior world, the intermediary space, ceases to exist once mimesis has become all-encompassing, and the mimetic and the other world collapse into each other. The total extension of mimesis is simultaneously its end" (320).
- ⁴⁶ Cooper cites Kress's article "Gains and Losses: New Forms of Texts, Knowledges, and Learning," *Computers and Composition* (22:1), p. 20, and McCloud's book *Reinventing Comics: How Imagination and Technology are Revolutionizing an Art Form* (New York: HarperCollins, 2000), p. 32.
- ⁴⁷ She borrows this term from Richard Young and Edwin Steinberg's "Planning Graduate Programs in Rhetoric in Departments of English," *Rhetoric Review* 18:2, 2000: 390-402.
- ⁴⁸ An alternative was to have a single class devoted to digital technology, but given recent cultural shifts that are transforming the fields of rhetoric and composition they felt that it should be included "as both a method and concept throughout the program" (7).
- ⁴⁹ This quoted phrase comes from a direct quotation provided by Yancey from Jay David Bolter and Richard Grusin's *Remediation*, Cambridge: MIT, 2000, p. 19.
- ⁵⁰ The theory of mimesis that I develop in this dissertation has close conceptual parallels with techne as described by Martin Heidegger and revamped as "post-techne" by Byron Hawk. According to Hawk, in Heidegger's view of *techne*, the subject is situated "as a body in a complex network of relations that influences the body and is influenced by the body" ("Toward a Post-Techne," 374). When one composes in these ambient environments "*techne* emerges only through enacting relationships," driven not from one's conscious mind but from the situation itself (384). He labels this emergent form of techne "post-techne" to distinguish it from accounts that limit techne to instrumentalist functions.
- ⁵¹ The original sources is Brown's book *Religion and Society in the Age of Augustine*, Eugene, Oregon: Wipf and Stock Publishers (Reprint Edition, 2007), p. 124.
- The denigration of "knack" by rhetoricians eager to preserve the elevated status of rhetoric as "art" needs to be interrogated. In ancient Chinese specifically Taoist philosophy, the spontaneous *wuwei* spirit embodied in a crafter's skill is translated as "knack." Joseph Needham tells us how in Taoist thought materials as variable as wood and clay and crude metals could only be worked by people "who learnt from decades of experience, to know the signs, the 'smell,' the physiognomy, of the materials suitable for [their] purpose." This knowledge was conceived as what we call knack: "The craftsman could not express his procedures in logical terms. In fact, he could not explain at all; he could only show. . . . Apprenticeship was subjective and personal, not a matter of intellectual understanding, not at all the appreciation of mathematical functions describing the behaviour of deeply analyzed physic-chemical entities." *The Shorter Science & Civilization in China: 4*, Cambridge UP, 1994, p. 23
- The title of the popular textbook *Everything's an Argument* quite succinctly captures this reductive view of rhetoric.

 4 Online Etymology Dictionary, "persuasion," http://www.etymonline.com/index.php?term=persuasion (Accessed

Works Cited

- Abram, David. The Spell of the Sensuous: Perception and Language in a More-Than-Human World. Vintage Books, 1997. Print.
- Adams, Rebecca, and Rene Girard. "Violence, Difference, Sacrifice: A Conversation with Rene Girard." *Religion & Literature* 25.2 (1993): 9-33. Print.
- Arendt, Hannah. The Human Condition. 1st ed. University Of Chicago Press, 1998. Print.
- Arola, Kristin L, and Anne Frances Wysocki. *Composing (media) = Composing (embodiment) Bodies, Technologies, Writing, the Teaching of Writing.* Logan, Utah: Utah State University Press, 2012. Print.
- Atwill, Janet M. Rhetoric Reclaimed: Aristotle and the Liberal Arts Tradition (Rhetoric and Society). Ithaca NY and London: Cornell UP, 1998. Print.
- Benjamin, Walter. "On the Mimetic Faculty." *Reflections: Essays, Aphorisms, Autobiographical Writings*. Trans. Jephcott, Edmund. New York and London:

 Harcourt Brace Jovanovich, 1978. 333-336. Print.
- Bennett, Jane. *The Enchantment of Modern Life: Attachments, Crossings, and Ethics*. Princeton, N.J.: Princeton UP, 2001. Print.
- Berlin, James A. "Contemporary Composition: The Major Pedagogical Theories." *College English* 44.8 (1982): 765-777. Print.
- Berman, Morris. *The Reenchantment of the World*. Cornell University Press, 1981. Print.
- Berthoff, Ann. "From 'The Making of Meaning.'" *Teaching Composition: Background Readings*. Ed. T.R. Johnson. Boston: Bedford /St. Martin, 2008. Print.
- Beyond Mimesis and Convention: Representation in Art and Science. Eds. Roman Frigg and Hunter Matthews (Boston Studies in the Philosophy and History of Science, Vol. 262) New York and Berlin: Springer Verlag, 2010. Print.
- Birchfield, David et al. "Embodiment, Multimodality, and Composition: Convergent
 Themes across HCI and Education for Mixed-Reality Learning Environments."

 **Advances in Human-Computer Interaction 2008 (2008): 1-19. **CrossRef*. Web. 20 Sept. 2012.
- Boyd, Richard. "Imitate Me; Don't Imitate Me: Mimeticism in David Bartholomae's 'Inventing the University.'" *Journal of Advanced Composition* 11.2 (1991): 335-345. Print.

- Brady, M. Ann, and Joanna Schreiber. "Static to Dynamic: Professional Identity as Inventory, Invention, and Performance in Classrooms and Workplaces." *Technical Communication Quarterly* 22.4 (2013): 343-362. Print.
- Buck-Morss, Susan. *The Dialectics of Seeing: Walter Benjamin and the Arcades Project*.

 Cambridge, MA: MIT Press, 1989. Print.
- Burke, Kenneth. *Attitudes Toward History*. University of California Press, 1984. Print --. *A Rhetoric of Motives*. Berkeley: University of California Press, 1969. Print.
- Carney, Dana R., Amy J. C. Cuddy, and Andy J. Yap. "Power Posing Brief Nonverbal Displays Affect Neuroendocrine Levels and Risk Tolerance." *Psychological Science* 21.10 (2010): 1363-1368. *pss.sagepub.com*. Web. Accessed: January 30, 2014.
- Carruthers, Mary J. *The Craft of Thought: Meditation, Rhetoric, and the Making of Images, 400-1200*. Cambridge, U.K.; New York: Cambridge University Press, 2000. Print.
- Coole, Diana, and Samantha Frost, eds. *New Materialisms: Ontology, Agency, and Politics*. Duke UP, 2010. Print.
- Cooper, Marilyn M. "Being Linked to the Matrix: Biology, Technology, and Writing."

 **Rhetorics and Technologies: New Directions in Writing and Communication. Eds.

 Stuart A. Selber and Carolyn R. Miller. University of South Carolina Press, 2010.

 Print.
- ---. "Rhetorical Agency as Emergent and Enacted." *College Composition and Communication* 62.3 (2011): 420-449. Print.
- ---. "Rhetorical Being." U of Utah, Salt Lake City: N. p., 2013. Print.
- Cope, Bill, and Mary Kalantzis, Eds. *Multiliteracies: Literacy Learning and the Design of Social Futures*. Routledge, 2000. Print.
- Couture, Barbara. *Toward a Phenomenological Rhetoric Writing, Profession, and Altruism*. Carbondale: Southern Illinois University Press, 1998. Print.
- Covino, William A. *Magic, Rhetoric, and Literacy: An Eccentric History of the Composing Imagination*. New York: SUNY Press, 1994. Print.
- Cuddy, Ann. "Your Body Language Shapes Who You Are." TED Talk, June 2012. Accessed:

 January 3, 2013. Available:

 http://www.ted.com/talks/amy_cuddy_your_body_language_shapes_who_you_

- Davis, D. Diane. *Inessential Solidarity: Rhetoric and Foreigner Relations*. Pittsburgh: University of Pittsburgh Press, 2010. Print.
- De Vignemont, Frederique. "Habeas Corpus: The Sense of Ownership of One's Own Body." *Mind & Language* 22.4 (2007): 427-449. *Wiley Online Library*. Web. 13 Nov. 2012.
- Dobrin, Sidney I. *Postcomposition*. Carbondale: Southern Illinois UP, 2011.Print.
- Dolmage, Jay. "Metis, Metis, Mestiza, Medusa: Rhetorical Bodies across Rhetorical Traditions." *Rhetoric Review* 28 (2009): 1-28. Print.
- Donald, Merlin. "Imitation and Mimesis." *Perspectives on Imitation: From Neuroscience to Social Science*. 2: Imitation, Human Development, and Culture. Cambridge, MA: MIT Press. 283-300. Print.
- Drexler, K. Eric. "The Data Explosion and the Scientific Method." *Metamodern: The Trajectory of Technology* 25 Oct. 2008. Web. Accessed: May 5, 2014.
- Dumouchel, Paul. "Emotions and Mimesis." *Mimesis and Science: Empirical Research on Imitation and the Mimetic Theory of Culture and Religion*. Ed. Scott R Garrels. *Studies in Violence, Mimesis, & Culture*. Michigan State UP, 2011. 73-85. Print.
- Dunne, Joseph. Back To the Rough Ground: "Phronesis" and "Techne" in Modern

 Philosophy and in Aristotle. 1st ed. University of Notre Dame Press, 1992. Print.
- Edwards, Laurie D, Francesca Ferrara, and Ornella Robutti. "Complementary
 Theoretical Perspectives on Multimodality." Manavgat-Side, Antalya, Turkey:
 CERME 8, February 6-12. Web. Accessed: 12 Jan. 2014. Available:
 http://cerme8.metu.edu.tr/wgpapers/WG16/WG16_Edwards.pdf
- Elkins, James. *The Object Stares Back: On the Nature of Seeing*. Mariner Books, 1997. Print.
- Evernden, Neil. The Social Creation of Nature. The Johns Hopkins UP, 1992. Print.
- Fleckenstein, Kristie S. "Writing Bodies: Somatic Mind in Composition Studies." *College English* 61.3 (1999): 281-306. Print.
- Friedberg, Anne. *The Virtual Window: From Alberti to Microsoft*. MIT Press, 2006. Print.
- Fulkerson, Richard. "Four Philosophies of Composition." *College Composition and Communication* 30.4 (1979): 343–348. Print.
- Gadamer, Hans-Georg. "On the Scope and Function of Hermeneutical Reflection."

- *Philosophical Hermeneutics*. Trans. David Edward Linge. Los Angeles: University of California Press. Print.
- Gallagher, Shaun. How the Body Shapes the Mind. Oxford UP, 2005. Print.
- Gallagher, Shaun and Andrew N. Meltzoff. "The Earliest Sense of Self and Others:

 Merleau-Ponty and Recent Developmental Studies." *Philosophical Psychology* 9.2

 (1996): 211-33. Print.
- Gallese, Vittorio. "Mirror Neurons, Embodied Simulation, and the Neural Basis of Social Identification." *Postanalytic Dialogues* 19 (2009): 519-536. Print.
- --. "The Two Sides of Mimesis: Girard's Mimetic Theory, Embodied Simulation, and Social Identification." *Journal of Consciousness Studies* 14.4 1-24. Print.
- --, Morris N Eagle, and Paolo Migone. "Intentional Attunement: Mirror Neurons and the Neural Underpinnings of Interpersonal Relations." *Journal of the American Psychoanalytic Association* 55.1 (2007): 131-176. Print.
- --, and George Lakoff. "The Brain's Concepts: The Role of the Sensory-Motor System in Conceptual Knowledge." *Cognitive neuropsychology* 22.3 (2005): 455-479. *NCBI PubMed*. Web.
- Garrels, Scott R. "Human Imitation: Historical, Philosophical, and Scientific

 Perspectives." Mimesis and Science: Empirical Research on Imitation and the

 Mimetic Theory of Culture and Religion. Ed. Scott R. Garrels. MSU Press, 2012.

 Print.
- --. "Mimesis and Science: An Interview with Rene Girard." *Mimesis and Science Empirical Research on Imitation and the Mimetic Theory of Culture and Religion*. Ed. Scott R Garrels. Michigan State UP, 2011. 215-253. Print.
- Garsten, Bryan. Saving Persuasion a Defense of Rhetoric and Judgment. Cambridge, Mass.; London: Harvard UP, 2009. Print.
- Gebauer, Gunter, and Christoph Wulf. *Mimesis: Culture, Art, Society*. Berkeley: University of California Press, 1995. Print.
- Gibbs, Anna. "After Affect: Sympathy, Synchrony, and Mimetic Communication." *The Affect Theory Reader*. Eds. Melissa Gregg and Gregory J Seigworth. Durham, London: Duke UP, 2010. 186-205. Print.
- Girard, René. *Evolution and Conversion: Dialogues on the Origins of Culture*.

 Continuum, 2008. Print.

- Grande, Per Bjornar. "Comparing Plato's Understanding of Mimesis to Girard's." Web. 12 Dec. 2013.
- Haas, Christina, and Stephen P. Witte. "Writing as an Embodied Practice: The Case of Engineering Standards." *Journal of Business and Technical Communication* 15.4 (2001): 413-457. Print.
- Halliwell, Stephen. *The Aesthetics of Mimesis: Ancient Texts and Modern Problems*. Princeton UP, 2002. Print.
- Hamrick, William S. "Language and Abnormal Behavior: Merleau-Ponty, Hart, and Laing." *Merleau-Ponty and Psychology*. Studies in Existential Psychology and Psychiatry.New Jersey: Humanities Press, 1993. Print.
- Hansen, Mark B. N. *Embodying Technesis: Technology beyond Writing*. University of Michigan Press, 2000. Print.
- ---. New Philosophy for New Media. Boston: MIT Press, 2006. Print.
- Hansen, Miriam Bratu. "Mass Culture as Hieroglyphic Writing: Adorno, Derrida, Kracauer," *The Actuality of Adorno: Critical Essays on Adorno and the Postmodern*, Ed. Max Pensky (SUNY Series in Contemporary Continental Philosophy, Ed. Dennis J. Schmidt), New York: SUNY Press. 81-134
- Haskins, Ekaterina V. "'Mimesis' between Poetics and Rhetoric: Performance Culture and Civic Education in Plato, Isocrates, and Aristotle." *Rhetoric Society Quarterly* 30.3 (2000): 7-33. Print.
- Hass, Lawrence. Merleau-Ponty's Philosophy. Indiana UP, 2008. Print.
- Hawhee, Debra. *Bodily Arts: Rhetoric and Athletics in Ancient Greece*. University of Texas Press, 2005. Print.
- Hawk, Byron. . A Counter-History of Composition: Toward Methodologies of Complexity. 1st ed. University of Pittsburgh Press, 2007. Print.
- --. "Toward a Post-Techne Or, Inventing Pedagogies for Professional Writing." *EServer TC Library*. N. p., 1 Jan. 2004. Print.
- Hayles, N. Katherine. *How We Became Posthuman: Virtual Bodies in Cybernetics*, *Literature, and Informatics*. 1st ed. University Of Chicago Press, 1999. Print.
- Heidegger, Martin. "Memorial Address." *Poetry, Language, Thought*. Harper Perennial Modern Classics, 2001. Print.
- ---. "The Question Concerning Technology." The Question Concerning Technology and

- *Other Essays*. Ed. J. Glenn Gray and Joan Stambaugh. New York: Harper Perennial, 1977. 3-35. Print.
- Hohendahl, Peter Uwe. "Adorno: The Discourse of Philosophy and the Problem of Language." *The Actuality of Adorno: Critical Essays on Adorno and the Postmodern*. Ed. Max Pensky. New York: SUNY Press, 1997. 62-82. Print.
- Horkheimer, Max, and Theodor W. Adorno. *Dialectic of Enlightenment*. Ed. Gunzelin Schmid Noerr. Trans. Edmund Jephcott. 1st ed. Stanford University Press, 2007.

 Print.
- Huhn, Tom. "Introduction: Thoughts beside Themselves." *The Cambridge Companion to Adorno*. Ed. Tom Huhn. Cambridge University Press, 2004. 1-18. Print.
- Huizinga, Johan. *Homo Ludens: A Study of the Play-Element in Culture*. Boston: Beacon Press, 1955. Print.
- Hurley, S. Susan L., and Nick Chater. *Perspectives on Imitation: Imitation, Human Development, and Culture*. MIT Press, 2005. Print.
- Husain, Martha. *Ontology and the Art of Tragedy: An Approach to Aristotle's Poetics*. SUNY Press, 2002. Print.
- Iacoboni, Marco. "Understanding Others." *Perspectives on Imitation: From Neuroscience to Social Science*. 1: Mechanisms of Imitation and Imitation in Animals. Cambridge, Mass.; London, England: MIT Press, 2005. 75-99. Print. 2 vols.
- Ingold, Tim. *Being Alive: Essays on Movement, Knowledge and Description*. Routledge, 2011. Print.
- Jarratt, Professor Susan C. *Rereading the Sophists: Classical Rhetoric Refigured*.
 Southern Illinois UP, 1998. Print.
- John-Steiner, Vera. Creative Collaboration. Oxford; New York: Oxford UP, 2000. Print.
- ---. Notebooks of the Mind: Explorations of Thinking. New York: Oxford UP, 1997. Print.
- Keller, Evelyn Fox. A Feeling for the Organism, 10th Aniversary Edition: The Life and Work of Barbara McClintock. New York: Macmillan, 1984. Print.
- Kennedy, George A. *Comparative Rhetoric: An Historical and Cross-Cultural Introduction*. New York: Oxford UP, 1998. Print.
- Kinsbourne, Marcel. "Imitation as Entrainment: Brain Mechanisms and Social Consequences." *Perspectives on Imitation: Imitation, Human Development, and*

- Culture. Eds. Susan L. Hurley and Nick Chater. MIT Press, 2005. 163-172. Print.
- Kress, Gunther. *Multimodality: A Social Semiotic Approach to Contemporary Communication*. Routledge, 2009. Print.
- ---. "Multimodality: Challenges to Thinking about Language." *TESOL Quarterly* 34.2 (2000): 337-340. *JSTOR*. Web. 25 Nov. 2011.
- ---. "Visual and Verbal Modes of Representation in Electronically Mediated
 Communication: The Potentials of New Forms of Text." Page to Screen: Taking
 Literacy into the Electronic Era. Ed. Llana Snyder. London and New York:
 Routledge, 1998. 53-80. Print.
- --, and Theo van Leeuwen. *Multimodal Discourse: The Modes and Media of Contemporary Communication*. Hodder Education Publishers, 2001. Print.
- Lacoue-Labarthe, Philippe, and Christopher Fynsk. *Typography: Mimesis, Philosophy, Politics*. Stanford University Press, 1998. Print.
- Lakoff, George, and Mark Johnson. *Philosophy in the Flesh: The Embodied Mind and Its Challenge to Western Thought*. New York: Basic Books, 1999. Print.
- Latour, Bruno. "An Attempt at a 'Compositionist Manifesto.'" *New Literary History* 41 471-490. Print.
- --. *Pandora's Hope: Essays on the Reality of Science Studies*. 1st ed. Harvard University Press, 1999. Print.
- Lauer, Claire. "Contending with Terms: 'Multimodal' and 'Multimedia' in the Academic and Public Spheres." *Computers and Composition* 26 (2009): 225–239. Print.
- Lucaites, John Louis, and Barbara A. Biesecker, eds. *Rhetoric, Materiality, and Politics*. First printing. Peter Lang Publishing, 2009. Print.
- Lynch, Dennis A., Diana George, and Marilyn M. Cooper. "Moments of Argument:

 Agonistic Inquiry and Confrontational Cooperation." *CCC* 48.1 (1997): 61-85.

 Print.
- Marratto, Scott L. *The Intercorporeal Self: Merleau-Ponty on Subjectivity*. New York SUNY Press, 2012. Print.
- Martin, Bruce. "Mimetic Moments: Adorno and Ecofeminish." *Feminist Interpretations of Theodor Adorno*. Ed. Renée Heberle. University Park: Pennsylvania State University Press, 2006. Print.
- Maturana, Humberto R., and Francisco Varela. Tree of Knowledge. Rev Sub. Boston and

- London: Shambhala, 1992. Print.
- McCandless, David. *The Beauty of Data Visualization*. N. p., 2012. Film. TED Talk (Conference Presentation).
- McGee, Michael Calvin. "A Materialist's Conception of Rhetoric," *Rhetoric, Materiality, and Politics*, Eds. Barbara A. Beisecker and Robert Louis Lucaites, New York: Peter Lang, 2009, 17-42.
- McKim, Robert. *Experiences in Visual Thinking*. 2nd ed. Pacific Grove, CA: Brooks/Cole Publishing Company, 1980. Print.
- McNeill, David. Gesture and Thought. University of Chicago Press, 2007. Print.
- Meltzoff, Andrew N. "Out of the Mouths of Babes: Imitation, Gaze, and Intentions in Infant Research." *Mimesis and Science: Empirical Research on Imitation and the Mimetic Theory of Culture and Religion*. Ed. Scott R. Garrels. Michigan State UP, 2012. 55-74. Print.
- Merleau-Ponty, Maurice. *Consciousness and the Acquisition of Language* (CAL). Trans. Hugh J. Silverman. Evanston: Northwestern UP. Print. Northwestern University Studies in Phenomenology & Existential Philosophy.
- ---. "The Child's Relations with Others" (CRO)." Trans. William Cobb. *The Primacy of Perception: And Other Essays on Phenomenological Psychology, the Philosophy of Art, History and Politics*, Ed. James M. Edie. Evanston, IL: Northwestern UP, 1964. 96-157. Print.
- ---. "The Experience of Others" (EO). *Merleau-Ponty and Psychology*. Review of Existential Psychology and Psychiatry, Humanities Press, 1993. 33-66. Print.
- ---. "Eye and Mind" (EM). *The Merleau-Ponty Reader*. Northwestern University Press, 2007. Print.
- ---. *Phenomenology of Perception* (PhP). Trans. Colin Smith. 2nd ed. Routledge, 2002. Print.
- ---. "The Primacy of Perception and its Philosophical Consequences," Trans. James M. Edie. *The Primacy of Perception: And Other Essays on Phenomenological Psychology, the Philosophy of Art, History and Politics*, Ed. James M. Edie. Evanston, IL: Northwestern UP, 1964. (12-42)
- ---. *The Prose of the World* (PoW). Ed. Claude Lefort. Trans. John O'Neill. Evanston: Northwestern UP, 1973. Print.

- ---. The World of Perception (WP). London; New York: Routledge, 2008. Print.
- Merlin, Donald. "The Central Role of Culture in Cognitive Evolution: A Reflection on the Myth of the 'Isolated Mind.'" *Culture, Thought, and Development*. Ed. Larry P Nucci and Geoffrey B Saxe. The Jean Piaget Symposium Series. Lawrence Erlbaum Associates, 2000. 19-38. Print.
- Mitchell, Robert, and Phillip Thurtle, eds. "Data Made Flesh: The Material Poiesis of Informatics." *Data Made Flesh: Embodying Information*. 1st ed. Routledge, 2003. Print.
- Morton, Timothy. *Ecology without Nature: Rethinking Environmental Aesthetics*. Harvard UP, 2009. Print.
- Moynihan, Karen E. "A Collectibles Project: Engaging Students in Authentic Multimodal Research and Writing." *The English Journal* 97.1 (2007): 69-76. Print.
- Parikka, Jussi. *Insect Media: An Archaeology of Animals and Technology*. University of Minnesota Press, 2010. Print.
- --. New APPS Interview: Jussi Parikka on His New Book "Insect Media" New APPS: Art, Politics, Philosophy, Science. 19 Mar. 2010.
- Poerksen, Bernhard. "'Truth is What Works': Francisco J. Varela on Cognitive Science,
 Buddhism, the Inseparability of Subject and Object, and the Exaggerations of
 Constructivism A Conversation" ("Humberto R. Maturana and Francisco J.
 Varela and the Humanities: The Poerksen Interviews," Hans Ulrich Gumbrecht,
 Humberto R. Maturana, and Bernard Poerksen), Journal of Aesthetic Education,
 40:1 (Spring, 2006): 35-53
- --. "The Paradox of Education: A Conversation." ("Humberto R. Maturana and Francisco J. Varela and the Humanities: The Poerksen Interviews," Hans Ulrich Gumbrecht, Humberto R. Maturana, and Bernard Poerksen), *Journal of Aesthetic Education*, 40:1 (Spring, 2006): 35-53
- Potolsky, Matthew. Mimesis. New Ed. Routledge, 2006. Print.
- Prior, Paul. "Moving Multimodality Beyond the Binaries: A Response to Gunther Kress's 'Gains and Losses.'" *Computers and Composition* 22 (2005): 23-30. Print.
- --, and Jody Shipka. "Chronotopic Lamination: Tracing the Contours of Literate

 Activity." Writing Selves/Writing Societies: Research from Activity Perspectives.

 Ed. Charles Bazerman and David R. Russell. The WAC Clearinghouse, 2003. 180-

- 238. Web. 10 Mar. 2012. Perspectives on Writing.
- Ratcliffe, Krista. "Rhetorical Listening: A Trope for Interpretive Invention and a 'Code of Cross-Cultural Conduct.'" *College Composition and Communication* 51.2 (1999): 195–224. Print.
- Reynolds, Jack. "Maurice Merleau-Ponty," Internet Encyclopedia of Philosophy.

 Accessed: March 10, 2013. Available: http://www.iep.utm.edu/merleau/
- Rickert, Thomas J. *Ambient Rhetoric: The Attunements of Rhetorical Being*. N. p., 2013.

 Print.
- Rivers, Nathaniel A. "Future Convergences: Technical Communication Research as Cognitive Science." *Technical Communication Quarterly* 20.4 (2011): 412-442. Print.
- Rosenblatt, Louise Michelle. *The Reader, the Text, the Poem: The Transactional Theory of the Literary Work*. Southern Illinois UP,1994. Print.
- Schweiker, William. "Beyond Imitation: Mimetic Praxis in Gadamer, Ricoeur, and Derrida." *The Journal of Religion* 68.1 (1988): 21-38. Print
- Selfe, Cynthia L. "The Movement of Air, the Breath of Meaning: Aurality and Multimodal Composing." *CCC* 60.4 (2009): 616-663. Print.
- Shipka, Jody. *Toward a Composition Made Whole*. 1st ed. University of Pittsburgh Press, 2011. Print.
- Simondon, Gilbert. "On the Mode of Existence of Technical Objects." Trans. Ninian Mellamphy. 1980 1958.
- ---. "Technical Mentality." Parrhesia 7 (2009): 17-29. Print.
- ---. Two Lessons on Animal and Man. University of Minnesota Press, 2012. Print.
- Spiegelberg, Herbert. "Toward a Phenomenology of Experience." *American Philosophical Quarterly* 1.4 (1964): 325-332. Print.
- Stiegler, Bernard, Richard Beardsworth, and George Collins. *Technics and Time*, 1: *The Fault of Epimetheus (Meridian: Crossing Aesthetics)*. 1st ed. Stanford University Press, 1998. Print.
- Stormer, Nathan. "Encomium of Helen's Body: A Will to Matter." *Rhetoric, Materiality, and Politics*. Ed. Barbara A. Biesecker and John Louis Lucaites. New York/Baltimore/Washington D.C.: Peter Lang Publishing. 215-227.

- www.peterlang.com. Web. 21 Aug. 2013. Frontiers in Political Communication 13.
- ---. "Recursivity: A Working Paper on Rhetoric and Mnesis." *Quarterly Journal of Speech* 99.1 (2013): 27-49. Print.
- Strauss, Anselm L. *Qualitative Analysis for Social Scientists*. Cambridge, London: Cambridge UP, 1987. Print.
- Sun, Cecile Chu-chin. "Mimesis and 興Xing: Two Modes of Viewing Reality Comparing English and Chinese Poetry." *Comparative Literature Studies* 43.3 (2006): 326-354. Print.
- Takayoshi, Pamela and Cynthia E. Selfe. "Thinking About Multimodality." *Multimodal Compostion: Resources for Teachers*. Ed. Cynthia L. Selfe. New York: Hampton Press, 2007. Print.
- Taussig, Michael T. *Mimesis and Alterity: A Particular History of the Senses*. Psychology Press, 1993. Print.
- Terrill, Robert. "Mimesis, Duality, and Rhetorical Education." *Rhetoric Society Quarterly* 41.4 (2011): 297-315. Print.
- Weiss, Gail. *Body Images: Embodiment as Intercorporeality*. New York: Routledge, 1999. Print.
- Whitebook, Joel. "Weight Objects: On Adorno's Kant-Freud Interpretation." *The Cambridge Companion to Adorno*. Ed. Tom Huhn. Cambridge University Press, 2004. 51-73. Print.
- Whithaus, Carl. "Claim-Evidence Structures in Environmental Science Writing: Modifying Toulmin's Model to Account for Multimodal Arguments." *Technical Communication Quarterly* 21.2 (2012): 105-128. Print.
- Winsor, Dorothy A. "Learning to Do Knowledge Work in Systems of Distributed Cognition." *Journal of Business and Technical Communication* 15.1 (2001): 5 -28.
- Yancey, Kathleen Blake. "Postmodernism, Palimpest, and Portfolios: Theoretical Issues in the Representation of Student Work." *CCC* 55.4 (2004): 738-761. Print.
- ---. "Re-Designing Graduate Education in Compostion and Rhetoric: The Use of Remix as Concept, Material, and Method." *Computers and Composition* 26 (2009): 4-12. Print.
- Yarbrough, Stephen R. After Rhetoric the Study of Discourse beyond Language and

Culture. Carbondale: Southern Illinois University Press, 1999. Print.