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Reconceiving curriculum: an historical approach

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RECONCEIVING CURRICULUM: AN HISTORICAL APPROACH

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To my family
for their love and support over the years as I pursue this dream
and
to the memory of my father.

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TABLE OF CONTENTS

ABSTRACT

This dissertation reconceives curriculum through an historical approach that employs Ludwig Wittgenstein's later philosophy. Curriculum is more than the knowledge taught in school. Curriculum, as I a theorist conceives it, is concerned with the broader intellectual and ideological ways a society thinks about education. Hence, the current school curriculum's focus on specific learning outcomes offers a limited view of the knowledge fashioned by a society, thereby offering an intellectual and social history that is highly selective. Wittgenstein's concept of "language-games" offers curricularists a way to re-include some of these stories.

The concept of curriculum emerges at the end of the Renaissance from Peter Ramus's refinement of the art of dialectic into a pedagogical method of logic. The modern curriculum field arose at the end of the nineteenth century as educators sought to further refine the remnants of scholasticism's pedagogical practices by employing "social efficiency" and scientific management to more effectively organize American education. Social efficiency and scientific management became the underlying premises of Ralph Tyler's (1949) rationalization of the school curriculum.

During the nineteen seventies, curriculum theorists began disrupting Tyler's rational foundations by reconceptualizing curriculum using philosophies and theories developed outside of education to alter the language used to describe education. I use Wittgenstein's later philosophy to further disrupt the school curriculum's rational underpinnings. Wittgenstein maintains that *knowing* does not require some internal or external authority, thereby rejecting the empirical and logical foundations of knowledge that underlie Western education. Using a Wittgenstein approach suggests that

education is an *indirect* activity of teaching students the use of words. Wittgenstein suggests that educating students indirectly more closely resemble the kinds of playful activities in which children engage in their ordinary lives. He suggests that learning is a synoptic presentation that connects concepts that emerge from our everyday use of language in new and interesting ways. By asking students to see the resemblances among concepts synoptically, rather than logically, education cannot be reduced to the acquisition of a set of facts, ordered in a sequence of steps. As such, a Wittgensteinian approach reconceives curriculum as an act of language-play.

CHAPTER 1
INTRODUCTION

According to Ralph Tyler, twentieth century America's best known curricularist, the school curriculum is "all learning, which is *planned and guided by the school*, whether or not it is carried on in classes, on the playground, or in other segments of the pupils' lives."[1] The field of curriculum studies, on the other hand, is generally interested in the broader study of the cultural, social, and ideological perspectives that influence how society thinks about education. Rather than focusing on schooling alone, curriculum studies is concerned with how education generally "shapes and is shaped by ideology and culture."[2] In this sense, curriculum might be considered a form of intellectual and social history as it reflects forms of knowledge, habits of thinking, and cultural practices that a society considers important enough to pass on to succeeding generations. The decisions a society makes about the curriculum it teaches are selective, and therefore may be seen to be a partial history. A curriculum (re)presents a society's past, present and future beliefs about itself—its educational folkways and imaginings, some scientific and rational, others mythological, but all in flux, all with a story that serves a purpose. Thus, as historical text, the school curriculum and the field of curriculum stories are incomplete stories. The stories that are not told, like other silenced histories, beg to be revealed.

Historically, the academic fields of curriculum studies and history converge in the late nineteenth century with debates over creating the American school curriculum and

[1]Ralph Tyler, "The Organization of Learning Experiences," in *Curriculum and Evaluation*, ed. Arno A. Bellack & Herbert M. Kliebard (Berkeley: McCutchan Publishing Corp., 1977), 45 (my emphasis). Reprinted from, *Toward Improved Curriculum Theory*, eds. Virgil E. Herrick and Ralph W. Tyler, Supplementary Educational Monograph No. 71 (Chicago: University of Chicago Press, 1950), 59-67.

debates over creating professional historical practices. American educators and historians attempted to transform both educational and historical practices by adopting German methods of pedagogy and research. In each case, the application of German methods and theories was used to reform what could be described as more "native" practices of education and history, both of which had arisen from Puritan colonial educational and intellectual practices.[3]

In this first chapter, I bring forward the connections I make between my experiences with history, historicism, and curriculum theory. I suggest that a more complex "ecological"[4] approach to history, learning history in various sites and ways, for example, as I suggest in my autobiographical vignettes, histories locally situated and contextualized, tell different stories than do textbooks. I suggest that the emergence of the field of curriculum studies, in the latter years of the nineteenth century, out of the positivist discourses of the "social efficiency" movement and the related concept of scientific management has similarities to scientific approaches to historiography arising during the same period. Although social efficiency had been only one of the tenets that

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[2]Petra Munro, "Engendering Curriculum History," chap. in *Curriculum: Toward New Identities*, ed. William F. Pinar (New York: Garland Publishing, Inc., 1998), 285, notes.

[3]See John Higham, *History: Professional Scholarship in America* (Baltimore: Johns Hopkins Press, 1989), 11-14; and Herbert Kliebard, *The Struggle for an American Curriculum 1893-1958* (New York: Routledge & Kegan Paul, 1987), 30-51. Higham reports that the American Historical Associations (AHA) emerged from the Social Science Association, and was organized by John Eton, who was the Commissioner of Education at the time, and Herbert Baxter Adams, who was a professor of history at Johns Hopkins (a leading university in the Germanization of higher education in America), and who wrote and edited pamphlets on history and the state of American education for the U. S. Bureau of Education. William T. Harris was also a charter member of the AHA, further strengthening the connection between education and history. See also, Theodore S. Hamerow, *Reflections on History and Historians* (Madison: The University of Wisconsin Press, 1987), and John M. O'Donnell's, *The Origins of Behaviorism: American Psychology, 1870-1920* (New York: New York University Press, 1985), 25-50, discussion of the influence of German experimental psychology on American universities during the end of the nineteenth and beginning of the twentieth centuries.

[4]What I am calling an ecological approach situates human understanding within a context of human "natural" history that is biologically, culturally, and environmentally situated—the complex interweaving of the individual, embodied within an ever-changing local, living social and physical ecology.

constituted the progressive education reform movement during the first half of the twentieth century, it became an underlying premise of Ralph Tyler's rationalization of the school curriculum. Furthermore, Tyler's rational curriculum discourse dominated much of the curriculum field for most of the second half of the century.

History as Learning: A Synoptic Autobiography

As far back as I can remember, I understood my everyday life historically. In part, this has to do with growing up in New Orleans, a city steeped in history. My historical outlook is connected to the fact that my family—at least my maternal side—is intimately related to the city's history, having members who have played key leadership roles in the city's past. Moreover, one of my earliest recollections of doing schoolwork is reading a history textbook. Interestingly, I have few memories of doing actual schoolwork that do not include doing history. Most of what I remember about learning does not take place in school, but in other learning environments. I have few fond memories of life in school.

As a youth, most of my non-school readings were various kinds of histories, whether they were books from the library, or the Golden Book collections my parents bought at the grocery store, or stories about various Catholic saints. Not surprisingly, when I finally decided to go to college, I chose to study history.

Immediately following high school, I had no desire to continue my education and joined the Navy. My decision to go to college occurred after my first year in the Navy in the middle of reading T. Harry Williams's biography of Huey Long. I found the book's blending of social, political, and intellectual history to be very interesting, as well as, the author's use of oral history and everyday material like newspapers and political

handbills. My interest in Russian history began to develop soon after reading *Huey Long*. One day, while working on a cleaning detail, I found George Vernadsky's *A History of Russia*. What I found most interesting, as I read, were some apparent similarities between Russian and American history. Reading these two books established a pattern in the kinds of books I have read during those periods in my adult life when I was not working on some degree. My casual readings have mostly been various kinds of serious histories covering a variety of times and places. Consequently, one could say that upon entering the field of education, my very concept of learning implied an historical approach.

With this sort of a background, it is not surprising that I have been less interested in the present for its own sake and more interested in how the present and past are intertwined. Thus, I was both fascinated and puzzled when I first read Ludwig Wittgenstein's statement, "What does history mean to me, mine is the first and only world."[5] The notion that history was somehow unimportant to how one lives or that each of our lives is a new beginning was confounding. This is not how I understood history. Nor is it how I grew up. My extended family talked—I should say the women of my family, because they and not the men were the storytellers—about our ancestors as if they were still sitting at the dinner table. Heritage was tacitly presented like a kind of

[5]In Alan Janik and Stephen Toulmin, *Wittgenstein's Vienna* (New York: Simon and Schuster, 1973), 243; quoted from Wittgenstein's *Notebooks 1914-1916*, 82. Wittgenstein's concept of history is closely related to his concept of time presented in his Ludwig Wittgenstein, *Tractatus Logico-Philosophicus*, trans. D. F. Pears & B. F. McGuinness, Introduction by Bertrand Russell, paperback edition (Atlantic Highlands: NJ: Routledge, Humanities Press International, Inc. 1988), #6.4311. He states, "If we take eternity to mean not infinite temporal duration but timelessness, then eternal life belongs to those who live in the present." Wittgenstein's concept of history (as well as Michel Serres's, discussed below) roughly echoes the philosophy of history presented by Saint Augustine, in *The City of God*, which he used to refute the then prevalent Greco-Roman cyclical concept of history, as well as, the Christian idea of progress that had become popular in the early church. See Norman F. Cantor's

genetics that determined one's character, like the color of one's eyes. For instance, I did not realize that the South had lost the Civil War until I was eight or nine years old. Nor, like most of the important things about life, did I learn this in school, but from one of my friends while building forts for our toy soldiers in a sand pile. While I was never told explicitly that the South had won or lost, neither my family nor the community talked about the Civil War as if the South had been defeated. On the other hand, it was not as if the Civil War was a major topic of conversation. There were no Confederate flags in my family's houses and no sentimentality about the war of Northern aggression. Stories of this war were often intermixed with stories about the more recent ones and were mostly about personal (family) experiences. My grandmother would tell the story about sticking her finger in the mini ball hole in her uncle's leg. He had been an officer with the Washington Artillery. She would also reminisce about seeing my grandfather off to fight Pancho Villa on the Mexican border with General "Black Jack" Pershing.

Eventually I came to understand that Wittgenstein's statement should not be understood as a rejection of history out of hand. Instead, what Wittgenstein is rejecting is the concept that history represents an inevitable stream of human progress toward a utopian society.[6] Wittgenstein states, "Our civilization is characterized by the word

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discussion of Augustine's philosophy of history, in *Medieval History: The Life and Death of a Civilization* (New York: MacMillan Publishing Co., Inc., 1969), 81-88.

[6]Maurice Mandelbaum, in *History, Man, and Reason: A Study of Nineteenth-Century Thought*, paperback edition (Baltimore, MD: Johns Hopkins Press, 1977), 12 & 41-49, defines this progressive notion of history as "historicism," which, in part, was a consequence of the positivist philosophy expressed by August Comte and Herbert Spencer. Comte and Spencer's positivism "was dominated by the view that there had taken place, and was taking place, a progressive development of man and society." It was a concept that "was deeply rooted in nineteenth-century thought" and paralleled a belief in the unlimited potential of education to change (develop) human beings in a socially desirable direction. See Immanuel Kant's, *Education*, and *On History*.

'progress.' Progress is its form rather than making progress being one of its features."[7] In other words, because of the technological advances that have been brought about by science, progress is what Western Civilization has come to assume. Michel Serres (1998) suggests that a progressive view of history is related to a linear understanding of time brought about by the scientism of the eighteenth and nineteenth centuries.[8]

Wittgenstein's is not only suggesting that learning about the past does not necessarily lead human society to some utopian end, his statement also suggests that a society's culture has no distinct beginning—no single origin. Like any attempt at doing one's complete genealogy, as a person looks back upon his or her family tree, one's ancestors eventually become a diffused, voiceless mass, a continual doubling at each generation. Who is to say that it is this ancestor and not some other (probably less desirable one) that one most takes after? Furthermore, Wittgenstein is rejecting the nineteenth-century notion that cultures and societies develop organically in the same way that an individual human being grows and matures.[9] Wittgenstein is not suggesting, however, that cultures and societies do not change. Instead, by stating that "mine is the first and only world," he is suggesting that culture is not about what our ancestors did, said, or believed, but what we do, say, and believe today.[10] At the same time, cultures that exist at different times and different places, like people, are still

[7]Ludwig Wittgenstein, in C*ulture and Value*, ed. G. H. von Wright, in collaboration with Heikki Nyman, trans. Peter Winch (Chicago: The University of Chicago Press, 1984), 7e. Oswald Spengler's, *Decline of the West* influenced Wittgenstein's anti-historicism and anti-progressive perspective. (In my subsequent citations of each of Wittgenstein's works, I will cite them by *title* only.) See also Munro's, 263-264, similar rejection of historical progress and origins from a "feminist poststructuralist" perspective.

[8]Michel Serres with Bruno Latour, *Conversations on Science, Culture, and Time*, trans. Roxanne Lapidus (Ann Arbor: University of Michigan Press, 1998), 48-51.

[9]See Mandelbaum's discussion, in chapter 10, "Organicism: Culture and Human Nature," 163-191

related. Wittgenstein observes that even when a culture appears over time to remain the same, or when the way of speaking appears similar at different times and in different places, because of the years that have passed and the distance that has been traveled, an entirely different way of behaving and an entirely different use of language is being employed so that the activities being performed constitute a new way of living. Yet, even among the many differences, similarities still remain.

Like Wittgenstein, I have come to believe that the cultural practices that we engage in today are a sketch or caricature that only roughly resemble the traditions or heritage we believe we follow. This resemblance is not unlike the resemblances that exist among different members of a family.[11] Even in our post-post world, past, even primitive, ways of behaving and speaking continue to persist. Wittgenstein suggests that much of what we do and say is related to these primitive ways of behaving and speaking that remain part of our ordinary lives. On the other hand, what sometimes appears to be our unchanging ways of acting and thinking are our habits of doing, speaking, and believing that change along with the constantly altering contexts of our everyday lives. These changes are unrecognizable because our as ordinary ways of living change, the context of our surroundings continuously changes as well. Eventually, these new habits become our conventions because there is no fixed backdrop, or foreground against which changes can be recognized.

Serres suggests that time, rather than being a linear stream of unfolding human progress, exists as a chaotic enfolding, a turbulent twisting or percolating of human

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[10]The notion that culture is what one does rather than our supposed heritage is also suggested by Cameron McCarthy, in "The Uses of Culture: Canon Formation, Postcolonial Literature, and the Multicultural Project," chap. in *Curriculum: Toward New Identities*, 253-262.

[11]*Culture and Value*, 14e.

activities. He uses the metaphor of the crumpled handkerchief to present his non-linear concept of time—a chaotic labyrinth of intersecting diversity collapsing upon a single point in space.[12] As such, not unlike Wittgenstein's concept of an eternal present, Serres maintains that our present human practices exist as a historical bouquet in which primitive and recent practices, as well as, our future imaginings converge. Using this non-linear concepts of time, what we call the past, the present, and the future can be understood as a nexus that forms a temporal knot—the entangled threads of human concepts and practices that constitute our everyday lives.

Yet, if learning history does not lead to the creation of an ever better society, then, one might ask: "Why study history? What can one learn from it?" What can be learned from history is that the knowledge that makes up the school curriculum is not some isolated or static body of information that just suddenly appears in a textbook. Instead, by studying history a student could begin to learn that knowledge is historically and, thereby, socially situated. It is constructed by the ways in which other human beings relate to the world, as well as, the ways they relate with each other.[13] Knowledge is the way people talk (write) to one another about themselves and about the world in which they lived. As such, the knowledge we learn in school presents us with a form of life that reveals people's practices of living along with their hopes and fears for the future. In so doing, understanding the historical and social context from

[12]Michel Serres, in *Hermes: Literature, Science, Philosophy*, ed. Josue V. Harari & David F. Bell (Baltimore: The Johns Hopkins University Press, 1992), 75, and Serres/Latour, 57-62. Serres was influenced by the Austrian physicist, Ludwig Boltzmann's concept of time as a kind of bouquet that enfolds back upon itself. It is very likely that Wittgenstein would have been familiar with Boltzmann's concept of time. William Doll, in *A Post-Modern Perspective on Curriculum* (New York: Teachers College Press, 1993), 177-178, suggests a concept of learning as a process of chaotic recursion that is derived from Serres and Boltzmann's notions of time.

which knowledge emerges, while not telling us where society is inevitably progressing, can help us understand something about our current forms of life and why we act and believe the things we do.

An historical approach does not require employing historicism's methodology of using the past to affirm the present and, thereby, the future. Nor does it mean that history becomes the Romantic practice of studying the past in an attempt to understand it for itself, alone, as if it were some "natural" or "pure" lost age. Instead, an historical approach can be understood, as Serres suggests, as "a struggle against forgetting."[14] Rationalism's method, designed to produce certainty, and positivism's scientistic drive toward utopian social progress depend upon the human tendency "to forget." Forgetting allows for the creation of the rigid distinctions required for categorical stereotypes and for establishing some essential order. Instead, history becomes an interrelated temporal nexus that offers the possibility of bringing the past into the present moment. In other words, studying history enables us to expand the present moment by re-engaging past discourses that have either been ignored or purposefully left out because they do not adhere to progressivism's modern imagine of the future.[15]

The current school curriculum presents us with an entanglement of our educational past, present, and future—a nexus of educational concepts and practices of teaching and learning situated within an even larger social tangle. Because any one thread gets its meaning from the nexus of all the others, it serves no purpose to find either the beginning or the end of any one thread. To do so would require that it be

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[13]Dwayne Huebner, "Religious Metaphors and the Language of Education," in *Lure of the Transcendent: Collected Essays by Dwayne E. Huebner*, ed. Vikki Hillis, collected and introduced by William F. Pinar (Mahwah, NJ: Lawrence Erlbaum Associates, Publishers, 1999), 368-370.

[14]Serres/Latour, 53

completely removed from its knot, thereby changing its meaning. The historical approach I pursue in this dissertation is not to untie but to unravel the temporal knot called curriculum just enough so that we may study aspects of its various threads. Some of the threads are part of the current educational discourse found either in the school curriculum or in the curriculum studies field. Other threads are those of the ancestors' voices, curriculum's pedagogical and philosophical forbearers, which have not often been heard in current conversations concerning curriculum.

Much of the time researching and writing this dissertation was spent trying to articulate a language that would expresses my tacit understandings of what it means to teach and learn. While this endeavor has given my tacit understandings a voice, it has also altered my understanding of the meaning of teaching and learning. At times the journey has been slow and difficult; it has also been interesting and enlightening. My investigations have led me into unexpected and fascinating areas of research. As I began understanding one situation, new questions would emerge. The hardest part has been approaching the complexity of the knot, trying to make it understandable without oversimplifying it. My historical task, therefore, has been to preserve the knot, while loosening, acknowledging, and exploring the past threads of various educational ideas that comprise our understanding of curriculum. I am endeavoring to offer another way of understanding curriculum by reconceiving the role language plays in teaching and learning, historically, pedagogically, and philosophically. In so doing, I am reconceiving curriculum. Instead of the practice of simplifying mature knowledge to make it easier to demonstrate to youthful minds, I am suggesting that curriculum be reconceived as an

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[15]Serres/Latour, 51-55.

indirect activity that allows students to engage in the multiple uses of various *languages* that emerge as students and teachers engage in complex learning activities.

Synopsis of the Dissertation

The dissertation is divided into six chapters. Following this introductory chapter, I discuss in chapter two the emergence of the curriculum field, in the latter years of the nineteenth century, out of the positivist discourses of the "social efficiency" movement and the related concept of scientific management. Although social efficiency had been only one of the tenets that constituted the progressive education reform movement during the first half of the twentieth century, it became an underlying premise of Ralph Tyler's rationalization of the school curriculum. Furthermore, Tyler's rational curriculum discourse dominated much of the curriculum field for most of second half of the century. In response to Tyler's rational discourse and scientific management approach to curriculum development, new theorists entered the curriculum field during the mid-nineteen seventies and began disrupting Tyler's rational efficiency frame. These theorists began reconceptualizing curriculum by applying new philosophical and theoretical discourses to education. Three of these theorists, Dwayne Huebner, William Pinar, and Madeline Grumet, reconceptualized the field by using these new philosophies and theories to alter the language used to describe and analyze educational practices.

A reconceptualized view of curriculum returns education to a conversational form of discourse that includes a variety of voices. As such, knowing no longer exists as pre-set and static knowledge, but is revitalized as a living and generative educational activity. Huebner critiques education's dependence upon the positivist languages of

learning employed by the social sciences. He observes that these technical languages inadequately describe what it means to become an educated human being.[16] Pinar and Grumet reconceptualize curriculum as *currere*. Rather than focusing on curriculum as a pre-determined set of content standards, educational objectives, and assessment procedures, *currere* reconceptualizes curriculum as the teacher's and students' individual encounters with the objects of education. Pinar and Grumet apply psychoanalytical and phenomenological methods to aid teachers' and students' inquiries into their educational experiences.[17] By applying these alternative perspectives, teachers and students are better able to investigate both their own subjectivities and the ways in which their social situations effect their beliefs and attitudes about their immediate educational experiences.

Chapter three discusses one of those stories that, for the most part, have not been included in our studies of curriculum. Much of the history of the American curriculum begins with the late nineteenth-century debates over adopting a school curriculum. Moreover, curriculum theorists typically begin their philosophical critique with Rene Descartes's rational method of mind, or, at the earliest, Francis Bacon's development of a new, empirical method. The Dark and later Middle Ages, however, have remained relatively unilluminated by the light of curriculum theory. In a small way, this dissertation attempts a beginning at changing this situation.

The chapter discusses how the concept of curriculum was a sixteenth-century invention that emerged from medieval scholasticism's revival of learning and its efforts to bring order and certainty to its practices of teaching medieval liberal arts courses.

[16]See Huebner, "Religious Metaphors and the Language of Education."

The concept of curriculum as well as our current classroom practices slowly evolved from scholasticism's refinement of the medieval art of dialectic. The Renaissance pedagogue and University of Paris Arts Master, Peter Ramus, would eventually transform the art of dialectical reasoning into a pedagogical method of textual analysis. Following Ramus's early death, European book publishers and schoolmasters adopted Ramus's pedagogical method as the model for curriculum development.

In addition, chapter three briefly discusses the Puritans' adoption of Ramus's pedagogical method as well as his art of dialectic as a method of logic. Ramism not only influenced the development of educational institutions in colonial New England but also continues to influence the American curriculum through today. Furthermore, the chapter briefly discusses the relationship between Ramus's refinement of method and the emergence of new methodologies, in particular, those developed by Bacon and Descartes, during the seventeenth century.

Chapter four presents the philosophical thought of Ludwig Wittgenstein. Although Wittgenstein is recognized as one of the twentieth century's most influential philosophers, his ideas have only marginally influenced the field of curriculum. However, his later philosophy has been described as being thoroughly pedagogical.[18] In his later works, Wittgenstein uses situations of teaching and learning to offer a radical approach to human thinking and understanding. In so doing, he moves beyond the Cartesian epistemology that underlies the concept of curriculum presented by Tyler's Rationale. In this chapter, I am suggesting that Wittgenstein's later philosophy, in

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[17]William F. Pinar and Madeleine Grumet, *Towards a Poor Curriculum* (Dubuque, IA: Kendall/Hunt Publishing Co., 1976).

[18]Michael Peters and James Marshall, *Wittgenstein: Philosophy, Postmodernism, Pedagogy* (Westport, CN: Bergin & Garvey, 1999), 175.

particular his concepts of “language-games” and “forms of life,” could be used to further enhance reconceptualized notions of curriculum. Wittgenstein’s later philosophy suggests that knowing does not require some internal or external authority. As such, he is suggesting that the empirical and logical foundations of knowledge that underlie Western thought are not essential to our ability to know.

In addition to situating Wittgenstein's thoughts pedagogically, the chapter also situates his philosophy historically, both within the Anglo-American empirical school of analytical philosophy, and the Vienna Circle's logical-positivist philosophy. Through these philosophical schools, the entirety of Wittgenstein's philosophical thought is seen to grow out of scholasticism's dialectical tradition as well.

Chapter five further situates Wittgenstein historically within Vienna's *fin-de-siecle* and the post World War One milieu. This chapter discusses Viennese culture and society, as well as, a history of the Wittgenstein family and its relationship to Vienna's *fin-de-siecle* society. In addition, the chapter presents Wittgenstein biographically both as a child growing up in one of the wealthiest families in Europe and his experiences as an elementary school teacher in rural Austria following his return from the First World War. In so doing, the chapter discusses how Wittgenstein's own informal childhood learning activities and his teaching experience may offer insights to the pedagogical nature of his later philosophy.

This chapter additionally discusses the ways in which some curriculum theorists and educational philosophers have recently begun using Wittgenstein's later philosophy to address issues facing education. David Jardine (1992) uses Wittgenstein's concepts of language-games and family resemblances within a phenomenological framework to

reconceptualize the relationship between human beings, knowledge, and the world.[19] C. J. B. MacMillan (1998), uses the concept of language-games to help educators better understand why students sometimes fail to learn.[20] M. Jayne Fleener, Andy Carter and Stacey Reeder (2001), similar to MacMillan, use Wittgenstein's notions of games, to investigate the levels of "language play" between teacher and students and among students in a fourth-grade math classroom.[21]

Chapter six concludes by suggesting that, following Wittgenstein's later philosophical concepts, teaching should be understood as an *indirect* activity in which students are helped to understand the multiple conceptual resemblances that exist among the multifarious “language-games” that are part of their everyday lives. To do this, students need to be shown how to “see” the world “synoptically” rather than logically. In other words, a student’s ability to understand these various resemblances calls upon him or her to “see” these concepts metaphorically, what Wittgenstein describes as “seeing-as,” rather than methodologically. As an act of “seeing synoptically,” teaching and learning can no longer be understood as a linear, cause-effect, method for analyzing and synthesizing knowledge. Instead, teaching and learning are better understood as practices of pointing to the various resemblances that exist among concepts, which adhere to the multiple languages used in the classroom.

Although experiential learning activities have played an important role in various attempts to resituate teaching and learning practices as an indirect activity,

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[19]David Jardine, *Speaking with a Boneless Tongue* (Bragg Creek, Alberta: Makyo Press, 1992).

[20]C. J. B. MacMillan, “How Not to Learn: Reflections on Wittgenstein and Learning,” in *Philosophy of Education: Accepting Wittgenstein’s Challenge*, ed. Paul Smeyers and James Marshall (Boston: Kluwer Academic Publishers, 1995).

[21]M. Jayne Fleener, Andy Carter and Stacey Reed, “Language-Games in the Mathematics Classroom: Learning a Way of Life,” in *Journal of Curriculum Theorizing* (Pending).

Wittgenstein's later philosophy suggests that it is through a varied use of multiple languages, rather than activities alone, that is crucial to opening up the practice of teaching as an indirect activity. As an indirect language activity, teaching and learning are transformed from a representational process to a presentation activity that allows teachers and students to express the conceptual relationships they discover among the varied languages-games emerging from the classroom. In so doing, teaching and learning practices may be understood as more closely resembling the kinds of playful activities in which children engage in their ordinary lives.

I originally intended to include a chapter discussing the possible historical and philosophical relationship between Wittgenstein's work and the *connectionist* or Parallel Distributive Processing model of cognition. In the end, I decided that including this third aspect would make the dissertation too unwieldy. The interplay of curriculum and Wittgenstein's philosophical thought is complex enough on its own. However, my research has further convinced me that the various psychological research activities that influenced the development of *connectionism* also influenced Wittgenstein's later philosophy.[22] As such, this is an area for further research in the future.

Finally, because the dissertation touches upon the numerous areas of scholarship that impact the curriculum field, it raises more questions than can be answered in a single work. Because of the constraints of the dissertation, I have been able to address only some of the questions my research has raised. Thus, many areas of further research not addressed in this dissertation are possible. My hope is that the

[23]Of all of Wittgenstein's later works, *Zettel*, trans. G. E. M. Anscombe (Berkeley: University of California Press, 1970), suggests the best conceptual relationships with connectionism's cognitive perspective.

ideas and concepts discussed here will elicit more questions and point to areas of future research from the reader.

Of the questions for additional study that are raised, I would like to briefly mention one area that I believe has important curriculum implications. While the dissertation follows the position that Wittgenstein's later philosophy was significantly influenced by his teacher training and experiences teaching elementary school, I report in a number of footnotes that there appear to be some intriguing similarities between the anthropological aspects of Wittgenstein's later philosophy and the social psychological concepts suggested in Fredric Bartlett's works, *The Psychology of Primitive Cultures* (1923) and *Remembering* (1932). Both Wittgenstein and Bartlett were students in Cambridge's Trinity College from February 1912 until the outbreak of The Great War. In addition, both were members of the all important Moral Science Club. I am not suggesting that Wittgenstein and Bartlett directly influenced each other's ideas. On the other hand, the source of their philosophical and psychological concepts more than likely emerged from the same sources, namely their studies with Trinity's eminent scholars: philosophers Bertrand Russell, G. E. Moore, and the psychologist C. S. Myers, to name a few.[23] Further investigations into these similarities could be educationally significant considering the importance of Bartlett's ideas on schema for the reading curriculum as well as its impact on cognitive psychology.

[23]See Brian McGuinness's, *Wittgenstein: A Life, Young Ludwig 1889-1921* (Berkeley: University of California Press, 1988), 94-97 & 125-128, discussion about the Trinity class of 1912 and Wittgenstein's work with Charles S. Myers.

CHAPTER 2
RECONCEPTUALIZING CURRICULUM

The field of curriculum studies, as a distinct area of educational research, emerged in the 1920s. From its inception, the field was strongly influenced by social scientific methodologies used to underpin education as a pedagogical science. In the 1960s, educational scholars, such as Dwayne Huebner, Paul Klohr, and James MacDonald began questioning the use of these social science metaphors to justify the way in which the American curriculum was being structured.[1] By questioning these metaphors as well as the practices and procedures they were generating, these scholars were critiquing the field's intellectual and philosophical foundations. The purpose of their critique, along with their students, has been to interrupt the accepted practices of all those engaging in education—students, teachers, and administrators. In so doing, these scholars, identified as curriculum theorists, have been "reconceptualizing" the school curriculum by borrowing a variety of theoretical approaches from other academic disciplines, thereby intending to re-form American education.

Curriculum theorists maintain that the field has become firmly entombed within a narrowly defined rational methodology used to organize education. Ralph Tyler's (1949) *Basic Principles of Curriculum and Instruction* epitomized this rational methodology. Influenced by Tyler's thoughts, during the last fifty years the purpose and objectives of American school education, along with the corresponding organization of classroom activities, have been determined by an increasingly nationalized educational bureaucracy. As we begin the new millennium, the curriculum has become defined in

terms of national "standards" and "benchmarks." Students' successful attainment of these standards are now assessed using "high stakes" testing, which are further used to evaluate the capabilities of the teacher and the school. Even more importantly, by adhering to these "standards," the curriculum is removed from the local context of students' and teachers' everyday activities that are situated within a culturally pluralistic society. Rather than motivating educational excellence, standards and the accompanying high-stakes exams limit the act of studying as a transformative activity compelling teachers to "teach to the test." As such, a curriculum organized in this way presents a limited notion of education, one that subjugates a depth of understanding to an accounting procedure for identifying and cataloguing a knowledge inventory. In so doing, standards become little more than the lowest behavioral and intellectual denominators common to a culturally, ecologically, and economically diverse population.[2]

Instead of being interested in the personal transformation of students, a "nationalized" curriculum continues to move America toward a limited understanding of national purpose. This was the case following Sputnik when educational bureaucracies from outside the local educational situation implemented a new, nationally oriented curriculum, promoted by national politicians and developed by university experts in the scientific disciplines.[3] As Joseph Schwab (1970) warned in his declaration of curriculum's morbidity, a curriculum with such limited educative purposes serves to

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[1]William F. Pinar, ed., *Curriculum Theorizing: The Reconceptualists* (Berkeley: McCutchan Publishing Co., 1975).

[2]See Maxine Greene's comments on the educational problems and limitations raised by "Goals 2000: The Educate America Act," in *Releasing the Imagination* (San Francisco: Jossey-Bass Publishers, 1995), 122-129.

[3]William F. Pinar and Madeleine Grumet, *Towards a Poor Curriculum* (Dubuque, IA: Kendall/Hunt Publishing Co., 1976).

narrow schooling's interests,[4] which in turn leads, as Huebner (1976) further warned, to the curriculum's ultimate intellectual death.[5] Despite continuous state and national efforts at educational reform, the "reconceptualized" critique appears even more applicable today then at any time in the last twenty-five years.

The education establishment in the United States has generally accepted the social sciences (rational) concept of curriculum and its narrow understanding of learning. This has resulted in the belief by the general population that learning is a consequence of a student's ability to acquire a curriculum's pre-set educational objectives, and that successful learning is measured by the student's ability to replicate prescribed patterns of intellectual behavior. From this viewpoint, American education continues to maintain a didactic pattern of instruction with its logical methodology for teaching bureaucratically determined knowledge. As Herbert Kliebard (1977) observed over two decades ago, "Tyler's Rationale put the capstone on the current epoch of curriculum inquiry, a new epoch is long overdue."[6]

Foundations of the Curriculum Field

From its inception in the early decades of the twentieth century, the curriculum field looked to business's use of "scientific management" methods to rationalize American industry as the guiding principles for modernizing American education. William Pinar (1981) observes that during the first half of the twentieth century school administrators developed the field of curriculum studies by adopting bureaucratic

[4]Joseph Schwab, "The Practical: A Language for Curriculum," in *Science, Curriculum, and Liberal Education: Selected Essays*, ed. Ian Westbury and Neil J. Wilkof (Chicago: The University of Chicago Press, 1978), 287.

[5]Dwayne Huebner, "The Moribund Curriculum Field: Its Wake and Our Work," in *The Lure of the Transcendent*, 248-250.

[6]Herbert Kliebard, "The Tyler Rationale," in *Curriculum and Evaluation*, ed. Arno A. Bellack and Herbert M. Kliebard (Berkeley, CA: McCutchan Publishing Corporation, 1977), 65.

techniques used to manage American corporations.[7] Most school administrators appeared to believe that "our schools are, in a sense, factories in which (children) are the raw products to be shaped and fashioned to meet the various demands of life."[8] Franklin Bobbitt suggests:

> Education is 'rather backward' compared to industry, but this is understandable because our educational system was of 'very recent growth' whereas the development of business organization began in the Middle Ages. Therefore, it was natural that education should borrow from business.[9]

By investigating the curriculum scientifically, administrators sought to establish the optimum procedures for successfully coordinating school activities. As such, school administrators' initial interest in curriculum studies was primarily a material management process. Throughout the remainder of the twentieth century, school administrators and curriculum planners have continued to search for operating methods that would enable them to anticipate and solve the behavioral and intellectual problems involved in mass schooling. Furthermore, they pursued classroom methods that would ensure the smooth operation of the school as well as instruction with the same practical efficiency that scientific management has provided business and industry.[10]

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[7]William F. Pinar, "The Reconceptualization of Curriculum Studies," in *Curriculum and Instruction: Alternatives in Education*, ed. Henry A. Giroux, Anthony N. Penna, and William F. Pinar (Berkeley: McCutchan Publishing Corporation, 1981), 89. Pinar was a student of Paul Klohr, and has been strongly influenced by both Huebner and MacDonald. See also, William F. Pinar, William M. Reynolds, Patrick Slattery, and Peter M. Taubman, *Understanding Curriculum: An Introduction to the Study of Historical and Contemporary Curriculum Discourses* (New York: Peter Lang, 1995), 93-102; and Raymond E. Callahan, *Education and the Cult of Efficiency: A Study of the Social Forces that have Shaped the Administration of the Public Schools* (Chicago: The University of Chicago Press, 1962).

[8]Ellwood P. Cubberley, *Public School Administration* (Boston: Houghton Mifflin Company, 1916), 338.

[9]Callahan, 80. As discussed in Chapter Two, below, Bobbitt appears to present this in reverse. Instead, business may well have borrowed its methodology from education.

[10]Callahan, 11-13, suggests that there appears to be a close connection between American industry's interest in German methods of industrial organization and American interest in German methods of education at both higher and lower levels of education. This interest appears to go well beyond the short lived Herbartian movement that advocated the scientific pedagogical methodology of Johann Herbart. See also, Kliebard, *The Struggle for an American Curriculum*, 18-20 & 33-34.

By following American business's rational managerial approach, the curriculum field evolved as an extension of Frederick Taylor's research into the scientific management of American industry. Under Taylor the individual worker became the object of intense investigation, but only "within the context of increased production."[11] His primary purpose had been increasing the industrial productivity of American industry by compelling workers to work more efficiently. Taylor measured this increase in productivity, and thereby increased profits, by the amount of money saved. To achieve this end, Taylor believed that "scientific principles" needed to be used to research the "abilities and limitations" workers possessed as well as by analyzing the specific jobs that had to be performed. In this way, Taylor argued that each activity could be reduced to its most essential components. Once this was accomplished, then both the job and the worker could be reorganized to function as efficiently as possible.[12]

It is out of this scientific milieu, with "its emphasis on sheer practical efficiency," that curriculum studies emerged as a distinct research project. In addition, Callahan observes that the notion of efficiency had become part of the "bloodstream of American Life" through the widespread attacks on the waste of monopolistic capitalism in the popular press at the turn of the century.[13] By marrying schooling to scientific management, school administrators began organizing the school curriculum to *"successfully"* educate students by making the job of teaching "simpler." For much of the twentieth century, traditional curriculum research was preoccupied with bureaucratic procedures as well as with public (visible) objects of schooling: curriculum design, its

[11]Herbert Kliebard, "Bureaucracy and Curriculum Theory," in *Curriculum and Evaluation*, 614.

[12]Frederick Winslow Taylor, *The Principles of Scientific Management* (New York: Harper and Brothers, 1911), 43-45. See also, Kliebard, "Bureaucracy and Curriculum Theory," 609-611; and Doll, *A Post-Modern Perspective*, 40-42.

sequencing, evaluation, behavior, and materials. In so doing, it generally ignored the learner's experience with these objects. As the educational philosopher, Maxine Greene (1977) has explained, the traditional curriculum represents "little more than an arrangement of subjects; a structure of socially prescribed knowledge"[14] situated within a prescribed, didactic method. Following social efficiency's methodology, rather than providing students with the possibility for creative and generative intellectual activity, the traditional curriculum has focused on making the labors of the teacher, school, and, thereby, the learner as efficient as possible.[15]

Tyler's Rationalization of the Curriculum

In his *Principles of Curriculum and Instruction*, Ralph Tyler (1949) presents a four-step "Rationale" for developing and evaluating curriculum objectives and activities that has provided American educators with the essential methodology for managing the many facets of contemporary schooling. Tyler proposes that the curriculum should be organized by first determining the "educational purposes schools should seek to attain." He presents educational purposes as a set of behavioral outcomes derived through the "scientific study" of both the "learner" and "contemporary life." Second, the curriculum must determine the "educational experiences" that will "likely attain these purposes." Tyler maintains that "learning activities" have to be analyzed in order to determine those that are "critical" in helping the learner achieve the pre-selected outcomes. Third, once the critical learning activities have been identified, curriculum developers then have to

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[13]Kliebard, "Bureaucracy and Curriculum Theory," 609; and Callahan, 5.

[14]Maxine Greene, "Curriculum and Consciousness," in *Curriculum and Evaluation*, 237.

[15]Pinar et al., 93, observe that Edward L Thorndike's psychological research in education paved the way for the adoption of Taylor's method of scientific management. Kliebard, "Bureaucracy and Curriculum Theory," 609, describes this as the "bureaucratic model" of curriculum, while James B. Macdonald, in "Curriculum, Consciousness, and Social Change," *Contemporary Curriculum Discourses*,

“effectively organize these educational experiences." Tyler proposes that to ensure that the selected learning activities will produce the curriculum’s objectives in each student they must be put into the proper (logical) sequence. In the fourth and final step, the learner’s ability to achieve the curriculum’s pre-established objectives must be “scientifically analyzed” to ensure that the learned behaviors match the curriculum's objectives.[16]

In developing these principles, Tyler assumes that education’s sole purpose is the “changing of the behavior patterns of people.”[17] He suggests that the curriculum can accomplish this only by changing a learner’s basic habits, ways of thinking, skills, attitudes, and interests. Changing these behaviors, however, requires a considerable amount of time as well as continuous attention on a large number of learning experiences that focus upon a single outcome. Hence, he proposes that the curriculum’s objectives and activities should represent only the particular changes desired by the society as a whole. While Tyler believes that the way to *“intelligently”* determine these changes would be to scientifically analyze the differences between the learner and the society, he adds that in order for the identified differences to be considered *educational* outcomes they first have to be “screened” by a set of “socially acceptable norms.”[18]

Tyler stresses that, while the objectives and activities chosen for the curriculum are a “matter of choice,” these judgments must be made within a “comprehensive

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ed. William F. Pinar (Scottsdale, AR: Gorsuch Scarisbrick, Publishers, 1988), 165, further describes this curriculum model as “technological rationality.”

[16]Ralph W. Tyler, *Principles of Curriculum and Instruction* (Chicago: The University of Chicago Press, 1949, paperback edition, 1969), 1. See also, Doll’s, 30-31, 51-52 & 115, observation that Tyler’s four-step rationale “is a variation on Rene Descartes’s [rational] method for rightly conducting reason.”

[17]Tyler, 6, states that he is using the term “behavior in the broad sense to include thinking and feeling as well as overt action."

philosophy" explicitly expressing the society's values. By accepting these norms as standards for judging the educational appropriateness of outcomes, these norms become the "values . . . aimed at in the educational program of the school." In this way, society's comprehensive philosophy will serve as a screen used by the school to eliminate the objectives and activities that are deemed "unimportant" or contradictory."[19]

Tyler proposes that, as the society's educational philosophy, "the values deemed essential to a satisfying and effective life" provide the *essential definition of what it means to live in a good society*. He further suggests that a democratic society's educational philosophy should emphasize important democratic values. One of these values calls upon a democratic society to maintain a "faith in *intelligence* as a method of dealing with important problems"[20] offering the society a framework for working through any problems presented by its others values. Kliebard, however, criticizes Tyler suggesting that, while objectives and learning activities are to be drawn from a variety of social and intellectual sources, the apparent "democracy" of Tyler's approach is just "window dressing." Kliebard argues that Tyler leaves us "in the dark about how one arrives at a philosophical" screen, and he does not explicitly describe how schools should engage in this screening process.[21]

It appears, however, that Tyler does reveal a great deal about the philosophical outlook a society should use to determine the selection, organization, and evaluation of a school's objectives and activities. Throughout the first chapter, in which he presents

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[18]Tyler, 6 (my emphasis).

[19]Tyler, 32-34.

[20]Tyler, 34 (my emphasis), democratic values include: the importance of every individual; the opportunity to fully participate in all of society's activities; and the "encouragement of various personalities."

[21]Kliebard, "The Tyler Rationale," 62.

his Rationale for determining educational outcomes, Tyler roughly equates the terms "science," "intelligence," “method,” and "analysis." As already stated above, not only does he propose that the scientific method is the most *intelligent* way to determine the needs of learners, but he also proposes that *intelligence* (i.e., science) should be the philosophical “method” used by a democratic society to screen the appropriateness of these outcomes. Tyler explains that educational objectives and activities should be identified and organized using scientific management's practical logic developed for analyzing the essential activities a worker performs on a job. To explain this point, Tyler describes how, at the beginning of the First World War, the traditional apprenticeship system for training workers was considered too slow in providing for the ever increasing demands for skilled workers by American industry. Consequently, in order to teach new workers the required job skills more rapidly, job training was moved from the factory to the classroom. In order to create and organize these new training programs, curriculum developers were required to “analyze the activities carried on by the workers in a particular field.” Tyler’s Rationale proposes that a *“similar ‘logic’”* should be used to develop a school's educational objectives and activities. He further adds, "Almost all of the methods of social investigation can be used in studying the learner's needs."[22]

Hence, by arguing that the “needs” of the learner and of contemporary society be investigated scientifically and that the educational value of these outcomes is further analyzed using the same method, Tyler has provided schooling with a single method for

[22]Tyler, 12 & 17-20. The methodology Tyler utilizes to organize the school curriculum can already be recognized as important in the report by The National Society for the Study of Education, in *The Foundations and Technique Curriculum-Construction: Twenty-sixth Yearbook of the National Society for the Study of Education*, ed. G. M. Whipple (Bloomington, IL: Public School Publishing Company, 1927). Pinar et al., 150, observe that “the great social efficiency curricularist,” W. W. Charters, was one of Tyler’s professors and had a significant influence upon his carreer.

ordering the curriculum, which also acts as the society's comprehensive philosophy. By structuring the classroom's objectives and activities into a sequence of linear steps, rather than being primarily concerned with how human beings come to know, Tyler is centering the curriculum within a philosophical outlook of pedagogical expediency that arranges learning activities in the curriculum for the purpose of practical efficiency.[23]

Kliebard observes that centering the curriculum on the presumed certainty of a mechanistic metaphor ignores that "the most significant dimensions of an educational activity, or any activity, are those that are completely unplanned and wholly unanticipated."[24] Tyler's rational method of learning fundamentally differs from students' everyday learning experiences, which, as Dewey observes, are informal and incidental. According to Dewey, everyday learning is incidental because our daily associations are not formally organized to educate us in any direct way. Dewey argues that, while this kind of "incidental education is natural and important," formal schooling is also necessary in a "complex [industrial] society." However, echoing his contemporary, Alfred N. Whitehead (1929), Dewey cautions that formal education can "easily become remote and dead." For Dewey and Whitehead, education is not merely the procedures for pouring knowledge into learners to fill the "gaps" in their behavior, or for directly leading the learner in a step-by-step fashion from what they know to what they don't know. Instead, learning or knowing is an active, creative process in which the student

[23]Tyler, 16-17. As we will see in Chapter Two, below, the rational philosophical framework Tyler uses to organize the curriculum is not something new within the tradition of Western European education.

[24]Kliebard, "The Tyler Rationale," 64.

must “wrestle with a problem first hand, finding his or her own way out,” thereby making the ideas implied by the problem the student’s own. [25]

Kliebard suggests that Tyler’s Rationale presents the curriculum field with the problem: How can learning experiences, understood from Dewey as an “interaction between a student and environment” be pre-determined by the teacher or the curriculum? If learning “is essentially a consequence of the perceptions, interest, and previous experience of the student,” then should it be within the power of those designing and implementing the curriculum to determine explicitly what a student will actually learn? Tyler assumes this by tacitly centering the curriculum on the school bureaucracy’s ability and right to establish learning objectives. As the school organizes and manipulates the student within the tightly constrained environment of the classroom and establishes activities to meet behavioral objectives, then it acquires the tacit right to invoke the kind of behavior the curricular objectives require.

Tyler proposes that curriculum developers can only ensure that learners have learned the planned outcomes by scientifically evaluating their behaviors, making certain that nothing had been omitted from the pre-established sequence of activities. Consequently, Tyler’s purpose in evaluating student’s behavior is not to analyze whether the pre-set objectives are appropriate educational goals, but to evaluate whether the experiences are implemented correctly. Learning experiences are judged to be correctly designed and sequenced depending upon the students’ ability to attain these pre-set objectives. This ensures that, if a student fails to learn the desired behavioral objective, it is not the fault of the curriculum or the teacher. Instead, the

[25]Dewey, 4-8 & 150-160; and Alfred North Whitehead, “The Aims of Education,” in *The Aims of Education and Other Essays* (New York: The Free Press, 1929; The Free Press, 1967), 2.

student has not adapted to the design set. As Doll suggests, “the linear nature of the sequence” of Tyler’s organizing principles de-contextualizes the learning process which “allows the goals or ends to exist apart from the means of implementation and evaluation, with the evaluation referring only to the success of the implementation, not to the question of the appropriateness” of the educational outcomes.[26]

Tyler’s curriculum appeals to a practical common sense of efficiency that continues to fortify the scientific management model used by American business and industry.[27] The corporate management model and the rationally organized curriculum appear to merge in the examples Tyler uses to describe schooling’s educative purpose as fulfilling schooling’s and industrial society's shared “need” of educating its youth for an economically productive career.[28] As such, what Tyler ultimately provides the American curriculum is a systematic procedure for ordering classroom activities in an attempt to guarantee that all students will grow up to serve economically useful roles.

Teacher as a Decision Maker

The logic that structures Tyler’s curriculum methodology is similar to the framework that underpins the "Teacher as a Decision Maker" model of teacher education. This model for “effective teaching,” presented by James M. Cooper (1999), provides a three-stage procedure for “the instructional process: planning, implementation, and evaluation.” The *planning* stage collapses Tyler’s first three principles into a single process, “requiring that teachers make decisions about the student’s needs,” the “most appropriate objectives to meet these needs,” the “content to

[26]Doll, 53.
[27]Kliebard, “The Tyler Rationale,” 64-65.

be taught," and select and organize the "teaching strategies" and "learning activities" best "suited to attain these objectives."[29]

Following the planning stage, the "decision maker" model expands Tyler's fourth principle for determining whether students attain the prescribed educational outcomes by dividing it into the *implementation* and *evaluation* stages. The implementation stage "requires teachers" to evaluate their on-going instruction in order "to make adjustments to their plans based on student" feedback during the lesson. During the evaluation stage, teachers are required to decide "on the suitability of chosen objectives, the teaching strategies keyed to those objectives and whether students achieved the intended outcomes." Asking teachers to evaluate the lesson's objectives may, at first, appear to be a significant revision of Tyler's fourth principle, which was not intended to evaluate the educational objectives. However, the model's primary purpose for having teachers evaluate the lesson's planned objectives is to ensure that these objectives match the objectives that are used to evaluate student achievement. Hence, as with Tyler's Rationale, assessment goals continue to drive the development of learning objectives.

In the "decision maker" model, educational purposes and activities are no longer determined using Tyler's scientific studies. Instead, the teacher is now required only to "deliberate" among the various options for objectives and activities selected by an education bureaucracy. In current school curricula, a lesson's particular objectives are

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[28]Ralph Tyler, "Specific Approaches to Curriculum Development," in *Curriculum and Instruction*, 18-19. Reprinted from, *Strategies for Curriculum Development*, eds. Jon Schaffarzick and David H. Hampson (Berkeley: McCutchan, 1975), 17-33

[29]However, as one of my interns ironically observed in her reflection on this model, in the school she teaches, teachers are allowed *to make few decisions* about what and how to teach. Instead they are required to follow the curriculum predetermined by the school administration with the single goal of

required to fit within a framework of educational outcomes, in the guise of benchmarks and content standards, already delineated by the state or local school district. This is not a rejection of Tyler's Rationale, but is a contemporary implementation of his four principles. In particular, it appears to be the fulfillment of the scientific management philosophy promoted by his Rationale with a strong emphasis on measured achievement as the criteria for an educated student, as well as advancement of the economic purpose for education. As such, the "effective" teacher's curriculum responsibilities have become limited to a kind of judgement based upon a set of analytical practices that arranges the complexities of classroom teaching for the singular (pedagogically expedient) purpose of "*bringing about intended learning outcomes*."[30] As with Tyler's Rationale, it is not the teacher's role to determine whether the outcomes are appropriate, but only whether the objectives and activities used to enable students to achieve these outcomes function properly.

Reconceptualizing Curriculum

Pinar and Madeleine Grumet (1988) propose that by reconceptualizing the curriculum field, curriculum theorists hope to disrupt the accepted theory-practice relationship, which suggests that theory exists only to serve the practical effectiveness of classroom teachers. Instead, curriculum theorists have the responsibility to inform everyone engaging in education (students, practitioners, and administrators) that the practices traditionally associated with efficiently implementing bureaucratically determined educational objectives and activities are not the only possible curriculum

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ensuring that students meet the state and school district's standards by passing the "high stakes" exam (my emphasis).

[30]James M. Cooper, "The Teacher as a Decision Maker," chap. in *Classroom Teaching Skills*, ed. James M. Cooper (New York: Houghton Mifflin Co., 1999), 7-9.

practices.[31] In doing so, curriculum theorists are attempting to restore thoughtful or critical inquiry to classroom activities. They want to enable teachers and students to begin questioning the kinds of underlying organizing structures presented by Tyler's curriculum principles, which "practical activity silences." In so doing, curriculum theorists ask educators to question not only the activities in which teachers engage, but the very nature of knowledge as discreet objectives, outcomes, and purposes ordered for the effective transmission of the school curriculum. By questioning the accepted practices and beliefs of those engaging in education, teachers and students are no longer compelled to succumb to the evident demands of schooling's institutional situation. [32]

For example, a graduate student, who has been teaching first grade for eleven years, recently described how, at the end of this past school year, the local school district required all of its elementary teachers to complete a "curriculum map addressing the district's benchmarks" for the system's "Curriculum Coordinator." The map needed to include "all the objectives and activities the teachers would be using in language arts and mathematics for each month of the [next] year at their grade level." They were given this task during the busy last two weeks of the school year, being provided with only about ninety minutes of actual planning time in which to finish the map. The teachers were "told that the function of the curriculum map was to ensure that every student at a given grade level will be on the same page on any given day, across the entire school system."

[31]Pinar and Grumet, "Socratic *Caesura* and the Theory-Practice Relationship," in *Contemporary Curriculum Discourses*, 98.

[32]Pinar and Grumet, "Socratic *Caesura*," 98-99.

As this example suggests, the primary purpose of most curriculum research continues to focus on making schooling more efficient. In so doing, it promotes "effective teaching" by ensuring that teachers will be able to make quick, practical decisions within the classroom setting by facilitating the implementation of pre-established educational procedures of a bureaucratically imposed curriculum. Pinar observes that most traditional curriculum researchers and developers are former schoolteachers who continue to maintain their intellectual and practical connections to their own classroom experiences. Hence, their research interests tend to focus on the entrenched habits and pre-conceived realities that structure classroom practices as well as the existing school culture. These researchers share a common institutional theme in their endeavor to "serve the practitioners."[33] They show little interest in studying and understanding how new theoretical perspectives that emerge from a variety of academic disciplines might be used to reconceptualize classroom practices
as an activity to serve teachers' and students' broader intellectual transformation.

Critiquing Curricular Language

Theorists reconceptualizing curriculum maintain that schooling has become increasingly separated from the everyday lives of teachers and students. In the mid-seventies, curriculum theorists began their criticism of schooling by rejecting the behavioral theories underpinning social efficiency's methods of traditional quantitative and statistical educational research. An important aspect of their critique was the rejection of the social sciences' theories of learning that situated learning activities

[33]Pinar, "The Reconceptualization of Curriculum Studies," 88-89.

within a Pavlovian frame.[34] Dwayne Huebner, one of the founders of curriculum theory,[35] believes that the school curriculum's theories of learning are embedded in a technical-rational language that is not adequate for transforming students' lives. He maintains that the technical language upon which schooling has been built continues to search for universal laws for governing human behavior.[36] Huebner's critique of the language of learning focuses on the scientism of the social science disciplines, their tendency to transform knowledge into a technological discourse, and their dependence upon educational psychologists' positivist understanding of how and what humans come to know. As he explains:

> Making content present for or accessible to students is primarily a matter for educational technology. The various sciences now associated with education such as learning theory, child development, and cognitive psychology are most appropriately seen as technical tools for making content available, not for reaching great truths about being human.[37]

Huebner suggests that in psychologists' attempts to explain the learning process they appropriated the scientific belief that maintains that change occurs as a direct result of a cause-effect relationship "between two events at different times." He believes that this kind of learning does not resemble education.[38] As Dewey observes, "We never educate directly, but indirectly by means of the environment."[39] Huebner emphasizes that in their attempt to acquire scientific status, behavioral psychologists adopted a technical language to explain learning which subsumes human activity under

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[34]Kliebard, "The Tyler Rationale," 63, uses the term "Pavlovian" to generally refer to behavioral theories of learning upon which educational psychological has been built. See Pinar et al's discussion of the behavioral foundations to "social efficiency;" Tyler's Rationale; and Benjamin Bloom's "cognitive" taxonomy of "higher ordered thinking, in *Understanding Curriculum*, 90-102, 148-51 & 155.

[35]William F. Pinar, Introduction to *The Lure of the Transcendent*, xxiii.

[36]Huebner, "Developing Teacher Competencies," in *The Lure of the Transcendent*, 301.

[37]Huebner, "The Moribund Curriculum Field," 250-254.

[38]Huebner, "The Tasks of the Curricular Theorist," in *The Lure of the Transcendent*, 215-216.

the metaphors devised for explaining experiments on animal conditioning. Huebner insists that this form of technical discourse cannot "describe what we do when we educate" human beings.[40]

These technological cause-effect structures presume that a "universal knowledge can be produced which will fit general situations." This has led educational psychologists to believe that their research would lead to a universal theory of learning that could methodologically solve all the problems teachers face in the classroom. In time, this led curriculum researchers to believe that a "theory of teaching" could be found that would do the same thing.[41] Throughout the twentieth century, curriculum researchers have adapted technological advances to school's traditional didactic methodology in their attempt to ensure that all students would learn the curriculum's pre-set educational objectives.

Huebner has attempted to refocus education upon its potential as a "journey of the self,"[42] encouraging students to study "for their own transformation, a way of working on . . . [the] loosening of old binds and discovering a new self."[43] Education's focus on achieving technical skills destroys the importance of the student's act of studying. Rather than simply being willing to accept the curriculum's already established, technical knowledge, Huebner believes that education should become a "protest" against these forms of knowledge, offering students and teachers a way to protest against society's

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[39]Dewey, 19.

[40]Huebner, "Religious Metaphors and the Language of Education," in *The Lure of the Transcendent*, 359. See James Watson's argument in, *Behaviorism* (New York: W. W. Norton & Company, 1930; The Norton Library, 1970), 6, where he presents the dominant behavioral perspective that psychology should not attempt to study the soul.

[41]Huebner, "Developing Teacher Competencies," 303-04.

[42]Huebner, "Autobiographical Statement," in *Curriculum Theorizing: The Reconceptualists*, 4, and in Pinar et al., 861.

[43]Huebner, "Education and Spirituality," in *The Lure of the Transcendent*, 411.

idealized and never questioned conventions. As he describes, “Most of my professional career has been a search for more adequate and powerful ways to describe education.” Once we accept the point of view that education is a protest, then as students we are called upon to constantly renew and transform our traditions.

According to Huebner, equating education with the acquisition of schooling’s procedural “objectives,” “is a paltry response to humankind’s” full participation in life’s transformative potential. We can be educated—drawn beyond our present experience—only if we recognize the transcendent possibility in our lives. Huebner declares, “Education is the lure of the transcendent,” bringing hope to our “*forms of life*.”[44] It is a transcendence that exists both within us and within the midst of our relationships with others. Because we are always in relationship, the transcendent emerges from the new possibilities that are embodied in the differences and opportunities created by our relationships with others. In this way, the transcendent opens us to the future, enabling us to become more than the sedimentary accumulations of our past experiences. The transcendent ignites the creative spark that stimulates students and teachers to continually transform who they are.[45]

Huebner believes that these disruptions in our everyday life call upon us to “reach out beyond ourselves,” beyond our accumulated experiences, and enter into the lives around us. However, while education occurs in community, contrary to schooling's current theories of learning, an education is not something that can be forced upon

[44]Huebner, “Religious Metaphors,” 362 (my emphasis). While he does not specifically cite Ludwig Wittgenstein at this point, Huebner’s use of “forms of life” appears to be a reference to Wittgenstein’s use of this term in his *Philosophical Investigations*, which will be discussed further in Chapter Three.

[45]Huebner, “Religious Metaphors,” 360-61.

others. Instead an education is something that we do only for ourselves.[46] Rather than being considered learning, the human act of becoming aware of the world around us would be better understood as a way of knowing that constantly re-weaves our various relationships with others and the world, thus continuously recreating the fabric of our lives.

The encounters of teachers and students with the school community, its people and academic content, offer them the means to go beyond the school's bureaucratic structures and pre-set technological knowledge. By continuing to depend upon technical-rationality's idealized discourse, Huebner warns that our education comes to an end because we no longer remain open to the freshness of life. Without this approach humans would be "incapable of the continuous education which seems to be theirs."[47]

Theorizing Curriculum as Autobiography

As an alternative to the traditional concept of curriculum, Pinar and Grumet began reconceptualizing curriculum in the mid-nineteen seventies by incorporating new theoretical perspectives from phenomenology, existentialism, and psychoanalysis that challenge the learning theories espoused by the mainstream curriculum field. Pinar observes that education research has become almost indistinguishable from social science research, which manages learning as a linear, mechanized, neurophysiological reflex.[48] Both Pinar and Grumet believe that by refocusing education research toward

[46]Huebner, "Religious Metaphors," 360.

[47]Huebner, in "Education and the Church," in *The Lure of Transcendent*, 178, states, "the natural language for talking about education is religious." He maintains that it is only through a religious language of spiritual transcendence that education moves us beyond received forms of technical knowledge.

[48]Pinar, "The Reconceptualization of Curriculum Studies," 91, and Huebner, "The Moribund Curriculum Field," 246-47. Paul Smeyers, "Assembling Reminders for Educational Research:

the individual experiences of teachers and students the curriculum can begin to bridge the Cartesian divide between people's inner, cognitive world of thought and the outer "psycho-social" world of human experience. They have identified this reconceptualized curriculum as *currere*, transforming the school curriculum from a simple, pre-determined course that students must endure, into a complex, personally situated, autobiographical experience.[49]

Currere comes from the same root word as curriculum, which in Latin means to run a course. Advocates of *currere* believe that curriculum should embody more than an institutionalized, bureaucratic methodology of study that the individual student has little control over. According to Pinar and Grumet's reconceptualized perspective, not unlike Huebner's, what the field of curriculum must recognize as vital to educating human beings, is not the replication of an imposed didactic course of knowledge, but the different ways each teacher or student runs the course established by schooling's pre-established structures. It is this personal, idiosyncratic notion of curriculum that *currere* emphasizes. *Currere* attempts to revive the dialectical independence and dialogical freedom lost in the transformation of medieval scholasticism into a modern pedagogical science. Rather than determining classroom practice, Pinar and Grumet propose that *currere* permits theory and practice to play off one another by using theory to expose the limitations inherent in schooling's practical methodology, thereby opening the possibilities for expanding educational practices. *Currere* presents teachers and students with a renewed dialectical approach to learning that offers them an existential activity, which personalizes their encounters with the curriculum. As Pinar and Grumet

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Wittgenstein on Philosophy," *Educational Theory* 48, no. 3 (1998): 287-308, reports that qualitative forms of educational research are only now beginning to receive a wider acceptance.

suggest, teachers and students must first recognize what they do not know, and then study and search, remaining open to their "experiences, open to others, and being willing to abandon" what they believe "in the face of what they see."[50] Through this dialectical activity, *currere* offers education a way to return its focus on the multiple ways teachers and students can be transformed by the interactive nature inherent in all human activity.

As Pinar observes, while "the track around which I run may be inalterably forced, the rate and quality of the running and my body moving through space and time are my creations; they are my responsibilities."[51] No matter what the social or institutional contexts the track might represent, because it is still the individual teacher or student who is running the track, what is taught or learned is an individual response to the course. *Currere* offers those engaged in education with the potential for an autobiographical self-awareness that connects their autonomous thoughts: dreams, fantasies, or daydreaming—creative thinking that occurs tangential to their immediate activities, which are often fragmentary and idiosyncratic—back to the educational situations in which they become engaged. Instead, Grumet maintains that today's bureaucratically imposed curriculum continues to be more concerned with whether or

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[49]Pinar and Grumet, *Towards a Poor Curriculum*, 16-17; and Pinar et al., 518.

[50]Pinar and Grumet, *Towards a Poor Curriculum*, viii, and "Socratic Caesura," 99. Interestingly, the dialectical relationship presented by *currere* appears to share similarities with the open-ended, or "*broken,*" dialectic that Francis Bacon presents in *The Advancement of Learning*, vol. I: in Great Books of the Western World, 30, as a new method of inductive inquiry that opposes the schoolmaster's method for pre-ordering experiences, which Bacon describes as the "idols of the mind."

[51]Pinar and Grumet, *Toward a Poor Curriculum*, vii.

not teachers and students are conditioned by their myopic focus on a didactic process that seeks to reproduce narrowly defined educational objectives.[52]

Pinar and Grumet use phenomenology's philosophical perspective to liberate teachers and students from their unconscious immersion in schooling's bureaucratic language. As a phenomenological process *currere* attempts to transform education into a curriculum that investigates educational experiences by returning them back to "things in themselves," Husserl's "pre-conceptual realm in which experience has yet to be shaped by language."[53] *Currere* offers the curriculum field a new way of seeing through Husserl's phenomenological method of the "*epoche.*"[54] Husserl's *epoche* enables us to "automatically bracket the causalism of the natural attitude and other theoretical impositions on immediate experience."[55] Grumet maintains that phenomenological bracketing "requires that we distance ourselves from our experiences in order to come closer to them."[56]

By using phenomenological bracketing, curriculum theory has sought to restore the contemplative moment with which students interrupt their taken-for-granted understandings enabling them to ask the questions practical activity silences. According to Grumet, *currere's* phenomenological perspective removes teachers and students from

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[52]Grumet, "Bodyreading," in *Contemporary Curriculum Discourses*, 459. This article is also a chapter in Grumet's book, *Bitter Milk: Women and Teaching* (Amherst, MA: The University of Massachusetts Press, 1988), 129-152.

[53]William F. Pinar and William M. Reynolds, "Introduction: Curriculum as Text," in *Understanding Curriculum as Phenomenological and Deconstructed Text*, ed. William F. Pinar and William M. Reynolds (New York: Teachers College Press, 1992), 4. See also Pinar and Grumet, *Towards a Poor Curriculum*, viii & 38-39. This is what Merleau-Ponty describes, in support of Husserl, as "the pure, and still dumb experience, which must be brought to the pure expression of its own meaning."

[54]See Edmund Husserl, *The Crisis of European Sciences and Transcendental Phenomenology*, trans. David Carr (Evanston, IL: Northwestern University Press, 1970), 137. See also, Nicholas Gier, *Wittgenstein and Phenomenology: A Comparative Study of the Later Wittgenstein, Husserl, Heidegger, and Merleau-Ponty* (Albany, NY: State University of New York Press, 1981), 14.

[55]Gier, 96.

[56]Pinar and Grumet, *Toward a Poor Curriculum*, 35.

their practical and unexamined orientation toward the curriculum by giving them the ability to “bracket” their ordinary classroom understandings. By bracketing their experiences teachers and students are able to re-envision the ordinary as strange, thereby transforming themselves biographically and seeing ordinary situations anew. In this way, bracketing sets apart our understandings, “cleansing” them of the “irrelevancies” that clutter our field of consciousness. By reducing the clutter, we are left with only the essential recurring forms, “revealing not any particular truth of its facticity, but its general truth as it emerges in a community of multiple subjectivities.”[57]

Pinar further suggests that by adopting Husserl’s *epoche*, *currere* offers teachers and students the ability to bracket the flux of schooling’s experiences, stabilizing and then ordering them in the freshness and immediacy of the bracketed encounter.[58] In so doing, they are able to escape their conceptual memories. This allows teachers and students to examine independently their experiences and to see the connections to their psychological, physical, and biographic situation—to “one’s form of life” as lived experience.[59]

Currere not only allows teachers and students to inspect their own bracketed subjectivity, it also offers them a way to investigate the effect that their social milieu has upon them. By reconceptualizing the curriculum, theorists reposition the context of the field to reveal the ways in which schooling is embedded within the social and cultural situation of its surroundings. In so doing, *currere,* as do the existential phenomenologists, "recognizes culture as the given situation, through which the

[57]Pinar and Grumet, *Toward a Poor Curriculum*, 41-43.
[57]Pinar and Reynolds, 6.

individual [teacher and student] experiences his or her subjectivity, embodied in acts in the world."[60] Grumet maintains, "Whenever we speak of education, we are speaking of human experience in the world. Despite the unique specificity of each person's perspective, . . . he or she exists always in context."[61]

Grumet additionally describes how *currere* uses phenomenology to provide a new metaphor for learning as "a reflexive cycle in which thought bends back upon itself and thus recovers its volition."[62] By critically reflecting upon their educational experiences, students are allowed to wander back into their past, freely associating current curriculum content with these experiences. As students recall remembrances of life experiences they can disclose these experiences back to themselves helping them to understand more clearly how these experiences impact their intellectual development. Students learn as they mark the connections they find between the present and the past.

Grumet further suggests that through *currere's* autobiographical methodology, teachers and students are able to reclaim lost experiences, allowing them to reconceptualize the curriculum as they reconstruct their remembrances of the past. As students autobiographically reconstruct the curriculum they are also learning by reconstructing their experiences along with the essential recurring academic forms of "literature, or mathematics, or science." In other words, *currere* enables students to learn by providing them a way to understand how the academic disciplines contribute to their general development.[63]

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[59]Pinar, "*Currere*: Toward Reconceptualization," in *Curriculum Theorizing*, 27; and William F. Pinar, "Autobiography and an Architecture of Self," in *Autobiography, Politics and Sexuality* (New York: Peter Lang, 1994), 218.

[60]Pinar and Grumet, *Towards a Poor Curriculum*, 44 & 45.

[61]Pinar and Grumet, *Towards a Poor Curriculum*, 33.

[62]Pinar and Grumet, *Towards a Poor Curriculum*, 130-131.

[63]Pinar and Grumet, *Towards a Poor Curriculum*, 42; and Pinar et al., 516.

Currere's importance as a method of research and of learning is connected to its role in helping students explore their psyche. Freud, according to Pinar, has taught that our experiences as infants and children remain "hidden" from our view. This hidden psyche is "the accumulations of experience, layers of sedimentation" that form our memories and our various categories of thought. The psyche, according to Pinar, is the source of our outward activity; it is the integrative center, from which hidden experiences reveal themselves as our given beliefs. Hence, *currere's* autobiographical method relies upon psychoanalysis' use of regression to uncover the underlying structures of our beliefs. As autobiography, the teacher or student's psyche become the source for both the curriculum and educational research, as well as the source for his or her own transformation.

Currere offers teachers and students a way to bracket their everyday school experiences by using psychoanalysis' method of reflective regression.[64] According to Pinar, *currere* provides teachers and students a way to autobiographically capture their past "as it hovers over the present." By asking them to look into their past lives psychoanalytically, teachers and students attempt to "retrieve sensory experience," so that their past is "not portrayed from the point of view of the present."[65] Pinar contends that the traditional curriculum compels us to dwell, both cognitively and subjectively, in the present, thereby acting out our sensory past within the context of our present situation. By combining bracketing and regression, he suggests that *currere* enables teachers and students to retrace their lived experiences in school, as well as other aspects of their life stories. This process makes it possible for them to intensify their

[64]Pinar and Grumet, *Toward a Poor Curriculum*, vii.
[65]Pinar, "Autobiography and an Architecture of Self," 217.

intellectual development in a way that hopefully transforms not only their teaching practice, but also their lives. With our deepening self-awareness, Pinar argues, "comes the freedom to comprehend the nature of our involvement in the academic disciplines, and with teaching and learning."[66]

Pinar reminds us that even though experiences remain hidden from our consciousness, their presence continues to impact our thinking.[67] Our hidden memories emerge as the source of autonomous, unconscious, and spontaneous thoughts, indirectly influencing what we come to know. While the environment does not directly activate these autonomous thoughts, they are born indirectly from our experiences that occur within an environmental and cultural context. These hidden memories are the means by which teachers and students go beyond being mere products of their environment. As Grumet further observes, although *currere's* autobiographical method enables us to excavate what has been hidden in our memory, our regular ways of thinking are also impacted by those experiences that remain hidden, without having to make them explicit.[68]

Once regressive psychoanalysis is used to recover our curriculum past, *currere* then uses existential imagination to initiate the next stage of its method by moving the curriculum towards our undetermined, autobiographical future. *Currere's* progression calls upon teachers and students to use their capacity to imagine what a curriculum could become, but is not yet present. In so doing, like the past, one's conception of the

[66]Pinar and Grumet, *Towards a Poor Curriculum*, vii, xi, 8-9 & 19; and Pinar et al., 515.

[67]Pinar, "Autobiography and an Architecture of Self," 202; and "Time, Place, and Voice: Curriculum Theory and the Historical Moment," in *Contemporary Curriculum Discourses*, 272.

[68]Grumet, in "Bodyreading," 459, argues that reading is more like thinking than is writing because through reading we seek what is hidden within our psyche without explicating it, while the purpose of writing is to explicate our thoughts.

future can also be employed to construct one's present by freely associating the possibilities that our imaginations create out of the current context of our lives. By calling upon students to use their imagination, *currere* also helps students to discern the direction their intellectual development could evolve, not only rationally or linearly, but also imaginatively and multi-dimensionally.[69] Without imagination it becomes difficult for students to bring past meanings forward into the present. This limits their ability to recover, recall, and relive their own biography. By restricting their history they limit the past, which they use to learn by recreating their present meanings. Otherwise, for many students, knowledge becomes static and stale, or, as Alfred North Whitehead states, it becomes "dead" and "inert."[70]

As a process of imagination, *currere* becomes an act of self-transformation, what Pinar describes as a "biographic situation." As *currere*, the curriculum is reconceptualized to embody the student's emerging biographical transformation, the imagined and spontaneous forms a human life can take between birth and death. Without this sort of biographic movement, Pinar believes that a student's intellectual development cannot occur and the student's ability to learn is restricted. As existential, imaginative, lived activity, *currere* fundamentally changes the curriculum from the narrow, bureaucratically centered didactic methodology that students are asked to mimic. The problem with the bureaucratized curriculum is its unimaginative focus that is not concerned with how the teacher or students exist as individuals. Instead, Pinar suggests that our intellectual development should parallel how individuals function biographically, rather than mechanically. According to John Dewey, the traditional

[69]Pinar and Grumet, *Towards a Poor Curriculum*, 9.
[70]Pinar and Grumet, "Socratic *Caesura*," 98; and Whitehead, 2.

curriculum anchors the student in the purely mechanical aspects of the educational activity that "leads to methods, which reduce much instruction to an unimaginative acquiring of specialized skill and amassing of a load of information."[71] As Dewey emphasizes, using our imagination is what moves learning beyond being a direct physical response to the environment. "Experience itself primarily consists of the active relation . . . between human beings and their natural and social surroundings," hence, Dewey declares, "we never educate directly, but indirectly by means of the environment." As he observes:

> Were it not for the accompanying play of imagination, there would be no road from a direct activity to representative knowledge; for it is by imagination that symbols are translated over into a direct meaning and integrated with a narrower activity so as to expand and enrich it.[72]

It is the imagination, what Dewey calls, "our mind-wandering and wayward fancy . . . cut loose from concern," our autonomous, tangential thoughts, our dreams and day-dreams, that are the connecting fabric between our historical reconstruction and projections of possible futures, which make up what we have come to know.[73]

Pinar observes that at any given moment a person lives within a "biographic situation." It provides a structure of meaning that embraces the whole context of one's existence, the present, remembrances of our past, and imagined expectations of possible futures. Our biographic situation, Pinar maintains, provides"coherence," a structure of meaning that "surrounds" each present event, not simply logically, but lived and felt as the embodiment of our existential experience. Pinar's "biographic

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[71]Dewey, 236-237.

[72]Dewey., 9, 236, & 274.

[73]Greene, in "Curriculum and Consciousness," 239, also appears to echo Dewey's use of imagination as a way of going beyond the purely mechanical aspects of activity to bring new meanings into being. See also, Greene's treatment of Dewey and imagination in, *Releasing the Imagination*, 17-22.

coherence" further suggests a more radical way of understanding individual existence because it also provides a process through which we are able to give meaning to contradictory or paradoxical experiences as well as those experiences that are not fully articulated. Biographic "coherence" does not require experiences to be complete or whole.[74] Instead, biographic "coherence" can be distributed across the fragmentary, isolated, and disjointed moments that make up our lives, enabling us to give meaning to the immediate situations we encounter.

A reconceptualized view of curriculum can be understood as an attempt to return to a *conversational* form of discourse that raises questions about our underlying beliefs. As a process that seeks to include multiple voices, learning once again becomes a continuous and dynamic re-constitution of our experiences that the didactic curriculum cannot provide.[75] It is no longer the learner who is being studied. Instead, the learner is again the one who studies" not objects at some distance as does the scientist, spy, or voyeur, but as one who is in an intimate relationship, generating new meanings and discerning the potentialities that emerge from the relationship. As a relationship among individuals, the curriculum no longer needs to dissect contemporary society in order to unveil its objects of limited consensus, like so many ribs. Instead, as a dialogical relationship, contemporary life becomes transformed into a living community—a dynamic ecology of living, social, and environmental relationships. These are relationships that go beyond static, idealized categories; they also include differences. When taken seriously, differences compel us to re-weave our understanding with new threads of meaning formed by the reciprocal relationship between the stranger and the

[74]Pinar and Grumet, *Toward a Poor Curriculum*, 52; and Pinar et al., 520.
[75]Pinar and Grumet, *Toward a Poor Curriculum*, 35.

knower. Finally, knowledge is no longer a pre-set object that determines what activities we experience and how, but a living, generative learning activity that gives students the freedom to constantly reconstruct who they are through the dynamic relationship between the living learner and a living community. As Grumet suggests, it is a "*form of experience*" that is idiosyncratic and depends upon context, offering an innate sense of freedom in choice and self-direction, that moves both outward and inward simultaneously—the fabric of existence woven into form with the cross threads of oppositions and tensions of the individual's on-going engagement in their given life-world.[76]

While the bureaucratic educational institutions in America shine no light on, and provide no *protest* of the school curriculum, neither is this curriculum simply a victim of the discourse of scientific management and social efficiency. As Doll (1993) has shown, American education's present bureaucratic forms are not a recent modern construction. Instead, they represent the continuation of a Cartesian rationalism, which Tyler's Rationale carried forward into the late twentieth century.

When Descartes exorcised our mind from our material body, he provided the rational underpinnings that helped to launch modernity and the scientific transformation of the academic disciplines. As such, Descartes's rational method has strongly influenced educational research by establishing the theoretical foundations for both behaviorism's theories of learning and Tyler's curriculum rationale. As Raymond Fancher (1979) observes, it was Descartes who "laid the 'cornerstone' of American psychology's behaviorist movement, especially its mechanistic stimulus-response theory

[76]Pinar and Grumet, *Toward a Poor Curriculum*, 35 (my emphasis).

. . . and linear chains of communication."[77] As curriculum theorists have shown, Descartes's rationalism has guided twentieth-century educational practices, along with schooling's modern understanding of the theory-practice relationship.[78] Descartes's rationalism, however, should be understood as the best expression of a general agitation for a single methodology during the seventeenth and eighteenth centuries. As such, Descartes's rationalism is a continuation of Renaissance humanism's search for method led by the sixteenth-century dialectician and pedagogue, Peter Ramus.[79] Ramus's pedagogical method of mapping knowledge into logical diagrams, helped establish the concept of curriculum. Ramism both influenced and was influenced by the rapidly developing Renaissance printing industry, which led to a uniformly certain concept of knowledge. Ramus and his followers dominated the production of classroom textbooks. As the typographical representations presented in these textbooks became established, Ramus's knowledge diagrams evolved into the formalized curriculum.[80]

According to David Hamilton (1990), well before the word "curriculum" first appeared as a description of Ramus's method for teaching, John Calvin preached that human existence was a "*vitae curriculum*," an obstacle course true believers endured on their way to salvation.[81] It does not take a great leap of imagination to recognize the properly ordered structures of present day schooling—books, buildings, desks, overheads, lesson plans, standardized tests, etc.—as a latter day obstacle course that students are asked to overcome. Doll states that this sense of curriculum, which these

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[77]Doll, 114. See also Raymond E. Fancher, *Pioneers of Psychology* (New York: Norton, 1979), 40.

[78]Pinar and Grumet, "Socratic *Caesura*," 98.

[79]Walter J. Ong, S.J., *Rhetoric, Romance, and Technology: Studies in the Interaction of Expression and Culture* (Ithaca, NY: Cornell University Press, 1971), 83-186.

[80]David Hamilton, *Curriculum History* (Geelong, Victoria: Deakin University Press, 1990), 27.

[81]Hamilton, 27.

Calvinist educators provided, has become a cultural artifact upon which American education has been built.[82]

Huebner's attempt to find a new (spiritual) language for describing education could also be understood as an attempt to transform Calvin's methodized language of spiritual enlightenment as much as an attempt to transcend the limited understanding of what it means to know provided by the positivism of the social sciences. Dewey was not only advocating a new experiential frame for curriculum in which knowing relies as much upon human imagination as upon outside environmental stimuli, he also objected to the rigid discourse used to teach the Ramist oriented, didactic curriculum of nineteenth-century America, as well as to the *scientism* of the dominant psychological (developmental) theories of learning. Tyler's curriculum principles tacitly rationalize the didactic and the scientistic discourses into a single method of curriculum. The extent to which Tyler was successful in accomplishing his goal suggests that the traditional Ramist curriculum and the new psychologically based curricula developed at the beginning of the twentieth century may not have been as different from one another as has been argued by progressive educators like Tyler. Aside from this interesting issue, Kliebard, Huebner, Greene, Pinar, and Grumet, following in Dewey's footsteps, have found Tyler's rational language of methodizing curriculum to be inadequate for education.

In a similar spirit, I suggest that the concept of curriculum can be further reconceived using the later philosophical ideas of Ludwig Wittgenstein, in which he attempts to offer a new language for philosophical investigations. While not generally

[82]William Doll, assisted by Al Alcazar, "Curriculum and Concepts of Control," in *Curriculum: Toward New Identity*.

cited by those searching for alternatives to Ramus's and Tyler's methodized approach to curriculum, I believe that Wittgenstein's later philosophy complements the curricular alternatives that have been proposed by the aforementioned authors. More significantly, however, Wittgenstein's offering of a new way to use language when doing philosophy presents its own radical sense of curriculum, especially found in his rejection of what we have traditionally called method.

CHAPTER 3
PETER RAMUS AND THE REFINEMENT OF METHOD

The pedagogic procedure that requires classroom learning activities to be broken down into simple tasks that are then methodologically arranged into a step-by-step progression to train students in a pre-established knowledge did not begin with the social science revolution of the nineteenth and twentieth centuries. As curriculum theorists Dwayne Huebner (1976) and William Doll (1993) observe, what appears to shackle education to the chains of a technological method of reasoning are the mechanisms of Rene Descartes's seventeenth-century mathematical rationality, facilitating the practical and scientific transmission of knowledge.[1] These mechanisms, however, did not just suddenly materialize out of Descartes's genius, nor has their application to classroom learning been a pedagogical afterthought to an Enlightenment philosophy of utopian progress. Instead, the mechanisms for a formalized rational method were fabricated by medieval scholasticism's search for a practical and efficient way of teaching that would guarantee the logically certain transfer of knowledge.

Medieval scholasticism's primary intellectual focus, around which the early cathedral and monastic schools as well as the early universities were organized, encompassed the educational practices used to teach its liberal arts courses. The first three of these arts courses: grammar, rhetoric, and dialectic, known as the *trivium*, were taught to young boys between the ages of eight and twelve by just slightly older boys or young men (many of them still in their teens). As such, the interplay of scholasticism's intellectual forces took place in a pedagogical tradition that focused on the "the large-scale, organized teaching of the *trivium* to generation after generation of schoolboys . . .

[1]Huebner "The Moribund Curriculum Field," 248-249; and Doll, *A Post-Modern*

[which] was a venture destined"[2] to eventually produce a new framework for understanding the universe. The new framework that emerged from the teaching practices of the scholastic classroom was a single rational method used to organize one's thinking in a series of ordered steps, thereby producing an efficient, routine, and distinct procedure for organizing all knowledge.

Walter Ong (1958) contends that, while over the centuries successive generations of educators have continuously re-evaluated the educational literature in an attempt to demystify the educational process by introducing new theories of thinking and learning, classroom teaching has steadily adhered to practices that arose to teach scholasticism's liberal arts courses. Thus, our modern concept of a rational method of teaching developed from these loosely assembled schoolroom activities rather than from some speculative theory or reflective philosophy. Ong suggests that the pedagogical reality presented by scholasticism's teaching of the *trivium* and in particular the art of dialectic played a fundamental role in the fabrication of the "sinews and bones of modern civilization." He further suggests that the ideas and practices found in scholasticism's pedagogical literature played a more significant role in the development of modern thought than all of humanism's noble ideals found in the entirety of the monumental literature of the Western Canon.[3]

This chapter will discuss how the refinement of method into a formal step-by-step procedure emerged from medieval teaching practices used to teach the Latin language

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Perspective, 1-5.

[2]Walter J. Ong, S.J., *Ramus, Method, and the Decay of Dialogue: From the Art of Discourse to the Art of Reason* (Cambridge, MA: Harvard University Press, 1958), 131.

[3]Ong, *Decay of Dialogue*, 9 & 171. See also, Ong, *Rhetoric, Romance, and Technology*, 120-124, 169, & 188-189; and Lisa Jardine, *Francis Bacon: Discovery and the Art of Discourse* (Cambridge: Cambridge University Press, 1974), 17.

as well as the Renaissance pedagogical practices used to teach students a simplified classroom logic for analyzing texts. The development of a simple method of logic, however, did not proceed along a single line of thinking. Instead, the conception and use of method, as the one right procedure for arranging how one should think, arose from the complex and sometimes discontinuous practices used to teach the art of dialectic throughout the Middle Ages and the Renaissance.[4] Ong, in his comprehensive work, *Ramus, Method, and The Decay of Dialogue*, provides an extensive discussion of the close relationship between the refinement of method and attempts by successive generations of scholastic arts masters and Renaissance schoolmasters to make the teaching and learning of the art of dialectic more effective.[5]

Ong observes that because the use of logical reasoning emerged from the oral tradition of ancient Greece, throughout antiquity and the Middle Ages logic was less concerned with the private operations of thought. The use of logic was closely allied with the use of dialectic and rhetoric to organize oral performance.[6] Ong further suggests that the on-going refinement of the medieval practices used to teach both arts courses played a fundamental role in "unintentionally" transforming European intellectual discourses from the ambiguous oral-aural relationship of sound into a distinct, visually oriented framework that situated words, like objects, in physical space. This transformation resulted in the vague and locally situated meanings of words found

[4]Ong, *Decay of Dialogue*, 171– 172; Friedrich Heer, *The Medieval World: Europe 1100-1350*, trans. Janet Sondheimer (New York: New American Library, 1962), 104; and Cantor, 535.

[5]Ong, *Decay of Dialogue*, 30. See also, Catherine M. Dunn, Introduction to *The Logike of the Most Excellent Philosopher P. Ramus Martyr*, trans. Roland MacIlmaine, 1574, ed. Catherine M. Dunn (Northridge, CA: San Fernando Valley State College, 1969), xvii-xxii.

[6]Ong, *Rhetoric, Romance, and Technology*, 4-5, suggests that logic did not become associated with the art of thinking until after the invention of the printing press and the mass production of printed books. Jardine, 19-20, points out that Aristotle defines dialectic as the study of the use of language rather than the stuffy of mental concepts and thought processes.

in an oral society becoming fixed within the certainty of a formalized methodological structure. Current ideas on teaching, learning, method, and the school curriculum continue to be influenced by the pedagogical alterations to ancient notions of education fostered over the centuries by both medieval and Renaissance humanists transformations in the use of language.

The *Trivium's* Influence on Medieval Logic

Beginning in the early Middle Ages, the *trivium's* arts courses were taught as the "tripartite" training of young boys in the practical use of the Latin language for both classroom disputations and for continuing their studies of the remaining liberal arts courses that composed the *quadrivium*. The close relationship that existed between the *trivium* and scholastic education is enhanced by Ong's observation that during both the Middle Ages and the Renaissance the term, *learning*, was used to refer only to the study of Latin. Medieval scholasticism adopted the ancient Greek and Roman belief that all human intellectual activity is conducted verbally, maintaining the belief that both dialectic and rhetoric were the arts used to study any and all subjects. Hence, the rules that governed the use of Latin taught by the *trivium's* arts courses were fundamental to all knowledge.[7]

The *trivium's* techniques for the proper use of Latin further reinforced an important ancient philosophical concept. Scholastic arts masters maintained the ancient belief that a direct correspondence exists between the logical structures of a

[7]Ong, *Rhetoric, Romance, and Technology*, 119-120; and Jardine, 17-20. According to Ong, during the Middle Ages, learning did not refer to becoming literate in one's vernacular. In order to enter a school, a young boy already had to know how to read and write in his native language. The purpose for teaching Latin was to enable students to read the treatises that composed the quadrivium: arithmetic, geometry, astronomy, and music. Ong further observes that Latin remained the language of learning well into the eighteenth century.

discourse and the structures of the mental and physical worlds.[8] As such, the *trivium* not only trained medieval students in Latin, but also presented them with the verbal structures that were believed to be essential for engaging in any reasoned discourse. Thus, scholasticism's need to teach young boys Latin effectively aligned the practices used to teach the *trivium* with the structures and rules of logic. Arts masters made little distinction between the *trivium's* arts courses and use of logic. The *trivium's* role in training students how to compose a reasoned discourse was typically presented as an architectural metaphor. First, students had to be taught how to form the verbal bricks needed to build a discourse. The medieval art of grammar trained young arts students how to fabricate the well-formed linguistic units required for presenting arguments in Latin. The art of dialectic taught students the technical skills needed to assemble these verbal bricks into a discursive edifice. Once a reasoned edifice was completed, the art of rhetoric taught students how to adorn the exterior of their discursive structure with the Latin figures of speech used to persuade others into action.[9]

While the medieval teaching of Latin required the construction of a distinct scholastic art of grammar, the arts of rhetoric and dialectic generally followed the older Aristotelian pattern. With the invention of script the Greeks began "technologizing" oral performance. In so doing, they transformed oral performance into *techne*, thereby converting rhetoric and dialectic into the first arts.[10] By technologizing language, the

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[8]Ong, *Rhetoric, Romance, and Technology*, 67-68. See also Timothy J. Reiss's discussion of this relationship in *The Discourse of Modernism* (Ithaca, NY: Cornell University Press, 1982), 208-211.

[9]Jardine, 4 & 18-19. See also, Ong's, *Rhetoric, Romance, and Technology*, 5, suggestion that Cicero defined dialectical reasoning as the art of discourse (*ars disserendi*). In addition, Ong explains that logic's association with the less verbal and more solipsistic concept of thought implied by "the art of thinking" did not come into use until after the invention of the printing press. See Wilbur Samuel Howell's discussion of Cicero's influence on English logic and rhetoric, in *Logic and Rhetoric in England, 1500-1700* (New York: Russell & Russell, Inc., 1961).

[10]Ong, *Rhetoric, Romance, and Technology*, 5.

Greeks made it possible to "systematically inquire" into the "practices and habits" of any subject.[11] Aristotle describes the art of dialectic as having several functions. Dialectic was employed when one desired to inquire critically into complex and uncertain questions; to enhance the intellect; and to deliberate over how best to act for the good of the community. After using dialectical reasoning to come to a probable conclusion on a topic, an individual uses rhetoric to persuade the public of the correctness of this conclusion. In other words, dialectic provides an individual with the means to gather evidence for an argument, whereas rhetoric, as the art of persuasion, supplies the most effective way to demonstrate the worth of the evidence.[12]

Medieval arts masters, however, did not derive the arts of dialectic and rhetoric directly from Aristotle. Instead, the *trivium* was generally based upon Roman treatises on Aristotle's *Topics* compiled by Cicero and, to a lesser extent, by Quintilian. While Aristotle maintained that rhetoric was the counterpart to dialectic, he did not consider the two arts equivalent. As he further asserts, the art of rhetoric is derived from dialectic.[13] The Roman treatises, however, blended the arts of dialectic and rhetoric into a single art of discourse and surreptitiously presented rhetoric as the more intellectually

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[11]Aristotle, *Rhetoric*, in Great Books Of the Western World, vol. 9, 593.

[12]Aristotle, *Topics*, in Great Books of Western Civilization, vol. 8, 143-144; and *Rhetoric*, 593-594. In the *Topics*, Aristotle maintains a philosophical distinction between the formal, logic used for demonstrating (scientific) knowledge and the logic used for dialectical reasoning. He asserts that the reasoning used for demonstration begins with *invariable* knowledge, which is "when the premises from which reasoning starts are true and primary." Aristotle defines the art of rhetoric as the "faculty for observing in any case the various means of persuasion available" to an orator. See also, *Posterior Analytic*, in Great Books of Western World, vol. 8, 97, where Aristotle maintains that while rhetoric employs the *enthymeme* (a syllogism in which the middle term is implied) "the persuasion exerted by rhetorical arguments is in principle the *same*" as the logic used to demonstrate (scientific) knowledge. For all certain knowledge is "scientific." Today we use scientific in a quite different empirical/experiential sense.

[13]Aristotle, *Rhetoric*, 596, proposes that while rhetoric deals exclusively with the enthymeme, the "business of dialectic is the consideration of syllogisms of all kinds, including the enthymeme." Dunn, in her Introduction to *The Logike of P. Ramus*, xiii-xvi, observes that England's first logician, Alcuin of York (c.794), used Zeno's metaphor of the closed hand for dialectic and the open hand for rhetoric to describe

important art. Thus, Cicero's art of discoursing well more closely bound medieval dialectic to the rhetorical art of *persuasion* than originally presented by Aristotle.

While the practices used to teach the *trivium* varied depending upon the emphasis arts masters placed upon the teaching of its arts courses, the pattern used to teach the *trivium* remained fairly consistent. Because the *trivium's* "practical" purpose was to teach Latin, students were first taught the art of grammar. Unlike the architectural model presented above, however, the art of rhetoric was the second course taught to medieval students. One reason offered for teaching rhetoric immediately after grammar was the arts masters's belief that rhetoric's rules of operation were simpler than those used to operate dialectic, thereby making rhetoric more conducive to the minds of young boys. Thus, an arts student's training in Latin culminated with the art of dialectic. While there were occasional attempts to reverse this pattern by teaching dialectic before rhetoric, largely because dialectical reasoning was believed to be critical to an arts student's ability to become an arts master by completing his studies of the *quadrivium*, efforts to teach dialectic before rhetoric never proved to be viable.[14]

As early as the eleventh century, the art of dialectic was being taught, not so much as the practice of critical inquiry for understanding the truth of an argument, but as the technical skill students needed to analyze and classify the various propositions, terms, and forms of inference used in an argument. In other words, for Aristotle the end of constructing an argument was to persuade the public of its worth. For medieval arts masters, fabricating and analyzing an argument became an end in itself. As such, the

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the distinction. See Howell's, 14-15, discussion of Zeno's metaphor.

[14]Ong, *Decay of Dialogue*, 276.

medieval art of dialectic became a technical tool to breakdown and convert a disputation into a form of ratiocination. However, the technicization of the *trivium*, which began with the teaching of the rules of grammar, continued and even became more institutionalized within the university right up to the beginning of the Renaissance. During the Renaissance this practice of splitting and converting arguments into distinct propositions was extended to written compositions, due in part to the rise of the printing press and the use of the art of dialectic in life beyond the classroom.

Beginning with the Renaissance, scholars reformed university educational practices by requiring students to engage in written composition rather than maintaining the medieval tradition of strictly oral disputations. As such, Renaissance arts masters used the art of dialectic to teach students the logical rules for sifting, identifying, and classifying information expressed in written discourse. As the use of written compositions became increasingly accepted, the art of dialectic began to dominate the program of Latin learning even more. By the end of the fifteenth century, the study of grammar was being taught less as an independent arts course, equal to rhetoric and dialectic, but as a prerequisite to the study of dialectic that introduced students to nearly all of the technical terminology essential in the use of dialectic. In other words, grammar became the template within which all other arts and sciences were organized, a procedure further refined and popularized by Peter Ramus during the mid 1500s. The educational necessity of teaching young boys the proper use of dialectical reasoning compelled youthful arts masters to continuously simplify their classroom practices from a dialectical dialogue between student and master, into an arts master's presentation of

a didactic argument. The simplification of these practices, in turn, led to the development of a simpler dialectical logic.[15]

The Renaissance reform of using written composition precipitated a realignment of the medieval arts courses that divided the liberal arts. Not unlike the medieval pattern, Latin grammar and rhetoric continued to be studied first, but without the art of dialectic. Instead, the art of dialectic was included in a program of philosophical study that blended it with studies in Aristotelian physics, which represented a highly mechanistic natural science.[16] Ong suggests that, while the ancient world's rhetorical tradition remained alive until the age of Romanticism, by the mid-sixteenth century Renaissance scholasticism's emphasis on written expression and the invention of the printing press had separated the arts of rhetoric and dialectic, remaking rhetoric into a kind of "grammar" of persuasion, which, like the art of grammar, was taught as a supplement to dialectic.[17] Thus, the Renaissance art of dialectic took on the primary responsibility for training students in the technical tools required for analyzing what were believed to be the "natural" (logical) relationships embodied within a written discourse. By linking the art of dialectic even more closely to Aristotelian physics, Renaissance arts masters believed that the use of dialectical analysis provided students with the tools they needed to manipulate written discourse in order to gain insights into the "natural" world.

Another reason for scholasticism's tendency to continually technologize the art of the dialectic was that successive generations of its arts masters had a limited access to Aristotle's works through Cicero's treatises, scholasticism's truer intellectual patron. As

[15]Ong, *Decay of Dialogue*, 43-63.
[16]Ong, *Decay of Dialogue*, 138-139 & 275.

such, Aristotle's formal reasoning for the demonstration of scientific knowledge found in his *Posterior Analytic* had not been available to the early medieval arts masters. According to Aristotle, scientific knowledge was knowledge that was invariable and certain and not arrived at through dialectical reasoning. Instead, arts masters employed Aristotle's rhetorical persuasion as a tool to demonstrate their conclusions as a form of invariable knowledge rather than as the culmination of probable understandings.

Even after Aristotle's complete corpus was introduced to the scholastic world, medieval arts masters continued to understand logic as a fusion of scientific and dialectical reasoning without recognizing the differences between the two.[18] Moreover, by asserting that "all instruction . . . proceeds from pre-existent knowledge," Aristotle equates the act of teaching with his scientific forms of demonstration. In other words, instruction does not use dialectical reasoning. Instead, is an act of logical demonstration more closely connected to a didactic argument.[19]

Aristotle further maintains that because teaching begins with what is already known, then only certain and invariable knowledge is capable of being taught. This has far-reaching implications, because it suggests that teaching can begin only with invariable knowledge (i.e., scientific), which further suggests that the very nature of scientific knowledge is that it can be taught. Thus, once something is taught, thereby demonstrated, then even the most speculative concept would by definition become scientifically invariable knowledge. This consequently suggests that the medieval practice of using rhetorical persuasion to teach (demonstrate) the art of dialectic silently

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[17]Ong, *Decay of Dialogue*, 271-273; and Jardine, 4-5 & 19-20.

[18]Ong, *Decay of Dialogue*, 145; and *Rhetoric, Romance, and Technology*, 5.

[19]Aristotle, *Posterior Analytic*, 97; and *Nicomachean Ethics*, 388. See also, Aristotle's statement in *On Sophistical Refutation*, 227, vol. 8, in Great Books of the Western World, that

transformed the art of dialectic from an idiosyncratic use of reason for critically inquiring into and to aid one in understanding complex and uncertain problems, towards the apparent certainty inherent in the use of formal logic—a certainty prized by the medieval schoolmen.

In time, the teaching practices used to train students in the art of dialectic established a systematized set of rules for a "science" of dialectical reasoning that was further refined by a Renaissance art of discourse used for composing written arguments. The art of dialectic, as the *bringing into being the true use of reason to produce right judgment*, became scholasticism's primary intellectual tool that arts masters fused with Aristotle's scientific forms of demonstration and refined into the method of teaching used to demonstrate any and all knowledge. In other words, the art of dialectic became the ultimate practical form used to understand and order all knowledge. For thousands of medieval and Renaissance arts teachers, the idea of the "practical" came to represent "pedagogical expediency"—what is sometimes referred to today as "praxis." Within this intellectual milieu emerged the pedagogical method developed by the Renaissance arts teacher Peter Ramus, whose primary purpose for refining method was to simplify even further the art of dialectic to make teaching more practical, more responsive to the needs of expediency.

While the transformation of the art of dialectic from the capacity to reason from opinion into a method for demonstrating scientific knowledge is generally considered a pedagogical rather than a philosophical reform, this belief implies that the scholastic teaching and scholastic study of philosophy existed as distinct intellectual practices. However, within scholasticism's complex intellectual milieu these two activities were

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scientific demonstration is a "didactic argument," relating it to the practice of didactic teaching.

"fused" together by the teaching practices found in the medieval classroom. Because medieval philosophy, under the guise of the *trivium*, was a subject learned only at school, the dominant pattern found in scholasticism's liberal arts courses was the consistent subordination of philosophy to teaching practices, via the role the art of dialectic played in each. Ong asserts that the very "term 'scholastic philosophy' offers the *prima-facie* evidence for this" subordination. In both medieval and Renaissance Latin, the term *schola* was used primarily to designate a "classroom." As such, "scholasticism [and scholastic philosophy] was understood as a kind of classroom-ism."[20] Thus, the art of dialectic, as the *bringing into being the true use of reason to produce right judgment*, was scholasticism's primary intellectual tool, which arts masters amalgamated with scientific forms of demonstration and refined into the method of teaching used to demonstrate any and all knowledge.

Over the centuries, philosophy, like the other modern academic disciplines, has established itself in its own right—in many ways filling the void left by theology as the "queen of the sciences." On the other hand, *educational* philosophy (similar to educational theory) has consistently retained a close kinship with, and has remained subservient to, classroom practice.

Medieval Dialectic and the Growth of Learning

The medieval brand of dialectic had evolved in the cathedral and monastic schools founded across Northern Europe during the early Middle Ages. Believing that using dialectical reasoning brought humanity closer to God, early medieval

[20]Ong, *Decay of Dialogue*, 150. This fusing together of medieval pedagogy and philosophy can also be found in Bacon's and Descartes's critique of "the schoolmen" and "their philosophy." Descartes, in *Rules for the Direction of the Mind*, Book I, in Great Books of the Western World, vol. 31, 2-3, goes to great pains to explain how his mathematical science is not philosophy, or at least, not philosophy in the

schoolmasters revived learning by first reforming the study of dialectic.[21] Thus, the rapid development of these schools was closely associated with the development of a medieval art of dialectic and the pedagogical practice of disputation used to teach Christian theology. Gerbert (d.1008), the schoolmaster and later archbishop at Rheims, reformed the study of dialectic by replacing the cruder and superficial texts produced during the Carolingian period with Boethius's sixth-century dialectical manual, *On the Different Kinds of Topics* (*De Differentiis Topicis*). Boethius's manual remained the primary manual for teaching dialectic until the mid-thirteenth century, thereby playing a major role in the continuous evolution of dialectic during the next four centuries.[22] Clerics, like Berenger of Tours (d. 1088) taught that reasoning was a gift bestowed by God. Clarembald of Charters (d. c1170) declared, "To theologize is to philosophize." Clarembald, who taught, "By exercising the most powerful resources of the intellect, everything is knowable," further expressed the principle that shaped the teaching practices of these schools. Therefore, by using ones reason, "God is also knowable."[23]

The growth and success of these early medieval schools relied heavily upon the teaching prowess and personality of the individual teachers. Christopher Brooke (1969) observes that medieval students wandered across Europe searching for the best teachers. Furthermore, these adolescent boys were "looking for adventures of mind as

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manner of the schoolmen. See also, Bacon, iv, 1-12.

[21]Robert S. Hoyt, *Europe in the Middle Ages* (New York: Harcourt, Brace & World, Inc., 1966), 316-320; Cantor, 351-353; and Christopher Brooke, *The Twelfth Century Renaissance* (New York: Harcourt, Brace & World, Inc., 1970), 30-34.

[22]Hoyt, 316-317; Brooke, 23 & 35; and Cantor, 67-68 & 351-353. Many of the leading schoolmasters became influential priors, abbots, and bishops of the Middle Ages. Some, like Gerbert of Rheims, even became Pope. Boethius's work presents three original treatises on dialectic entitled *The Consolidation of Philosophy*; Cicero's *Topics*; Porphyry's *Isagoge* (*Introduction*); and two of Aristotle's' treatises from his *Organon* on *Categories* and *Interpretations*.

[23]Heer, 116-126. See also, Hoyt's, 316-319, summarization of perhaps early scholasticism best use of dialectic to prove the existence of God by Anselm of Canterbury.

well as body," which they found by moving freely "from place to place and from teacher to teacher, searching for the best techniques at the most lively schools."[24] Perhaps the greatest of these wandering students and teachers was Peter Abelard. Abelard instinctively followed his own thoughts declaring that in time, "I rapidly surpassed my masters in disputation and so won their envy."[25] Abelard used dialectical reasoning to investigate and teach theological problems by posing questions and, then answering each question with qualified arguments supporting each side of the problem. Inherent in his qualified conclusions was a sense of uncertainty that Abelard believed, while complicating the issues being presented, helped students attain a more complete understanding of the problems being deliberated.[26] Abelard's successful use of dialectic in disputation inspired him to write his famous, *Sic et non*, (*Yes and No*), in which he laid out sets of problems and conflicting conclusions, many of them from his former teachers. He believed that, by working to resolve the apparent contradictions found in these conclusions, students were compelled to begin thinking on their own, just as he had. Abelard did not try to teach his students by directly demonstrating predetermined truths. Instead, he gave them the opportunity to deliberate and understand the nuances of the various arguments used to dispute important problems in the past.[27]

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[24]Brooke, 26 & 28; and Charles Homer Haskins, *The Rise of Universities* (Ithaca, NY: Cornell University Press, 1965), 39. See also, Heer, 109-120 & 262-263, who observes that the pursuit of knowledge was taken up by both young men, and later young women, who were all "eager to know more, to find out more, experience more, to love, and even suffer more." In addition, Heer depicts the most popular teachers as being akin to today's rock idols, with both their "hangers-on and overt [fundamentalist] enemies."

[25]Brooke, 24.

[26]Hoyt, 364.

[27]Brooke, 34-38.

While his ability as a logician and a master of rhetoric and disputation made Abelard one of the most popular teachers of the twelfth century, Norman Cantor (1969) asserts that an equally "important aspect of Abelard's work was his rediscovery of personality." Abelard's rediscovery of personality not only disrupted the early medieval patristic philosophical tradition, it also helped fuse scholastic teaching practices to the use and development of the art of dialectic. Underlying the Platonic idealism of patristic Christian belief was the Augustinian vision of the ideal (i.e., real) Christian person. This ideal Christian was represented as an abstract individual devoid of a unique personality. Cantor observed that after Augustine wrote his *Confessions*:

> Autobiography disappeared entirely, because literate people found their lives significant only to the extent that they conformed to ideal [Christian] patterns. The description of personal idiosyncrasies would have been regarded as proud, sinful arrogance.[28]

Biographical literature written during the early Middle Ages presented its subjects as "plaster statues" forcing them to fit within preconceived ideal forms of behavior. The ideal Christian strove not for knowledge (intellect) by way of reason, but the wisdom attained from illumination through Divine revelation. Abelard, however, did not portray human intellect as having to fit within an ideal or universal form, but as the particular and unique aspects of one's personality. Cantor suggests that Abelard's autobiography, *The History of My Calamities*, can be understood not only as a rejection of Augustine's

[28]Cantor, 362-363, suggests that "Augustine's *Confessions* was the last autobiography written before the twelfth century. Cantor adds, "When a person's individual personality did come forth in these biographies, it was due to the failure of the writer to maintain the idealized pattern." Also, Ernst H. Gombrich, *Art and Illusion* (New York: Pantheon Books, 1968), 146-147, presents a similar argument about teaching the visual arts during the Middle Ages. He suggests that "image making" required the artist to use a logical formula to imitate reality. This logic provided a basic "canon," which Gombrich describes a "schema," that had to be taught. This canon represented a basic vocabulary or grammar of geometrical relationships for constructing "plausible figures." In what Gombrich calls the "pathology of portrayal," any idiosyncratic alterations made by copyists or artists in the formal design would not have been seen as variations in style, but were, instead, recognized as mistakes of form by students who did not learn their

concept of ideal Christian behavior, but as a direct attack upon the existing philosophical absorption with the nature of universals as pre-existing ideal, Platonic forms, the principle theological issue of the early Middle Ages.[29]

It was Abelard's own flamboyant personality along with his masterful intellect and teaching performances using dialectical disputation that opened the way for a personal search for understanding. All these were crucial factors in the rapid rise of Paris as the medieval center for the study of dialectic. Charles Haskins (1965) observes:

> From the period of the university's origin we get a fairly clear impression of Abelard as a teacher and 'class-room entertainer,' bold, original, lucid, sharply polemical, always fresh and stimulating, and 'able to move to laughter the minds of serious men.'[30]

Brooke suggests, "It was the outrageous brilliance of Abelard's teaching, which made students flock to Paris from every part of Western Christendom."[31] Haskins suggests that, after Abelard, traveling to Paris in pursuit of learning became a matter of habit. It was out of this mass of students that the medieval university seemed to spring forth.[32]

Some of Abelard's contemporaries, like the Augustinian logician Hugh of St. Victor and the Christian mystic Bernard of Clairveaux, who was Abelard's primary intellectual and theological antagonist, opposed the use of dialectic to study theological questions, believing that dialectic's use of reason and intellect to inquire critically into issues of faith neither helped one achieve personal salvation nor offered a better way to understand Divine revelation. Many of those who opposed the use of dialectic believed

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lessons well.

[29]Cantor, 63-67 & 364, suggests that Abelard's rediscovery of personality can be associated with the urban lifestyle of the schools, particularly for the teachers and students in Paris, and the notion that "city air made men free."

[30]Haskins, 40.

[31]Brooke, 38.

[32]Haskins, 4 & 14. See also Hoyt, 316 & 325, who describes going to school "beyond mere reading and writing" as a kind of "fad."

that Aristotelian philosophy, in addition to the new knowledge then entering Northern Europe from the Islamic world, posed a significant threat to traditional patristic Christian teaching. In response to the problems posed by dialectical reasoning, Hugh proposed that the art of dialectic should not be used to study theological issues; its use should be restricted to teaching and investigating the physical world.

A century later, the followers of another Christian mystic, Francis of Assisi, adopted arguments similar to those presented by Hugh of St. Victor. In reaction to the introduction of the remainder of Aristotle's works and the rise of heretical theologies during the early thirteenth century, Franciscan theologians and philosophers, led by Bonaventure at Paris and Duns Scotus at Oxford, maintained that it was improper to use dialectical reasoning to study theology and should be limited to organizing one's teaching practices and to investigate God's creations. However, the Dominican scholastics, led by Albert the Great and his student, Thomas Aquinas, opposed the Franciscan position.[33] Aquinas's *Summa Theologica* is considered one of the best examples of the use of Aristotelian philosophy to explain the beliefs of Christian theology. By providing arguments on both sides of a problem, Aquinas presented the *Summa* using a pattern similar to the one used by Abelard in *Sic et Non*. However, unlike Abelard, Aquinas ended each discussion of a question with a concluding argument that demonstrated Christian truth using Aristotle's formal logic found in the *Posterior Analytic*. In this way, Aquinas avoided Abelard's error by not allowing readers to draw their own conclusions. However, because Aquinas used Aristotle's dialectical and scientific forms of reason, similar to Abelard, the Church condemned much of his

[33]Hoyt, 321. See also, Heer, 109, 114-115 & 119-120. Other important Franciscan philosophers were Roger Bacon, who taught at Oxford with Duns Scotus, and William of Ockham. Albert was the first

theological works. A century later, however, Aquinas's works were rehabilitated and continue to remain the official philosophy/theology of the Roman Catholic Church.

What the pattern of logical demonstration used by Aquinas in his *Summa* represents is that medieval arts masters did not follow the pattern of presenting probable conclusions to questions to teach the art of dialectic used by Abelard in *Sic et Non*. Furthermore, while Aquinas's work is representative of the way scholastic theologians used Aristotle's scientific logic, which had only recently become available, the teaching of the liberal arts courses at the rapidly developing Northern European schools and universities continued to be dominated by the art of dialectic's manual tradition as represented by Boethius's sixth-century textbook. For the ever-increasing number of young bachelors of arts being produced by the expanding universities responsible for teaching Latin to young boys, the art of dialectic was not intended to give students an opportunity to reason through complex problems, such as the nature of *universals* or theological questions, but to simply train them in the basic technical skills required for the construction of a convincing argument.[34] As Porphyry states in the *Isagoge*:

> As to *genera* and *species*, whether they actually exist or are present merely in thought or if existing, whether they are corporal or incorporeal . . . I cannot answer here in an elementary work. This being a lofty topic requiring further investigation.[35]

During the late thirteenth century, Boethius's text began to be replaced with a new dialectical manual, the *Summulae Logicales*, written by Peter of Spain. The

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arts master at Paris to write treatises on all of Aristotle's works.

[34]Jardine, 19-21.

[35]Porphyry, *Isagoge*, quoted in Hoyt, 317. According to Hoyt, "This passage is an allusion to the metaphysical problem of universals, a problem that both Porphyry and Boethius recognized as inappropriate for discussion in an elementary treatise on logic."

Summulae was an introductory textbook written to familiarize youthful arts students with the rudimentary concepts related to Aristotle's dialectical treatises. Peter of Spain's dialectical manual was a further refinement of works found in Boethius's *De Differentiis Topicis* including Porphyry's *Isagoge* to Aristotle's *Organon* and Aristotle's treatises on dialectical reasoning. Excluded from the *Summulae* was any discussion of the formal logic used for demonstrating scientific knowledge found in Aristotle's *Analytics*.[36]

Peter of Spain maintained that his further simplification of dialectic was necessary to make it easier for the many young bachelors of arts to learn and teach more easily the art of dialectic to young boys. While similar manuals were produced during this period, the *Summulae* was the primary textbook used to teach dialectic for the next three hundred years. According to the prominent, late medieval logician and dean of the dialectical arts masters at Paris, John Major, for the vast majority of medieval arts students the *Summulae Logicales* had been the "door to all logic."[37]

While the *Summulae* roughly parallels Aristotle's *Topics*, it does not adhere to the distinctions Aristotle maintains between dialectical reasoning and the formal logic required for scientific demonstration. Ong claims that Peter of Spain's treatises had the effect of "blurring the question of whether dialectic was an instrument of scientific certainty, or mere probability, or of both together." The *Summulae's* opening sentence declares, "Dialectic is the art of arts and the science of sciences, possessing the way

[36]Ong, *Decay of Dialogue*, 55. While many of the points Ong raises about Peter of Spain's manual are intriguing, my purpose is not to provide an in-depth discussion on the subtleties surrounding the relationships between ancient, medieval, and modern logic. My purpose is only to relay the pedagogical role that the manual tradition played in bringing about Ramus's method.

[37]Ong, *Decay of Dialogue*, 57. Ong maintains that Peter's manual was the most important, since, if for no other reason, it was the most widely used. Other manuals included John of Salisbury's, *Metalogicon*, and Vincent of Beauvais's, *Speculum Majus*. See also, Jardine, 19-23; and Dunn, xiv. Interestingly, in Howell's *Logic and Rhetoric in England*, Peter of Spain plays no role in his discussion of the development of English logic.

(*methodorum*) to the principles of all disciplines."[38] Its next sentence adds that "dialectic alone disputes with probability concerning the principles of all the arts, and thus, dialectic must be the first science acquired." With these statements, Peter of Spain initially situated the art of dialectic within Aristotle's *topical* reasoning that enabled one to "move from a question through probable argument to a probable conclusion." However, later in the text the issue of what style of reasoning Peter of Spain was attempting to apply to the art of dialectic became confused when he asserted, "dialectic alone deals with scientific certainty." Ong claims that with this statement Peter of Spain effectively upgraded dialectical reasoning away from the uncertainty of opinion and inquiry, toward the absolute certainty of the *Posterior Analytic's* scientific logic for demonstrating absolute knowledge.[39]

In other words, Peter of Spain moved the art of dialectic away from a reasoning that moved from probable opinions to a probable conclusion. Instead, he presents the art of dialectic as the reasoning used to move from opinion to an invariable conclusion that represents absolute truth. Peter of Spain accomplished this by focusing dialectical discourse on the use of conviction (i.e. rhetorical persuasion). He maintains that uncertainty exists only with the opening question. Uncertainty is eliminated once a conclusion has been proven. By so doing, the use of the art of dialectic to teach an arts

[38]Jardine, 5, and Ong, in *Decay of Dialogue*, 56 & 332. I have used Jardine's translation of Peter of Spain's statement, rather than Ong's because Jardine translates the last phrase in Peter's statement, "*methodorum principia viam habems*," as "possessing the way to the principles of all disciplines," while Ong translates it as "possessing the way to the *curriculum subjects*" (my emphasis). I believe that Ong's use of the term "curriculum" clouds the issues surrounding medieval education because, according to Hamilton, the term "curriculum," does not appear until the Protestant Reformation.

[39]Ong, *Decay of Dialogue*, 60; and Jardine, 19-24, & 48. Ong observes that Peter of Spain's notion of the topics or *loci* (places), like Cicero's, situated the place (locus) as 'the seat of an argument," using it to infer a conclusion, and thereby "creating a conviction in a doubtful matter." Ong suggests that aiming at conviction or persuasion (*fides*), situated Peter of Spain's treatise on the topics within the Aristotelian dialectical tradition. See also, John C. Briggs, *Francis Bacon and the Rhetoric of Nature*

course became less a dialogical practice between the teacher and the student and more of a didactic argument used to prove the conclusions drawn by the arts master.

The *Summulae Logicales* also includes several additional tracts known collectively as the *Little Logicals* (*Parva Logicalia*) that deal with the properties of various terms, chief among them being "supposition." Ong suggests that supposition and its associated terms "produced a highly quantitative, non-Aristotelian, medieval logic," similar to modern forms of mathematical or symbolic logic.[40] In what appears to be a critical point to the future refinement of the art of dialectic into a single method for ordering one's thinking, Ong stresses that Peter of Spain's use of supposition theory had the effect of reducing both the natural and discursive worlds to a set of simply defined terms. This simplification had the further effect of reducing "the epistemological field" to a *simple-fiction* of a segmented structure for both physical and mental reality. Derived primarily from Cicero, this segmented or *corpuscular* framework "saw both the real and mental worlds as an agglomeration [a cluster] of discrete items or things." This presented medieval schoolboys with an "epistemological and psychological atomism" that represented reality, not in terms of interrelated concepts, but as simple and distinct

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(Cambridge, MA: Harvard University Press, 1989), 190-193.

[40]Ong, *Decay of Dialogue*, 53-61. In addition to supposition, the tracts included: relative terms, extension, appellation, restriction, distribution, and exponibles. Ong suggests that the Little Logicals treatment of the theory of "supposition" (which treats terms as substituting or standing for individual existents) and its related terms, presented a quantitative logic that closely corresponds to the present day mathematical logic of Gottlob Frege, Bertrand Russell and Alfred North Whitehead. Although Ong does not discuss it, there appears to be an even closer relationship between Peter of Spain's *Parva Logicalia* and Bertrand Russell's description of the formal philosophical logic of Ludwig Wittgenstein's *Tractatus* found in Russell's Introduction that will be discussed in Chapter Three. See also, Sharon Kaye's discussion of the suppositional relationship between Bertrand Russell and William of Ockham, in "Russell, Strawson, and William of Ockham," in *Paideia*, (Internet), http://www.bu.edu/wcp/Papers/MediKaye.htm.

units. Ong maintains that in so doing, the *Summulae* unintentionally laid the groundwork for Ramus's eventual refinement of the art of dialectic into method.[41]

Additionally, the late medieval and Renaissance courses of study involved the most protracted and extensive study of Aristotelian physics than at any time during the Middle Ages. This increased emphasis on the study of Aristotle's highly mechanistic physics was coupled with Peter of Spain's quantitatively structured scholastic dialectic. Ong contends that because most scholastic arts masters learned dialectic from Peter of Spain's textbook, they became preoccupied with his simplistic logical formalism. Greatly influenced by its atomistic and quantitative analogies, later medieval scholastics were generally "not able to focus on something as elusive as [Aristotle's] probable argumentation."[42]

By the time of the Renaissance, humanist scholars were no longer teaching the art of dialectic as part of the *trivium*, but aligned it with Aristotelian physics as the art of philosophical discourse. However, they continued to maintain the ancient connection between verbal activity and intellect by insisting that "to discourse" was the same as using "ones reason (*ratione uti*)." By continuing to link discourse with reasoning, Renaissance arts philosophers were able to begin applying the art of dialectic to the functions of the entire human mental apparatus. Furthermore, by linking reasoning with physics (and its close relationship with medieval medicine) the Renaissance art of dialectic became little more than the practice of "marshalling and maneuvering

[41]Ong, *Decay of Dialogue*, 61, suggests that the key difference is that medieval logicians used simple Latin statements for what modern symbolic logicians express in propositional calculus.

[42]Ong, *Decay of Dialogue*, 60. Jardine, 18, observes that while dialectic was one of the medieval liberal arts, it was also one of the three aspects of ancient philosophy, including physics and ethics. Thus, it was in dialectic (logic) that the ancient and medieval worlds most closely converged.

corresponding little chunks of mind-stuff" in the form of words. It is out of this discursive practice that Ramus's simplified pedagogical method of logic would emerge.[43]

The scholastic tradition of associating intellect with the study and use of discourse and physics further suggests that the practices and activities involved in teaching, rather than the modern concept of *thought,* largely controlled how the use of reason (*ratio*) was understood. By declaring: "Dialectic is the art of arts and the science of sciences leading the way to all disciplines" (i.e. learning), Peter of Spain effectively subsumed the concepts of reason, art, science, and method within the activity of teaching. Ong contends, "In the rough-and-tumble everyday activities of the [scholastic] arts course the fine psychological distinction that may have been expressed in Aristotle's works between these terms could not be sustained."[44] Thus, the teaching of Peter of Spain's art of dialectic had, over several centuries, the effect of simplifying and formalizing dialectical reasoning. Ramus would eventually refine Peter of Spain's dialectic into a method for demonstrating knowledge by transposing the dialectical practices used to teach an arts course that had become embedded within a "cluster of mental habits" possessed by scholastic arts masters. Ramus's method of demonstration came to dominate late Renaissance and early modern intellectual practices; its influence continues to be strongly felt in the current school curriculum.

Ramus Dialectic

In his *Dialectic*, Ramus further refined Rudolph Agricola's fifteenth century revision of Peter of Spain's *Summulae Logicales* into an even simpler reasoning

[43]Ong, *Decay of Dialogue*, 142-144, observes that the close relationship between medieval medicine and physics is evident in our continued use of "physician" to describe a medical doctor.

[44]Ong, *Decay of Dialogue*, 56, and further asserts (on page 8), "The speculative and theoretical aspects of scholasticism's university heritage have too often been exaggerated."

process. In so doing, Ramus joined Renaissance humanist intellectuals like Agricola, John Strum, Desiderius Erasmus, Phillip Melanchthon, and Thomas More in a general critique of the medieval (and what they believed to be the Aristotelian) biases found in Peter of Spain's dialectical training manual. Agricola had refined the primary dialectical manual of the Middle Ages for the purpose of serving the practical educational reforms advocated by the Renaissance reformers. The medieval universities that followed the Paris model had been organized as guilds for teachers. Consequently, their primary pedagogical responsibility was to train new teachers to teach liberal arts courses. As such, Peter of Spain's textbook was closely associated with the training of scholastic arts students for the profession of teaching.

The most significant and lasting impact the Renaissance reforms had on education can be found in the transformation of scholasticism's liberal arts education into the preparation of students for life in general rather than preparing students merely to become teachers. Ong observes, however, that the Renaissance belief in a student-centered education, rather than weakening scholastic pedagogical practices, had the effect of reinforcing the central scholastic tradition that organized teaching of the art of dialectic. Despite the success of these humanist educational reforms, the teaching practices of the Renaissance universities continued to be organized around the original pedagogical purpose of training professional teachers. Thus, the repositioning of the purpose of the art of dialectic toward preparing students to engage in all human endeavors did not mean that dialectical reasoning would be freed from the classroom. Instead, it meant that the world outside the classroom began to be made more efficient by the practical application of an art of dialectical reasoning. In time, this would mean

that everyday life would become simplified and segmented according to a methodized art of dialectic. It is this intrusion of a pedagogical methodology into everyday human existence that appears to underscore Western Civilization's transformation from the medieval to the modern.

Agricola's version of dialectic was an integral ingredient in the Renaissance educational reforms. According to Wilbur S. Howell (1956), the significance of Agricola's dialectic is that it "was instrumental in inducing logicians of the sixteenth century to adopt Aristotle's *Topics*" rather than the more formal logical treatises of his *Organon*.[45] Agricola's revision of dialectic continued the medieval practice, following Cicero's adaptation of Aristotle's *Topics*, of dividing the art of dialectic into the books of *invention* and *judgement*. As the first book of the art of dialectic, "dialectical invention" presents a student with the procedures one follows when having to analyze a text when looking for something to say in an argument. The second book on "dialectical judgement" provides the procedure one uses to arrange the evidence that has been *invented* when composing an argument.

The Renaissance arts master and humanist reformer Johannes Sturm was the first arts master to introduce Agricola's dialectic in 1526 at the University of Paris. Once introduced to Paris, Agricola's dialectic quickly replaced Peter of Spain's *Summulae* as the primary textbook for teaching the art of dialectic at universities across Europe. While Agricola's manual provided a detailed discussion of the procedures to be used when inventing an argument, he did not revise the procedures used for judging or arranging the evidence one had gathered. Renaissance reformers generally, and

[45]Howell, 16. For example, Jardine observes that Francis Bacon studied Agricola's dialectic at Oxford, which had a profound influence on the development of his empirical method.

Ramus in particular, thus viewed Agricola's dialectic to be incomplete. Ramus's *Dialectic* not only further refined Agricola's *Dialectical Invention*, but by clarifying the procedures one uses to arrange dialectical judgments, was intended as its completion. Moreover, Ramus followed Agricola by placing the procedures for inventing evidence prior to those needed to judge their disposition. Ramus insisted that this order is the more natural procedure. He taught that one must "first find the topics of an argument before one could order and arrange them."[46]

Ramus's refinement of the art of dialectic began by attempting to firm up any of the vague notions that remained in Agricola's text. To accomplish this Ramus eliminated what he regarded as the redundant and indecisive aspects that remained from the medieval arts of dialectic and rhetoric. In addition, any feature shared by the two arts courses was placed exclusively in either dialectic or rhetoric. In so doing, he separated the arts of dialectic and rhetoric into two distinct practices. Thus, by refining dialectic, Ramus was also refining the art of rhetoric.[47]

Next, Ramus refined dialectical reasoning even further by dividing it into three steps or developmental stages: natural dialectic, the art of dialectic, and the exercise of dialectic. He described "natural" dialectic as the natural use of dialectical reasoning. The second stage, the art of dialectic, was described as the dialectical procedures one was taught in school. Finally, Ramus described the third and final stage, the "exercising" of dialectic, as the proper use of the art of dialectic in the life one lives outside the classroom.

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[46]Ong, *Rhetoric, Romance, and Technology,* 62, observes that Agricola's *Dialectical Invention* was probably completed around 1479, but was not printed until after his death. See also, Jardine, 25, 29-35 & 41; and Dunn, xv & 61.

[47]Dunn, xvii, suggests that by making these distinctions and clarifications, "Ramus was attempting

Ramus explained that the natural use of dialectical reasoning is similar to how a child learns about the everyday world. He believed that a child initially acquires knowledge of the immediate surroundings by discovering *particular* things about the world. As such, the things most known to the child are particular experiences about the immediate environment. However, Ramus maintained that from these experiential activities the child uses natural (inductive) reasoning to quickly ascend "'like an eagle to the sun' . . . one by one through higher species to the [more] general" understanding. Ramus further asserts, "Thanks to this quick assent, universals suddenly become better known."[48]

Ramus's second stage is the art of dialectic taught in school. He claims, "Any art, including dialectic, is by definition the systematization of natural operations." Thus, the practices used to teach the art of dialectic gives an art its structure. As such the art of dialectic is related to natural dialectic in the same way that medieval arts masters use diagrams (schematics) of physical phenomena to teach physics. These diagrams provide the natural world a structure that is simple and easy to understand. Lisa Jardine (1974) suggests that Ramus's stages provide an explanation for how the art of dialectic helps students develop their "natural" use of language, which Ramus believes simulates the "actual operations of the mind." Ramus adds, "The field of dialectic is discourse, and the origin of discourse is natural reason; hence [the art of] dialectic systematizes natural reason."[49] For Ramus, it is through classroom teaching practices that "natural" dialectic is systematized and made to serve pedagogical purposes.

. . . to make dialectic the chief instrument of communication."

[48]Ong, *Decay of Dialogue*, 255-257. Today, the use of what is called a "set induction" to open a lesson echoes Ramus's description of how a child learns using "natural dialectic."

[49]Jardine, 41-42.

Whether or not a student becomes a teacher, his use of dialectic continued to adhere to scholastic teaching practices. Thus an individual's everyday world was made practical by being organized according to pedagogically structured knowledge.[50]

Hence, it was only because an art could be taught that it was made to serve a "practical" purpose in the *exercise* of living one's life—the third stage of dialectic. By exercising the art of dialectic, the structure it provided could be practically and methodically applied to the rest of the world not already organized into knowledge by teaching. This meant that the application of the art of dialectic beyond the classroom was closely related to the Renaissance humanists' goal of reforming scholasticism by transforming it from the professional training of teachers to preparing students to live life.

Moreover, Ramus hoped to bring greater certainty to the art of dialectic by giving it a fresh humanist face. In doing so, he employed the Renaissance pedagogical reforms to scholastic teaching practices by employing the use of written composition along with the more pedagogically expedient use of didactic teaching. By insisting that dialectic should not merely govern what goes on in the classroom, but "should govern all life,"[51] Ramus's refinement of the art of dialectic becomes the primary vehicle by which the Renaissance educational reform begins to be fully realized.

Additionally, in time, Ramus's dialectical stages unintentionally and anonymously alter the purpose the university serves. From the Renaissance onward, as the university begins to study as well as teach almost every aspect of human existence, everyday life slowly begins to be increasingly reframed within pedagogical terms,

[50]Jardine, 4-5; and Ong, *Decay of Dialogue*, 162, 176-77, & 180.
[51]Ong, *Decay of Dialogue*, 167 & 178; and Jardine, 5 & 25.

thereby giving everyday life a “methodological” organization. In this way, the intellectual endeavor of the modern university begins to construct clear theoretical distinctions between the various arts and sciences. Ong suggests that such clear-cut divisions of knowledge do not function successfully in terms of distinct scientific theories, but are better understood, both “historically and psychologically,” as distinctions constructed to serve the practical pedagogical purposes of classroom teaching.[52] In other words, the pedagogical demands of the classroom that led medieval teachers to give up the dialogical practices of the ancients for the expediency of didactic classroom practices will lead Ramus to refine his highly systematized art of dialectical reasoning into a single method for arranging all knowledge, thereby transforming the exercising of one’s reason into a single way of thinking.[53]

The Teaching Method of Galen the Physician

While Peter of Spain uses the term *methodus* in the opening statement of his *Summulae*, he has little else to say about method throughout the remainder of the text. Hence, the concept of method played virtually no role in the medieval art of dialectic. On the other hand, method was closely associated with the teaching of the medieval art of medicine. The use of method by medieval masters of the art of medicine generally followed the way the term *methodus* had been employed in the works of Galen the

[52]Ong, Decay of Dialogue, 156-166, adds that a theoretical discourse can also be understood as a way of teaching rather than a way of thinking. See also, Reiss, 328-331, who, in his chapter on “Gulliver’s Critique of Euclid,” observes that the “analytico-referential” nature of modern, “theory-laden,” “discourses of knowledge,” while representing distinct, but parallel interpretations, all depend upon “just one right method in which the conceptual order, sense perception, and world order correspond: referred to in short hand as ‘Euclideanism’” (my emphasis). Ong’s, chapters: “Swift on the Mind: Satire in a Closed Field” and “Psyche and the Geometers: Associationist Critical Theory,” in *Rhetoric, Romance, and Technology*, 212-236, provide a discussion very similar to Reiss’s.

[53]Interestingly, Greta G. Morine-Dershimer, in "Instructional Planning," chap. in *Classroom Teaching Skills*, 19-33, uses a procedure very similar to Ramus's three steps, including "concept mapping," to teach student teaching candidates how to plan lessons.

Physician. Medieval physicians applied the term *methodus* to the conversation they would have with a patient to understand his or her symptoms. In addition, *methodus* was used to refer to any idiosyncratic practice in which a physician engaged to cure these symptoms.

Despite this association of method with a physician's highly individualized habit of diagnosing and curing a patient's illness, master physicians additionally employed the term *methodus* when demonstrating to their students that their prescription, rather than some natural occurrence, was responsible for curing the patient.[54] In so doing, a master physician set out the patient's symptoms to demonstrate in a systematic fashion how his remedies eliminated each symptom. This use of method to correlate a sequence of remedies with a set of symptoms parallels the step-by-step procedure established by Galen for dissecting a cadaver that master physicians used to instruct students in the names of internal organs. During a dissection, the master would remove the organs one after the other, showing it to the students, and then stating its name.

Jardine suggests that Renaissance reformers came to understand Galen's method of dissection as the procedures to employ when ordering an inquiry and demonstrating what one had learned. Understood in this context, the medieval physician's use of method to demonstrate the effectiveness of personal remedies was employed by Renaissance arts masters "as a way for laying out material for the purpose of teaching." Thus, to Renaissance arts students, the physician's "method for laying out symptoms" appeared to be identical to the method used for discovering the causes of an illness. By invoking Galen's methodological tradition, Renaissance dialecticians confused the specialized teaching practices of the medical arts with the general

dialectical practices used for inquiring into unknown principles.[55] Following this line of reasoning, the humanist schoolmaster, Phillip Melanchthon declares:

> Method is an acquired habit establishing a way by means of reason. That is to say, method is a habit that is, a science or an art, which makes a pathway by means of a *certain* consideration (*certa ratione*), opening a way . . . through the confusion of things, and ranging in order the things pertaining to the matter proposed.[56]

Moreover, by adhering to the procedural order suggested by Galen for dissecting a cadaver, Melanchthon asserts:

> Dialectic is the art or way [*methodus*] of teaching correctly, perspicuously, and in an orderly fashion, [which] is achieved by correctly defining, dividing, and linking true statements, and unraveling and refuting inconsistent or false ones.[57]

The efforts of Renaissance humanists like Erasmus, Melanchthon, and More to reform scholasticism's medieval teaching practices by adapting the method used by the medical arts to make teaching and learning more effective were aided by the close relationship that already existed between the medieval arts of physics and medicine. The increased importance of physics during the Renaissance, which forced a realignment of the *trivium* and *quadrivium* by pairing dialectic with physics, further influenced arts masters to adopt the art of medicine's use of method for the practices used to teach the liberal arts courses. For instance, Jardine observes that Melanchthon "confuses Galen's teaching methods" with the geometric procedures employed in an axiomatic proof." In so doing, Melanchthon helped place method on a trajectory that closely coupled it with geometry's formal procedures. Furthermore, because the art of

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[54]Ong, *Decay of Dialogue*, 174.

[55]Jardine, 40. For instance, Peter of Spain is better known as the physician to Pope Gregory X, rather than as a dialectician.

[56]Melanchthon, *Eerotemata dialectices*, lib. 1, in *Opera*, vol. 13, col. 573, cited by both Ong, *Decay of Dialogue*, 177; and Jardine, 35 (my emphasis).

[57]Jardine, 40. Ramus believed that this was the logical procedure used to first form each of the various arts and is similar to Galen's method of synthesis.

dialectic continued to be understood as the basis for teaching all arts courses, this coupling of the physician's use of method as a form of demonstration with geometry merged the future refinement of method with the quantitative bias found in the suppositional logic presented in Peter of Spain's dialectical teaching manual. A generation after Melanchthon, Ramus will insist that teaching should adhere to the conceptual order or sequence presented by Galen's procedures for investigating (dissecting) a subject. While attempting to revise the medieval dialectic of Peter of Spain, Ramus actually reinforces the quantitative bias found in the medieval dialectic.[58]

Ramus's Refinement of Method

Ramus's refinement of dialectic into a single method evolves out of his attempts to complete Agricola's *Dialectical Invention* by defining the procedures for rightly judging the disposition of an argument. However, as Ramus refines method into a procedure that lead one to reason to a definite rather than a probable conclusion, Ramus's dialectic slowly blurs the traditional distinction between invention and judgement that dialecticians had made throughout the centuries. In effect, Ramus's development of method collapses dialectical invention into judgment, thereby transforming the dispositions of an argument into a method for demonstrating knowledge (i.e. instruction).

Simply defined (in good Ramist fashion), method is a disposition or arrangement of an argument that places first that proposition, which among many "is absolutely most clear." It places second the proposition that is next, continually proceeding in an unbroken progression. Ramus defines a proposition as a disposition that consists of an

[58]Howell, 154, observes that Ramus believed that after Galen "the true love of wisdom ceased, and the servile love of Aristotle began."

"*antecedent*" and a "*consequent*." He adds that method “proceeds from the antecedent more absolutely known to prove the consequent which is not so manifestly known." He concludes, "This is the only method which Aristotle did observe."[59]

By stating that method is the disposition of a proposition, Ramus simplifies the art of dialectic by fabricating a new logical structure that he believed effectively eliminates the need for Aristotle’s formal logic for demonstrating scientific (proven) knowledge. While the traditional purpose of dialectical invention and judgement had been to identify and arrange the syllogisms used in an argument, Ramus claims that the art of dialectic did not teach a student how to organize propositions that had already been proven and, thus, are not in dispute. He insists that dialectical reasoning considers only those propositions that are in question. Nor does dialectic teach one how to arrange propositions that are already known, but have been set forth in a confusing manner and are not immediately clear to the auditor. In either case, students have no need of either dialectical invention or judgment because the propositions have already been discovered and judgments have already been inferred from syllogisms. Instead, Ramus proposes, “Only method remains . . . to recreate and refresh the auditor.” Using method, the student is able to set forth plainly the propositions by "knitting and joining together . . . the end of every declaration with the beginning of the next.” Once this has been completed the student should “use some familiar example” to make the fore-going

[59] *The Logike of P. Ramus*, 41 & 54-55. See also Gombrich, 150-152, who shows that by the Renaissance, the “logic of image making” had evolved from a general canon of geometric shapes to a step-by-step procedure that produced images from a generalized “geometric schematic” diagram that moved the artist through increasingly specific images until the intended image is achieved. In this procedure, each sketch represents a distinct “unit” within the movement from the general to the specific image that presents a close conceptual relationship between this geometric logic for drawing visual images, teaching practices, and Ramus’s method of demonstration.

"more easily understood."[60] In other words, method is the stringing together the antecedents and consequences of propositions into a cause-effect logical structure.[61]

Howell observes that by refining dialectic, Ramus went beyond Agricola's art of dialectic by "fortifying his art of dialectic with three general laws" that Ramus derived from Aristotle's *Posterior Analytic*. In English these laws came to be known as the laws of *truth*, *justice*, and *wisdom*.[62] The three laws allowed Ramus to remove any proposition that was not proven to be true or did not pertain to the art or science being studied. Of the three laws, however, the law of wisdom was the more important to Ramus's method because it enabled him to organize any subject in a clear and distinct arrangement.

Because of its significance in establishing the procedures for Ramus's method, the law of wisdom requires further discussion. Although the term, "law of wisdom," appears somewhat cryptic, it pertains to the Aristotelian concept of "philosophical wisdom," which combines the intellectual virtues of intuitive reasoning and scientific demonstration used to contemplate the higher virtues. The Latin term Ramus uses to refer to the law of Wisdom is "*lex sapientiae*." In the French version of his *Dialectic* Ramus translates *lex sapientiae* as "*universel premierement*," which in English translates as "universal in the first instance." Hence, because it is derived from Aristotle's concept of intuitive reasoning, the law of wisdom is Ramus's attempt at

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[60]*The Logike of P. Ramus*, 55-56. Dudley Fenner, *The Arte of Logike* (Middleburg, The Netherlands: Richard Schilders, 1584), in *Four Tudor Books on Education*, introduced by Robert D. Pepper (Gainesville, FL: Scholars' Facsimiles & Reprints, 1966), 167, defines method as the arrangement of "numerous and divers axioms [propositions] framed according to the properties of an axiom perfectly and exactly judged."

[61]Howell, 152-156. Fenner, 167, interprets Ramus's use of an axiom as determining truth, a syllogism as determining necessity (thereby eliminating its use in probable reasoning), and "method as the best and perfect way to handle a troublesome matter."

[62]Roland MacIlmaine, "The Epistle to the Reader," to *The Logike of P. Ramus*, 7.

applying “first principles.” As such, by beginning with that proposition which is first, Ramus’s method begins its chain of steps for demonstrating knowledge with what he believes to be first principles, which Descartes will put to effective use eighty years later in his *Discourse on the Method of Reason*. In time, the basic procedures Ramus sets forth as his “one and only” method will become the single logical order for demonstrating all knowledge.[63]

Ramus initially describes his method of disposition as “natural” method because it is the “natural” means for demonstrating any subject when teaching an arts course. Ramus defines this form of disposition as the “the orderly pedagogical presentations on any subject by reputedly scientific descent,“ meaning logical deduction. In other words, Ramus understands a disposition to be the “natural” way of teaching the “natural” order of things. He adds that his “natural” method provides the absolute order of knowledge by means of a definition, followed by the division of all related arguments. Thus the more natural method of distribution proceeds in step-by-step fashion that continuously divides propositions in an unbroken progression into their integral parts. In this way, Ramus believes that method provides the procedure that covers all the available material so that nothing would be omitted.[64] Ramus’s drive toward method as an alternative form of demonstration is precipitated by his desire to reform the practices used in teaching the liberal arts, and, in particular, the *trivium*, in order to effectively instruct young students in the use of Latin.[65]

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[63]Howell, 149-152; and Ong, *Decay of Dialogue*, 258-262, observes that prior to Howell’s establishing the connection between Ramus’s three laws of method and Aristotle’s *Posterior Analytic*, “recent studies have commonly proceeded as though the laws were entirely Ramus’s.”

[64]*The Logike of P. Ramus*, 55. See also, Ong, *Decay of Dialogue*, 30.

[65]See Frank Pierrepont Graves, *Peter Ramus and the Educational Reformation of the Sixteenth Century* (New York: The Macmillan Company, 1919), 120-159.

In the early versions of his *Dialectic*, this drive to establish more effective teaching practices also leads Ramus to propose a second method called the "method of prudence" (also known as "cryptic" method) that was to be used only when teaching recalcitrant, ignorant, and ill-disposed students. This second method proceeds by induction from particulars, thereby inverting the steps used in his "natural" method, while maintaining the organizational arrangement of moving from antecedent to consequence in a continuous progression.[66] By his final 1569 edition of his *Dialectic*, however, the method of prudence no longer remains a distinct procedure. Ong suggests that under pressure from his critics, Ramus continued to modify dialectical judgement until the two procedures became merged into a single method of demonstration either ascending from particulars by way of induction or descending from generals using deduction.[67]

While revolutionary in appearance, Ramus's method closely adheres to the parceling pattern already established by the medieval dialectical tradition that he and the Renaissance humanists were attempting to revise. Moreover, Ramism projects the liberal arts courses further along the didactic path originating at the heart of the university tradition. Ong asserts that, in the end, Ramus's quest for certainty led him to reject Aristotle's use of dialectical reasoning leading to probable conclusions. However, by adapting those aspects that Ramus found useful to his own project, he adopts the

[66] *The Logike of P. Ramus*, 58. According to Dunn, 93-94, MacIlmaine severely curtailed Ramus's chapter on the method of prudence, focusing instead, only on natural method. She further suggests that by treating cryptic method so negatively, "MacIlmaine is misrepresenting Ramus, thereby lending support to the notion, which eventually predominates England, that Ramus only advocated the use of natural method." Because Ramus's method of prudence is a method of systematic induction, its development has been attributed to Francis Bacon. See also, Ong, *Rhetoric, Romance, and Technology*, 175; and Howell, 160-164. Ong asserts that Ramus was "at a loss to convincingly explain the reasons for using it [prudential method] at all." Howell suggests that prudential method was just as important to Ramus's theory of method as was his natural method."

quantitative certainty of Peter of Spain's medieval dialectic the Renaissance reformers were attempting to supplant.[68] Furthermore, Ramus's refinement of method out of the procedures used to arrange the disposition of an argument provides historical context for the recent (and yet old) shift in teacher education toward associating teacher's dispositions the correct or acceptable methods employed in a classroom.[69]

In the end, method culminates Ramus's three stage dialectical process of nature, classroom, and practical exercise of life. By adhering to the Ancient Greek belief that dialectic is to be used in the pursuit of any subject, Ramus's steps establish the stages for modernity's pursuit of knowledge of the natural world, rationally ordered by a logical method, and made to serve the practical utility of improving the human estate.

Ramus's Invention of Curriculum

As a pedagogical activity, Ramus believed that his "one and only" method provided students the single mechanism they needed for acquiring knowledge. In particular, method assisted students in the scholastic practice of analyzing the complex

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[67]Fenner, 167, does not make a distinction between natural and prudential method.

[68]Ong, *Decay of Dialogue*, 145-146. While geometry was generally recognized as the perfect science, Ramus, along with his medieval predecessors as well as those who follow him, uses the art of grammar when discussing an art or science in detail, which makes grammar and not geometry the science par excellence. As Jardine, 4, points out, the "medieval grammar handbook contained important philosophical discussions that corresponded the structures of language with the mental and physical worlds. See also, Charles Lamb "The Old and the New Schoolmaster," *The Essays to Elia*, with an Introduction by Augustine Birrell (New York: E. P. Dutton & Co., 911), 60, who provides a sense of the extent to which the study of grammar alone equates learning: "Those fine old Pedagogues, since extinct . . . believed that all learning was contained in the grammar they taught and despised every other acquirement as superficial and useless."

[69]This connection or collapsing of dispositions into the notion of method is greatly emphasized and rationalized in the stated standards and objectives of the largest teacher education accreditation agency. See the National Council for Accreditation of Teacher Education, *Professional Standards: Accreditation of Schools, Colleges, and Departments of Education*, 2002 edition (Internet) http://www.ncate.org/2000/unit_stnds_2002.pdf. For additional discussions on the relationship between dispositions and education, see Harvey Siegel, in "What (Good) Are Thinking Dispositions?" *Educational Theory*, 49, no. 2 (1999): 221, who offers a rather Ramist answer to the question of what good are dispositions, stating that "thinking dispositions are good to the extent that they cause or bring about good thinking;" and Christine L. McCarthy, in "What is "Critical Thinking"? Is it Generalizable?" *Educational Theory*, 46, no. 2 (1996): 218, who suggests that "the development of dispositions" is an appropriate

arguments found in ancient and medieval texts when having to compose these arguments into a written exercise. In the Ramus classroom, written exercises were little more than logical operations on a text. As such, method was an analytical procedure that trained students how to retrieve all "matters" relevant to the subject being taught. Because method enabled students to mark off and properly order those passages pertinent to the art or science being learned, it became the primary strategy used in the classroom practice of textual analysis. Method's significance was that it provided the essential structure for demonstrating the knowledge that one had acquired.[70]

Ramus presented method as "a kind of hunting expedition" that reduced the text to a collection of distinct statements "written out on little slips of paper." Students would then arrange these slips of paper for whatever purpose that was at hand. As such, learning became a practice of literary empiricism in which method was used to break down the text. Once a text had been broken down, the various statements on a subject one retrieved could be used continuously by manipulating them into new discourses that served whatever situation was at hand. Ramus maintained that "composing a continuous discourse" was merely a matter of arranging analyzed statements into dichotomized diagrams. He believed that because it mapped knowledge into clear categories, method was the only procedure that enabled students to determine how these "slips of paper" should be arranged. As a map of dichotomized diagrams, Ramus's method presented a discourse as a visual structure that reduced knowledge to the bifurcated "spatial patterns" of a branching taxonomy.[71]

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educational goal only if dispositions are "generalizable and transferable."

[70]Ong, *Rhetoric, Romance, and Technology*, 172-177.

[71]Ong, *Rhetoric, Romance, and Technology*, 162-189. Ong suggests that Ramus's diagrammatic method fabricated the early steps in the development of procedures for the information process model of

Ramus taught that no expression or passage was intellectually useful to a student "unless it had first been analyzed" using his method. Continuing to adhere to his three dialectical stages, Ramus insisted that no form of knowledge, whether derived from a text or a student's own "mental possessions," should be accessible to the student until it had first been passed through his pedagogical method.[72] Furthermore, the ability of students to learn did not depend upon their ability to reason through complex questions for themselves or their own creativity, but upon their ability to analyze (dichotomize) a text. Ramus taught that his knowledge diagrams "served a practical educative purpose" of enabling students to "externalize the process of human cognition; revisiting, absorbing, and reproducing the dialectical processes used by illustrious thinkers."[73] Following both the ancients and the early medieval schoolmasters' use of dialectic, Ramus believed that by using his method students could *know all things* because it enabled them to organize an argument on any art or science that a schoolmaster wished to teach. Thus, the educational significance of method is that its pedagogical logic became the mechanism, which "holds the world together." What this position implies, is that for Ramus and Ramist schoolmasters that followed him well into the next century, the classroom became the doorway to reality.

The concept of curriculum as a formal course of study that all students are required to undertake arises directly out of Ramus's use of diagrams to map knowledge

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knowing by reducing understanding to the manipulation of slips or bits of information. In time Ramus's hunting exhibition would be modernized first into the textbook, then the calculating machine, and finally the electronic computer. Ramus's diagrammatic method attempts to demystify learning by presenting knowledge as an intellectual product that could be processed in terms of "intake," "output," and "consumption" rather than as an act of inquiry.

[72]Ong, *Rhetoric, Romance, and Technology*, 152 & 162. See also, Reiss's, 29-34 & 116, discussion on the transition of the medieval discourse of analogy and resemblances to the Renaissance discourse of analysis as a process of ordering knowledge, upon which modern scientific discourse was constructed.

into clear and distinct categories. The term *curriculum* appears to have been derived from Ramus's use of the term "*vitae curricula*" in a diagram he produced of Cicero's life. In this diagram, Ramus attempted to clarify Cicero's entire intellectual career from birth to death, organizing it along the line of the liberal arts. Ramus presented Cicero's intellectual development as a standardized course of study that students should follow. In so doing, Ramus was following Calvin's notion that salvation followed a *vitae curriculum*—a way of life that educated believers into the discipline of his severe social practices.

Ramus's diagram of Cicero's biography can also be understood as a movement away from the dialogical, personal and idiosyncratic world of sound found in the oral-aural linguistic tradition of disputation practiced in the earlier medieval art of dialectic found in Abelard's rediscovery of personality. Instead, Ramus's diagrams move discourse toward the silent, object world of the didactic, textbook, teaching tradition in which knowledge is conceived of in diagrammatic visual terms. In effect, curriculum becomes a map directing students along a distinct and ideal course of study that all students are required to run in order to acquire the knowledge needed to become the ideal human being. Ramus believed that to *think* is to *bracket*—dichotomizing knowledge into a logical architecture of a branching taxonomy. As a bracketing process, method's purpose is to separate and suspend the "natural" dialectic found in our everyday language, thereby, removing our use of reason from its everyday context. By separating our everyday understandings of the world into distinct categories, they can then be reconfigured using method's dispositions and exercised in the service of practical enterprises. In this way, the concept of curriculum emerges out of Ramus's

[73]Hamilton, 23 & 26; and Jardine, 43 & 46.

practice of methodizing by bracketing and dichotomizing concepts into distinct categories.[74]

Successive generations of Ramists transformed Cicero's "*vitae Curricula"* into a single pedagogical method—a predetermined course of learning that emphasized the certainty and clarity of thought. In this way, Ramus's "shortcut" to knowledge quickly became the method used for organizing all aspects of classroom instruction. Ramus's methodological short cut of branching taxonomies became the structure that has evolved into our present day understanding of a school curriculum with objectives, measurable outcomes, and assessment. Ramus believed that only through "formal education" could humanity be lifted from its fallen nature to its "natural perfection." By formalizing scholasticism's practical teaching practices into the method of "curriculum," Ramus firmly established himself as the "pedagogue's pedagogue."[75]

Post-Ramus Method

Following Ramus's death, his disciples continued to raise the use of method from its early position as a tertiary aspect of his initial writings on dialectical judgment, fashioning it into the entirety of the logical process. In particular, Ramism became popular with seventeenth-century schoolmasters and their students, insisting that method presented a new order to teaching and learning. Schoolmasters believed that method provided students with "the ultimate shortcut to knowledge," teaching Ramist diagrams as a "universal skeleton key" for all classroom subjects. In addition, Ramus's

[74]Ong, *Decay of Dialogue*, 199. Ong describes Ramus diagrams as "cartography of the mind." See also, Briggs, 202, who suggests that Ramus's "schematic dichotomies" are conducive to a conflation of rhetoric, dialectic, and a kind of observational inquiry equivalent to the Aristotelian meaning of scientific demonstration.

[75]Ong, *Rhetoric, Romanticism, and Technology*, 164.

curriculum method gave teachers a generalized template to guide their teaching.[76] The popularity of the “new learning” offered by method further reinforced the “didactic” pedagogical order that had been practiced in the medieval university since the thirteenth century.[77] Thus, seventeenth-century schoolmasters used method to recast scholasticism's medieval dialectical teaching practices into the didactic transfer of truth and knowledge.

The phenomenon that erupted into Ramism facilitated the development of an art of didactic. However, as Ramism transformed dialectic into an art of "didactic," it completely routed many of the pupil-centered reforms advocated by the Renaissance reformers. As Ramism’s offspring, the art of didactic was partly forged from medieval arts masters’ beliefs in a segmented or atomized view of the world, intensified by Renaissance reformers adaptation of the medical arts’ teaching practices in the decades immediately prior to Ramus. This segmented and highly structured view of reality was essential to the development of the kind of scientific mind that eventually evolved into the modern worldview. As a direct heir of Ramism, the art of didactic also emerged out of the scholastic humanism's textbook tradition and is a distillation of both traditions. The printed textbook became a driving force in the rapid rise of the European publishing industry. Ong suggests that the art of didactic should be understood as a

[76]*Ong, Rhetoric, Romance, and Technology*, 162; and Hamilton, 26.

[77]Hamilton, 26; *Ong, Rhetoric, Romance, and Technology*, 187-189; and William Haller, *The Rise of Puritanism: The Way to the New Jerusalem as Set Forth in Pulpit and Press from Thomas Cartwright to John Lilburne and John Milton*, 1570-1643 (New York: Harper Torchbooks, 1957), 300-302. Stephen Toulmin’s, *Cosmopolis: The Hidden Agenda of Modernity* (New York: The Free Press, 1990), provides an excellent explanation of how the political and religious disruptions in the sixteenth century led to the desire for certainty and order that culminated in Descartes’s philosophical method.

kind of quintessence of the university tradition that arose from scholasticism's art of dialectic and the Renaissance reformers pursuit of method.[78]

One schoolmaster who epitomizes the modernization of Ramus's dialectic into the art of didactic is Johann Comenius. It is Comenius who organized what we have come to recognize today as the essential features of the school curriculum. In his textbook the *Great Didactic* (1632), Comenius presents the didactic nature of curriculum in absolute terms, which is barely indistinguishable from Ramus's method. He believed that the curriculum needed to be properly organized in terms of time, subject matter, and methodology in order for the school to operate efficiently. Declaring, "Whatever needed to be known must be taught," Comenius reinforced the Ramist perspective that the classroom furnishes the single doorway to what lies beyond students' every day, familial existence, which they must pass through to properly experience the world. Comenius insisted that the corrective authority of his didactic pedagogy was so complete and absolute that once his curriculum was established and its mechanisms were set in motion, even teachers with no aptitude could use his methods to great advantage. They no longer needed to select their own subject matter, or work out their own method of teaching. Instead, they had only to deliver the curriculum's pre-set knowledge directly to their students.[79]

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[78]Ong, *The Decay of Dialogue*, 163-164.

[79]Ong, *Rhetoric, Romance, and Technology*, 139; Hamilton, 32; and Elmer Harrison, *The Foundations of Modern Education: Historical and Philosophical Backgrounds for the Interpretation of Present-Day Educational Issues* (New York: Rinehart & Co., 1942), 334-349. Comenius was a student of the German Ramist and encyclopedist, Johann Alsted. Harrison points out that the German schoolmaster and pedagogical realist, Wolfgang Ratke, also influenced Comenius. Ian Westbury, in *Teaching As a Reflective Practice: The German Didaktik Tradition (Studies in Curriculum Theory)*, ed. Ian Westbury, Stefan Hopmann, and Kurt Riguarts (Lawrence Erlbaum & Associates, 1999), 1-2, discusses Comenius's influence on Fredrick Herbart.

While the art of didactic appeared primarily within the German milieu, nowhere was Ramism more important than at fledgling Harvard University. Samuel E. Morison (1936) reports that Cotton Mather, one of Harvard's first students and a president, referred to Ramus as "that great scholar and blessed martyr." Harvard's adoption of Ramus's method put it on par with its sister universities in Britain.[80] Ramist logic was the first system taught to students attending Harvard, and his method of diagramming textual knowledge became highly popular with educators in New England.[81] According to Morison, Harvard's scholars taught their pupils Ramism's "neat dichotomy, branching out like a family tree, and on which the student could conveniently hang all the knowledge that he acquired from either books or lecture." To emphasize this point, Morison relays a note that Leonard Hoar, an early Harvard student, wrote to his nephew, Josiah Flynt. Hoar tells Josiah, who was about to enter the university, that when compiling your notebooks, "follow the definitions and distributions of the incomparable P. Ramus."[82] According to Morison, Harvard is one of the few places where Ramism remained important well into the nineteenth century.

By the late nineteenth century, Harvard President and former student of the university, Charles Eliot, called for an American curriculum to "champion the systematic development of reasoning power as the central function of the schools." He argued that

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[80]Samuel E. Morison, *Harvard College in the Seventeenth Century* (Cambridge, MA: Harvard University Press, 1936), 188-190; and Haller, 298-302. Harvard modeled its curriculum on the Scottish universities, whose program of study had been revised by Andrew Melville, a former student of Ramus. Additionally, John Harvard's original library included a copy of Ramus's *Dialectic* and three copies of his *Institutions Logicae*. See also, Morison's discussions on Melville's career at various Scottish universities, in *The Founding of Harvard* (Cambridge, MA: Harvard University Press, 1935). In addition, both Howell, 172; and Dunn, xvii, point out that Ramus's method had a "wide reaching" effect on English logic and rhetoric well into the seventeenth century.

[81]Perry Miller, *The New England Mind: From Colony to Province* (Cambridge, MA: Harvard University Press, 1953), 74-75; and John Morgan, *Godly Learning: Puritan Attitudes Towards Reason, Learning, Education, 1560-1640* (Cambridge, MA: Harvard University Press, 1988), 111.

reason provides a process of accurate observation, classification, and categorization, thereby, directing the curriculum to instruct a student in the mental habit of expressing one's thoughts "clearly, concisely, and cogently."[83] It is not difficult to recognize the Ramist ideals expressed in Eliot's statement.

What makes Harvard's complete adoption of Ramus's Method significant is the crucial role Harvard has played in shaping American education and the school curriculum.[84] Furthermore, the American curriculum can be seen as an on-going continuation of the Puritan educational system, which paralleled the rise of modernity replicating and re-enforcing our present educational forms: a curriculum of pre-determined objectives, teacher-proof institutional techniques, and standardized testing.[85] The sense of curriculum that these Calvinist educators provided has become a cultural artifact upon which American education has been built. Furthermore, when the methods of modern science and pedagogy were introduced in American universities and school districts during the second half of the nineteenth century, scientific method

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[82]Morison, *The Founding of Harvard*, 155. See also, "The Letter of Thomas Shepard to his Son at Harvard," (Internet, 2002) http://www.skidmore.edu/~tkuroda/HI107/sheplet.htm.

[83]Kliebard, *Struggle for the American Curriculum*, 11. In 1893, Eliot was the Chairman of the Committee of Ten, which established the first standards for a secondary school curriculum in American. Morison points out that even after the introduction of Cartesian rationalism at the end of the seventeen-century, the study of Ramist logic continued to play an important role at Harvard.

[84]Samuel E. Morison, *Three Centuries of Harvard 1636-1936* (The Belknap Press of Harvard University Press, 1936), 421-422, discusses Harvard's influence on school preparation in seventeenth and eighteenth Colonial New England. See also, Kliebard, *Struggle for the American Curriculum*; Pinar et al., 75-78, 86-87; David Tanner and Laural N. Tanner, *History of the School Curriculum* (New York: Macmillan, 1990); and L. Cremin, *The Transformation of the School: Progressivism in American Education 1876-1957* (New York: Vintage, 1961). Each of these works discusses the role that Harvard's faculty and graduates have played in the continuous debate over an American curriculum."

[85]Douglas McKnight, *Schooling, the Puritan Imperative, and the Molding of an American National Identity: "Education's Errand into the Wilderness"* (Maweh, NJ: Lawrence Erlbaum Associates, forthcoming). See also the description of Puritan educational folkways in Colonial America, in David Hackett Fischer, *Albion's Seed: Four British Folkways in America* (New York: Oxford University Press, 1981).

found a ready audience in the United States because it had originally evolved out of the Ramist methodology already being practice in American schools and universities.[86]

In the decades after Ramus, the pursuit of the "one right" method became a general preoccupation of seventeenth-century intellectuals. Ong suggests that in just a few generations Ramism is all but completely subsumed by the obsession with method, influencing both Bacon's empirical and Descartes's rational methods. As Morison adds, although "historians of logic have forgotten Ramus's name," for the history of education and modern culture it was "Ramus who cleared the way for the new scientific philosophies of Bacon and Descartes."[87] The significance of Ramism to modern thought and education is that it was Ramus's method rather than Aristotle's scientific logic that Bacon and Descartes adopted for demonstrating knowledge.

Unlike Bacon's and Descartes's methodologies, Ramus's method did not include specific content. Ramism was concerned only with the structure of the demonstration rather than with what one was demonstrating. This is indicative of the primarily pedagogical nature of Ramus's method. By requiring that one begin only with the proposition that is first, Howell suggests that Ramism's procedure begins with the class of things nearest to the subject being considered by the student rather than those things

[86]Higham, 93-94, suggests that America's eighteenth and nineteenth century patrician historians, who were the heirs of the Puritan intellectual tradition, already possessed the methodology associated with scientific history.

[87]Morison, *Harvard College in the Seventeenth Century*, 189. In the texts on Bacon that I have looked at, all published since the 1960s, Ramus has been presented as having an important influence on Bacon's ideas concerning, inductive method, natural philosophy, and logic. For comparisons of Ramus, Bacon, and Descartes see, Karl R. Wallace, *Francis Bacon on the Nature of Man* (Urbana, IL: University of Illinois Press, 1967); C. G. Crowther, *Francis Bacon: The First Statesman of Science* (London, The Cresset Press, 1960); Benjamin Farrington, *The Philosophy of Francis Bacon: An Essay on its Development from 1603 to 1609 with New Translations of Fundamental Texts* (Liverpool: Liverpool University Press, 1964); and Charles Whitney, *Francis Bacon and Modernity* (New Haven, CN: Yale University Press, 1986).

that are more remote.[88] Dudley Fenner's (1584) translation of Ramus's *Logic* (*Dialectic*) attempts to make method an even simpler and less problematic procedure by replacing the concept placed first in a disposition from the *most general proposition* to the *axiom* "*easiest*" for the student to comprehend of those under consideration. Thus, the axioms placed next become the less general for no other reason than they are the axioms *harder* for the student to understand. Finally, the "whole matter" should be arranged so that "all the parts may best agree with themselves and be best kept in memory."[89] Teaching practices that break learning into a set of simple tasks and arranges these tasks in a step-by-step procedure in order to train students in a pre-established knowledge continues to engage in Ramus's "one and only" method. This suggests that Ralph Tyler's rationale, with its highly methodized approach to fabricating the school curriculum, appears to resemble much of the Ramist use of method as a shortcut to teaching and learning. While differences between the two approaches exist, their *dispositions* of what a student must learn maintain an intimate relationship.

The ultimate effect of Ramus's method was to raise the concept of *techne*, by way of pedagogical practices, to the pinnacle of what Aristotle considered an intellectual virtue, what the Puritans described as *technologia*.[90] Thus, through the art of dialectic, the diagrammatic structures fabricated by the arts master to teach all natural phenomena—including reason, speech, physics, and mathematics—replaced the ancient practice of philosophical wisdom. The Renaissance pursuit of method enabled Western intellectuals in the seventeenth and eighteenth centuries to bring into being

[88]Howell, 152.
[89]Fenner, 167.
[90]David H. Scott, "A Vision of Veritas: What Christian Scholarship Can Learn from the Puritans 'Technology' of Integrating Truth," in *Origins*, (Internet, 2000) http://www.origins.org/aip/docs/scott.html.

from human hands modernity's dependence upon theoretical discourses.[91] Reconceiving the school curriculum with the hope of returning education to a purpose of personal and social transformation,[92] as suggested by the curriculum theorists discussed in Chapter One, above, asks teaching practices to begin using a language that has not been technologized, which recognizes that even the vaguest statement can teach profound meanings.[93] As the next chapter will discuss, this is the purpose of Wittgenstein's later philosophy.

[91]Bacon opens his *Nova Organon: Aphorisms Concerning the Interpretation of Nature and the Kingdom of Man*, First Book, no. 1-10, in Great Books of the Western World, no. 30, 107, by asserting that true understanding and mastery of the world is provided by the "hand" trained in the proper use of "instruments."

[92]While I agree with Rorty's longing for education to be socially and personally transformative, I believe that his trust in the socialization of K-12 students in a neo-liberal ideology only misses the impact that teaching practices have in reproducing a technological and mechanistic world view: a point both Wittgenstein and I believe is most important, and one that lies at the heart of this dissertation. As a parallel issue, not to be explored here, but worth further study at a later date, is Rorty's observation that the pragmatists' emphasis on scientific method ultimately leads to a dead end, resulting in current day neo-pragmatism emphasizing the use of language instead of method. See Richard Rorty, *Philosophy and Social Hope* (New York: Viking Penguin, 1999), especially his essays "Education as Socialization and Individualization," and "Truth without Correspondence to Reality."

[93]While the search for a new language for education has been an important aspect of Huebner's work, presented in *The Lure of the Transcendent*, the religious language he employs to describe what it means to educate, is as much a product of *techne*—the art of discourse—by way of medieval theology, as is the idealized language used by the social sciences.

CHAPTER 4
LUDWIG WITTGENSTEIN: RECONCEIVING PHILOSOPHY

Alan Janik and Stephen Toulmin (1973) report that the most important philosophical problem with which Wittgenstein was concerned was finding a way to describe the relationship between language and the world. Wittgenstein began to pursue his investigation of this relationship upon entering Cambridge in 1912 to study philosophy with Bertrand Russell. Wittgenstein's initial philosophical work culminated, in 1922, with the publication of his *Tractatus*. In his *Tractatus*, Wittgenstein presents the relationship between language and the world in his picture theory of language in which he proposes that a proposition (as a statement about the world) represents a diagram or schematic that models the logical structure of the world.

In his later philosophical work, Wittgenstein abandons the formal logical structure presented in the *Tractatus*. Instead, in his continuing endeavor to describe how language and the world are related, Wittgenstein enters the intellectual realms of pragmatics and psychology.[1] His later investigations began in 1927 while engaging in informal conversations with some of the philosophers that made up the Vienna Circle. They were attempting to use the formal logic of the *Tractatus* to improve the philosophy of science. Moreover, upon returning from the First World War, beginning in the summer of 1919 and through the spring of 1926, Wittgenstein worked as an elementary school teacher in several rural villages outside of Vienna. Not surprisingly, his later investigations into philosophy focus upon trying to understand how a young child learns

[1]Janik and Toulmin, 223-228, suggest that Wittgenstein's philosophical journey was a continuation of a general intellectual preoccupation during "*fin-de-siecle"* Vienna with the mapping of the limits of language. They further maintain that the logical positivists and empiricists, two particular and important philosophical schools of this era, dismiss "areas like pragmatics and pyschologism, as a formless intellectual slag heap."

to speak its native language. By asking the question of how a child learns language, Wittgenstein is asking further questions about the practices used to teach. For example, when having to teach a child about the existence of a chair, he asks, Does the *"idealist"* teach a child the concept of a chair any differently than does the *"realist"*?[2]

Wittgenstein opens his *Philosophical Investigations* with an examination of St. Augustine's explanation of how one teaches a young child the names of objects. His later investigations end just prior to his death with a set of notes published under the title of *Zettel*, in which Wittgenstein asks whether his pursuit of the relationship between language and the world had become little more than a study of child psychology.[3] By asking questions about teaching and learning to investigate how language and the world are related, he indirectly raises questions about curriculum not unlike those currently being raised by curriculum theorists. A brief glimpse of how Wittgenstein's philosophical concepts might impact current curriculum are presented in the following passage: "How do we learn the expression, '*Isn't that glorious'*—No one explained it to us by referring to sensations, images or thoughts that accompany hearing!" He further suggests that when one understands an expression, the impression it makes "is connected with things in its surroundings—e.g. with our language and its intonations; and hence with the whole field of our language-games."[4] By suggesting that learning an expression is not dependent upon what are referred to as internal mental processes, Wittgenstein is rejecting the representational view that language is merely a scaffold that connects the external world and the internal mind. Instead, he is suggesting that

[2]*Zettel*, no. 413-414.

[3]*Zettel*, no. 412; and Ludwig Wittgenstein, *Philosophical Investigations*, trans. B. E. M. Anscombe (New York: Macmillan Publishing Co., 1958), I, no. 1. Not long before his death, Wittgenstein gave up working on the notes that became *Zettel* because he was too weak to continue. Amazingly, all of

learning is related to our everyday use of language as well as to other ordinary life activities in which we engage, as we use language.

William W. Bartley (1974) claims that Wittgenstein's experiences as an elementary school teacher helped him abandon all belief that a direct, formal relationship between language and the world can be found. Instead, he came to recognize that meanings and our understandings of them emerge from the multifarious practices in which humans engage. Teaching young children allowed him to "make the connection between the concept of teaching and the concept of meaning."[5] This realization led him to urge that to better understand the relationship between language and the physical and mental worlds, one needs "to reflect more carefully on the ways in which children do in fact learn" the ordinary patterns of their native language. Equally important, philosophy needed to study more closely the contingencies, as well as, the

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Wittgenstein's works, except his *Tractatus* were published posthumously.

[4]*Zettel*, no. 170-175.

[5]William W. Bartley, *Wittgenstein* (London: Quarter Books, 1974), 98 & 126-129. Bartley suggests that Wittgenstein's experience as an elementary school teacher influenced his later philosophical shift away from his initial use of formal logic. However, most scholars have either completely ignored the possible influences teaching may have had on his later thoughts, or have merely paid it lip service. Judith Genova, *Wittgenstein: A Way of Seeing* (New York: Routledge, 1997), 209, following Bartley, suggests that Wittgenstein's teaching experience was crucial to his later thought. She adds that Charlotte and Karl Buhler influenced Wittgenstein. Karl Buhler's 1934 work, *Sprache Theori*, influenced both Jean Piaget's and Lev Vygotsky's ideas on Constructionism. However, Bartley, as well as Ray Monk, *Ludwig Wittgenstein: Duty of Genius*. New York: Penguin Books, 1990), report that Wittgenstein was exposed to Karl Buhler's psychological and philosophical ideas in 1921 during his training at the institute run by the Austrian School Reform Movement. Buhler had studied and worked with the experimental psychologist, Oswald Kulpe, at Wurtzburg developing the psychology of imageless thought. Aspects of Wittgenstein's philosophy resemble this psychology of "imageless thought," in particular the relationship he points to between teaching, as an activity, a meaning. Peters and Marshall, generally concur with Bartley's position. However, Eugene E. Hargrove, "Wittgenstein, Bartley, and the Glockel School Reform," in *Journal of the History of Philosophy*, 18, no. 4 (1980): 453-461, claims that Bartley's position is not sufficient to establish a direct connection between Wittgenstein's later philosophy and the School Reform Movement's educational theories. My research suggests that Wittgenstein was probably exposed to the Wurtzburg School's psychological ideas as early as 1912 while doing experiments on the psychology of music in Cambridge's psychology lab with C. S. Myers. See Nancy Nelson, *The Constructivist Metaphor: Reading, Writing, and the Making of Meaning* (San Diego: Academic Press, 1997); McGuinness; and Steen F. Larsen and Dorthe Berntsen, "Bartlett's Trilogy of Memory: Reconstructing the Concept of Attitude," in *Bartlett, Culture and Cognition*, ed. Akiko Saito (Cambridge: Psychology Press, 2000), 91-97.

"metaphysical confusions that can flow" out of "everyday language."[6] He declared that the purpose of his later investigations was to eliminate all metaphysical considerations from our ordinary use of language.

Wittgenstein's later investigations acknowledge that logic's primary purpose had been to fix human experience within its meta-discourse, thereby, idealizing a particular (logical and theoretical) way of thinking. He adds that this methodological way of thinking has led us to believe that the discourse used by logic must first be taught *directly* to students so as to ensure that they will use logic as the only proper way of explaining the world. Wittgenstein's later works reject this centuries-old tide of scholasticism's didactic pedagogy. As such, his later philosophy presents an alternative to traditional teaching practices by proposing that teaching should be understood as an *indirect* rather than as a *direct* discourse. Teaching should not be limited to one right method for delivering knowledge because it "does no good" for the teacher to draw explicit conclusions for students. All a teacher can hope to accomplish is to help students imagine, for themselves, the various possibilities that emerge from their learning activities.[7] As Wittgenstein observes, "You cannot lead people to what is good; you can only lead them to some place or other. The good is outside the space of facts."[8]

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[6]*Philosophical Investigations*, I, no. 116 & 132. See also, Janik and Toulmin, 224; and Bartley, 127.

[7]Janik and Toulmin, 228. See also, Dewey, 158-163, who suggests that thought and experience work in a way similar to Wittgenstein's concept. He states, "A thought (what a thing suggests but is not as it is presented) is creative—an incursion into the novel. It involves inventiveness. What is suggested must, indeed, be familiar in *some* context; the novelty, the inventive devising, clings to the new light in which it is seen, and the different use to which it is put."

[8]*Culture and Value*, 3e. According to the "Allegory of the Cave," in Plato's *The Republic*, Book VII, the purpose of education is the achievement of "the good." For Plato, while the "good" was fixed and determined, the student could achieve the good only indirectly, by way of experience and struggle. It is not the role of the teacher to provide the student the good directly. See also, Huebner's description of the meaning "to educate" in "Religious Metaphors and the Language of Education," 361; and Paul

Ironically, Wittgenstein's critique of logic and its formal method for arranging thought, language, and the world into a single order appears to have emerged from his own teaching experience, not unlike Ramus's refinement of the art of dialectic (into a method of logic), from his teaching experience. However, unlike Ramus, Wittgenstein believed that the purpose of teaching should be to help students recognize that the world consists of multiple meanings. The teacher's purpose is to help students transform their ordinary understandings of the world by showing them new ways of "seeing." This new way of seeing, however, should not simply send students off on a kind of conceptual holiday from which they are unable to return. The later Wittgenstein contends that using logic sends students on just such a journey because logic's meta-discourse never allows them to return home to their ordinary use of language. By keeping students away from their ordinary language, logic turns this holiday into a "`life in a bottle,' transforming our ideals into *a priori* idols, to which, it insists, reality must correspond."[9]

Janik and Toulmin suggest that Wittgenstein came to believe that "there are no metalanguages." Wittgenstein established the position that formal, theoretical discourses, like logic, cannot alone give the totality of meaning to the world. As he observes, we are taught logic's "ideal," which has become "unshakable," that the "strict and clear rules of logical structure . . . must be found in reality."[10] He describes logic's way of seeing as looking at the world through a "pair of glasses." The purpose of these glasses is to remove "any vagueness," conditioning us to "assume that a perfect

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Feyerabend, *Against Method* (New York: Verso, 1988), 273-274.

[9]Genova, 10; and *Philosophical Investigations*, I, no. 131.

[10]*Philosophical Investigations*, I, no. 101-103, as well as Wittgenstein's critique of the role of the "ostensive teaching of definitions" in language learning, no. 6-9.

language awaits our construction." However, "it never occurs to us to take them [our logic] off." Thus, we are compelled to see the world as just "such-in-such a case." Our glasses provide a methodized view of the world that we "cannot get outside of" and which compels us to ignore the possibility that "a *thought* can be what is not the case."[11]

The Vienna Circle and the *Tractatus*

The intellectual goal of the Vienna Circle, not unlike Descartes's, as well as his scholastic predecessors, was the development of a single method of organizing philosophy along "the sure path . . . of a single science, thereby unifying all intellectual thought."[12] Toulmin states, "The Vienna Circle's chief preoccupation was reviving exactitude . . . around a core of mathematical logic." As such, logical positivism can be understood as a revival of Descartes's "monopolistic position" that called for a single "universal method" for ordering the mind. To accomplish this, members of the Circle integrated the philosophical logic presented in Wittgenstein's (1921) *Tractatus*, with the positivist epistemology of "sense data."[13]

The Circle's logical positivism was a reaction against the nineteenth-century upheavals in natural science away from Cartesianism's "value free" rationalism and "mechanistic theories of physics." This upheaval had been generated by the "new sciences's" (psychology, sociology and anthropology) attempts to restore a human quality to scientific inquiry by "reintegrating thought and feeling." Furthermore, as

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[11] *Philosophical Investigations*, no. 95, 98, &103; Ludwig Wittgenstein, *On Certainty*, ed. G. E. M. Anscombe & G. H. von Wright (New York: Harper Torchbooks, Harper & Row, Publishers, 1972), no. 133 & 287.

[12] Janik and Toulmin, 212. See also, Stephen Priest, *Theories of the Mind* (New York: Houghton Mifflin Co. 1991), 37-38; and Monk, 324.

[13] Toulmin, 154; Janik and Toulmin, 133-138; and Antony Flew, ed., *A Dictionary of Philosophy*, 2nd ed. (New York: St. Martin's Press, 1979), 324-325; Bertrand Russell's "Introduction" to the *Tractatus*. The term "sense data" refers to Ernst Mach's theory of sensationalism, which argues that sensory

participators in Vienna's *fin-de-siecle* cultural milieu, the "sciences" were reacting to the social uncertainties in Eastern Europe caused by the political upheavals following the end of the First World War, and in particular, to the cultural consequences of the dissolution of the Habsburg Empire.[14]

While members of the Vienna Circle were excited by Wittgenstein's use of logical calculus, as a method for analyzing the "truth-function" of propositions, following both Bertrand Russell and Gottlob Frege,[15] what interested them most about Wittgenstein's work was his proposal that "`atomic facts' corresponded to the [elementary] propositions of an idealized formal language."[16] According to the *Tractatus*, "facts" are not "things," but are, instead, statements about the world. An "atomic fact" (*Sachverhalt*) is a simple fact that cannot be further divided into a simpler fact, but can be divided into "objects (things)." A proposition is a statement that expresses a thought. The objects that compose a proposition are names. Thus, names, like "objects, are simples."[17] Garth Hallett (1967) explains that in the *Tractatus*, "The simplest facts are mirrored by the

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experiences "are the ultimate and real components of the world." Thus, "anything knowable can be discovered through sensory experience."

[14]Toulmin, 149-155. See also, *Culture and Value*, 6e. The significance of the Habsburg Empire to the Viennese frame of mind is a central theme in Janik and Toulmin's *Wittgenstein's Vienna*. For the profound sense of loss produced by the Empire's dissolution see, Stefan Zwieg, *The World of Yesterday*, Introduction by Harry Zohn (Lincoln, NE: University of Nebraska Press, 1964, reprinted from Viking Press edition, 1943).

[15]Janik and Toulmin, 213, observer that "the formal truth calculus of the *Tractatus* thus became a method for the logical construction of human knowledge."

[16]Janik and Toulmin, 212-213, describe Wittgenstein's "elementary propositions" as "unit propositions," while Bertrand Russell, in his "Introduction" to the *Tractatus*, xiii, describes them as "atomic propositions"

[17]*Tractatus*, no. 1, 1.2, 2, 2.01, 2.02, 3.14, 3.202, 3.203, 4.21, & 4.22. Monk, 162, explains that C. K. Ogden's 1922 translation of the *Tractatus* translates *Sachverhalt* as "atomic facts," while Pears and McGuinness's edition translate *Sachverhalt* as "state of affairs." Russell, xiii, provides the following example of a fact and an atomic fact: "Socrates was a wise Athenian" is a fact that contains the two atomic facts: "Socrates was wise" and "Socrates was an Athenian."

simplest propositions—elementary propositions. And in these there are no signs except names."[18]

In the *Tractatus*, Wittgenstein maintains the traditional philosophical position that the structures of the external physical world and the internal mental world are linked by a "logical scaffolding" found in the structure of language.[19] He provides the following example of this relationship:

> A gramophone record, the musical idea, the written notes, and the sound waves, all stand to one another in the same internal relation of depicting that holds between language and the world.
>
> They are all constructed according to a common logical pattern.[20]

However, Wittgenstein's logical scaffold does not include an empirical component. In the *Tractatus*, Wittgenstein does not provide empirical examples of either atomic facts or elementary propositions. Nor does he maintain that simples (objects or names) are required to contain any empirical content. Instead, he states that "names" (i.e. objects) occupy a logical space in the similar manner that a "point" occupies a geometric space. According to Ray Monk (1990), Wittgenstein insists, "The very possibility of analysis demands that there be such things, providing the structure of both language and the world." As such, simples, which correspond to reality, exist as a consequence of the "logical necessity demanded by theory."[21]

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[18]Garth Hallett, S.J., *Wittgenstein's Definition of Meaning in Use* (New York: Fordham University Press, 1967), 19, further explains that by establishing this relationship between facts, names, and simples, Wittgenstein was following the *suppositional theory* of William of Ockham. Hallett states that names become the only signs because "Ockham's razor eliminates all others." Wittgenstein, no. 3.328, declares, "If a sign is useless, it is meaningless. In, no. 5.47321, he adds, "the point of . . . Ockham's maxim . . . is that *unnecessary* units in a sign-language mean nothing" (Wittgenstein's emphasis). Furthermore, Hallett suggests that this is the origin of Wittgenstein's concept of "meaning in use," which will be further developed in his later philosophy, in part, by eliminating only the logical structure of Ockham's suppositional theory.

[19]*Tractatus*, no. 3.42.

[20]*Tractatus*, no. 4.014.

[21]Monk, 118 & 129, observes that in the *Tractatus*, Wittgenstein contends that "there must be a logical structure in common between a proposition and *states of affairs* and it is this commonality of

Michael Dummett (1973) observes that in the *Tractatus*, Wittgenstein endeavors to "reinstate philosophical logic as the foundation of philosophy."[22] In so doing, Wittgenstein was attempting to "overthrow" the epistemological foundations upon which modern philosophy has been built since Descartes.

The *Tractatus* presents an analytical method of representation that reduces propositions from their most general into their most elementary linguistic components. It is a method of representation that mirrors the atomistic structure of the world. The *Tractatus* opens with the highly general proposition, "The world is all that is the case." The next proposition states, "The world is the totality of facts, not of things."[23] By defining the world as the totality of facts and then dividing facts into linguistic simples, Wittgenstein's philosophical logic echoes Ramus's "natural" method of analysis that proceeds from the most general to the most particular. Wittgenstein goes on to describe his "picture theory of language," explaining that these facts provide a "picture" of reality that arranges facts into a logical scaffold. However, this "picture" is not an *image* or *snapshot*. Instead, he asserts that a picture projects "a model of reality." Wittgenstein then declares that this logical scaffold is a human construction by

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structure which enables language to represent reality" (my emphasis).

[22]Michael Dummett, *Frege: Philosophy of Language*, 2nd ed. (London: Duckworth, 1973), xxxiii, cited in McGuinness, 83. Dummett observes that following Descartes, philosophical investigations began with the questions: "What do we know and how?" McGuinness adds that the philosophical shift brought about by Wittgenstein's Tractatus has remained limited to only a few schools of thought within the Anglo-American tradition. Interestingly, Wittgenstein's Cambridge mentor, Bertrand Russell, and the logical-empirical school of analytical philosophy that followed him, were among those who did not fully appreciate the philosophical shift Wittgenstein presented in the *Tractatus*. This was the case, despite Russell's belief, as early as 1912, along with others at Cambridge, that Wittgenstein would produce the next great advance in philosophy.

[23]*Tractatus*, no. 1 & 1.1. Following these opening propositions, he states, "The facts in logical space are the world," no. 1.13, and next, "The world divides into facts," no. 1.2. See also, McGuinness, 77.

asserting, “We picture facts to ourselves,” further adding, “A logical picture of facts is a thought.”[24]

Wittgenstein’s picture theory of language, as a model of reality, functions like a map or diagram of the physical world. Norman Malcolm (1984) reports that Wittgenstein conceived of his picture theory from a diagram or schematic of an automobile accident he saw in a magazine, while on the Eastern Front during World War One. Malcolm observes that as he was looking at the diagram, “It occurred to Wittgenstein that this map was a proposition and that there in was revealed the essential nature of propositions—namely to picture reality.”[25] This story suggests that there is an even stronger resemblance between Wittgenstein’s logical scaffolding and Ramus’s method. Thus, it appears that Wittgenstein was unknowingly extending to a single proposition a structure similar to the one Ramus had given to a string of propositions. As such, the *Tractatus* could be understood as indirectly following in the tradition of previous dialectical textbooks produced by scholastic arts masters.[26]

Members of the Vienna Circle believed that logic’s main function was to provide science with epistemological guarantees. They wanted to reverse the relationship between logic and science by “using the techniques of science” to solve philosophical problems. They proposed that by uniting scientific facts—empirical statements about

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[24] *Tractatus*, no. 2.1, 2.12. & 3. By presenting philosophical logic as a human construction, and not something found pre-existing in nature, he was returning logic to the Greek and Scholastic concept of an "Art" or *techne* (to make something).

[25] Norman Malcolm, *Ludwig Wittgenstein: A Memoir* (Oxford: Oxford University Press, 1984), 68, See also, Georg Henrik von Wright’s more detailed story of this event, in “A Biographical Sketch,” in *Ludwig Wittgenstein: A Memoir*, 7-8; and Hallett, 16.

[26] In the *Tractatus*, no. 3.26, Wittgenstein claims that "a name cannot be dissected [analyzed] any further . . . ." Janik and Toulmin, 184, suggest that in the *Tractatus*, the logical “arrangement of ‘facts’ are not exact reproductions of these facts, but only of what is essential in the logical relationships between them.” Using the word “arrangement” to refer to the *Tractatus’* method of demonstration, further suggests a strong resemblance to Ramus’s method, as an orderly disposition of propositions.

the physical world—with the tautological arguments found in the *Tractatus*, philosophical language would be better able to "distinguish meaningful, from meaningless" statements about the world. To do this, the Circle had to remedy Wittgenstein's omission of empirical evidence. By equating atomic statements with the empirically "hard facts" of positivism's sensory epistemology, Wittgenstein's "atomic facts" were re-presented as "the ultimate carriers of knowledge, each of them recording one single item of sensory evidence."[27]

After Wittgenstein entered into informal discussions with members of the Vienna Circle concerning their use of his philosophical ideas, he quickly rejected their philosophical position. He argued that its members were misinterpreting the philosophical position he had presented in the *Tractatus*. Their conclusions compelled Wittgenstein to rethink his use of philosophical logic and logical calculus to present his philosophical ideas.[28] Thus, Wittgenstein's later philosophical work can be understood as a critique of the Circle's adaptation of his earlier work.

Wittgenstein's Critique of Logic

In his later philosophical investigations, Wittgenstein abandons the logical scaffolding he constructed in the *Tractatus*. He insists that we have been led to believe that the purpose of logic is to present concepts like "proposition, language, thought, and

[27]Janik and Toulmin, 212-216, report that the Circle's members adapted "Russell's doctrine of 'knowledge-by-acquaintance to Wittgenstein's 'atomic facts.'" See also, Priest, 37-38; as well as Kaye's criticism of Russell's realism using Ockham's suppositional logic, in "Russell, Strawson, and William of Ockham."

[28]For Wittgenstein, in the *Tractatus*, what logic shows is that knowledge, which cannot be expressed using language, like higher forms of ethical and moral knowledge, is *unsayable*. Therefore, he states, "what we cannot speak about we must pass over in silence," no. 7. For the logical positivists of the Vienna Circle, however, what was most important about logic was what it *could say* about the world (i.e. could be proved).

world as standing in line one behind the other."[29] Thus, we are taught to believe that this method of arranging logic is the essence of thought, which he declares:

> Presents an order, in fact the *a priori* order of the world: that is the order of possibilities, which must be common to both world and thought. But this order, it seems, must be *utterly simple*. It is *prior* to all experience, and must run through all experiences; no empirical cloudiness or uncertainty can be allowed to affect it----It must rather be the purest crystal.[30]

He adds that this belief places us "under the illusion that what is essential in our investigations, resides in trying to grasp the incomparable essence of language."

Wittgenstein's critique of logic calls into question the analytical method by definition and division that philosophy uses to examine what can be said about the world. As he explains, logic attempts to clarify the "misunderstandings concerning the use of words" that are "caused by certain analogies between different forms of expression." Logic attempts to eliminate these misunderstandings by "substituting one form of expression for another," thereby, attempting to "make our expressions more exact." He observes that this procedure "may be called an 'analysis' of our forms of expressions for the process is sometimes like taking things apart." Furthermore, logic assumes that "our usual forms of expression were essentially unanalyzed; as if there were something hidden in them that had to be brought to light . . . and which an analysis digs out."[31]

The purpose of Wittgenstein's later investigations, however, is not to dig for something that is hidden" because, he argues, everything "we want to *understand* . . . is

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[29] *Philosophical Investigations*, I, no. 96.

[30] *Philosophical Investigations*, I, no. 97. This description of logic's essential order is reminiscent of Ramus's description of method (see Chapter two, above). Because in his later philosophical works Wittgenstein uses punctuation and grammar to disrupt the usual way one reads (i.e. thinks about) philosophy, I have quoted him by using his original form of punctuation and grammar as often as possible.

[31] *Philosophical Investigations*, I, no. 90-92.

already in plain view. For *this* is what we seem in some sense not to understand."[32] He adds that while he wants "to establish an order in our knowledge of the use of language," he is not attempting to establish "*the order*. To this end we shall constantly be giving prominence to distinctions which our ordinary forms of language easily make us overlook." As such, "It is not our aim to refine or complete the system of rules for the use of our words. There is not a [single] philosophical method . . . no measuring-rod to which reality *must* correspond." Instead, he suggests, "There are indeed methods, like different therapies."[33] Here, Wittgenstein is not only rejecting Ramus's "one and only" method of demonstration, but by declaring that methods are like therapies he is trivializing the concept of method by returning its meaning to the ancient notion of a conversation between a physician and a patient. In so doing, Wittgenstein is also undermining the pedagogical underpinnings that led to Ramus's refinement of method.[34]

Judith Genova (1997) suggests that Wittgenstein's later philosophy "presents the radical notion that language is not a product of art or *techne*; it is not a human-made artifact, but a living dimension of existence."[35] Wittgenstein notes, "Reading the Socratic dialogues one has the feeling: what a frightful waste of time! What's the point of these arguments that prove nothing and clarify nothing?"[36] By rejecting the belief that an art of language could fabricate a structure of distinct meanings for words,

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[32]*Philosophical Investigations*, I, no. 89 (Wittgenstein's emphasis).

[33]*Philosophical Investigations*, no. 131, 132, and 133.

[34]See Chapter Two, above. In *Philosophical Investigations*, no. 255, Wittgenstein adds, "The philosopher's treatment of a question is like the treatment of an illness." This statement follows his discussion on the impossibility of a "private" language by showing how our concept of "pain" is related to a language-game of pain, which ties back into the notion of a diagnosis as a conversation and a treatment as an idiosyncratic remedy.

[35]Genova, 120. In *On Certainty*, no. 475, Wittgenstein states, "Language did not emerge from some kind of ratiocination." In *Culture and Value*, 4e, he suggests that if "the study of logic" provides "a 'solution' to the problems of philosophy, we need to remember that at the time when they had not been solved people still knew how to live and think."

[36]*Culture and Value*, 14e.

Wittgenstein alters the dialectical relationship between language and the world, which forms the basis of the *Tractatus*. As just one language-game among many, the art of dialectic no longer remains "the capstone of the sciences, [beyond which] . . . the nature of knowledge can go no further."[37] In other worlds, Wittgenstein is recognizing that the methodization of language—Ramus's systemization of our "natural" language into a practical discourse through the art of dialectic—Is not the only way of applying language to our everyday world. Instead, he weds the use of reason to the activity of playing games. In so doing, Wittgenstein calls into question the very intellectual foundations of Western philosophy, science, and most importantly for us, pedagogy.

Genova further suggests that Wittgenstein's later investigations continue to show that modernity's "diachronic" method of analyzing and explaining the world is a continuation of the Cartesian, epistemological misconception which assumes that a direct cause-effect relationship exists between associated concepts.[38] Focusing on the contingencies found in our ordinary forms of life that are expressed in our everyday language, Wittgenstein disrupts the modern epistemological debate between empiricism and rationalism over the ultimate source of knowledge. His later philosophy contends that the "dialectical relationship between the internal and external worlds (mind and nature), [upon which method was developed] no longer provides a framework for understanding human relationships to the world."[39] Method's step-by-step procedure maintains the illusion that an essential order exists within a logical discourse "between concepts, words, truth, experience and so on" that links language, thought, and the

[37]Plato, *The Republic*, Book VII, 398.
[38]Genova, 34. See also, Toulmin, 11.
[39]Genova, 26 & 34.

world.[40] For Wittgenstein, logic is unable to transform its formal representations into a plain description of the world. Furthermore, by undermining the philosophical dualism that separates human thought from the material world, Wittgenstein's later philosophy disrupts the theory-practice relationship upon which modernity's theoretical practices and discourses are embedded. His rejection of both the empirical and rational foundations of knowledge signals an abandonment of the practice of "grand theorizing" upon which modernity operates.[41]

Jean-Francois Lyotard (1988) observes that logical discourse is "an artificial (axiomatic) language" that is composed of our "'natural' or 'everyday' language." Our everyday "language is universal . . . [because] all other languages can be translated into it." This universality limits our ability to completely understand any formal language system with absolute certainty because our everyday language "is not consistent with respect to negation, [thereby] . . . allowing the formation of paradoxes" (i.e. uncertainty).[42]

Wittgenstein asserts that "logic's science" is not an act of inquiry or discovery in the search for truth. Instead, its scientific method is an act of "persuasion." By arguing that logic is an act of persuasion, Wittgenstein is reminding us of how medieval scholasticism refined the art of dialectic from a use of reason to judge truth to a method of persuasion, and, thereby, an act of teaching. As he observes, the essence of logic is the construction of a "super-order" (i.e., a "super-mechanism") that structures language

[40]*Philosophical Investigations*, I, no. 97.

[41]Genova, 173-175 and 196. See also, Toulmin, 11, whom observe that the main thrust of Wittgenstein's critique found in the *Philosophical Investigations* and beyond "is directed at Descartes's 'theory-centered' style of thinking—one that 'sees' the world in timeless and universal terms and linked to the quest for certainty."

[42]Jean-Francois Lyotard, *The Postmodern Condition: A Report on Knowledge*, trans. Geoff Bennington and Brian Massumi, Forward by Fredric Jameson, Theory and History of Literature, vol. 10

into “a chain of associations which come naturally under certain circumstances.” This "super-mechanism" leads us to express ourselves using *superlatives*, as in, “*This* is really *this*.” Superlatives use the super-mechanism of “logical necessity” to transform our ordinary and inexact descriptions of the world into clear and distinct definitions. Wittgenstein explains that logical necessity provides language with a “geometric lever” that “cannot bend.” Logic is the only lever “made of an infinitely hard material.” Thus, “logical necessity persuades us . . . to believe one thing over another,” thereby compelling us “to neglect the differences” that our investigations may reveal.[43]

Wittgenstein’s later philosophical thought led him to believe that no direct, formal relationship exists among “propositions,” “facts,” and “nature.” Genova suggests that Wittgenstein’s later philosophy puts forward the radical notion that "language, logic, and the world are all *autonomous* phenomena."[44] Forcing human experiences to conform to the rules of logic divides thinking into distinct linear threads that run infinitely parallel to one another. Methodizing thinking in this way blocks out the immediate surroundings that situate our experiences within their social and cultural contexts. It is like asking us to see the world while "wearing blinders." Wittgenstein insists that these methodological blinders (both logical and theoretical) make the multifarious meanings that emerge from our everyday activities impossible to grasp.[45]

(Minneapolis: University of Minnesota Press, 1988), 43.

[43]Ludwig Wittgenstein, *Lectures and Conversations on Aesthetics, Psychology, and Religious Belief, Compiled from Notes taken by Yorick Smythies, Rush Rhees and James Taylor, ed. Cyril Barrett* (Berkeley, CA: University of California Press), II, no. 23-29, and III, no. 20, 22, & 33-35. Wittgenstein observes that “it reminds us of that marvelous motto: ‘Everything is what it is and not another thing.’” He adds that by connecting thinking with both physical and mathematical form, our view of reality as a mechanistic and mathematical order has become an “incontrovertible truth.” This way of seeing and thinking, he declares, holds for us “a great deal of charm.”

[44]Genova, 141, and *Philosophical Investigations*, no. 402 (my emphasis). For Wittgenstein, seeing the world wearing blinders would be akin to reasoning by using Kantian categories.

[45]*Zettel*, no. 447; and *Philosophical Investigations*, I, no. 81– 82. See also, Gier, 79-80; and John Shotter, “in Living in a Wittgensteinian World: Beyond Theory to a Poetics of Practices,” in *Journal for the*

Contrary to the Western intellectual drive toward a single method, Wittgenstein opposes any attempt to impose a mechanistic order onto the world. He rejects all ways of thinking which argue that to better understand either our existence or the world we are required to bracket or distance ourselves from our everyday understandings. Instead, Wittgenstein believes that it is impossible for us to completely disengage ourselves from the immediate situations surrounding our ordinary use of language and our everyday understandings, "as if our logic were a logic for a vacuum." As such, using logic or theory to bracket everyday experiences does not alleviate the problems we seek to solve. Reasoning should not be seen as a "simple validating machine . . . like an idling engine not doing any work," merely transmitting already established knowledge. Unlike an ideal discourse, our ordinary language permits us to stay on the "rough ground of our everyday experiences."[46] By allowing us to interact within an immediate context of a particular time and place, our everyday use of language operates in the not-yet-analyzed, complex wilderness of our everyday surroundings. As such, we enter a nascent wilderness through which no path (no method) has been cleared. Thus, we are compelled to find our own way through the rough ground of our everyday life, leaving open the possibility for new understandings. As the contexts surrounding our ordinary ways of living change, our everyday use of language is compelled to cope with these changes. Because no method has been constructed for

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Theory of Social Behavior, 26, no. 3 (1996): 295, who observes that, "if Wittgenstein is right and we cannot change ourselves simply by 'putting a theory into practice,' it is only . . . by developing new practices, that we can change ourselves."

[46]It is possible that Wittgenstein is referring to the early computers developed by the British during World War II to break the German encryption machine, Enigma. Some of the scientists and mathematicians developing this computer were from Cambridge. One of the most notable, Alan Turing, was one of Wittgenstein's seminar students in 1939. Monk, 417-422, reports that this seminar evolved into a contest of wits as Wittgenstein attempted to convince Turing of the social foundations of mathematics. Notes of this seminar were eventually published as the *Remarks on the Foundations of*

us to follow, our everyday language provides a generative process that transforms our ordinary understandings into something new.

Language-Games and Forms of Life

Wittgenstein initiated his later philosophical investigation by reconceiving language's relationship to the physical and mental worlds. Describing the rudimentary practices in which people engage when using language, he proposes that the relationship between language, thought, and the world should be reconceived as playing a children's game. He observes:

> We can also think of the whole process of using words as one of those games by means of which children learn their native language. I will call these games "language-games" and will sometimes speak of a primitive language as a language-game.
>
> And the processes of naming [objects] in [an activity] and of repeating words after someone [calls them out] might also be called language-games. Think of much of the use of words in games like ring-a-ring-a-roses.
>
> I shall also call the whole, consisting of language and the actions into which it is woven, the "language-game."[47]

To help us understand how language-games work, Wittgenstein suggests that the relationship between language and games is similar to the relationship between playing a game and the rules of the game. Lyotard suggests that language-games are the "various categories of utterances which are defined in terms of rules specifying their properties and the uses to which they can be put."[48] Although the concept of rules may help us understand something about the nature of language-games, the relationship between language and meaning cannot be simply determined by the rules. A language-game is not the totality of a set of rules. Instead, both the meanings of the words used in a language-game and the rules for the use of these words emerge from the way

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Mathematics (Cambridge, MA: M. I. T. Press, 1967).

[47] *Philosophical Investigations*, I, no. 7.

someone applies language in a given situation. For Wittgenstein a language-game is the relationship between an expression and the rule it appears to depict. This relationship is established by the dynamic relationship that exists between a speaker and a situation that encompasses expressing words in a particular way. He insists that we do not learn to speak a language by first learning definitions, nor by merely following the rules. Constructing definitions and obeying rules are already forms of language-games. As such, learning the rules changes our judgment of a given situation.[49]

Wittgenstein observes that while we often use propositions "like the rules of a game," as with any game, we can learn to play "without [first] learning explicit rules."[50] Unlike the rules that govern logic, the rules that govern our everyday language-games do not exist prior to our playing the game. He explains, "Language is not something that is first given a structure and then fitted onto reality."[51] Because the rules of our everyday language-games are dynamic and flexible, they emerge as we begin playing the game.

The dynamic and emergent nature of our everyday language-games generates the pragmatic contingencies from the context of our ordinary lives that provide the cross-strips we use to weave together the ideal streams of thought that theoretical discourses induce us to imagine. Without the connecting cross-strips of our ordinary lived experiences theoretical discourses become our infinitely disconnected imaginings. As such, our everyday language-games give meaning to our lived experiences by

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[48]Lyotard, 10. See also, Genova, 117.

[49]*Philosophical Investigations*, I, no. 80-81; and *Lectures on Aesthetics*, I, no. 15, 5. See also, Janik and Toulmin, 223, who suggest that language-games are "the pragmatic rules that govern the uses of different expressions"; and Gier, 101, who suggests that language-games represent language systems that relate to different linguistic worlds. See also, Ludwig Wittgenstein, *Philosophical Remarks*, trans. R. Hargreaves and R. White (Oxford: Blackwell, 1975), 118.

[50]*On Certainty*, no. 95.

weaving together our multifarious concepts and activities into a linguistic kinship. Thus, Wittgenstein believed that by investigating the language-games we use in our ordinary practices and activities, rather than analyzing them like some natural phenomena through a theoretical lens, we are better able to bring into the open the various contingencies that give meaning to our ordinary ways of living.

Wittgenstein's discussion of language-games presents human thinking within a non-mechanistic view of the world by returning meaning and understanding to the nascent multiplicity found in everyday human existence. As he observes:

> There are countless kinds of different uses of what we call "symbols," "words," "sentences." And this multiplicity is not something fixed, given once and for all; but new types of language, new language-games, come into existence, and others become obsolete and get forgotten.[52]

Rather than providing clear and distinct meanings of words, language-games form a momentary linguistic gestalt whose purpose is to keep us from falling into skepticism's meaningless abyss. Thus, the construction of meaning, "ceases to lie in the formal character of linguistic [logical] representations. Instead, meaning emerges as an aspect of humanity's 'natural history'."[53]

The concept of games illustrates that there is no essential order that is "common to all the activities" that compose our various uses of language. On the other hand, language-games are not related by mere chance. He explains:

> Consider, for example the proceedings that we call "games." I mean board games, card-games, ball games, Olympic games, and so on. What is common to them all? Don't say: "there must be something common, or they would not be called 'games'"—but look and see whether there is anything common to all. For if you look at them you will not see something that is

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[51]Ludwig Wittgenstein, *Philosophical Grammar*, ed. Rush Rhees (Oxford: Blackwell, 1974), 89.
[52]*Philosophical Investigations*, I, no. 23.
[53]Janik and Toulmin, 223; and Ting, Fu-ning, *Wittgenstein's Descriptive Method* (Hong Kong: Caritas printing training center, 1989), 40 & 50.

> common to all, but similarities, relationships, and a whole series of them at that. To repeat: Don't think, but look!
>
> And the result of this examination is: We see a complicated network of similarities overlapping and criss-crossing: Sometimes overall similarities, sometime similarities of detail.[54]

He adds that there is "no better expression to characterize these similarities than 'family resemblances.' I shall say: 'games' form a family." Thus, what is common to our everyday language-games is the concept of a "spinning thread twisting fiber on fiber." The strength of the relationship between various language-games, "like the strength of the thread, does not reside in the fact that some one fiber runs the whole length, but in the overlapping of many fibers."[55]

Wittgenstein maintains, "The term 'language-game' is meant to bring into prominence that the *speaking* of language is part of an activity, or a *form of life*."[56] He adds that "language is characteristic of a larger group of activities: talking, writing, traveling on a bus, meeting a stranger, building a house."[57] By situating language within human activity, meaning and understanding become contingent upon our "forms of life"—the everyday practices in which we are engaged—rather than some formal, pre-defined structure.

"Forms of life" are the localized patterns of human existence found within our current practices, activities, and behaviors. They are, at the same time, both social and biological, embodying the individual, the culture, and the environment in a *linguistic* unity. Wittgenstein attempts to illustrate this point by contending that even "if a lion

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[54] *Philosophical Investigations*, I, no. 65 & 66.

[55] *Philosophical Investigations*, I, no. 67. He adds that like games, "The various resemblances between members of a family: build, features, color of eyes, gait, temperament, etc., etc. overlap and criss-cross in the same way."

[56] *Philosophical Investigations*, no. 23. In *On Certainty*, no. 229, Wittgenstein added "our talk gets its meanings from the rest of our proceedings."

[57] *Lectures on Aesthetics*, I, no. 2.

could talk, we could not understand him."[58] Forms of life provide a way of seeing and thinking that begins at birth and is continuously configured out of our everyday human activities and practices. In other words, even if a lion could speak, because it is not human, we would not be able to understand the way in which the lion is using the language.

A form of life tells us how the world ought to look. However, we are typically unaware of the view it provides. As such, a form of life constitutes a point of view that appears completely natural and inevitable because we acquire it "at a time when the correctness of our thoughts and actions are unimportant." Wittgenstein observes, "Acquiring a form of life" is similar to the way children are instructed either "to believe in God, or that no God exists." Hence, forms of life are the ground from which our beliefs first emerge. He adds, "A child learns to believe a host of things [by] learning to act according to these beliefs." For instance, the first time a child arrives at school, is not the child ready to "believe the teachers and the textbooks." Over time, these initial beliefs "form a system" (a form of life) in which "some things stand fast, while other things are likely to shift."[59] What stands fast does so not because of anything intrinsically obvious, but because of the context in which the form of life appears. As such, forms of life, and their language-games, make up the riverbed of human existence that emerges out of ordinary human situations.

Like a riverbed, which "consists partly of hard rock and partly of sand that gets washed away and re-deposited," language-games and forms of life are subject to alteration. While momentarily appearing fixed, at any moment they may return to a

[58] *Philosophical Investigations*, II, 223. See also, Gier, 103-110, who discusses the phenomenological implications of "forms of life" as *Lebensphilosophy* (life philosophy).

"state of flux"—"now in one place, now in another. Nothing is final."[60] While the movement of the water and the shifting bed are often distinguishable, this distinction is not always a sharp one and can often be imperceptible. Wittgenstein uses this riverbed metaphor to show that the practices of everyday living, rather than the rules of logic, constitute our various forms of life. He observes, "Rules leave open loop-holes, and the practice has to speak for itself. We do not learn practices . . . by learning rules: we are taught examples and their connection with other examples." In this way, "The totality of a practice is made plausible to us."[61] It is through the practices of a form of life—not only the way people build shelters, construct roads, and plow land, but also the way they hope, grieve, believe, and, in particular, the way they use language—that people go about actively shaping the world and are shaped by it. Because a form of life consists "of the language and the actions into which it is woven," it is related to a particular social situation.[62]

Furthermore, forms of life appear to be Wittgenstein's attempt to undermine the philosophical foundation of first principles as the absolute knowledge that one starts from to prove what can be known. Wittgenstein's description of forms of life as a point of view that is completely natural and inevitable suggests that it is roughly equivalent to Aristotle's notion of intuitive reasoning from which first principles are established. However, by presenting forms of life as socially constructed understandings that emerge from our everyday use of language, Wittgenstein is challenging the belief that first principles provide the invariable knowledge from which all proof and all direct

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[59] *On Certainty*, no. 103, 105, and 107.
[60] *On Certainty*, no. 95, 96, & 99.
[61] *On Certainty*, no. 139-140 & 287. Wittgenstein adds, "We no more need a law of induction to justify our actions or our predictions, then does a squirrel to infer that it is going to need stores next

instruction are required to begin. As such, if first principles are variable (i.e. not absolutely known), and subject to social agreement, then, as Aristotle argued, one cannot demonstrate directly what one knows. Wittgenstein observes, "When language-games change, then there is a change in concepts, and with concepts the meanings of the words change."[63] It is this active and generative sense of meaning and understanding that culminates in the concept Wittgenstein describes as "meaning-in-use."[64]

Meaning-In-Use

In Wittgenstein's later philosophy, the concept of meaning-in-use presents a new way of knowing that asks us to "see" the family relationships that exists among concepts, rather than just "think" (i.e., use reason). By calling upon us to "look" at the ways in which concepts are related, Wittgenstein uses his notion of "family resemblances" to weave "thinking and "seeing" into what Genova describes as "an inextricable whole." As the weaving together of resemblances, meaning-in-use reconfigures our patterns of thinking by removing our logical blinders and applying the cross-strips of our everyday language-games to the endless theoretical imaginings that Descartes's unaided reason has constructed. According to Genova, through our everyday language-games, meaning-in-use comes to the aid of reason. In so doing, meaning-in-use turns our attention away from investigating one's mental state, where the modern concept of meaning has theoretically resided. Instead, Wittgenstein

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winter."

[62] *Philosophical Investigations*, I, no. 337. See also, Gier, 107.

[63] *On Certainty*, no. 65.

[64] *Philosophical Investigations*, I, no. 139. I have hyphenated meaning-in-use to suggest its use as a unitary concept.

refocuses our investigations of meaning onto the ordinary activities of "thinking" and "seeing" in which we engage.[65]

Wittgenstein asks, "What really comes to mind when we understand a word?" Critiquing the logical scaffolding of the *Tractatus'* "picture theory" of logic, he answers that what comes to mind is not merely a picture of a word because no single picture that we could construct will "fit" all the possible "uses" of a word that can be imagined. What one understands is the use of a word that is suggested by a given situation.[66] He emphasizes that maintaining a "picture" of a word (whether as an image or a diagram) in our "imagination" "is absolutely *unessential*" to our ability to apply a word.[67] Thus, meaning-in-use asks us to reconceive thinking as the application of our language in a given situation. Following Wittgenstein, thinking can be reconceived as fundamentally different from method's "utterly simple" order, which logic assumes is essential to thought. He observes, "When I think in language, there aren't 'meanings' going through my mind in addition to the verbal expressions: the language is itself the vehicle of thought."[68]

Rather than being a logical or theoretical bridge between an internal and external reality constructed by method's single way of thinking, meaning-in-use employs family resemblances to weave together the understanding provided by our everyday language-games. While momentary and incomplete, this dynamic and open-ended "way of seeing" brings together our immediate circumstances and surroundings in which our current activities are situated. In so doing, meaning-in-use "produces just those

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[65]Genova, 26 & 98.

[66]*Philosophical Investigations*, I, no. 139. For a full explanation of the difference in the way Wittgenstein applies this concept in the *Tractatus* and his later philosophy, see Hallett's discussion, in *Wittgenstein's Definition of Meaning as Use*.

understandings which consist of 'seeing connections'"—"synoptically."[69] Instead of determining meaning by first analytically taking language apart and then reconstructing an ideal discourse by synthesizing isolated concepts, meaning-in-use portrays thinking as a synoptic presentation of an *ensemble* of concepts. Wittgenstein's synoptic way of seeing recognizes that all we need to understand meaning in our everyday lives are the rough sketches and family resemblances already existing between concepts. Rather than linear, disconnected threads of theoretical thought that lead from "causes to ends," meaning-in-use presents knowing as a pragmatic description of the world.[70] As Wittgenstein observes, no single proposition holds fast because of what it is in itself, but because it belongs to a "nest of propositions."[71]

The Knowledge Game

We can begin to understand the revolutionary nature of Wittgenstein's later philosophy as we come to realize that its purpose, in Genova's words, "is the undermining of all previous foundations for knowing." In his later philosophy, Wittgenstein establishes the position that our ability to know something does not require the presence of some form of internal or external authority. If knowing does not require either kind of authority, then the empirical and rational foundations of knowledge that underlie Western thought are no longer necessary. Presenting the relationship among concepts as a kinship of family resemblances that are configured synoptically through meaning-in-use, Wittgenstein's later investigations provide an on-going illustration that knowing something depends upon little more than the act of *acknowledging* that we

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[67] *Philosophical Investigations*, I, no. 141 (my emphasis).
[68] *Philosophical Investigations*, no. 329. See also, Ting, Fu-ning, 40.
[69] *Philosophical Investigations*, I, no. 122. See also, Gier, 77-78; and Genova, 33 & 34.
[70] *Philosophical Investigations*, I, no. 90; and Genova, 45.

know something. This act of acknowledgement, however, does not require a decision. As such, this form of knowing does not require reflective thought or contemplation. Instead, acknowledgement only requires that one be in a position to know.[72] To illustrate this concept, Wittgenstein describes the following example:

> We teach a child 'that is your hand,' not 'that is perhaps (or 'probably') your hand.' This is how a child learns the innumerable language-games that are concerned with his hand. An investigation or question, 'whether this is really a hand' never occurs to him. Nor, on the other hand, does he learn that he *knows* that this is a hand.[73]

Genova explains that as acknowledgement, knowing creates its own authority. Acknowledgement further recognizes that knowing neither begins nor ends with a specific object or event. By declaring that "our talk gets meaning from the rest of our proceedings," Wittgenstein was indicating that when someone knows something, one does not know just one thing. Because what one knows is related to numerous other concepts in a family of ways, knowing and learning cannot be limited to a direct psychological relationship between a fact and a mental state. Instead, knowing and learning depends upon a complex relationship involving one's use of language within a larger social context. Thus, to know one thing is to know something else.

Because our language-games and forms of life form a system of beliefs, our acknowledgement of these beliefs makes knowing others possible. As such, knowing and learning do not depend upon our being certain about what we know. Instead, our sense of certainty resides in our ability to already to play the game. This suggests that learning a new language-game is only possible if one first "trusts" the game being taught. Wittgenstein explains that being certain that "this is my hand . . . doesn't rest"

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[71] *On Certainty*, no. 225. See also, Gier, 79; and Genova, 34.
[72] Genova, 196-197.

upon being certain. Instead, this certainty pre-supposes ones participation in the language-game concerning learning the concept of hands depicted above.[74] What Wittgenstein is attempting to illustrate is that our being certain results from our playing the game rather than this certainty providing the framework upon which knowing and learning depend.

Genova equates the notion of having knowledge without certainty to having "knowledge without Descartes" because she maintains that it was he who made certainty a condition of knowing (i.e., the elimination of all doubt and error).[75] Wittgenstein challenges Descartes's method of doubt by calling into question Descartes's method for constructing epistemological certainty. Wittgenstein asks, "Can one say: Where there is no doubt there is no knowledge either? Doesn't one need grounds for doubt?" He replies that a "child learns by believing [trusting] the adult." He adds, "When someone is trying to teach us mathematics, he will not begin by assuring us that he knows that a + b = b + a." Thus, it is by accepting what we are being told that we come to accept an enormous amount of knowledge. It is only later that we realize that what we initially learn is either "confirmed or disconfirmed by our experiences." Thus, "Doubt comes after belief."[76]

For Wittgenstein, acknowledgement "teaches" through the practices in which we engage rather than the certainty assumed by a set of rules. He states, "We come to know the nature of calculation by learning to calculate." In this statement, Wittgenstein

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[73]*On Certainty*, no. 374.

[74]*On Certainty*, no. 229, 378, & 446. In no. 457, he asks: "Do I want to say, then, that certainty resides in the nature of the language-game?" See also, Genova, 175 & 196-198.

[75]Genova, 188. In *On Certainty*, no. 115, Wittgenstein states that "if you tried to doubt everything you would not get as far as doubting anything. The game of doubting itself presupposes certainty." Genova suggests that Wittgenstein's argument, that doubt must have a context and that it follows trust and certainty, is similar to the pragmatic position taken by Charles Sanders Peirce.

tries to show that mathematical knowledge, like all knowledge, is tied to the practice of a form of life. We learn how to calculate by being taught, "'this is how calculation is done.' In such circumstances a calculation is treated as absolutely reliable, as certainly correct." He also reminds us that, while "we do calculate according to a rule," the rule for calculating is not necessary. It is only by "practicing the use of the rule that shows . . . a mistake in its employment."[77]

Additionally, Wittgenstein indicates that, not unlike calculating, "A meaning of a word is a kind of employment of it. For it is what we learn when the word is incorporated into our language."[78] Wittgenstein asks, "How do I know that this color is red?" He responds that "it would be an answer to say: 'I have learned English.'" Wittgenstein further disrupts our standard way of thinking by declaring, "You learn the *concept* of 'pain' when you learned a language."[79] Genova cautions that the purpose of Wittgenstein's comments are "to shock and disturb us" by undermining the authority of empirical evidence as being essential to knowing. In so doing, he is providing a further disruption to Cartesian rationalism. Genova describes Descartes's statement, "I think, therefore I am," as an empirical declaration, which "claims that everything can be deduced from the act of one thinking subject."[80] In opposition to Descartes, Wittgenstein asserts that knowing is not "the logical condition of someone having such-and-such an experience!" Nor is it "simply a question of physiology."[81]

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[76]*On Certainty*, no. 121-123, 126, and 160-161. He adds: "Doubts form a system."
[77]*On Certainty*, no. 29, 38, and 45-46.
[78]*On Certainty*, no. 61. In no. 62, he adds, "That is why there exists a correspondence between the concepts 'rule' and 'meaning.'"
[79]*Philosophical Investigations*, I, no. 381 & 384 (my emphasis).
[80]Genova, 188.
[81]*Philosophical Investigations*, II, 208. This can also be understood as a critique of Bacon's belief that understanding is a product of the hand and its instruments.

For Wittgenstein, "knowledge is possible without first-hand experience." Contrary to our typical way of thinking, experience is *not* crucial to learning. Genova explains that Wittgenstein's position is that we do not have to "experience the exact same phenomenon" in order to understand one another. While experience is necessary for language, for the development of the game, it is not a requirement for learning particular statements about the game. As such, "We learn and grow by acquiring a language."[82]

Wittgenstein opposed the psychological belief that all human behavior is governed or caused by overt physical behavior or by the body's internal physiological processes. He reports, "To 'know' something is not one clear-cut physical event. Nor can one be disturbed while intending."[83] Wittgenstein asks:

> Think of this language-game: Determine how long an impression lasts by means of a stopwatch. The duration of knowledge, ability, or understanding cannot be determined in this way.
>
> Pain is a state of consciousness [that can be measured] understanding is not. I don't feel my understanding.[84]

To illustrate another example, Wittgenstein asks, "Think of the expression 'I heard a plaintive melody.' 'Does one hear the plaint?' And if I reply: 'No, one merely has a sense of it'—where does that get us? One cannot mention a bodily organ for this 'sense'."[85] He observes that "if you feel the seriousness of the tune, what are you perceiving?—Nothing that could be conveyed by reproducing what you heard." In this

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[82]Genova, 176 and 186. Think of how a toddler learns not to touch a hot pot. What is the more typical experience in this case? The child's direct experience of touching a hot pot, or just hearing the mothers cry: HOT! At the moment the mother says the word, hot, the child enters the form of life of multiple language-games in which the term, "hot," is operative and is repeated more often then actually touching. Without language, touching a hot pot becomes an isolated personal experience that has no connection to a broader social context. In this case, would not a child need to touch a hot iron in order to learn not to touch it?

[83]*Zettel*, no. 46, 49, 469 & 487; and *Philosophical Investigations*, I, no. 545 & 585.

[84]*Zettel*, no. 82 & 84.

[85]*Philosophical Investigations*, II, 209.

example, Wittgenstein suggests, "The physiological is a symbol of the logical."[86] Because of the many subtleties involved in this kind of situation, it is difficult to imagine how someone could have used method when learning a language.

Learning as Meaning-In-Use

Genova suggests that "meaning in use" was Wittgenstein's attempt to answer the "age-old questions: How do we know, and what equipment do we use to learn?"[87] While sensory stimulation and innate mental structures are the traditional tools of learning theorists, Wittgenstein believed that learning, like teaching, requires a more dynamic and immediate medium. Contrary to scholasticism's pedagogical and philosophical tradition, it is senseless to talk of a one-to-one correspondence between the simples of language and those of the physical and mental worlds. Even if we assume, as do the rules governing logical method, that objects of this kind even exist, Wittgenstein asks: how can "private sensations" be used to anchor language, which is socially situated?[88] By turning to our everyday language, he presents a new way of *thinking* about learning. Once we recognize that to "imagine a language means to imagine a form of life,"[89] learning occurs by *listening* carefully to the language-game used for another "form of life and simultaneously imagining other possibilities," which we

[86]*Philosophical Investigations*, 209-210. Paul Rabinow, in "Representations are Social Facts: Modernity and Post-Modernity in Anthropology," in *Writing Culture: The Poetics and Politics of Ethnography*, ed. James Clifford and George F. Marcus (Berkeley: University of California Press, 1986), 236, observes that Wittgenstein, along with Martin Heidegger and John Dewey, agree that the notion of knowledge as accurate representation, made possible by special mental processes, and intelligible through a general theory of representation needs to be abandoned" so that we can begin playing a different game. See also, Richard Rorty, in *Philosophy and the Mirror of Nature* (Princeton: Princeton University Press, 1979), 6; and Shotter, 293.

[87]Genova, 26.

[88]*Philosophical Investigations*, I, no. 246-253.

[89]*Philosophical Investigations*, I, no. 19, 23 & 141.

synoptically present to ourselves. By doing so, we can "discover what others already know, albeit indistinctly."[90]

Wittgenstein believes that teaching should not be governed by one right method. Although a curriculum that breaks learning activities into a series of simple skills may make it easier for some students to acquire particular skills, having to accumulate all these separate skills tends to clutter, confuse, and then paralyze a student's thinking. Knowing as an act of acknowledging suggests that we already understand aspects of the new language-game before we begin to learn it. Wittgenstein emphasizes that "one has already to know (or be able to do) something in order to be capable of asking a thing's name."[91] This implies that we do not build language, as the school curriculum maps out, by learning individual sentences, words, or skills, but in a reverse manner by learning to apply these things within an integrated whole.

Wittgenstein urges that "to understand a sentence means to understand a language. To understand a language means to be master of a technique."[92] As such, meaning-in-use is oriented in the belief that by being educated in a technique, a student is also educated in a way of seeing that is rooted in the technique. Wittgenstein cautions, however, that the mastering of a technique is not determined by any particular experience. While a technique may involve some experience, it "does not direct us to

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[90]Genova, 25-26.

[91]*Philosophical Investigations*, I, no. 30.

[92]*Philosophical Investigations*, no. 199; and *Remarks on the Foundations of Mathematics*, 124. Both Bacon and Descartes blur the relationship between a technique and "seeing" by referring to their method of thinking as "common sense." John St. Julien, in "Cognition and learning: the implications of a situated connectionist perspective for theory and practice in education," (Ph.D. Dissertation, Louisiana State University, Baton Rouge, 1994), describes how the technique of using a telescope changed Galileo's way of seeing and thinking about the world. Reiss, 22-27, discusses how Galileo's telescope and the telescopic metaphor changed the medieval way of referencing the world into the modern rational-technical, analytical-referential, visual way of seeing. See also Doll's discussion on the subjectivity of scientific knowledge, in *A Post-Modern Perspective*, 124-132; and Thomas Kuhn's, *The Structure of Scientific Revolutions*, 2nd edition (Chicago: University of Chicago Press, 1970), 48 & 175.

derive anything [specific] from this experience." Crucial to Wittgenstein's belief that teaching is an *indirect* activity is his position that an experience does not occur as a discreet step in some pre-arranged series of demonstrable facts. Instead, one's ability to master a technique is but a substratum of an ensemble of experience:

> It is only if someone *can do*, has learnt, is [already] master of such-and-such that it makes sense to say he has had *this* experience. We talk, we utter words, and only later [do we] get a picture of their life.[93]

He maintains that what our experiences show us is how the world could *otherwise* be envisioned. Within any single experience, aspects of multiple understandings are available.

Wittgenstein's later philosophy suggests that learning and meaning are intimately related. When learning the name of an object, we do not learn the image of the thing the word represents. "What we learn is the word's meaning. Meaning, therefore, is not a thing referred to, but the use of the word referring to such a thing." Thus, when we learn a word's meaning, what we are learning is the word's use in a particular situation. Furthermore, when we learn a word's meaning we are also learning the meaning of an experience. Because it is related to the use of a language, the meaning of an experience is not simply determined by any a single experience. While one is more immediate that the other, both the meaning of a word—its meaning—and the meaning of an experience—meaning it—are related to the language-game in which it is being used.[94]

Hallett further suggests that Wittgenstein is definite in that meaning is not related to a mental image or sensation. On the final page, Wittgenstein ends the *Philosophical*

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[93] *Philosophical Investigations*, II, 209.

[94] Hallett, 90-93. Hallett describes Wittgenstein's application of meaning-in-use in his later

Investigations by stressing the point that meanings do not have *experiential* content (i.e., the mind is not a store house of meanings). The mental content that sometimes accompanies an experience—images and words—is not the same as experiencing meaning.[95] Thus, meaning is not something we construct. What we do construct is the way in which words are used—language-games—to which meanings adhere. While theories of learning attempt to show the causal connections between what Wittgenstein describes as "what is experienced with something physical," he contends that, as meaning-in-use, learning weaves together "what is experienced with what is experienced."[96] This implies that what we experience is language and it is by using language to learn new language-games and not by merely engaging in physical activity that we learn and grow. Genova contends:

> Wittgenstein's conclusion is not that experience fails to teach, only that its success depends upon our use of language-games. It depends, that is, on a form of life. Experience teaches in context. And this context is as much a function of language as it is of experience.[97]

Interestingly, Genova expresses fairly well Wittgenstein's possible contribution to the field of curriculum. She states, "Language is a teacher as much as experience, and in many cases a better teacher." Thus, by sharing a language one is sharing a form of life, thereby, "ensuring a degree of understanding." Furthermore, because knowing does not require "first hand experience," we are not required to experience others lived experience to understand what they know. Instead, all we need to recognize is that

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philosophy as, "Ockham's razor in action.

[95]*Philosophical Investigations*, I, no. 693, and II, 184, 217-225.

[96]Ludwig Wittgenstein, *Remarks on Color*, ed. G. E. M. Anscombe, trans. Linda L. McAlister and Margarete Schulte (Berkeley: University of California Press, 1977), 48.

[97]Genova, 186.

their forms of life, and the language-games that inform them, share a kinship of meaning resembling our own.

Wittgenstein's later philosophy suggests that the *absolute* nature of method and its ideal discourse has the tendency of putting everyone to "sleep." Instead of attempting to motivate everyone methodologically by beginning with what we already know, a way is needed to awaken us to the wonders and mysteries that can be found in our everyday lives.[98] As an elementary school teacher, Wittgenstein had come to believe that by providing students with new ways of seeing they could learn better when working through interesting and complex situations. Beginning with difficult and complex problems allows teachers to lead students, *indirectly*, toward the multifarious understandings that underlie any given situation, and not just to a single understanding. He suggests that what we often call simplicity is the ordinary way an activity comes to feel through conventional or habitual use. In order to go beyond traditional classroom methodology, it is important for teachers to learn how to transform the strange into the ordinary and the ordinary into the strange.[99]

By reconceiving curriculum as meaning-in-use, teaching would no longer be the practice of transmitting a series of pre-determined facts *directly* to students. What meaning-in-use suggests for the school curriculum is not that national curriculum standards, high stakes testing, and bureaucratically determined methods of instruction construct learning experiences that are too narrow, but that its discourse of educational assessment constructs an ideal language that is too limited. This limited language does

[98] *Culture and Value*, 5e.

[99] *Philosophical Investigations*, I, no. 47, and Bartley, 97-98 & 137. See also, Gershon Weiler, *Mauthner's Critique of Language* (Cambridge: Oxford University Press, 1970), 29. See also Doll, *A Post-Modern Perspective*; and Huebner, "Religious Metaphors and the Language of Education," 361-363.

not allow students to integrate their classroom activities with their practices of living outside of school. As such, the movement toward using high-stakes tests to assess students' acquisition of (isolated) "knowledge" undermines the dynamic and generative role that meaning-in-use (using language-in-action) plays in enhancing students' capabilities to understand the complexities that emerge from the various forms of life that one lives in the broader world.

CHAPTER 5
A WITTGENSTEINIAN CURRICULUM: LANGUAGE, *CURRERE*, PEDAGOGY AND PERSPECTIVES

Wittgenstein told the following story to his elementary school students:

> Once upon a time there was an experiment. Two small children who had not yet learnt to speak were shut away with a woman who was unable to speak. The aim of the experiment was to determine whether they would learn some primitive language or invent a new language of their own. The experiment failed.[1]

Bartley maintains that this brief story, which was likely part of a larger lesson, presents the central role that Wittgenstein believed language plays in the practices of teaching and learning.[2]

In *Wittgenstein's Vienna*, Janik and Toulmin propose that the totality of Wittgenstein's philosophical ideas should be viewed within the context of Vienna's social and cultural milieu at the end of the nineteenth century. They suggest that Wittgenstein's philosophical investigations into the limits of what can be known from the use of language continued the kind of language critique that had been occurring within aesthetics and the sciences in *fin-de-siecle* Vienna.[3] Carl Schorske (1980) contends that to more fully understand the complexities of the Viennese milieu, scholars need to go beyond the "diachronic" investigations that limit research in the sciences, the arts, or social studies only to the theoretical discourses established by the academic disciplines. Instead, Schorske advocates using a style of inquiry that cuts across the academic disciplines by enabling scholars to study the "synchronic" relationships that integrate the whole of Viennese society at the end of the nineteenth century. While Schorske uses a

[1]Bartley, 74.

[2]Interestingly, Wittgenstein's story resembles aspects of Plato's "allegory of the cave" in which the prisoners can see and hear shadows and echoes, but have no way of knowing what it is their senses are experiencing because they have no language, *The Republic*, 388.

[3]Janik and Toulmin lay out their theses in Chapters Two and Three of *Wittgenstein's Vienna*.

psychoanalytical lens to examine Viennese life, Janik and Toulmin present a synchronic investigation that focuses on the central role being played by language within the Viennese milieu. They contend that focusing on language, as well as on the critique of its use, offers greater insight into Wittgenstein's own project.[4]

The Viennese Coffee House: A *Fin-de-Siecle* Learning Environment

Stefan Zweig maintains that *fin-de-siecle* Vienna's coffee houses blossomed into the nexus that created the city's cultural and intellectual milieu. In its coffee houses a variety of cross-threads of conversations intertwined all aspects of Vienna's unique milieu—the various language-games produced by the daily practices of business, science, the arts, beauracracy, and the proletariat. According to Zweig, a gymnasium student's "true" education was learned in the coffee houses. Their rich aesthetic and intellectual atmosphere provided the city's youth with an escape from the rote and stifling pedagogy of the state-run schools. He explains that in school a student was compelled "to assimilate the science of the not-worth-knowing." In the coffee houses one could hear and discuss the latest Expressionist poetry of the Jung Wien writers such as Hugo von Hofmannsthal and Rainer Marie Rilke; debate the latest exhibitions of the Secession artists such as Gustav Klimt and Oskar Kokoschka; and hear and critique the new music of Gustav Mahler, Joseph Labor, Richard Wagner, and Arnold Schonberg, as well as the older music of Strauss, Mendelssohn, and Brahms. The "textbook" of the coffeehouse "classroom" was the Viennese paper, *Neue Freie Presse*,

[4]Carl Schorske, *Fin-De-Siecle Vienna: Politics and Culture* (New York: Vintage Books, 1980), xx-xxv; and Mark Francis, *The Viennese Enlightenment*, ed. Mark Francis (New York: St. Martin's Press, 1985), 2, suggests that the unique experience of Viennese society can best be understood within the framework of Freudian psychoanalysis.

and its most read and discussed section, the cultural and literary essays of the "*feuilleton*," which acted as a catalyst for aesthetic debate.[5]

Fin-de-siecle Vienna presents us with a sonorous world of conversation, debate, noise, and music. As the novelist, Robert Musil, remarks:

> Hundreds of sounds were intertwined into a coil of wiry noise, with single barbs projecting, sharp edges running along it and submerging again, and clear notes splintering off—flying and scattering. Even though the peculiar nature of this noise could not be defined, a man returning after years of absence would have known, with his eyes shut, that he was in the ancient capital and imperial city, Vienna.[6]

Here is an auditory world of orality and sound that cannot be easily limited to a methodized view of the world. While the visual world of the fine arts is ever present, it is ancillary to the production of sound. In the paintings of a Kokoschka, one does not see only human misery; more significantly, one is called upon to hear the cries of human suffering. Rather than merely representing a static visual image, Kokoschka's paintings are a dialogical performance between the artist and the audience.[7]

Mark Francis (1985) further describes *fin-de-siecle* Vienna as a city of dynamic movement using terms such as "decadence," "liberation," and "destruction."[8] Musil, illustrates this feeling of dynamic, even chaotic, movement permeating Vienna remarking:

> Motorcars came shooting out of deep, narrow streets into the shallows of bright squares. Dark patches of pedestrian bustle formed into cloudy streams. Where stronger lines of speed transected their loose-woven hurrying, they clotted up—

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[5]Zweig, 39-42 & 99-102. For *fin-de-siecle* Vienna, the *Neue Freie Presse* played a role similar to the *New York Times* in the United States today. Besides the *feuilleton*, the Viennese read other publications dedicated to cultural and social critique, including Karl Kraus's *Die Frankel*.

[6]Robert Musil, *Man Without Qualities*, vol. 1, trans. and forward by Eithne Wilkins & Ernst Kaiser (New York: Capricorn Books, 1965; Coward-McCann, Inc., 1953), 3.

[7]See also, Janik and Toulmin's, 100-102, discussion of Kokoschka's impact on the aesthetic, ethical, and intellectual sensibilities of Vienna before and after World War One.

[8]Francis, 6.

only to trickle on all the faster then and after a few ripples regain their regular pulse-beat.[9]

Musil additionally characterized Vienna's *fin-de-siecle* generation as ostensibly a culture of young men who were "urged forward by some uncanny wanderlust . . . for whom there is no returning home and no arriving anywhere."[10]

Another fitting term used to describe Vienna's energy is the term "modernism." As one of the city's many progenies, Zweig articulated the extent of the city's modernism by stating that for late nineteenth-century Viennese society, the belief in "progress" had become its "religion," and "science its archangel."[11] Although modern, industrial society arrived late to the Habsburg Empire, and only in the Austrian half, compared to the cities of Western Europe, Vienna had become, by the end of the nineteenth century, the city where modernity began to mature fully. Here began the social and cultural experiment that would become the twentieth century.[12]

The group primarily responsible for modernism's rapid development was the empire's industrial and commercial bourgeoisie. From their initial beginnings as peasants, petty merchants, and artisans, the Austrian bourgeoisie grew rapidly, developing into some of Europe's richest families. Their burgeoning wealth also brought

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[9]Musil, 3.

[10]Musil, 277. This notion led me to attempt to find works that study the role of women in *fin-de-siecle* Vienna. To date I have found only one recent work, Harriet Anderson, *Utopian Feminism: The Women's Movement in Fin-De-Siecle Vienna* (New Haven: Yale University Press 1996). According to Anderson, to a great extent women operated below the cultural and social radar. However, in a patriarchal society in which so many of the ruling elite's sons committed suicide (Vienna had the highest suicide rate in Europe), the surviving daughters almost certainly would have had an opportunity to play an increasingly public role. One of those that did was Margaret Wittgenstein Stonborough, Ludwig's sister. The role of women in turn of the century Viennese society appears to be an apt area for further research and study.

[11]Zweig, 3.

[12]See Janik and Toulmin's, 19, observation that, while nineteenth-century Vienna has been described as "the City of Dreams," in the initial years of the twentieth century it was described by the social and cultural critic, Karl Kraus, as the "Proving-Ground for World Destruction" that would exemplify the rest of the century.

access to the best of German high culture, of which the bourgeoisie became the principal consumers. Following the 1848 revolution, the liberal bourgeoisie took control of all aspects of Viennese society, with the exception of the Imperial Government. Because the bourgeoisie, whose intellectual depth was epitomized by the slogan "business is business," were primarily preoccupied with commercial activity, they did not create a cultural style of their own. While both economically and politically they had been able to push the Austrian aristocracy aside, the bourgeoisie were satisfied to leave issues of culture and manners to the aristocracy. This left all of Viennese society exposed to the fashion whims of the aristocratic dilettantes and professional cultural elite. Zweig explains:

> The Imperial Theater, the *Burgtheater*, was for the Viennese and for the Austrians more than a stage upon which actors enacted parts; it was the microcosm that mirrored the macrocosm. In the court actor the spectator saw how one was to dress, walk into a room, how to converse, which words one might employ as a man of general taste and which to avoid. It was a spoken and plastic guide to good behavior and correct pronunciation.[13]

The Viennese theater influenced all levels of Viennese society because its operas, plays, and symphonies were open to and attended by all social classes. This constant access to performances of all types gave all Vienna's citizens, as Zweig noted, “an uncommon respect for every artistic presentation.” Thus, “a connoisseurship without equal evolved” among Vienna's general population, thereby enabling all classes to feel secure in critiquing or commenting on any performance “no matter what their station.”

The Viennese believed that the turn of the century was the "Golden Age of Security," which blended Liberal political civility and economic prosperity with

[13]Zweig, 15

conservative social and cultural life. It was an age in which "everything had its norm, its definite weight and measure."[14] With a quantifiable sense of security and certainty came a confidence and tolerance that guaranteed Vienna's younger generation a freedom of expression that blended the society's various cultural and intellectual language-games. The vitality and dynamism that Vienna's language-games offered its younger generation were best represented in coffeehouse conversations.[15]

The importance of language in Viennese society is further illustrated in the Expressionist poetry of the *Jung Wien* (Young Vienna) literary movement, which emerged out of the aesthetic and intellectual conversations spoken in the coffee houses. This younger generation of Viennese rejected the received aesthetic orthodoxy of their parents. *Jung Wien* did not want to be anchored to what they believed to be the anachronistic fashions that had been dictated by the dilettante taste of Habsburg aristocracy. Nor did the *Jung Wien* generation want "truth" limited to some rational or dogmatic concept of beauty. The use of scientific reason and technology to dominate "nature" in the name of "progress" conferred upon the liberal bourgeois the belief that they had the moral authority to create the "good society." However, their rationalism, as well as their practices of social certainty had produced only an allusion of security, while at the same time creating a kind of "spiritual vacuum." This spiritually empty, logical fantasy led the bourgeois to believe that the physical world could be forced to comply with their aesthetic whims.[16]

[14]Zweig, 1; and Harry Zohn, "Introduction," in *The World of Yesterday*, viii-ix.

[15]Andersen, observes that young women, as well as young men frequented the coffeehouses in an attempt to escape the drudgery waiting for them as a virtual object in the liberal household.

[16]Janik and Toulmin, 99-110.

Conversely, the *Jung Wien* Expressionists came to believe that "truth" could not be discovered rationally, but could only be revealed aesthetically through one's actions. Their aesthetic practices were opposed to the idea that an object should determine how one ought to live. Instead, *Jung Wien* presented a new aesthetic, maintaining that human artifacts should conform to the transformations occurring in contemporary society. The Viennese architect, Adolf Loos, provided an excellent example of this new aesthetic concept by suggesting that "culture" should take on the form of society's "uses" of it. He declared, "We do not sit in such-and-such a way, because [carpenters believe that] a chair is built in such-and-such a way. Rather, the chair is made because someone wants to sit in that way."[17]

Expressionism's new aesthetic led its *Jung Wien's* poets to adopt Ernst Mach's psychological "sensationalism." Expressionist poets used Mach's "sensationalism" to assert that their poetic language more authentically represented the "reality" of sensory experiences than did the theoretical discourses of science. Thus, the *Jung Wien* Expressionists came to believe that only the arts and not science and technology furnished Austrian society with the cures for its ills.[18]

While the freedom of expression found in Vienna's coffeehouse-culture enabled them to produce an amazing level of aesthetic, as well as scientific, achievements, this freedom of expression also created significant social and political problems. As Janik and Toulmin observe, "The problem of identity and communication plagued Viennese

[17]From Paul Englemann's unpublished collection, *Bel der Lampe*. Quoted in Janik and Toulmin, 99. Loos was a close friend of Ludwig Wittgenstein. The two worked together to build the Stoneborough House for Ludwig's sister, Margaret.

[18]Janik and Toulmin, 113.

society at every level of life."[19] The problem of communication among the various national (ethnic) groups served as a catalyst for the language critique pursued by Viennese intellectuals as they endeavored to find the limits of what one can know from language.

The communication problems are particularly apparent in the Austrian Liberal Party's attempts to govern the Habsburg's multinational empire. During the nineteenth century, language had become the primary means the Empire's various ethnic nationalities used to identify themselves.[20] An example of the kind of problems the use of these different ethnic languages created can be seen when, in 1907, the Austrian half of the Empire, which included Germans, Czechs, Slovenes, Italians, and Poles, granted the vote to all males citizens. The Czechs and Germans, who made up the vast majority of Austria's liberal assembly, were unable to communicate with one another—the two languages speaking across each other—and thereby had difficulty governing. The liberal government's failure to communicate was partly due to many of the German in the assembly "failed to recognize the Czech language,"[21] much less the languages of the lesser national minorities. While the Czechs were the most significant ethnic

[19]Janik and Toulmin, 65. The degree to which language continues to play a significant role in areas once controlled by the Habsburg Empire can be seen in bitter differences between Croats and Serbs. While they are represented as two different nationality groups, they are ethnically and linguistically identical, divided only by their alphabet and religion. For a complete discussion of the role of language in the rise of national and political identity in the Habsburg Empire see, the *Austrian Yearbook*, vol. 1-3 (Houston: Rice University, 1967).

[20]See Hans Kohn's discussion, in *The Idea of Nationalism: A study in Its Origins and Background* (New York: Macmillan Co., 1945), 428-437, of the differences between the rise of national identity in Western Europe and Central and Eastern Europe. Kohn applies the ideas of Johann Herder, who argues that in Central and Eastern Europe nationalism arises out of the natural language of the folk, which is transformed into a national consciousness (a kind of collective common sense) through the synthesis of folk tales, poetry, and songs into a romanticized national literature and history (not unlike the developmental stages of Ramus's dialectic). Herder points particularly to the rise of Czech nationalism and praises the role of Johann Comenius and his leadership of the Bohemian Brethren in this movement. Kohn observes that Herder's purpose was to extend the noble ideas of the Renaissance "humanists principles to the folk . . . [and] to form and educate mankind to make it more human and humane."

minority in the Austrian government, many Germans continued to believe that as Slavs, Czechs were either not capable of, or unworthy of, any political or economic power.[22]

Living A *Fin-de-Siecle* Form of Life

Ludwig Wittgenstein was born into Vienna's *fin-de-siecle* social and cultural milieu in 1889. The Wittgenstein family epitomized the rapid rise of the liberal bourgeois to wealth and culture during the late Habsburg Empire. Ludwig's grandfather, Hermann Christian Wittgenstein, began life as a Jew in Korbach, Hesse. Hermann Christian's father, Moses Meier Wittgenstein, worked as an agent for the house of Pyrmont-Waldeck in the county of Wittgenstein.[23] Hermann Christian began to acquire wealth through large-scale farming and the successful management of his real estate holdings. Upon moving to Vienna, many of the city's renowned musicians, including Johannes Brahms, were frequent visitors to his home, where they performed, taught music to the Wittgenstein children, and socialized with Hermann Christian's family and friends. In addition, Hermann Christian was an occasional financial patron of aspiring young musicians. One of these musical progenies was his wife's nephew, the violin virtuoso Joseph Joachim, whom Hermann sent to study with Felix Mendelssohn. Like the other newly forged bourgeoisie, the Wittgenstein home was where family and friends

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[21]Janik and Toulmin, 65.

[22]For an excellent example of the role of language and literature in the rise of Czech nationalism, see, Bruce M. Garver, *The Young Czech Party 1874-1901 and the Emergence of a Multi-Party System* (New Haven: Yale University Press, 1978).

[23]McGuinness, 1-2, reports that in all likelihood Moses Mierer adopted the name of the county in order to comply with an 1808 edict by Jerome Bonaparte that all Jews were required to take a family name. In addition, Hermann Christian was not Moses Mierer's son's original name, but the name he took upon being baptized.

gathered to discuss the latest literary works from across Europe and was also filled with some of the finest examples of the art of the period.[24]

Of Hermann Christian's ten talented children, the most successful was Ludwig's father, Karl, who became one of the richest industrialists in Europe—Austria's Rockefeller. Unlike his other siblings, Karl was a difficult and troublesome youth. While the rest of Hermann Christian's children were taught at home, Karl insisted upon being sent to a state gymnasium, which, in the officially Catholic Habsburg Empire, was run by the Church. Karl, however, was not a good student. He often neglected his studies to spend this time practicing and playing the violin. At age 11, not long after the family moved to Vienna, Karl unsuccessfully ran away from home in an attempt to return to the family's former home in Leipzig. In 1864, at age 17, he purposefully got himself expelled from the gymnasium, one year away from receiving his certification, by writing a paper disputing the immortality of the soul. Soon after Hermann Christian arranged for a tutor to complete his son's studies, Karl vanished. He reportedly spent the first two months hiding out in Vienna. He eventually traveled to New York where he spent two years; initially he worked as a laborer and later taught music, strings and horn, as well as Greek, Latin, German, and mathematics at a Christian Brothers School.[25]

Upon returning to Austria, Karl spent a year studying engineering at the Technical High School in Vienna to complete his education. During this year he also worked for the State Railway. In 1872, following a number of minor technical jobs, he

[24]McGuinness, 5-8, and Janik and Toulmin, 169-170. The Wittgenstein's considered Brahms to be a close family friend.

[25]Jean Baptist de La Salle founded the Brothers of Christian Teaching in 1684 to teach the sons of poor families. The Christian Brothers "charity schools" were the first successful schools opened specifically for poor youths. In addition, La Salle opened the first schools for delinquents. For a more complete discussion of La Salle's career see, Edward A. Fitzpatrick, *La Salle, Patron of All Teachers* (Milwaukee: Bruce Publishing Company, 1951).

obtained a position working as a draftsman for Paul Kupelwieser, the brother of his brother-in-law, constructing the Teplitz Rolling Mill. Karl used this position to begin his rapid rise, becoming the leading industrialist and steel manufacturer in Austria by putting into practice lessons he had learned from the freewheeling capitalism practiced during the American Civil War. Because he remained loyal to Paul Kupelwieser during a boardroom dispute, he was, in 1876, promoted to the board of directors. A year later he succeeded Kupelwieser as the company's managing director. As the company's director, Karl showed daring and an ability to make quick decisions by using his considerable technical knowledge to think through problems and provide solutions. These abilities allowed him to secure contracts over some of the most prestigious companies in Europe, such as Krupp and Rothschild.

The beginning of Karl Wittgenstein's professional career coincided with his beginning a family. The same year that he went to work for the Teplitz mill, Karl married Leopoldine Kalmus (Poldy). Karl and Poldy had eight children, the youngest being Ludwig. Their home was a world, like both their parents, filled with music, literature, and art. While Karl and Poldy participated in the liberal bourgeois practice of being consumers of Vienna's aristocratic culture, their offspring embraced the younger generation's desire for creating a new style of culture. Their oldest son, Hans, was an extremely gifted musician, who began composing at the age of four. The next to youngest son, Paul, despite losing his right arm in the Great War, had a successful career as a pianist. It was for Paul, in 1931, that Ravel wrote his "Concerto for the Left Hand." The oldest daughter, Hermine, and the second son, Rudi, were also talented artists. In addition, Hermine, along with the youngest daughter, Margaret, were

members of the intellectual circles and close friends with such notable artists, musicians, and scientists as Gustav Klimt, Gustav Mahler, Josef Labor, and Sigmund Freud. Of all the children, the one who showed the least potential talent as a child was Ludwig.[26]

When it came to his children's education, Karl Wittgenstein did not pursue the approach he laid out for himself, but instead, followed the example laid out by his father. Rather than sending the children to a traditional state school, they were educated at home by a variety of nurses, governesses, and tutors. However, those hired to teach the Wittgenstein children were less than competent. By 1903, when Ludwig was fourteen, the situation came to an end when Ludwig and Paul's tutor informed Karl that his two youngest sons were learning "nothing." After testing the boys himself and finding their academic abilities wanting, and possibly troubled over the underlying conditions for Hans's recent suicide, Karl decided to send the boys to school. While Paul was sent to a gymnasium in Vienna, for a traditional academic education, Ludwig, because he was considered less academically inclined and more technically gifted, was sent to the *K. u. K Realschule* in Linz. The *Realschule* taught more technically oriented courses in science and engineering than did the more traditional gymnasium. Interestingly, however, despite Karl's belief that Ludwig would be more suited to the *Realschule's* technical curriculum, his youngest son's school grades, which were low, overall, revealed that he made even lower marks in his science and engineering

[26]Monk, 10-14; and McGuinness, 10-23. It is suggested that Karl's insistence that his older sons following him in the family business, rather than their artistic talents, probably contributed to both Hans and Rudi's suicides. While Rudi's suicide is certain—poisoning himself with cyanide in a Berlin bar—Hans's is less so. Like Karl, Hans abandoned his father's plans by escaping to America. One evening Hans disappeared from a boat on the Chesapeake Bay and his body was never found. Thus, the family concluded that he had committed suicide. A third son, Kurt, also committed suicide towards the end of the First World War after his troops refused to obey his order to advance into action.

courses. McGuinness suggests that Karl's belief in young Ludwig's technical abilities was apparently based on a single incident. According to family stories, ten-year-old Ludwig surprised everyone by constructing a working model of a sewing machine from wood and wire. Not long after this incident, Karl bought his son a small wood-lathe to play with.[27]

Generally, what young Ludwig's educational experiences illustrate, is that formal academic instruction at school was no more important to him than when he was taught informally at home. As such, he never developed the desire exhibited by “good” students to learn the great quantity of knowledge that schoolwork requires. Nor did he show the desire to compete academically with his classmates merely for the sake of competition. Thus, Ludwig never learned to use his mind to accumulate and store the copious amounts of received knowledge that is the function of schooling. Nor did he develop the practices of “collecting, sorting, storing, and retrieving information”[28] generally associated with classroom learning over the centuries. Yet, despite this apparent lack of academic training, as an adult Ludwig possessed the ability to become a person of deep intellect and cultural understanding.

Not unlike his father, Ludwig showed the ability to learn those things he needed to know for some immediate purpose. He also showed a preference for learning those

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[27]McGuinness, 32; Janik and Toulmin, 174-175; and Monk, 14-15. All three works present the effectiveness of Wittgenstein's education differently, confusing somewhat the issues involved. While McGuinness views both his education at home and at school negatively, Janik and Toulmin present both in a more positive light. Monk appears neutral on Wittgenstein's home schooling, but concurs with McGuinness on young Ludwig's school training. However, Monk attributes Ludwig's low scores to his being homesick and his inability to fit in with the school’s middle and working class students. Furthermore, although McGuinness, as well as Janik and Toulmin, state a case for young Ludwig's technical talents, Monk portrays Wittgenstein's apparent interest in technical subjects as merely his unwillingness to go against his father's desires and what the family generally expected. Monk reports that as an adult, Wittgenstein "privately regarded himself as having 'neither taste nor talent' for engineering" and his youthful willingness to always do what was expected as a character flaw.

[28]McGuinness, 44.

things that he could teach himself. One of his greatest talents lay in his capacity to concentrate on a particular problem, and he was particularly adept at mastering the knowledge and techniques required for problem solving. To accomplish this, however, required Wittgenstein to become fully engaged in finding the solution, which thereby compelled him to abandon all other activities. Through this practice of focused concentration, Wittgenstein developed the ability to explore every possible combination for solving any given problem. McGuinness suggests that these habits of thought provided Wittgenstein with the ability to study "problems in fundamental and concrete terms," thus enabling him "to become involved with the most abstract of problems."[29]

Wittgenstein's "habits of thought," as described by McGuinness—the ability to work through problems for himself; to learn on his own; and to focus on a single problem until a solution is found—closely resembles Wittgenstein's philosophical concept of meaning-in-use. As the activity of applying language to a given situation, meaning-in-use presents knowing—learning and understanding—as an active process that requires the knower to exert effort. The habits of thought Wittgenstein developed in his youth offer a possible explanation for his later belief that teaching, and thereby learning, should be seen as an indirect exercise in a language-game that alters the riverbed of one's existence. Teaching as the direct conveyance of existing knowledge requires the student to remain a passive spectator, rather than one engaged in a form of life. However, by striving to apply the language one is learning, meaning can only be

[29]McGuinness, 46; and Janik and Toulmin, 174, all are in agreement that Wittgenstein's educational experiences fostered his remarkable intellectual abilities.

acquired indirectly because a language-game is altered by one's effort to understand the words being spoken.[30]

If Wittgenstein's investigation of how a child learns language is reconceived as an autobiographically situated language-game, then, applying William Pinar's concept of *currere,* the various practices and activities that constitute the forms of life from which these idiosyncratic learning habits emerge may be "seen" as a form of curriculum. *Currere* allows a teacher or student to reconceptualize curriculum as one's biographically situated experiences while engaging schooling's pre-determined course of study. In addition, because the school curriculum is situated within a larger social and cultural context, *currere* attempts to re-embody an individual's experiences outside the classroom into one's understanding of curriculum. Likewise, the various remarks about teaching, learning, and knowing that Wittgenstein used in his later philosophy to critique both epistemology and logic's formal methodology imply a concept of curriculum that expands pedagogical practices to include the emergent realm found in the nascent complexity of one's everyday language-games. Finally, Wittgenstein's biographically situated idiosyncratic habits of thought appear surprisingly similar to the "progressive" curriculum of the Austrian School Reform Movement, in which Wittgenstein taught elementary school.

Wittgenstein's Pedagogy

In 1919, Wittgenstein entered the Austrian School Reform Movement's teacher training institute, *Lehrerbildungsanhalt*, which was directed by the Social Democrat educational reformer, Otto Glockel. Glockel had a long history of opposing the Habsburg's educational system and its "drill school" curriculum.[31] However, until the fall of the Habsburg Empire at the end of the First World War, neither he nor other

[30]As an effortful act, Wittgenstein's meaning-in-use resembles Frederic Bartlett's concept of knowing as "effort after meaning," in *Remembering: A Study in Experimental and Social Psychology* (Cambridge: The University press, 1932), 20. Bartlett was C. S. Myers's assistant in the Cambridge psychology lab in1912 when Wittgenstein and Myers performed experiments in the psychology of music.

[31]Charles A. Gulick, *Austria: From Habsburg to Hitler*, vol. I, "Labor's Workshop of democracy," Foreword by Walther Federn (Berkeley: University of California Press, 1948), 544, opens the chapter on Austrian education between the two World Wars stating, "'Drill schools!' 'Beating schools!' Such were the epithets flung at the schools of imperial Austria by working class parents and middle-class educational reformers in protest against the mechanical instruction and severe discipline of which the children were the victims."

reformers enjoyed much political or educational success. With the beginning of the "new," post-Habsburg Austria, Glockel and the school reformers quickly gained control of the country's education system and replaced its traditional academic curriculum with an *"Arbeitsschule"* or "work school" curriculum.[32]

The Reform Movement's pedagogical goal was the elimination of all rote learning and passive storing of facts. Instead, the reformers wanted students to develop all of their capabilities by participating in learning activities that required them to puzzle through problems and resolve complex questions with as little involvement from the teacher as possible. The leaders of the reform movement, in particular the Social Democrats, believed that "their" new Austria needed students who could develop into independent and original thinkers.[33] The three key curriculum concepts most often associated with the Austrian school reforms were: "self activity, use of local environment, and integrated instruction." For Social Democrat educators, like Glockel, "self activity" referred to something more than mere manual or hands-on learning and industrial training. "Self activity" required students to become "active participants" in the planning of their own lessons including the organizing of their own learning materials and activities. This was especially true when students engaged in traditional learning practices. Furthermore, the term *Arbeit* emphasized the concept of craftsmanship,

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[32]Bartley, 97; and Ernst Papanek, *The Austrian School Reform: Its Bases, Principles and Development – The Twenty Years Between the Two World Wars*, Forward by Hans Mandl, Introduction by William H. Kilpatrick (New York: Frederick Fell, Inc., 1962), 49-59 & 66-68; and Gulick, 553-554. Papanek reports that the Austrian Reform Movement adopted the "work school" concept from the curriculum developed in Germany by Georg Kerschenstelner. American educators, John Dewey, William H. Kilpatrick and G. Stanley Hall, as well as, Sweden's Ellen Key and Switzerland's Jean Piaget also influenced the Austrian reform curriculum.

[33]Bartley, 80. As discussed in Chapter Three, above, note 22, Bartley reports that Glockel's School Reform curriculum was strongly influenced by the psychologist, Karl Buhler, and his wife, the child psychologist, Charlotte. See also, Papanek, 68-75. According to Papanek, the reform curriculum was not only influenced by the Buhlers, but also by Austrians Sigmund Freud, Anna Freud, Edwin Lazar, and Siegfried Bernfeld, to name a few.

which the Social Democrats viewed as a pedagogically important concept to their general political strategy of acquainting Austria's middle-class children with the real intellectual demands and creative skills needed to perform industrial labor. For example, the curriculum called for students to construct their own spelling lists as they engaged in various reading and writing activities. The traditional "drill school" curriculum required students to memorize the spelling words and grammar rules dictated to them by the teacher. Instead, the school reform curriculum encouraged children to discover the rules of spelling and grammar for themselves. Initially students were allowed to write stories without paying attention to either spelling or grammar. It was only after students had acquired some writing ability that spelling and grammar rules were introduced for the students to use to correct the mistakes in their writing.[34]

To incorporate the local environment into the curriculum, teachers organized their lessons by incorporating village life or the surrounding countryside familiar to their students. The reformers believed that education should begin with "the unceasing torrent of 'why's' and 'how's' which flow from the tongues of children concerning"[35] their everyday lives. From the immediate surroundings of the students, the teacher would expand their lessons to include broader intellectual areas. For example, since most students entered school speaking a local German dialect, the reform curriculum used these dialects as the basis for teaching language and grammar.

Because the Austrian reform curriculum encompassed learning from "the environment and human life (*Heimat-und Lebenskunde*)," the reform principle of integrated instruction (*Gesamtunterricht*) was closely related to the other two principles

[34]Gulick, 560; and Bartley, 79 & 96.
[35]Gulick, 561.

of self-activity and using the local surroundings. While the reformers laid out broad goals for the kinds of content and techniques students needed to be taught, the teacher was granted tremendous "latitude" in preparing how and when these goals would be introduced to the students. In the elementary grades subjects were not taught as distinct disciplines, thus no subject-centered curricula were ever formulated. Nor were teachers required to establish specific periods of instruction for "reading" or "spelling." As such, learning activities were organized around particular topics. Some topics were taught for a day or two, while other ran for two to three weeks.[36]

Bartley observes that the aims of the reform curriculum were admirable and worked surprisingly well. The Reform Movement's success "caught the attention of educators throughout the world."[37] However, in the social and political atmosphere that existed in Austria between the two world wars, the country's educational reforms, despite being supported by diverse aspects of the Austrian society, became too closely associated with the Social Democrats' political agenda. Many conservative politicians viewed the School Reform Movement as "less a program of educational reform, and more a program for dissent and revolution."[38] While Wittgenstein did not fully support the reform movement's political program, and often poked fun at their slogans and projects, he nevertheless threw all his energy and imagination into what evolved into a

[36]Gulick, 561; and Bartley, 94-95.

[37]Bartley, 76. See also, William H. Kilpatrick, Introduction to *The Austrian School Reform Movement*, v-vii; May Hollis Siegl, *Reform of Elementary Education in Austria* (New York, 1933); and Robert Dottrens, *The New Education in Austria*, ed. Paul L. Dengler (New York, 1930).

[38]Monk, 188-189. The movement's political ties to the Social Democrats meant that as Conservative forces regained political power in the new Austria, the school reform movement eventually became limited to the areas in and immediately around Vienna. Such ideological and geographical distinctions in the administration of educational programs may not have been so absolute. Gulick, 571, reports that a "curriculum especially adapted" to the Social Democrats school reforms was "tried out in rural elementary schools during 1926-27." Siegl, 21, cited in Gulick, 555, reports that despite the reformers' best social democratic intentions, rather than mitigating the class distinctions produced by the former Habsburg social structure, the reform curriculum tended to maintain them.

six-year-long effort to “get the peasantry out of the muck.” Bartley contends that this simple statement fully embodied Wittgenstein's educational views as well as his goals.[39]

Unlike Glockel, as well as the other leaders of the reform movement, many of whom provided Wittgenstein with constant and enthusiastic support, Wittgenstein did not believe education provided a social panacea. Thus, Wittgenstein threw himself into the teaching the peasants’ children not to “improve their external conditions.” Instead, he wanted to help them become better human beings by improving them intellectually. Wittgenstein did not teach his students mathematics, science, German literature, and art, merely to provide them a way out of their rural poverty or with the goal of preparing them for a "better" life in the city. Instead, as Bartley reports, “He wanted to impress upon them the value of intellectual attainment for its own sake.”[40]

However, because his teaching practices closely adhered to the reform movement’s curriculum principles, Wittgenstein’s elementary school teaching could be described as being thoroughly progressive. He encouraged his students to engage in all sorts of activities that went well beyond the traditional curriculum’s routines of mathematical and grammatical drill. For example, his students learned zoology by assembling the skeletons of cats and other small animals. His students learned principles of physics by constructing models of steam engines, pulleys, and other mechanical instruments. Many of the educators who saw these models claimed that they were better constructed than those models the school system could have

[39]Bartley, 80 & 85. In addition, Janik and Toulmin, 243-245, suggest that Wittgenstein’s skepticism of the political agenda of the School Reform Movement was a reflection of his “ahistorical” (anti-progressive), and therefore apolitical ethical approach. Under the influence of Oswald Spengler’s *Decline of the West*, throughout his philosophical works Wittgenstein maintained his opposition to the idea that meaningful improvement of the human condition could *not* come about as a result of human history.

[40]Bartley, 101-102.

purchased, if it had the money to do so. To study astronomy, Wittgenstein took his students on excursions into the surrounding hills to gaze at the night sky and to discuss what they observed. They studied botany and geology by identifying plants and rocks during walks through the countryside, and learned about architecture and art during overnight visits to Vienna.[41]

One of the best examples of how Wittgenstein's teaching practices paralleled the reform movement's progressive curriculum is the wordbook he had his students compose, which was published in 1926 under the title, *Worterbuck fur Volksschulen*, by the Ministry of Education. Beginning in his first year of teaching, Wittgenstein instructed his students to create their own word lists from which they selected words to be entered into a general class wordbook. He then made the general wordbook available for all his students to use during class. Eventually the wordbook grew into a compilation of all the words entered over his years of teaching. Many of the words were drawn from the local German dialect spoken by the students. Wittgenstein then adapted these words for use to teach spelling and grammar.

Bartely reports that in the preface Wittgenstein prepared for the published edition of the *Worterbuck*, he explained how he adapted the words from the local dialect for teaching the use of language. In addition, he used the preface to claim that the official language textbooks provided by the Education Ministry for teaching spelling and grammar were "poorly adapted" for this purpose. The new wordbooks approved for teaching language were not much different from the ones previously used for the

[41]Bartley, 94-95; and Monk, 195. As Monk points out, an integrated curriculum was so important to Wittgenstein's concept of learning that at the beginning of 1924, he lasted only thirty days during his one attempt to teach secondary school (middle school in the Austrian system), leaving for this very

traditional curriculum. Wittgenstein contended that these official texts were "littered with foreign words [meaning words from other parts of Germany] that peasant children did not use." In addition, the students had great difficulty comprehending the examples used to teach grammar because the grammar used by these texts was too "literary" and confusing.

What made the wordbook Wittgenstein and his students created more conducive for the teaching and learning of spelling and grammar was that it included only those words students would typically encounter and, thereby use during their daily activities. Wittgenstein believed that having them compile a word list while engaging in their daily learning activities taught his students (indirectly) to be aware of "the ambiguities of their own use of language."[42] By becoming aware of the complexities embedded within their own dialect, students learned better how to apply the rules of spelling and grammar.

Wittgenstein believed that providing his students with an integrated curriculum, which does not seek to sort out and simplify the complex relationships among the concepts, indirectly teaches an alternative "way of seeing" that opposes the methodological way students are traditionally taught to learn and think about the world. He maintains that the purpose of teaching is to help students "see" the world synoptically rather than analytically, thereby teaching them to connect familiar concepts in new and varying ways. In so doing, students could begin to understand that "the

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reason. See also similar examples of topical lessons integrated around similar excursions in Gulick, 562; Dottrens, 72-87; and Siegl, 57-112.

[42]Bartley, 96-98. See also, Monk's account, 225-228. Both Bartley and Monk suggest that Wittgenstein's use the local dialect of his students to teach spelling and grammar made his *Wordbook* unique. However, since using the local dialect to teach the formal use of the German language was a key aspect of the Austrian reform curriculum, as Gulick reported above, then all that appears to be unique about the *Worterbuck* was that Wittgenstein took the time to compile and maintain a book of the words used by his "peasant" students, as well as thinking to have it published for other teachers to use (which defeats the initial purpose of having students compile their own lists).

applicability or inapplicability of some actual category or concept depends upon the practices of human decisions," rather than some pre-determined rational structure.[43] Thus, students are able to learn how to "see" (understand) the world synoptically only by learning to employ the meaning of a word in their everyday use of language.

By suggesting that concepts are connected synoptically through the way a language is used in a given situation, Wittgenstein is situating meaning and understanding within the nuances expressed in people's everyday conversations which resist being transcribed into a theoretical discourse's visually oriented frame of reference. Thus, his synoptic "way of seeing," articulated by meaning-in-use, recovers the sonorous relationship between our concept of meaning and speaking a language that blurs the analytical distinctions presented by diagramming logical categories. The sonorous quality of speech blends concepts together into a continuous flow of sound that requires us to listen, judge, and interpret all that one hears. As an alternate way of "seeing" that asks teachers and students to listen for the sonorous relationships among concepts, meaning-in-use offers curriculum theorists the kind of synchronic investigation that opens all aspects of our educational practices to investigation.[44] Wittgenstein

[43]Janik and Toulmin, 229.

[44]See Ong's discussion, in *Rhetoric, Romance and Technology*, 232-236, of how the development of associationist psychology in the seventeenth century completed the transformation of Western thought, begun by Ramus's method of diagramming knowledge, "away from the auditory . . . [and] sonorous world . . . of antiquity . . . to the visual [and] . . . observational world of modern science." Ong contends, however, that meaning and knowing can no longer be returned to the ancients' auditory world of orality. As Wittgenstein's use of the metaphor of "seeing" for thinking suggests, because the modern world is so embedded in a visual frame of reference any endeavor to return reason to orality is ultimately framed within the visual form. Ong describes the phenomenon of resituating modernity's visual frame within an auditory pattern as "secondary orality." See also J. C. Nyiri, "Wittgenstein and the Problem of Machine Consciousness," in *Wittgenstein in Focus—Im Brennpnkt: Wittgenstein*, eds. Brian McGuinness and Rudolf Haller (Atlanta: Rodopi, 1989), in which he suggests that Wittgenstein's meaning-in-use represents language's transformation from literacy to Ong's concept of a secondary orality.

suggests that any research that "does not include a complete investigation of all aspects of our practices while in use is either misdirected or at best inadequate."[45]

Educational Uses of Wittgenstein's Pedagogical Perspective

Most scholars studying Wittgenstein, including those in the field of education, have either minimized or chosen to pass over the role his elementary school teaching experience may have played in the development of his later philosophy. Nor has anyone, including McGuinness, suggested that a relationship may exist between Wittgenstein's informal educational practices and those activities that contributed to his "habits of mind" and his later philosophical ideas. Furthermore, to date, Wittgenstein's philosophy has had little impact on the field of curriculum.[46] Attempts by curriculum theorists over the last quarter century to reconceptualize the field within more dynamic and socially situated philosophical and theoretical frameworks have tended to overlooked Wittgenstein's later philosophy.[47] One possible reason has been that, until recently, the philosophers of education who have studied Wittgenstein's ideas have worked within the logical-empiricist or logical-positivist schools of analytical philosophy, which are perspectives that curriculum theorists have been critiquing. Another possible reason is that Wittgenstein's later philosophy criticizes the use of theoretical discourses to analyze the meaning of human activity. As such, using Wittgenstein's philosophy would appear to be contradictory to the whole notion of a curriculum *theory.* Furthermore, his anti-theoretical perspective makes it difficult to classify Wittgenstein's

[45]*On Certainty*, 61. See also, Susan B. Brill, *Wittgenstein and Critical Theory: Beyond Postmodernism and Toward Descriptive Investigations* (Athens, OH: University of Ohio Press, 1995), 105.

[46]Peters and Marshall, 179-184.

[47]Pinar, et al., for example, cite only a single reference for Wittgenstein, which they place within the broader framework of curriculum as phenomenological text. Dwayne Huebner does mention Wittgenstein, but only in passing.

later work within the broader philosophical and theoretical perspectives that curriculum theorists draw upon to critique the field.

Within the last few years, however, a small number of educational philosophers and curriculum theorists have begun using Wittgenstein's later works in their effort to transform education beyond the Cartesian epistemology that undergirds modern theories of education.[48] These scholars want to undermine rationalism's methodological hold on educational practices in the hope of finding an alternative to the behavioral and information processing theories of mind that dominate the modern concept of curriculum. They believe that Wittgenstein's radical anti-foundational approach offers education a new perspective for understanding both the residual problems that continue to confront teachers in the classroom, such as motivating students to learn, and the new challenges facing education, such as teaching in diverse, multicultural classrooms.[49]

Three scholars in particular use Wittgenstein's later philosophy, strongly and directly, to reconceive curriculum and teaching practices. David Jardine[50] uses Wittgenstein's notion of family resemblances to suggest a new way of understanding

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[48]See Stephen S. Triche and John St. Julien, "Reconceptualizing Educational Psychology: A Pragmatic Approach to Developments in Cognitive Science," in *Philosophical of Education* (Urbana, IL: A Publication of the Philosophy of Education Society, 1996), contend that the later Wittgenstein and John Dewey possess a pragmatic kinship that can be used to understand problems within the field of situated cognition. Recently, Wittgenstein's later philosophy has been used within the emerging discourse of "Queer Theory" and its desire for a queering of our conventional understandings of the social relationships that constitute the curriculum. See essays by James T. Sears "A Generational and Theoretical Analysis of Culture and Male (Homo)Sexuality," and Kenn Gardner Honeychurch "Carnal Knowledge: Re-Searching (through) the Sexual Body," in *Queer Theory in Education*, ed. William F. Pinar (Mahwah, NJ: Lawrence Erlbaum, Associates,1998); and Suzanne de Castell and Mary Bryson, in *Curriculum: Toward New Identities*, ed. William F. Pinar (New York: Garland Publishing, Inc., 1998).

[49]Michael Peters, "Philosophy and Education: 'After' Wittgenstein," *Philosophy of Education: Accepting Wittgenstein's Challenge*, ed. Paul Smeyers and James Marshall (Boston: Kluwer Academic Publishers, 1995), 189-190, describes ways in which philosophers like Jean-Francois Lyotard and Richard Rorty use Wittgenstein's anti-foundational arguments to undermine the Cartesian-Kantian rational tradition. Peters and Marshall, 133-151, expand upon the discussion of Wittgenstein's influence on Rorty's philosophical thought found in *Philosophy and the Mirror of Nature*. See also, Alven Neiman, in "Wittgenstein, Liberal Education, Philosophy," in *Philosophy of Education: Accepting Wittgenstein's Challenge*, 85.

how human beings learn about the world. C. J. B. MacMillan[51] suggests that Wittgenstein's later philosophy offers educators "a source of insights into the theoretical and practical problems" teachers face getting students to learn. M. Jayne Fleener[52] believes that the language-games students use effect what and how they learn.

Jardine suggests that Wittgenstein's concept of family resemblances offers the field of curriculum a relationship of kinship that unites modernity's dualism by disrupting education's dependence upon Cartesian rationalism's "univocal" methodology, and its representation of the world as a pre-defined, distinct, and self-existent object. Instead, the kinship of meaning found among varying language-games presents knowing as a constant integration of various "multivocal" activities that continuously aid human beings in "sustaining relationships of kind," rather than as the practice of sorting concepts into distinct categories.[53]

By applying Wittgenstein's philosophy to pedagogical practices, Jardine believes that the curriculum can no longer subsist as a static form of knowledge. Instead, teaching would be understood as the practice of initiating a child into dynamic forms of life and their related language-games. As such, Wittgenstein frees education from the rational, step-by-step procedure of the information processing model that present simply

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[50]David Jardine, *Speaking with a Boneless Tongue* (Bragg Creek, Alberta: Makyo Press, 1992).

[51]C. J. B. MacMillan, "How Not to Learn: Reflections on Wittgenstein and Learning," in *Philosophy of Education: Accepting Wittgenstein's Challenge*.

[52]M. Jayne Fleener, Andy Carter and Stacey Reed, "Language-Games in the Mathematics Classroom: Learning a Way of Life," in *Journal of Curriculum Theorizing* (Pending). See also Fleener's, *Curriculum Dynamics* (New York: Peter Lang, 2002), Chapter Six.

[53]Jardine, *Boneless Tongue*, 120. Shotter, 293-294, also echoes Jardine, stating that Wittgenstein offers a "radically different way of grasping our continuously changing sense of living relatedness, both to each other and to the larger world around us."

arranged bits of knowledge as the building blocks of pedagogical practice and, thereby, of intellectual life.[54]

As a kinship of human practices, Jardine proposes that forms of life present education as an ecological tale (the interrelationship of human beings, their culture, and their environment) in which everything and everyone is intimately related within the living history of all human beings. He accepts the Wittgensteinian notion that forms of life are both social and biological patterns of human existence that offers an ecological breakthrough by furnishing a dynamic shift in our understanding of how human beings live in the world that rejects logic's categorical scaffolding. Instead, forms of life situate meaning as a "nest of interweaving, ambiguous kinship" that no longer isolates human thinking within the individual separated from the material world.[55]

Moreover, Jardine observes that Wittgenstein's later philosophical ideas offer educators a multivocal perspective for understanding pedagogical practices that coincides with the postmodern rejection of meta-discourses. As such, teaching practices would no longer be required to present knowledge as being *that* which is only textually inscribed as an internal mental object and as the symbolic projection of a

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[54]Jardine's, *Boneless Tongue*, 21, position is supported by Paul Smeyers, "Initiation and New ness in Education and Childrearing," in *Philosophy of Education: Accepting Wittgenstein's Challenge*, 113, who suggests a view sympathetic to Jardine's, stating "the knowledge acquired at school is senseless so long as it does not belong to the 'living child.'" See also, Paul Smeyers and James Marshall, "The Wittgensteinian Frame of Reference and Philosophy of Education at the End of the Twentieth Century," in *Philosophy of Education: Accepting Wittgenstein's Challenge*, 3, who state that as a form of life, the curriculum can be reconceived as one's "dynamic initiation into a form of life."

[55]Interestingly, Jardine's description of Wittgenstein's forms of life echoes Bartlett's explanation of the relationship between psychology and culture should be conceived, in *Psychology and Primitive Culture* (New York: The Macmillan Co., 1923), that Bartlett adopts from C. S. Myers and W. H. Rivers. Jardine's views resemble concepts Wittgenstein presents in *Remarks on Frazer's Golden Bough*, trans. A. C. Miles and revised by Rush Rhees (Atlantic Highlands, NJ: Humanities Press, Inc., 1979), which Jardine does not cite. Wittgenstein's *Remarks on Frazer's Golden Bough* is a compilation of notes from his first seminar at Cambridge following his return in 1930. This all further implies some kind of connection between Bartlett and Wittgenstein's work, probably through Myers's work on social psychology, that to date scholars appear not to have explored.

formally defined certainty.[56] Using Wittgenstein's concepts, Jardine repositions pedagogy as a form of postmodern anthropology that resituates teaching as a practice of seeing the learning activities of students in ecological terms.[57] Resituating pedagogy as a postmodern anthropology asks educators to recognize the complexities of students' current situations. Jardine maintains that while "asking the young into the world is the task of pedagogy," the oppressive authority imposed by the school curriculum has routed the intimacy that is associated with educating children into a form of life. He believes that by applying the multivocity of language-games and family resemblances to education, repositions pedagogy in the hope of recovering "schooling's lost intimacy" by restoring an attitude of "*kind-ness* and generosity" to the practices of teaching the young.[58]

MacMillan proposes that those who take the challenge of teaching seriously need to begin to pay attention to the "pedagogical utterances" being used in the classroom. In part, teachers need to recognize the conceptual relationship that exists between the language employed by teachers as well as students' everyday use of language. In other words, MacMillan believes that a student's ability to learn is intimately related to

[56]Jardine, *Boneless Tongue,* 119-122. Similar to Jardine, Peters, 192-194, suggests that Wittgenstein's thought represents a historical "shift away from a single, universal, and formal model of rationality motivated by logical considerations, to an informal, historical, and sociological model that more closely approximate the kind of "rationality" employed by agents in their practices and in their active construction of social reality." Peters further observes that Wittgenstein's philosophy is a cultural critique that parallels some of the strains of thought associated with "post-structuralism's" critique of modernity. For a discussion on the differences between Wittgenstein's late work and poststructuralism, see Marjorie Perloff, *Wittgenstein's Ladder: Poetic Language and the Strangeness of the Ordinary* (Chicago: University of Chicago Press, 1996); and Henry Stanten, *Wittgenstein and Derrida* (Lincoln: University of Nebraska Press, 1986).

[57]Jardine draws the notion of a postmodern anthropology from James Clifford's, "Introduction: Partial Truths," in *Writing Culture*.

[58]Jardine, *Boneless Tongue,* 21. See also, Peters and Marshall, 175, who suggest that the style of Wittgenstein's later philosophical is "essentially pedagogical" because it attempts "to shift our thinking" by "helping us escape the picture [of education] that holds us captive."

the ability of a teacher's pedagogical utterances to translate a student's everyday concepts into the concepts presented by the curriculum discourse.

MacMillan maintains that Wittgenstein's philosophy of language helps educators recognize that students learn a tremendous amount of knowledge simply on trust. As discussed in Chapter Two, above, Wittgenstein suggests that beginning with the first day of school, students learn many things merely by *acknowledging* the language-games being used in the classroom as they listen to and *accept* what the teacher or textbook says. Students' then mimic and parrot the words and gestures they hear and see in the same way that a toddler first begins to learn to speak. In other words, as Wittgenstein asserts, by imagining and trying to use a language-game, a student is *accepting* the existence of a form of life. The student does not ask the teacher to prove anything. As such, learning a form of life would be impossible for students who are unable to first *accept* the language-game into which they are being initiated.

MacMillan maintains that the relationship between learning and the ability of students to accept (acknowledge) the existence of a language-game is one that educators have not readily *acknowledged* themselves. As Wittgenstein points out, a student's failure to learn cannot be related to his or her decision to doubt something's existence. Doubting requires that one already knows something about what one doubts. As such, when a student fails to learn, it is not because the student doubts something's validity. Instead, a student's failure to learn is due to the student's inability to trust the language-game being used in the classroom.[59] Thus, the ability of students to learn what is being taught requires that they first accept what either the teacher or the curriculum is saying.

Fleener, Carter, and Reeder offer a position that closely resembles the one presented by MacMillan. They suggest that, in order to discover why students sometimes fail to learn, educators should begin investigating the ways both teachers and students use language in a classroom. They propose that the curriculum should be viewed as an on-going conversation emerging from a classroom situation. Following Wittgenstein, the authors view language as a dynamic social activity out of which the meanings of words emerge from the way people use language in everyday social contexts. Similar to Jardine and Michael Peters, Fleener, et al maintain that human knowing is socially situated within a form of life. As they explain:

> From the perspective of language-games as communication networks within social contexts, we are interested in exploring how mathematical meaning is conveyed and transformed through conversations during a problem-solving episode. We explore the language-games of a particular mathematics classroom in order to better understand how students construct meanings about fractions.[60]

In order to understand better these patterns of meaning, the authors use Genova's three notions of *play*, which she derives from Wittgenstein's language-games, to explore the way students apply the language of an elementary math curriculum. The study discusses four African-American female 3rd graders and their attempts to understand and solve a word problem involving the use of fractions.[61] Fleener, et al observe that initially the students begin trying to solve the problem by initiating a variety of conversations relating to the problem. In so doing, the students disrupt the sequence of learning activities intended by the teacher. Consequently, in her attempt to manage her students and to keep them focused on her planned outcomes, the teacher quickly

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[59]*On Certainty*, no. 283.

[60]Fleener, et al, 7. See also Genova, 174.

[61]The Pizza Problem: Amber, Mario, Denise, and Jason have a pizza they want to share fairly. How much pizza would each one get?

steps in to halt the group's attempts at generating conversations to help each other understand the problem. Instead, the teacher refocuses her students by engaging each of them individually in a question-answer dialogue.

Fleener, et al contend that in an effort to solve the word problem, the students were engaging in what they describe as a kind of dynamic word play with the language of the problem. However, by constantly interrupting their conversations, in an attempt to keep the students on task, the teacher was depriving them of a possibility for understanding the problem from their own everyday context. Responding to the teacher's questioning, two students eventually give the right answer and a third shows that she appears to understand the principles concerning fractions that the problem asked for. In the case of the fourth student, she not only fails to answer correctly, but because her repeated answer consistently "misused" the fractional term "one half," it appears she failed to learn much about fractions from the lesson. While the teacher responds to the student's consistently wrong answer by employing the proper fractional term, she never once stops to ask the student to explain how she was attempting to use the term "one half."

Fleener, Carter, and Reeder propose that Wittgenstein's notion of games can "serve as tools for analyzing the interactions of classroom language," which might help educators to understand better why the fourth student is the only one who fails to learn how to use properly the fractional terms. They claim that the students and teacher were engaging in three levels of play, which the authors describe as "playing-with," "playing-at," and "playing-in" language. In the case of "playing-with" a language, students are allowed "to stretch or extend meanings through analogy" similar to the way "children

'suppose' or 'imagine' that a toy can do certain things" it is not designed for. The authors suggest that, when students play-with language, as in the case of the group's initial conversations about the problem, students are not bound to a particular script or procedure for understanding the meanings of words. Instead, by playing-with words, they are composing their own meanings in imaginative and varying ways.

When "playing-at" a language, the authors suggest that students are attempting to use the words in an appropriate or conventional manner by endeavoring to follow correctly the rules of operation for a particular language. Despite trying to follow the rules students' playing-at a language may make mistakes. However, when playing-at a language little is learned because new understandings do not emerge from students' conventional application of the rules for the particular language-game being employed. Nor are new meanings allowed to emerge from the mistakes students make when employing mathematical terms because there is no imaginative interplay between the student and the mistaken application of the rules in a conventional language-game.[62]

Finally, the authors contend that the activity of students' "playing-in" a language is the same as their appropriately following a script. As such, playing-in a language is the practice of correctly using the rules of the language where the meanings adhere to their conventional use. Thus, students playing-in a language, are engaging in a performative activity by which their application of the words are measured against the established rules of practice. As the authors suggest, "In the traditional mathematics classroom, 'playing-in' the mathematics discourse by following the script determines the student's level of success."

The school curriculum and its component lesson plans, as a set of standards for behavior, asks students to play-in only the formal, established script of the subject disciplines or the behavioral standards used to measure "effective teaching." Teachers are generally held accountable for how well students can play-in the language of the pre-determined school curriculum. A teacher is expected only to engineer the leaning activities of the students, thereby ensuring that they can correctly follow the curriculum's instructional blueprint.

In the pedagogical situation presented by Fleener, Carter, and Reeder, the teacher and students alternate among all three levels of play. In their initial attempts at constructing conversations concerning fractions and pizza the students endeavor to understand the word problem's language by playing-with its particular use of words. In so doing, the students attempt to explore the meanings of words; construct additional contexts in which fractional terms are used; and generate ideas from their own experiences associated with the problem. The teacher, however, playing-in her role as curriculum engineer or decision-maker, does not allow the group to move away from her lesson's planned objectives, by consistently working to bring each student back from playing-with to playing-at the mathematical language of fractions. When left alone, the students attempt to return to playing-with the problem, especially in their attempts to help each other understand the use of fractional terms. However, as the teacher questions each student in succession, the group slowly abandons its attempt to help the one student find the right answer by playing-with the problem. Instead, they all opt for pleasing the teacher by playing-at the mathematical language of fractions.

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[62]Fleener, et al, 6. While I believe that Genova presents a dynamic sense of play for all three levels, not just for playing-with, the way in which the authors apply these three notions of play do provide

What this classroom situation shows is that not only are the students expected to adopt the discipline's mathematical language, but that the meaning of mathematical words also depends upon the students adopting the teacher's particular use of the language in the classroom. Because she focuses only on the conventional use of the language of fractions, the teacher either misses or chooses to ignore the other language-games that the students endeavor to play-with while trying to understand the problem. In so doing, the teacher is unable to hear and imagine the various difficulties the students are having as they try to solve the problem. As the authors observe, the difficulties exhibited by the students may not be so much mathematical, but the difficulty understanding the language-game used by the mathematical word problem.[63]

The pedagogical problem presented by Fleener, Carter, and Reeder is closely related to the question MacMillan raises of why students sometimes fail to learn. Apparently, the student unable to answer the pizza problem correctly fails to do so not because she is unable to perform the activity of dividing a pizza, but because she was unable to learn the formal language of fractions. However, one could suggest that her incorrect answer does show that she is attempting to play-at the mathematical language. For some reason, she appears unable to accept or acknowledge the mathematical language scripted in the lesson plan. Equally important, however, is the teacher's apparent failure to acknowledge the highly contextualized language within which the group was engaging to help each other understand the problem. What Wittgenstein's later philosophy suggests is that when a student fails to learn or when a teacher does not attempt to listen for the alternative language-games a student may be

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a useful way to investigate the kinds of pedagogical problems they are trying to explore.

applying to a particular situation, then the pedagogical problem facing educators is not a methodological one related to an incorrect way of thinking, but is, instead, a conceptual problem related to a teacher's inability to "see" the ways in which students are using language.

What is missing when a person is unable to experience a variation in a word's meaning is not a lack of knowledge, but the ability to conceive of the language-game being used.[64] This is a conceptual problem that returns us to the connection that Wittgenstein identifies between meaning-in-use and the practice of teaching. The case presented by Fleener, et al, suggests that, when students are allowed only to play-in or play-at a curricular language-game, the teacher is assuming that a direct cause-effect relationship between teaching and learning is constructed by the curriculum's discourse—Ramus's methodological language-game. This belief does not allow a teacher to imagine the applicability to the lesson's pre-planned outcomes of any other language-game that the students may need to use to help them understand the concepts being taught. If the teacher in this study had understood that teaching is an indirect relationship between her and her students, then she may have been more open to the everyday language her students used to help each other understand fractions by playing-with the words in the problem, and, thereby ultimately enabling the entire group to apply fractional terms correctly.

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[63]The point of Wittgenstein's *Remarks on the Foundations of Mathematics* is to show the social nature of mathematical operations.

[55]*Philosophical Investigations*, II, 213-216.

CHAPTER 6
A WITTGENSTEINIAN APPROACH TO CURRICULUM AND INSTRUCTION

Teaching and Learning as an Indirect Activity

Wittgenstein's notion that teaching, and thereby learning, is an *indirect* activity initially led me to explore further his philosophical works. While researching a paper on the history of Soviet curriculum, I happened upon the educational writings of Leo Tolstoy. In his essays on education, written in the mid-nineteenth century, Tolstoy vigorously criticized contemporary methods and theories of education being implemented in Europe and America. Rather than shackling students to a narrow predetermined concept of knowledge, Tolstoy believed that education should free students to engage in understanding through "creative improvisation," allowing them to "reshape society to meet new needs and challenges."[1] After reading Tolstoy's essays on education, I re-read Janik and Toulmin's *Wittgenstein's Vienna*. I first read their work as an undergraduate student and remembered that Tolstoy's ideas on art, morality, and religion had influenced both *fin-de-siecle* Vienna and Wittgenstein's philosophical thought, which led me to investigate whether Tolstoy's educational writings influenced Wittgenstein as well.[2]

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[1]Reginald D. Archambault, "Introduction," *Tolstoy on Education*, trans. Leo Wiener (Chicago: The University of Chicago Press, 1967), ix. The notion of "creative improvisation" can best be seen in Tolstoy's description of teaching peasant children to write in his school at *Yasnaya Polyana*. In "Are the Peasant Children to Learn to Write from us? Or, Are We to Learn from the Peasant Children?" 191-244, Tolstoy's position is similar to the one advanced by Huebner in "Religious Metaphors," which he patterns on Whitehead's "Aims of Education" (see Chapter One, above). See also, William H. Schubert, *Curriculum: Perspective, Paradigm, and Possibility* (New York: Macmillan Publishing Company, 1986), 70, who observes that "Tolstoy's brief [educational] experiment anticipated the most liberal aspects of progressive education and saw curriculum as primarily embodied in the teacher."

[2]According to Janik and Toulmin, 157-165, Tolstoy's literary works as well as his polemic against aesthetic theories, *What is Art?*, trans. Almyer Maude, introduction by Vincent Tomas, The Library of Liberal Arts (New York: Macmillan Publishing Co., 1960), was part of the general cultural milieu of *fin-de-siecle* Vienna. In addition to Tolstoy, Kierkegarrd's notions of "indirect communication," or "communication by means of reflection" in the service of Christian understanding, also had a profound influence on both Viennese society and Wittgenstein. The difference between the two was that

The idea that students learn *indirectly* what they are taught suggests that no matter what method(s) a teacher employs, students ultimately learn and know in their own way. The notion that teaching is an indirect activity, further suggests that knowledge cannot be transmitted directly by some immediate pedagogical stimulus. As Dewey counsels, "Perhaps the greatest of all pedagogical fallacies is the notion that a person learns only the particular thing he is studying at the time."[3] This is not to suggest, however, that teachers do not play an important role or that the method or practices in which teachers engage are irrelevant to what students eventually learn. On the contrary, the notion that the relationship between teaching and learning is an indirect one places an even greater importance on teachers and their practices. As MacMillan observes, if students are unable to trust a teacher's pedagogical language-games because they appear either irrelevant or nonsensical, or, if a teacher's practices limit the kinds of learning activities in which students are allowed to engage, then the students' understanding students of what is being taught may itself be limited. Additionally, as suggested by the study presented by Fleener, Carter, and Reeder, if a teacher's classroom language is too narrowly focused on a disciplinary discourse, then some students may fail to learn what is being taught. This not only pertains to the strict use of language within a discipline's discourse, but pertains to the restricted pedagogical language used to plan, manage, and assess what students learn as well. Moreover, limiting the ability of students to understand what is being taught also limits their ability to apply what they learn beyond the context of the classroom. As Whitehead

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Kierkegarrd's notion of indirect communication was rooted in the individual while Tolstoy's was situated socially in the village collective or commune (the *mir*).

[3]John Dewey, *Education and Experience* (New York: Colliers, 1938), 48.

advises, being educated means that a student must be able to say that he or she has made the “ideas [being learned] one’s own.”

In this chapter I will explore first the assumptions of the Tyler rationale, and then Wittgenstein’s notions of synoptic seeing, language-games, and play; all of which disrupt the organizational flow toward Tyler’s educational goals and the historicist progressivism surrounding these goals.

The School Curriculum: An Historically Ordered Activity

The current school curriculum, following the general procedures laid out by Ralph Tyler’s rationale, organizes instruction in a way that those who are responsible for the curriculum believe can best ensure a direct transfer of knowledge to the learner. In order to facilitate this direct transfer of knowledge, the curriculum organizes teaching and learning by reducing knowledge into a set of simple facts that are then organized into a logical sequence of steps. This method of organizing knowledge is based upon the belief that there are basic or essential forms of knowledge upon which future teaching and learning must be built. It is a belief that learning—and by implication thinking—progresses over time from simple ideas to more complex concepts. It is a method of thinking that organizes knowledge in a progressive “historicism,” which maintains that the more a society knows the better off it will be in the future. Following from Tyler, the school curriculum becomes the knowledge a society has accumulated that it believes continues to be most useful toward achieving its social objectives.[4]

Throughout the twentieth century, American education has been carried along by the currents of progressivism's three modern theoretical movements of "social

[4]See Chapter Two, above, 25-26.

efficiency," "human [psychological] development," and "social meliorism."[5] While focusing on varying aspects of the curriculum, all three of progressivism's currents of thought were undergirded by positivism's theories of organic social development and its historicism.[6] It is progressivism's varied pedagogical currents that Tyler endeavored to rationalize mid-way through the century. Tyler's rationalization of progressivism's three currents into an efficient procedure of curriculum and instruction continues to function as a general framework for the models for effective teaching upon which the current curriculum of "high-stakes" accountability is based.

Because the school curriculum is organized in a logical step-by-step sequence that leads students to what are considered pedagogically useful or practical outcomes, teaching practices that begin a lesson by activating students' prior (or taught) knowledge could be understood as a kind of historicism. In other words, this practice assumes a progressive, building block approach whereby students' prior knowledge, in order to be made useful, must be arranged in a logical fashion that is related to the content area being taught. As such, the usefulness of students' prior knowledge becomes limited to the organizational structure of the subject discipline. In other words, the pedagogical method used to plan and implement a lesson has the effect of organizing students' prior knowledge in a textbook fashion. This understanding of how

[5]Herbert Kliebard, "Three Currents of American Curriculum Thought," in *Current Thought on Curriculum*, ASCD Yearbook (1985): 31-44. Kliebard asserts that during the twentieth century the opposing curriculum forces were not progressivism versus humanism, but were progressivism's three currents struggling for dominance among each other. However, the nineteenth-century humanist curriculum, which could be roughly described as maintaining the Puritan's Ramist practices, was not eliminated from American education. Instead, it remained in the educational background and thus functioned as a kind of didactic embankment within which progressivism's three currents rampaged.

[6]See Chapter One, above, 5; and Kliebard's discussion in "Dewey and the Herbartians: The Genesis of a Theory of Curriculum," in *Contemporary Curriculum Discourses: Twenty Years of JCT*, ed. William F. Pinar, in Counterpoints: Studies in the Postmodern Theory of Education, vol. 70 (New York: Peter Lang, 1999/1981).

the knowledge students bring with them into the classroom needs to be sequentially organized is, I believe, closely related to Peter Ramus's belief that a student's own "mental possessions" need to be arranged by employing a set (his, or the teacher's) method in order to make them pedagogically useful.[7]

The reconceptual view of curriculum offered by *currere's* autobiographical method disrupts the history upon which Tyler's rational efficiency curriculum framework is built. In addition, *currere's* use of existential imagination resists the loss of individuality precipitated by positivism's scientistic and progressive pull on social history. In so doing, *currere* challenges Ramus's dialectical stages, as well as his belief that his pedagogical method could organize all knowledge for its practical exercise in life.[8] Moreover, *currere* disrupts the Ramist belief that a student's experiences are made more useful by organizing them pedagogically. *Currere's* autobiographical method calls upon teachers and students to remember their experiences that occur outside of school—their "biographic situation"—so these experiences can be used by teachers' and students' to better understand their on-going experiences with (and within) the school curriculum.

Similar to the way Wittgenstein's ahistorical understanding of forms of life offer us a means to move beyond positivism's progressive historicism, I believe his concept of *language-games* affords everyone involved with curriculum the opportunity to move educational practices and research beyond progressivism's theories of education as well as the school curriculum's ever-present didactic underpinnings. Recognizing, as

[7]See Chapter Three, above, 93.
[8]See Chapter Three, above, 82.

John Dewey urges, that "we never educate directly, but *indirectly,*"[9] helps teachers reconceive their pedagogical practices as the multiple use of languages (discourses), rather than simply a logical sequence of learning activities, designed to achieve some pre-determined objective. In addition, by understanding that to educate is to lead students in the use of a great variety of languages, curriculum theorists may begin to conceive of teaching and learning as a *synoptic* activity that opens up multiple interpretations and forms of knowing. By expanding knowing via synoptic seeing, by exploring the use of language-games, and by reconceiving the role of play, Wittgenstein offers us a new way to conceive of curriculum, quite in keeping with *currere's* autobiographical dynamism.

Synoptic Seeing: A New Way of Knowing

Wittgenstein observes that to teach is the practice of teaching students the use of words in a language-game. He emphasizes that it is only by using a word within a given context that we learn to employ its meaning. Words do not just represent a naïve reality. Nor do they simply stand-in for meaning. Meaning is not an external or internal "object" that stands outside our use of words. Words are utterances that we use, like tools, to fashion relationships among concepts and, to which, meanings adhere. As such, Wittgenstein maintains that our uses of words form a system (language-games)—a nest or knot of social-linguistic relationships—that inform and present our forms of life. In so doing, our everyday uses of language work to shape our lives, while, at the same time, being shaped by our lives.

As expressions of our forms of life, our uses of words aid us in understanding the variety of forms that our lives take, helping us see the various routes of meaning that

[9]Dewey, *Democracy and Education*, 19 (my emphasis).

interconnect our uses of words to concepts. Ramus, and those who would follow his direction, focus such "seeing" on the narrow pathway constructed by his method. In this seeing process, one begins always with what is "absolutely known," progressing methodologically and surely, step-by-step, to that which is "not so known."[10] Overarching or underlying this methodological process is, as Kliebard points out in his critique of the Tyler Rationale, a practical view of learning that is limited to a utilitarian, functional use of knowledge. This, of course, is one reason why the New England Puritans, as well as their English brethren, were so taken with Ramism.

In asking us to "see synoptically," Wittgenstein encourages us to replace seeing narrowly and simply with seeing broadly and complexly, thereby helping us become aware of the multifarious connections that exist among the concepts emerging from our everyday use of words. In asking us to see in such a manner, Wittgenstein is asking us to see "perspicuously" (i.e., clearly) by setting "out the whole conceptual field" so that our understanding of the possible meanings of words can pass more easily from one concept to another.[11] Furthermore, he believes that attending to the everyday uses of our various language-games enables us to see more "clearly" that these multifarious connections, and their interwoven knots of meaning, are indeed in plain view. Understanding the world synoptically requires us to remove the logical blinders forced upon us by "method's" essential ordering of meaning, thereby allowing us to see the context and complexity of our everyday surroundings and its interlocking labyrinth of

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[10] *The Logike of P. Ramus*, 54-56 (my emphasis). See also, Chapter Two, above.

[11] *Remarks on Frazer's Golden Bough*, 9e & notes. Wittgenstein describes this "synoptic" view as an *ubersichliche Darstellung*. According to Miles, we really don't have an English word for *ubersichliche*. While it is often translated as 'perspicuous,' Miles suggests that no one really uses this word in English. Gier, in *Wittgenstein and Phenomenology*, 12 & 81, suggests that *ubersichliche* is better understood as "synoptic," which is the translation that I have chosen to use. According to Gier, the term *ubersichliche Darstellung* first appears in Wittgenstein's original, 1931, notes on Frazer's *Golden Bough*.

meanings. In so doing, we can begin seeing the connections among concepts that we might not have otherwise seen. Synoptic seeing asks us to reduce our dependence on thinking and increase our ability to "look," thus reconceiving our practically understood situations as ones holding new and yet unimagined possibilities—what Wittgenstein calls "seeing –as."[12] John Shotter (1996) calls Wittgenstein's synoptic seeing "a poetics of practice" through which "new usages are spontaneous and unforeseeable adaptations of past usages."[13]

Presenting the curriculum synoptically provides teachers and students an *indirect* presentation of the varying aspects of meaning that concepts can take as they emerge from the multiple language-games used in the classroom. Rather than understanding the curriculum in its conventional, taken-for-granted way, seeing the curriculum synoptically, as Wittgenstein's teaching experiences show, enables students to recognize new meanings that emerge, first as one thing, then as another, out of the context of their everyday lives. As such, the synoptic practice of seeing-as provides curriculum theorists with a new way of understanding *how students learn.*

While teaching practices that employ method's limited use of language compels teachers into delivering, and students into receiving, the curriculum as "inert ideas," Wittgenstein's synoptic seeing replaces the essential order of the school curriculum's logical discourse with the unmapped wilderness of our everyday language through which no single pathway need be cut. A synoptic view of knowledge applies the "rough ground" of our unrefined uses of language to the classroom, thereby allowing

[12]Henry Stanten, *Wittgenstein and Derrida* (Lincoln, NE: University of Nebraska Press, 1986), 66, suggests that the extent to which Wittgenstein is using a "method," it is a method of destabilizing our taken-for-granted understandings of the world.

schooling's concepts to be seen differently. In this way, seeing synoptically asks teachers and students to know by *seeing*-the-curriculum-*as* something other than inert, dead ideas.

Wittgenstein maintains that to read a "sign" (i.e., to understand the meaning of a word) in a conventional way requires no interpretation; no change is our use of a word; no change in meaning. His practice of seeing-as, on the other hand, gives teachers and students the opportunity to see the curriculum's practical use of knowledge in new and imaginative ways. Seeing-as allows teachers and students to recompose the practical meanings taught by the curriculum's limited use of words by imagining new metaphorical relationships. Seeing-as makes it possible for teachers and students to return to the flux and dynamic relationships that emerge from our everyday life experiences.

If we understand that the words students use outside of the classroom are metaphorically related to the words they are being taught inside the classroom, then teachers would better understand that the pedagogical discourse used to teach employs an indirect use of words, even when teacher are trying to teach directly. The practice of teaching as a direct, ostensive demonstration of a language limits these metaphorical relationships. As such, teaching directly limits the connections students are allowed to imagine among concepts, thereby limiting what students may learn. Thus, the greater the variety of words (language-games) teachers use in the classroom, the greater the possibility that the students will make the kinds of metaphorical connections they need

[13]Shotter, "Living in a Wittgensteinian World," 306 (my emphasis). Shotter uses the standard translation of "perspicuous presentation" for *ubersichliche Darstellung*.

in order to learn the concepts being taught.[14] Synoptic knowing is not a process that asks students only to learn *skills* (i.e., *techne*) that seek to change their behaviors to fit within bureaucratically pre-set social norms. By recomposing concepts metaphorically, seeing-as offers teachers and students a way to see the curriculum creatively, thereby helping them invent new ways of speaking, new understandings, new practices, and new forms of living.

Reconceiving the Curriculum as Language

Over the second half of the twentieth century, despite the best efforts of those responsible for curriculum to provide more interactive, creative, and dynamic learning activities, the school curriculum has remained rutted in Tyler's rational methodology as well as the technological, positivist language of the social sciences used for planning, implementing, and assessing student achievement. In so doing, teaching practices have remained overly directed toward pre-determined outcomes solely because they are presumed to be measurable. As such, not only are students' learning experiences limited in terms of the kinds of activities in which they engage, but, more importantly, overly directed learning activities restrict the ways in which language is used in the classroom. Thus, the ability of students to transfer the school curriculum to their everyday lives continues to be a significant educational problem. Huebner observes, "The problem is that the language and the practices of education are nearly independent. Educational practices too often are inarticulate, unconnected to the legitimating and descriptive powers of language."[15]

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[14]Nelson, 2, suggests a similar view of the role that metaphors play in her discussion of communication and discourse. See also, Doll, *A Post-Modern Perspective*, 169.

[15]Huebner, "Curriculum Field: Its Wake and Our Work," 242. Throughout his career, Huebner has tried to show that the curriculum's dependence on the language of the social sciences limits what

Over the generations, traditional teaching practices of literacy and calculating have constructed classroom knowledge into a hierarchical taxonomy, which is often presented today as higher-order-thinking-skills. Such taxonomies effectively suspend the dynamic and generative nature of human understanding (i.e., learning) within rigid categories that have been fabricated for the purpose of instruction. Moreover, didactic forms of instruction depend upon a discourse that stands idle as objective, formal knowledge. This knowledge can be bracketed, classified, categorized, and, thereby, memorized by students. Our everyday, unrefined language-games, however, keep our understanding running in such a way that even a vague utterance can be understood. This is because our everyday use of language depends heavily upon the *tacit* understandings that are part of the living dynamics of our ordinary lives. Wittgenstein came to believe that our tacit understandings are not knowledge that is transmitted by some psycho-physiological phenomena or by some *gnostic* metaphysic. Instead, our tacit understandings are implied by, and acquired indirectly from, our everyday language-games that inform our ordinary forms of life. As he discovered, through his later investigations, the ordering of our ordinary use of concepts into distinct and rigid categories is impossible. What this suggests, is that due to the dynamic nature of hands-on, as well as, creative learning activities the use of language never stands idle. Instead, as students are shown how to engage in an activity, words are acting in ordinary, unrefined ways as students are being told what they can and cannot do.[16]

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students learn in the classroom. See also, Doll's critique of the engineering framework within which the social sciences are situated and its limited view of what it means to educate, in *A Post-Modern Perspective*, Chapter Two.

[16]It is only when we try to directly demonstrate to a child what a ball is by showing the ball to the child and naming it saying, "This is a ball" that we would try and ostensibly teach a child what a ball is. This is the kind of methodological language-game that is used in the classroom. However, the first time we play ball with a child we do not stop to ostensibly teach the child what a ball is, we just begin playing

Even from those perspectives, including Wittgenstein's, that situate knowing within a larger social context, which recognize that knowing one thing enables a student to know many other things, the school curriculum's use of a narrow positive discourse to construct objectives and assessments (i.e., technologizing knowing) continues to limit the ability of students to fully understand that there exists numerous other possible understandings of the curriculum's use of language. While the social, interactive, and dynamic nature of human understanding suggests that the experience of learning something has no single direction, or that knowing neither begins nor ends with a specific object or event, it is still the individual student who engages in the knowing. As such, if the goal of the school curriculum (following the noblest aspirations of the humanist tradition) is to provide students with the ability to apply what they learn to their everyday lives, thereby becoming independent learners, then why would the curriculum *not* want to draw upon the ordinary, unrefined ways that students use language. From a Wittgensteinian view, any curriculum that does not completely investigate all aspects of students' everyday use of language is either misdirected or inadequate.[17]

While Wittgenstein's proposition that knowing something does not *require* some external authority, rational certainty, or direct sensory experience undermines the rational and empirical theories of learning, upon which the current school curriculum has been built, his later philosophy helps teachers recognize that language plays a crucial role in both experiential learning and the didactic practices used to teach the subject

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by saying, "go get the ball," or "kick the ball here," etc. This is a point that Wittgenstein is making in his discussion of St. Augustine's example of ostensive teaching at the opening of *Philosophical Investigations*, I, no. 1.

[17] *On Certainty*, no. 61. This is also, Brill's, 105, argument.

disciplines.[18] Educators who support experiential learning activities often seem to forget that when students engage in “hands-on” learning activities, the use of language does not suddenly disappear. As one of my students recently wrote, as a high school student he had realized that language played an important role in learning because he recognized that "the sheer volume of information available [to students] would take too long to experience and develop, one piece at a time."[19]

However, even Dewey’s discussion of experiential learning gives the use of language little if any role. Instead, he presents experience as a psycho-sensory connection (albeit an indirect one) between the mental and physical world. Rather than relating experience to one’s use of language, Dewey describes experiential learning as a journey of discovery. He suggests that experiential learning is “a psychological statement . . . it is historic; it notes steps actually taken.” What one notes, however, are not the words one uses to describe such experiences, but the activities of the experiences themselves, “the more or less accidental and devious paths traced by the explorer" (the one experiencing).[20] On the other hand, neither essentialism’s “back to

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[18]These are the two pedagogical categories set forth by Dewey as the ”psychological” method and the “logical” method of education, in *Child and Curriculum* (Chicago: The University of Chicago Press, 1902), reprinted in *Curriculum and Evaluation*, 178. Current curriculum standards continue to maintain this dichotomy of teaching methods.

[19]Christopher Smith, in his "Educational Autobiography" assignment spring semester, 2001. Chris is an alternative certification student who teaches math and science at a small town parochial high school in South Louisiana. Prior to becoming a teacher, he had been a successful hospital administrator. This notion that experience can teach only over an extended period of time is an important aspect of Aristotle’s discussion of “practical wisdom” (*phronesis)* in his *Nicomachean Ethic*.

[20] Dewey, *Child and Curriculum*, 182-183. Dewey’s act of mapping appears to be a systematic ordering (i.e., a smoothing over of the unrefined rough edges of experience) using his “scientific method.” As such, Dewey’s concept of experiential learning echoes the New England Puritan practice of using Ramus’s diagrams to map their pathway to salvation from their life experiences. See Haller’s, 301-303, discussion of the Puritans’ use of “biography and history” (whose refinement in the New England colony was adopted and advanced in England by John Milton) as a method of observing (demonstrating) “the operations of the Holy Spirit in their own breasts and the lives of men about them.” Ong, *Decay of Dialogue*, 116-121, further observes that Renaissance scholars, like Rudolph Agricola or Francis Bacon, often depicted the “common” places (*loci*) from which arguments were derived as a forest or wilderness (*silva*). Rhetorical or dialectical “invention” enabled a speaker to “cut out” and sort or arrange the timber

basics" curriculum of reading, writing, and calculating, nor "perennialism's" humanist curriculum of the Western canon pay any more attention to students' use of language. In the current school curriculum, the consideration that teaching and learning practices involve students' own use of language appears to get overlooked in the technological discourse of information processing, communication, and scientific methodologies.

Dewey and Wittgenstein do, though, come together in the pragmatic belief that one must move in order to know. In both experiential exploration and language-games, knowing is not a matter of mere contemplation, but is a matter of action. The differences lie in the kinds of actions taken; for Dewey the fundamental act of human experience is to psychologically map one's experiences. For Wittgenstein, however, the most fundamental of human acts (what makes us human) is to speak. Dewey's use of the mapping metaphor suggests that his view of knowledge, while personal, is still a representational one.[21] Wittgenstein's language-games, on the other hand, are "not a representational structure, but a presentational act." While language is composed of signs, these "signs *mean* by doing for themselves, not by pointing to something or other [as does a map]."[22] Moreover, Genova observes that Wittgenstein's rejection of philosophy's analytical practices is a rejection of the use of the therapeutic "as the

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or trees into a useful discourse. Ramus's method transformed the process of sorting out into one of mapping a clear path through the forest. The Frenchman, Jean Bodin employed the metaphor of a "clear path" in an attempt to methodize history in his 1566 work, *Methodus ad Facilem Historiarum Cognitionum.*

[21]Dewey, in *Child and Curriculum*, 182, suggests that "the map . . . serves as a guide to future experience: it gives direction; it facilitates control; it economized effort, preventing useless wandering, and pointing out the paths which lead most quickly and most certainly to a desired result."

[22]Genova, 117 (my emphasis), states, "Thus, like other post-structuralists, Wittgenstein comes to appreciate the importance of speech, *parole* . . . . Language is an action, a tongue whereby sounds achieve meaning."

primary simile for his concept of philosophy,"[23] which has been one of the underlying practices of schooling since the Renaissance. Rather than a means to an end, language-games are an end in themselves. As such, Wittgenstein's "synoptic presentation" reminds everyone responsible for the curriculum that teaching and learning are not simply technological products, but involve the dynamic and generative use of language in a variety of ways. His use of "seeing-as" calls upon teachers to change the conventional or practical ways language us used, instead, asking students to see the other possible conceptual relationships presented by alternative uses of the words. Changing the way a word is used changes the word's meaning. As such, by changing the language-game, "seeing-as" changes the context of the form of life in which a word is socially situated. Furthermore, Wittgenstein is suggesting that the curriculum's use of language—the concepts and meanings students learn—should emerge out of the multifarious activities and practices in which teachers and students engage, while interacting both in and out of school. This use of language, rather than directing students to some per-set outcome, composes a "kinship of meaning" intimately related to these activities.

In his latter philosophy, Wittgenstein constantly uses the resemblances among our multifarious language-games to show us that through our experiences we are continuously altering our concepts about the world, like an ever-changing riverbed. Because to learn one thing is to learn others, as we acquire new facts we merely exchange one concept for another. At times these alterations occur without our even

[23]Genova, 124. Stanten, 67-68, further suggests that Wittgenstein's philosophical "method," rather than being a therapeutic conversation, is a ruse—an act of playful disruption that endeavors to stabilize our taken-for-granted understandings.

noticing that a change in our beliefs has taken place. In this way, what was once important to us becomes unimportant and what had been unimportant finds new importance.[24] In other words—taking a cue from Wittgenstein—what would a conceptual structure for the term "games" look like? Does not the "concept [games] "presuppose the concept 'difference of [games].'"[25] Because the games we play resemble one another in so many different ways, would there not be too many differences to make such a conceptual structure useful when trying to understand how the word "game" is being used in a particular situation. Instead, Wittgenstein is suggesting that by engaging in the practice of "seeing-as," teachers and students are engaging in acts of language-play, through which they are better able to understand the great variety of meanings that concepts reveal in our many language-games.

Reconceiving Curriculum as A Dialectic of Play

The practice of play that Wittgenstein offers the curriculum field suggests a different way of speaking (i.e., thinking) about how students come to understand (i.e., learn) the meanings that emerge from the dynamic, social interactions that take place among people when engaging in any activity. Furthermore, Wittgenstein's use of synoptic language play offers teachers' and students' insights into the curriculum that are different from the practical or instrumental explanations educators typically use to account for the way students learn in school. In other words, Wittgenstein engages in a practice of play in an attempt to persuade us to change our way of thinking about knowing and learning.

[24]In *Zettel*, no. 352, Wittgenstein asserts, "It is a fact of experience that human beings alter their concepts, exchange them for others when they learn new facts; when in this way what was formerly important becomes unimportant, and *vice versa*."

In his later philosophy, Wittgenstein is not attempting to create a theory of play. Instead, through the way he uses language to discuss the concepts of language-games and meaning-in-use, Wittgenstein is presenting the reader with a "practice of play" through his use of a conversational language-game to present his ideas—what Shotter describes as Wittgenstein's "poetics of practice." In so doing, Wittgenstein is endeavoring to expand our understanding of *meaning*, which logic has fixed through its *use* of method. Through his use of language-play, Wittgenstein is hoping to disrupt logic's methodological foundations it uses to understanding the world by transforming its understanding into a use of *non-sense*.[26]

Henry Stanten (1986) suggests that, while not speaking about a concept of play, Wittgenstein is playing "the classroom cut up;" he is acting-out his frustrations with logic's limited methodological representation of the world by playing the "refractory student, one who refuses to go the way [his teachers have] laid out for him, and he sets himself up as a model for other ruffians to follow."[27] By so playing, Wittgenstein is calling into question Western Civilization's social and intellectual norms (i.e., its exercise of practical "common sense"). The consequences of playing are believed to have little, if any, practical utility—as suggested by the statement: "children at play."[28] Through his use of seeing-as, Wittgenstein is playfully disrupting our conventional and practical understandings of the words that we use, thereby exploring the possible alternative

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[25]For the sake of this example, I have substituted Wittgenstein's use of the term, "substances," with the term, "games."

[26]Stanten, 132.

[27]Stanten, 132.

[28]Charles Lamb, in "The Old and the New Schoolmaster," 62, offers an adult's view of the impracticality of children at play, stating that children are "unwholesome companions for grown people. . . . The noises of children, playing their own fancies . . . inexpressibly take from the labor of my task. . . . for in the voice of that tender age there is a kind of poetry, far unlike the harsh prose-accents of man's conversation."

meanings among concepts, which our conventional ways of seeing do not provided. As such, he uses the practice of play in the recuperation of "sense" (i.e. understanding) through the use of "non-sense."[29]

The concept and action of play may, at first, appear to be paradoxical to the purposes presumably served by the school curriculum. This paradox is based upon an assumption that playing is equivalent to having "fun" or "frivolity."[30] On the other hand, not all learning that is understood as having fun is identical to learning activities that involve play. When teachers endeavor to make learning fun, they are generally attempting to get and hold their students' interest. Fun learning is understood as any classroom activity that is exciting and interesting. As such, fun learning is often presented as hands-on, experiential activities that compel students to discover or make something. However, just because some learning activities are *fun,* does not mean that students are engaging in Wittgenstein's practice of play.

Dewey suggests that the natural condition of children is to be playful; activity is the nature of their being. As with their concepts of knowing, Dewey and Wittgenstein's concepts of play converge at the level of activity (i.e., movement). Like Wittgenstein, Dewey maintains that play is an "activity which is not performed for the sake of any result beyond itself." Unlike work, play is not a means to an end. However, Dewey presents play as the natural precursor to work. He states: "Play passes into work when fairly remote results of a definite character are foreseen and enlist persistent efforts for

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[29]Stanten, 156, maintains that Wittgenstein's playful practice bares a kinship to deconstruction's "fictive possibilities." Similarly, both language-games and deconstruction appear to be attempting to disrupt ("*rupture*"), in Jacques Derrida's words, in *Writing and Difference*, translated and introduced by Alan Bass (Chicago: The University of Chicago Press, 1978), 278, "the organizing principle of the structure [that] would limit what we might call the *play* of the structure."

[30]William E. Doll, "Play and Mastery: A Structuralist View," in *Journal of Curriculum Theorizing*, 1979: 209-226.

their accomplishment."[31] Thus, for Dewey, the natural activities of a child are transformed into the practical activities of the adult when spontaneous acts of play are organized, controlled, and made purposeful through education. In other words, although the activity of play is the natural condition of being a child, play becomes work by applying its activity to specific ends or purposes. Interestingly, Dewey's belief that play is the preparatory stage for work carries echoes of Ramus's dialectical stages in which the "art of dialectic" transforms "natural dialectic" into an "exercise" of practical reasoning through classroom teaching.[32]

Although Wittgenstein uses the analogy of tools to describe the various ways in which language-games employ words, by using the "simile of a game" with language, he keeps his playful practice of seeing-as more non-utilitarian than Dewey's concept of play. Through the simile of games, Wittgenstein is not presenting language as a means, like some communicative or representational tool, working towards a utilitarian *end*, but as a synoptic activity (i.e., meaning-in-use) that, like playing a game, is an end onto itself. As such, Wittgenstein's language play is not simply a precursor to work. As Wittgenstein's use of the term "tools" suggests, the concept of playing sometimes carries with it meanings that resemble the way the term "work" is generally employed. Hence, while work is a means to some end (as in achieving a goal or objective—an

[31]Dewey, *Democracy and Education*, 204. This view of play as an activity that children engage in preparatory to becoming adults is a concept of play that Dewey brought forward into the twentieth century from the ancient Greeks. See also, Doll, "Play as Mastery," 210-211.

[32]See Doll, "Play and Mastery," 214-220, who suggests that similar to Dewey, both Jean Piaget and Jerome Bruner present the relationship between play and work as a preparatory one that is fundamental to the learning process. Furthermore, the similarity between Ramus's dialectical stages (Chapter Two, above) and the movement from a natural stage of playful activity to a more practical stage of work through the systematic ordering brought about by teaching is just as apparent in Piaget and Bruner's educational views on play. Whitehead's, 17-18, concept of "romance" presented in "The Rhythm of Education," in *Aims of Education*, suggests a notion of play. Not unlike Dewey's notion of play as preparation to work, Whitehead's "romance" is a preparation for his concept of "precision."

activity organized around achieving some managed end), Wittgenstein's language play is not a means to anything but itself.

Genova suggests that by disassociating the use of language from its assumed representational or communicative ends, one is better able to see language's dynamic nature.[33] In other words, because using language is an important aspect of the dynamic, social relationships in which humans engage, even when an activity or practice, like those occurring in a classroom, is directed toward some specific purpose or goal, the potential for play never disappears, but remains ever present in our everyday language-games. (Thus, any discourse has the potential of being transformed into a *farce*.)

For Wittgenstein all forms of play are acts of pretending, and pretending is intimately related to seeing synoptically. For example, he states:

> Here is a game played by children: they say that a chest, for example, is a house; and thereupon it is interpreted as a house in every detail. A piece of fancy is worked into it.
> And does the child now see the chest as a house?
> "He quite forgets that it is a chest; for him it actually is a house."
>
> And if you knew how to play this game, and, given a particular situation, you exclaimed with special expression "Now it's a house!"—you would be giving expression to the dawning of an aspect [seeing-as].[34]

As this example of seeing-as shows, when children engage in play, they are exploring the possible relationship between using language and meaning by acting out the use words in an imaginative context staged by an activity. In other words, pretending that a chest is a house is related to a conceptual relationship between the chest and the

[33]Genova, 117, further states that in this situation, "'Game' here does the same work as it does for Gadamer and Derrida." This is closer to the Ancient Greek notion of play that is related to the indirect use of language in the form of the *farce*. See Doll, "Play as Mastery," 210.

[34]*Philosophical Investigations*, II, 206.

utterance: *"Now it's a house!*" By uttering the words, *"Now it's a house,*" the conventional way that one sees a chest is disrupted. As such, Wittgenstein is showing us that the playful practice of seeing-as is activated through the use of language, thereby enabling a person to explore the metaphorical relationships between words, concepts, and the world. Genova asserts that when engaging in a new language-game we do not merely say things that have already been said. Instead, we are staging the utterances related to the activities and practices of a new form of life, thereby presenting to our selves the dynamic relationships found in a particular linguistic situation for the first time.[35] By exploring the multiple possibilities between concepts and the use of words, we are liberating meaning from its conventional usages, which enables us to explore further the frontiers of our understandings of the world. Thus, unless students are given the opportunity to explore their use language by playfully *seeing-the-curriculum-as*, they are missing out on the whole concept of play.

On the other hand, new meanings are not explored simply by students not following correctly a rule or technique when learning an ideal (i.e., logical) language-game. Such alterations in the game could be passed off merely as some categorical mistake when trying to apply the logic of the canon (e.g. someone is just not following the rules).[36] In this situation, the broader practices related to students' use of words would not be altered because the conventional use of language in which the rules are embedded maintains its dominance. If some form of *language-play*, though, is applied to the context of the mistake (whether explicitly or implicitly), a new language-game

[35]Genova, 123-124.

[36]See Gombrich's discussion of how any alterations in medieval art were considered to be canonical mistakes, in Chapter Two, above, note 28. Furthermore, this is the concept of "playing-at" that Fleener and associates are suggesting in Chapter Four, above.

begins to be explored and new meanings begin to emerge. As a new language-game emerges, new practices also emerge—a new form of life.

Wittgenstein's use of the simile of a game to better depict the relationship between learning and language suggests a dialectical relationship that cannot be attributable to the reasoning practices provided by either *praxis* (i.e., doing) or *poiesis* (i.e., making). Nor is it a function of the analytical practices required for theoretical speculation (i.e., *theoria*) or philosophical wisdom. One might consider that Wittgenstein's use of play, rather than being simply a return to Ramus's "natural dialectic," suggests a third dialectical relationship. Instead of following Aristotle's philosophical categories of "the practical" (doing) and "an art" (making—*techne*), Wittgensteinian play is a dialectic of the impractical and non-technical, engaging in open-ended, generative activities related to the unrefined induction presented by his synoptic way of seeing-as—an inexact, pragmatic, momentary, and contextualized holistic way of understanding that questions modern philosophical and pedagogical practices.

Jerome Bruner (1975) suggests that play offers students the kinds of non-directed activities they can quickly generalize that are crucial to their ability to transfer learning beyond specific classroom activities.[37] This view of play's pedagogical role, similar to Wittgenstein's, echoes the kind of knowing expressed in Ramus's assertion that young children first learn from particulars (understood here as learning by doing) that moves them quickly to generalize about the world "like eagles soaring to the sun."[38]

[37]Jerome Bruner, "On Coping and Defending," in *Toward a Theory of Instruction* (Cambridge: The Belknap Press, 1975), 136. For Bruner language remains a representational and communicative system.

[38]See Chapter Three, above, 80. Similar to the important role played by Ramism in modernity's quest for method, this understanding of Ramus's thought as presenting a method of learning by doing has

Such an untrammeled and immediate way of understanding the world, presented by Wittgenstein's playful practice, suggests a new kind of aesthetic, one that is not scientific, mechanistic, nor historical or progressive.[39]

Wittgenstein's practice of play cannot be methodized. Nor can a theory of play be established because a theory must carry with it a set of practices that serves the purpose of demonstrating correctness or incorrectness. Yet, like the Greek concept of dialectic, Wittgenstein's use of play has no specific content. (To the extent that play is related to content, it begins to approach our concept of work). With no content, play has no form. With no form, play requires no specific technique. Such a dialectic of play cannot be quantified, and, therefore, it would have nothing that can be accounted for. With nothing to account for, it cannot be effectively demonstrated (i.e., applied with a degree of certainty), analyzed (i.e., reduced to its essential nature), or tested (i.e., replicated procedurally). As such, a dialectic of play cannot be taught because it cannot be systematically planned for or implemented. No one can teach what good playing is, nor explain what playing badly might consist of. However, one can and does learn to play. Furthermore, the practices one learns when playing are used to learn other things.

Pedagogically, a Wittgensteinian dialectic of play may not, at first, lead to the use of any teaching-learning activities that are fundamentally different from those already attributed to hands-on or experiential learning strategies. Over time, thought, a dialectic of play would free teaching-learning activities from being sequentially ordered and

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been lost in the history education. Learning by doing, as an empirical-inductive method of education, is typically thought to begin with Francis Bacon. However, this issue should be reconsidered in light of Ramism's influence on schoolmasters throughout Northern Europe.

geared to a method of assessment. Thus, new pedagogical questions and insights might well emerge. Former question, such as, How does one teach a student such and such, or How do I know that a student is learning what is being taught?, would be replaced by What learning is *at play* in the activity being perused? Pre-determined learning outcomes and objectives, while possibly directing students to appropriate answers, limit the language (and thoughts) used to present the curriculum, thereby limiting students and teachers' abilities to explore and understand the various meanings that emerge from a broader use of language. Within the current school curriculum, bound by pre-determined and standardized objectives and assessments, it will be difficult for teachers and students to engage in Wittgenstein's practice of play. Yet, such engagement is important for it brings into view the important pedagogical and ethical question: What unintended outcomes are students learning from an activity, those not related to a lesson's stated objectives?[40]

Implications for Pedagogical Practice: Curriculum as Synoptic Language-Play

By investigating the synoptic and playful aspects of our everyday use of language, rather than trying to unravel languages methodological, communicational, and representational processes, Wittgenstein's language-games offer curriculum theorists a way to enhance the reconceptualization of curriculum's theoretical and pedagogical practices. Furthermore, reconceiving curriculum as an act of synoptic

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[39]See the new aesthetic for knowing and thinking that Wittgenstein presents in his *Lectures on Aesthetics*.

[40]The pedagogical question of what else is learned by an activity is similar to Bruner's fourth principle in his theory of play, in Jerome S. Bruner, Alison Jolly, Kathy Sylva, *Play—Its Roles in Development and Evolution* (New York: Basic Books, 1976), 15, in which he suggests that play offers the opportunity to explore other possibilities inherent in a student's learning experiences. In addition, play offers teachers the freedom to notice details in a students learning activity that seem irrelevant to the defined purpose of the activity.

language-play helps curriculum theorists answer the criticism that reconceptualized perspectives provide little that is new to educational practices, little which has not already been suggested by progressive educators in the past.[41]

Reconceiving curriculum as a practice of synoptic language-play allows students to imagine how they might use a new language-game. We do not "see" these imagined contexts with the senses. Nor is an imagined situation constructed by or for one alone. Instead, they are socially composed and situated by and within the context of our everyday language-games.[42] When imagining some new context, we are using our language-games to describe what could be possible. Thus, when students imagine a new situation, they are using the newly acknowledged language-game to see new aspects of an emerging form of life.

While the traditional school curriculum is typically presented as two opposing methods of instruction with experiential learning on one side and didactic teaching practices on the other, by using Wittgenstein's synoptic approach of seeing-as these different methods of teaching begin converging at the level of language. Curricularists need to recognize that teachers and students use of words to describe, both to each other and to themselves what they are learning and doing, plays an important role in experiential learning activities. Furthermore, learning subject area knowledge is closely related to experiential learning activities through the use of language. Because it is

[41]See, for example, William Wraga, in "'Extracting Sun-Beams out of Cucumbers': The Retreat from Practice in Reconceptualized Curriculum Studies," in *Educational Researcher* 28, no. 1, (1999): 4-13.

[42]Richard Evans and Thomas Barnet Lamb, "GDC 2002: Social Activities: Implementing Wittgenstein," in Game Developers Conference 2002 Proceedings (San Jose, CA: Internet, 2002) http//www.gamasutra.com/features/20020424/evans_01.htm. The authors suggest that using Wittgenstein's concept of language-games to construct activity-oriented structures could be the best way to improve the social practices of human-like agents in simulation games.

through language that students begin to understand the conceptual relationships that exist between the subject disciplines and their experiential learning activities, synoptic language-play begins conflating the differences educators and theorists have accepted as existing between these two practices.

Going back then to the metaphor of the knot in the first chapter, we may see a knot, identify it correctly as a knot and then move on. This might be the approach encouraged by a Tylerian curriculum. However, from Wittgenstein's perspective, to do so interrupts our looking for new conceptual possibilities by seeing, discussing, and listening to the multiple contextual relationships—the messiness, the entanglements, and the fibers—that constitute the Gordian twists left transparent by a Tylerian approach. As it relates to studying history, what the school curriculum says *is* "history," the understanding that "history" is *the* story of our past. We do not perhaps understand that this past has been (re)constructed (reformed) from progressivism's, or some other *'ism's*, particular perspective. When presenting our past as *the* "history," we do not, perhaps appreciate the great variety of fibers that constitutes the thread that becomes the single-voice narrative that could be told as multiple stories, parodies, or allegories—and then, it is still not *my history*.

As Wittgenstein's own teaching experiences show, teaching practices that involve a dynamic use of language-play to help students experience the world synoptically, rather than analytically, provide students an opportunity to build and create their own learning "technologies," thereby offering teachers "*effective*" educational strategies that are, at the same time, "*efficient*." It is the varied use of language, rather than knowledge structures, that enables students to participate in the various forms of

life that give them a context to more broadly understand the multiple language-games used in the larger world about which they read, write, and calculate. As such, one might suggest that it is a student's ability to apply multiple language-games in a variety of constantly changing contexts and not some ideal or meta-discourse that is fundamental to being "literate" in today's world.

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VITA

Growing up in New Orleans served as a backdrop that fostered Stephen Triche's love of history. It was not until after joining the Navy, shortly after graduating from high school, that he decided to go to college to pursue a history degree. He earned his bachelor degree in Russian studies in 1979 from Louisiana State University (LSU). After working as a financial advisor and later as a store manager for several years, he earned a master's degree in Russian history from LSU in 1991.

Upon entering the doctoral program at LSU in curriculum and instruction, he began teaching Developmental Reading, first as a graduate assistant and later as a full-time instructor. In time, LSU's Developmental Reading program evolved into a College Learning program, which he coordinated for several years. For the last two years, he has been a visiting instructor at Nicholls State University. He has been teaching a range of courses in the College of Education, including both foundations and methods courses. He is presently a member of the Philosophy of Education Society, the National Counsel for the Teaching of Social Studies, the Society of Curriculum History, and the International Association for the Advancement of Curriculum Studies. He plans to graduate with a degree of Doctor of Philosophy in curriculum and instruction in August, 2002. His research interest include curriculum history, Wittgensteinian Philosophy, social studies curriculum and pedagogy, and cognition.