"Look, Karen, I'm Running Like Jell-O":
Imagination as a Question, a Topic, a Tool for Literacy Research and Learning

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In this paper I examine the role of imagination in literacy learning using data collected over a 5-year period in my primary classrooms. My conception of imagination as a missing component in literacy instruction was raised by a child's question about the importance of the read-aloud experience as a daily literacy practice. That question, and my failure to answer it effectively for my student, prompted me to undertake a close study of imagination and its role in discourse acquisition. The study progressed from a general look at how imagination makes itself visible in the work of children to a conceptual structure that proposes an inside-out *theory of literacy learning. This structure presents identity, discourse appropriation, and what I am calling* the authoring process *as essential elements that are unified through the imaginative actions of students as they come into contact with the texts, tools, and props of each discipline. I argue that to be successful and meaningful to all, literacy teaching must begin and end with a focus on imagination.*

Introduction

Field Notes: September 22, 1995: Emily is sitting alone at a table with one of her ants in her hand. She is talking to the ant, asking it questions.

EMILY: Do you have anything else to say? She puts her head close to the ant and listens. Later she explains that the ant has been telling her that she's ten years old, and her birthday is August 2nd, and it's a her. She shows me how she wrote that information on a piece of paper. (See Figure 1; the names of all students in this paper are pseudonyms.)

Emily was the first child I had taught who, at six, had quite plainly begun her life work. Emily is a scientist. It is quite possible she was born that way because she is the only six year old I've met whose life revolves around a desire to immerse herself exclusively in a study of the natural world. In Emily's case her chief fascination is with insects, most especially ants. During the year I taught her, in fine weather she spent all of her outdoor time pursuing insects, capturing them, and making containers to keep them in so that she could take them home with her for further observation. As a collector she was never without plastic baggies, and any crawl-

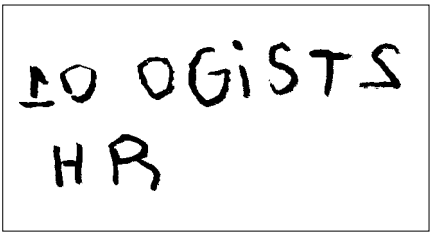

Figure 1. Emily's notes about her ant

ing thing was scooped up and put in her cubby for later study. She drew the insects and bugs she collected, wrote about them avidly, and offered a wealth of information about most of them to anyone who was interested.

She was not, however, a child who ever chose to read a fiction book or listen to a fictional story. She did not involve herself in dramatic play unless I asked her to do so. At home she insisted on being read only nonfiction, although her parents made valiant attempts to read fiction with her. When she was left to herself, her interests in life were exclusively in natural science and/or things that were "real." I was surprised, therefore, to find out early in the school year that Emily believed she could talk to insects (and who am I to say she can't?). Often at recess and sometimes in the classroom, she could be seen walking around engaged in serious conversation with whatever poor creature she had happened upon.

At the time I taught Emily I was beginning my third year of inquiry into the subject of imagination and the role it plays in early literacy, and she provided a unique example of the workings of imagination as it interfaced with a specific discipline. Yet Emily was just one child among many who were playing out their imaginative lives in plain view of anyone who cared to watch. This paper places the imaginative work of Emily and many other children into a framework that attempts to focus attention on the role of imagination in literacy learning. I describe how my questions about imagination emerged, although I will not claim to have answered those questions. I will propose three ways in which I believe imagination is linked to discourse acquisition and forms a cornerstone of the literacy process for students of all ages, presenting data that focus on the issues of identity, discourse appropriation, and what I am calling *authoring*. In each of these areas, the development of my theoretical structure will be laid out chronologically so that the reader can see the recursive way in which my process as a teacher researcher changed my practice, which in turn changed my theoretical framework, which again changed my process as a teacher researcher, and so on.

My purpose in pursuing this chronological process is to make tangible the role of imagination as I have seen it working in my classrooms; to open up for discussion the necessity, in fact what I believe to be the imperative, of studying the imaginative work of literacy learners more closely. My descriptions will focus on the *prosaics* (Morson & Emerson, 1990) of imagination. In other words, I will not describe well-planned, teacher-orchestrated artistic events whose goal was to elicit specific imaginative responses to

my instruction. Rather, the data included here are comprised of everyday incidents of imagination I observed and participated in that were part of the stream of classroom life.

It would, however, be the height of hubris for me to make the claim that by the end of this paper the reader will have a coherent description of imagination. Rather, it is quite likely that for some of my readers I may only provoke the sort of disorientation and sense of intangibility that this research has regularly produced in me. To be honest, most of the time I can barely make out the image of what I am trying to understand and reach for. There are brief flashes of understanding and insight when I know for sure that my search is hitting home with children: My data show me that, the children's achievements show me that, but then those fade into the background. In essence, most of the time my research questions are much too hard. Nonetheless, I remain optimistic. My belief in the centrality of imagination to children's work in the world pushes me to try and make this elusive process concrete, to point out patterns in what more closely resembles disorder and randomness, and at the same time to propose, as Binet puts it,

> A theory of action, according to which mental life is not at all a rational life, but a chaos of shadow crossed by flashes, something strange and above all discontinuous, which has appeared continuous and rational only because after the event it has been described in a language which brings order and clarity everywhere; but it is a factitious order, a verbal illusion. (cited in Donaldson, 1963, p. 28)

Imagination and Education

The idea that imagination is a critical part of the educational process is certainly not a new one. At different points in the last century, educational theory has embraced the arts, creativity, play, children's questions, and the idea that human intelligence is multidimensional and human expression multimodal (Cadwell, 1997; DeBono, 1969, 1970; Edwards, Gandini, & Forman, 1993; Eisner, 1976; Gardner, 1973, 1980, 1982; Greene, 1995; John-Steiner, 1985; Kellogg, 1967; Richardson, 1964). In the same way much of my work as a teacher and a researcher has been circling around the workings of imagination. My training as a teacher in the early 1970's focused on the methodology being articulated in the British Infant Schools at that time, in which rich experiences with materials, the importance of play, and the role of the arts in learning were integral. From that base I built a teaching philosophy that placed the arts and creative expression in the center of the curriculum. I have always believed that play is a critical part of learning and that wonder feeds our desire to understand the world. These beliefs have shaped my teaching and directed my research.

The use of imagination, therefore, is not new to the field of education or to my practice, but for educators and researchers it remains, with a few exceptions, a peripheral subject. Educators know intuitively that imagination is important, but it is difficult to describe how, when, and why it is important. They describe the ways in which

teachers can support children's imaginative work and use imagination as a teaching tool, but do very little to describe the workings of the process itself as it relates to educational goals. Most often the subject of imagination is approached through discussions of creativity, but imagination remains a mysterious, albeit useful dynamic, something that educators vaguely know is important to many kinds of creative pursuits. While it is not possible in the context of this paper to do an extensive analysis of the relationship between creativity and imagination, for the purpose of directing the reader's attention I would offer a simple distinction between creativity and imagination. Creativity is most often defined as a process of construction of the new, while imagination is a form of thought in which the new is brought to awareness. Both, therefore, have to do with generating the new, but creativity speaks of action in the mind and the world, while imagination speaks of a power of mind that, as it comes in contact with the world, synthesizes a range of cognitive, aesthetic, psychic, and psychological processes into ideas and images.

Although the subject of imagination has been a peripheral one in the field of education, it has been widely explored by philosophers, artists, theologians, and scientists. Many artists have explicitly written about their imaginative processes (e. g., Coleridge, 1907; Grotowski, 1968; Lewis, 1956; Paz, 1990; Sartre, 1964; Stevens, 1960). Philosophers and theologians have considered the role of imagination in learning, perception, and more broadly as a way to situate oneself in the world (e.g., Bachelard, 1971; Corbin, 1969; de Chardin, 1960; Greene, 1995; Sartre, 1961; Warnock, 1976). Scientists have spoken or written about the role of imagination in the development of their work (e.g., Cobb, 1993; Fox-Keller, 1983; Holton, 1973; Medawar, 1982; Ochs, Jacoby, & Gonzales, 1996; Raymo, 1987; Root-Bernstein, 1989; Salk, 1983; Wolpert & Richards, 1997).

Thus, there are many first-hand accounts of the imaginative process at work in the lives of adults who have succeeded mightily in their respective fields. These accounts are rich with descriptions of the role of imagination. The writers speak about becoming an expert in a chosen field, about the processes at work in generating important theoretical and experimental breakthroughs, and about the connection between the inner world of perception, belief, and identity and the outer world of work and achievement. Rarely, however, are their insights and theoretical positions taken into account within the field of education. Only recently in the context of literacy research and teaching have a few scholars begun to direct their attention to the role of imagination in the process of becoming literate in a discipline (John-Steiner & Meehan, 2000; Warren, Ballenger, Ogonowski, Rosebery, & Hudicourt-Barnes, 2000).

Why Imagination?

My desire to understand imagination began with a teaching problem. In 1994 I met Denzel, a second grader. Denzel was healthy, happy, intelligent, and serious about school, but he had not been

read to in his home. He learned to read in second grade but could not be engaged in listening or responding to literature at read-aloud time. I spent one teaching year looking carefully at the meaning and function of storybook reading and exploring Denzel's and my other students' perspectives on that very central part of early literacy teaching (Gallas, 1997). By June of that year, I concluded that Denzel did not have the ability to project himself imaginatively into the life of a *read* story, and I also saw that he could not deeply engage with many other kinds of classroom texts to advance his own learning.

At that point I began to view imagination as a critical component of literacy learning, and as a teacher I went on to focus more clearly on the kind of learning that I considered to be the goal of my work with children. Denzel helped me see that what I wanted was to take my students beyond basic skills that "toe at the edges of literacy" (Gallas, 1997, p. 253) to move them toward a deeper understanding of the texts, talk, and semiotic tools that lie at the heart of each discipline (Lemke, 1990; Smagorinsky & Coppock, 1994). I felt I had failed Denzel because I had not been able to build an explicit bridge to that kind of involvement. However, it was precisely that sense of loss and inadequacy that pushed me into a deeper consideration of the topic of imagination.

Imagination as a Question

> Everything man does that's worth doing is some kind of construction, and the imagination is the constructive power of the mind set free to work on pure construction for its own sake. The units don't have to be words; they can be numbers or tones or colors or bricks or pieces of marble. It is hardly possible to understand what the imagination is doing with words without seeing how it operates with some of these other units. (Frye, 1964, p. 119)

My fieldnotes from the week of June 16th through the 23rd of 1994 show how, after 9 months of inquiry into storybook reading, I came to identify imagination as a focus for future inquiry. The following is an excerpt from my fieldnotes written in the last week of school:

> Field Notes: June 16-23, 1994
>
> *Monday:* I've been very distracted by Denzel and what I perceive to be some kind of failure on our part to crack this thing called school. I want to feel like he has entered the metadiscourse on thinking and learning that the other children move so freely through—the one that combines intellect and creativity, that uses imagination to enter new subjects, or books, or poems. I don't feel I've gotten him to the point where he is developing a knowledge of higher order thinking and how one accesses that. What is it that I want from him? It seems to be a particular kind of mindfulness. How to define it?
>
> *Tuesday:* We have our summer-baby-birthday-party. Parents bring in great food: sushi, cake and strawberries, cookies, cupcakes, juice, and Jell-O. Ayako's mom made a raspberry Jell-O that was just beautiful: layers of white and red gelatin. Denzel had four servings. We went outside to play, and half the class started to make up a line game that resembled Red Rover, but their line was like an ocean wave that chased and then enclosed whomever it caught. They were chanting nonsense rhymes, laughing and falling. Denzel and Alex came out a little late and they watched for a few seconds. Then Denzel came over and asked me if he could go and play catch with his cousin, who was also out on the playground

with his class. I said no, that I wanted him to play with our class. The children went under a big, shady pine tree and conferred. Denzel stood on the edge of the group, listening. Then the children broke apart running in goofy ways, making nonsense sounds. Denzel watched them for a minute, then followed running in a jerky, wobbling manner past me, and he had a big smile on his face and called out, "Look, Karen, I'm running like Jell-O!" He continued running after the group, then reached them and ran on. I stood still, trying to grasp the words and shocked at the metaphor that had just come out of his mouth. Had I ever heard him use a metaphor before? I don't think so.

Wednesday: At recess I watched Denzel playing soccer with a group of boys using the entire playing field, which is huge, for their game. At one point Denzel was skipping backwards, anticipating the arrival of the ball. He was really skipping backwards as fast as he could with no one in sight. Then he tripped, fell, rolled over once backwards, jumped up with a huge smile on his face, and continued skipping backwards.

Thursday, the last day of school: We usually have a private class recital. That means that anyone who wants to perform can. Children dance, sing, play instruments, do impersonations. When I asked in the morning who wanted to perform, about half the class responded, including Denzel. My intern, Cindy, and I surveyed what the children would be doing. Denzel said he would be doing a dance. That afternoon we gathered in the auditorium, sitting in two levels of chairs around the piano. When Denzel's turn came he got up, went to the center of the empty space, and announced, "I will do a dance from Karate. And it's called 'The Lion.' But I won't do the song."

He then performed a very beautiful series of movements beginning with a crouch, transitioning to back rolls and somersaults that propelled him around the edges of the audience in an arc. Then he sprang up onto all fours and crawled slowly across the center of the space growling in a low, even . . . Was it a purr? A lion's purr? Our mouths dropped at this and the children, who had been absolutely silent and still, bent forward imperceptibly to see him, wondering I think as I was whether they were hearing things! Finally Denzel stopped, dropped lower to the floor, and then raised himself up on his knees with his hands resting on his lap. "Done," he said. We applauded, still somewhere between wonder and bewilderment. Then Denzel announced, "The Snake." He began again, a less choreographed version of the movement of the snake including more rolls, half somersaults, a dance clearly emerging from the martial arts. But this one seemed different from the first. I could have sworn he was improvising.

What I saw Denzel do in those last few days of school negated my judgments about his lack of imagination. Clearly imagination was there working for him on a very sophisticated, aesthetic, and intellectual level, but it was working outside the units of words. For Denzel, movement was a way for him to imaginatively understand his world, one I had missed in spite of careful watching and talking for 9 months. After this final observation my questions emerged clearly: What does imagination look like in its different forms? Where does it fit in the process of literacy learning and teaching? How does one pursue a study of something as permeable as imagination? As Frye (1964) points out, in order to fully "understand what imagination was doing with words" (p. 119), I needed to broaden my notion of the forms it took in everyday life.

Method

Beginning with Myself

To consider imagination as a topic to be investigated, I realized I had to start with my own life since I had never paid

close attention to the ways in which imagination functioned for me. From July of 1994 through the summer of 1995, a year in which I was not teaching, I kept a journal about my own experiences of imagination using personal experience as a way to focus in on the problem of expanding how I viewed the subject. I contemplated, for example, the problem of understanding pure movement as an imaginative form, recording what passed through my mind when I took my daily two hour walks, when I danced, when I swam. Slowly I began to get a fix on how imagination did and didn't work for me. For example, in early December as I walked along a desolate stretch of Gloucester, Massachusetts coastline, the following words popped into my head. After they ran on for a while repeating themselves and gradually expanding as new phrases were admitted, they finally came fully to consciousness, and I stopped by the side of the road and wrote them down as fast as I could:

> Once this coast was common land, covered only by spanses of wooly briars, old man's beard, bursting clouds of filament, wily oaks, and crackling bittersweet. They ran from the edge of the beaches just behind the tufts of sea grass, straight across hills of granite and pine—forever. The only way in was from the rocky coast, and it offered no knowledge of how to pass through. There were no paths, only deer run and the low, damp tunnels of ancient box turtles. In this land, I live, with little memory or imagination. My sight of that time is limited to night frights and small moments of delight in the objects cast off by the ocean.

This reflection is only partly true. There is a quality of imagination that admits me to other worlds, that begins stories about things or people I see and lets me begin to build their story around some random (or purposeful?) act, one I only happen upon. But those stories are only beginnings. They never end because, as I said, my imagination is a small one confined mostly to night frights and flights of bizarre fancy. I begin these stories and then, because their endings would either be too filled with joy and resolution (something I have never understood), or too perverse (something I fear), I abandon them. And besides they only unfold in my head. The texts are never more than vines of story, starting and stopping, then unwinding in quieter hours.

This kind of text represents a part of what I was trying to bring to awareness. By studying my own experience of imagination, I felt I could begin to pull the phenomenon apart and develop new categories within it. In fact, over the year I did begin to identify a number of different ways in which my imagination was functioning, recording examples over time of fantasies, delusions, wonder and questioning, play, dreams, songlines, movement patterns, fears, visualizations, projections, and more.

I also began to discover the ways in which those functions had positive or negative effects on my daily life and on my own learning. For example, the following excerpt from my journal illustrates a case in which my imagination interfered with my learning. In this case I had been learning to scuba dive and was having my first class using scuba equipment in water. I wrote:

Although I had wanted to learn for a long time, every now and then a bit of panic would seize me as the thought of not being completely in atmosphere (that is, breathing air naturally) passed through my mind. What I was aware of was the lack of control in the endeavor. In other words, if everything went well, this new pastime was a snap; but if something went wrong. . . . Well, my imagination ran amuck with the possibilities. I was definitely in trouble, imagination overrunning logic; the whole thing had hints of mortality about it. I was fine until I went down, breathing as I'd been taught, but the quality of the breaths was alarming. There wasn't enough air, just as I'd imagined. I became claustrophobic and signaled that I had to surface.

Defining Imagination

By the end of that year there were very few aspects of daily life I could name that were not influenced by imagination. For example, at their most basic levels the functions of the autonomic nervous system (breathing, swallowing, digestion, the beating of the heart, the blinking of the eyes) are not governed by the work of the imagination. However, upon further consideration it becomes clear that these functions, if acted upon by the conscious mind, can be altered by the action of imagination. Hence, the emergence of different body-mind practices such as yoga, meditation, and biofeedback, as well as the existence of psychosocial disorders such as anorexia nervosa and post-traumatic stress syndrome. Essentially even the simple act of walking down a street requires a form of imaginative projection to bring itself to completion: We must first develop a goal that is to be achieved in the future (taking a walk), plan the route of the walk, predict the weather conditions and dress accordingly, anticipate the hazards on the street, and finally remember to take along the key to the house so that upon our return we are not locked out. Each of these functions—planning, predicting, anticipating, and remembering—cannot occur effectively without the work of the imagination.

Expanding the Search

For the purposes of thinking about Denzel and my original questions, however, I also needed to explore how imagination was conceived of on a theoretical level from the perspectives of many different disciplines. I sought to expand my ideas by reading first hand accounts of imaginative work by artists and scientists and theoretical works on imagination in the fields of literature, psychology, theology, and philosophy. I found the works of Warnock (1976), Sartre (1961), and Cobb (1993) in particular to be especially helpful as I reconsidered the relationship of imagination to learning. Sartre, for example, describes the way in which "imaginative knowledge" interacts with the world: "[I]magination is not an empirical and superadded power of consciousness, it is the whole of consciousness as it realizes its freedom; every concrete and real situation of consciousness in the world is big with imagination" (p. 270). Within this definition Sartre proposes that to comprehend events in the world, whether reading a novel, viewing a painting, or participating in a mundane daily event, there must be a movement back and forth between the real and the imaginary. Thus, the mind apprehends the

present by association with the past. However, Sartre's conception of imagination underscores the tension that existed for me in attempting to define and study imagination. In his framework imagination represents both freedom from reality and dependence upon reality for its meaning. Artworks, novels, poems, and performances become "analogues" that convey meaning using reference points that are from lived experience but are not real themselves (p. 277).

Thus, to imagine something one must know it in some way in the world, and to comprehend events in the world, one must use imagination as a reference point. We move back and forth between consciouness and the "hidden surpassing towards the imaginary" (Sartre, 1961, p. 273). Images take us to a new levels of understanding, but our apprehension of them is constituted by real experience:

> It is the image which is the intuitive "filling in" of the meaning. If I think "sparrow," for instance, I may at first have only a word and an empty meaning in my mind. If the image appears, a new synthesis is formed and the empty meaning becomes a consciousness full *of sparrow*. (p. 83, emphasis in original)

Warnock (1976) speaks to another aspect of imagination, that of interpretation and its relationship to perception. She emphasizes the importance of imagination to the process of finding meaning in unfamiliar symbolic objects:

> [W]e use imagination in our ordinary perception of the world. This perception cannot be separated from interpretation. Interpretation can be common to everyone, and in this sense ordinary, or it can be inventive, personal, and revolutionary. So imagination is necessary to enable us to recognize things in the world as familiar, to take for granted features of the world which we need to take for granted and rely on if we are to go about our ordinary business; but it is also necessary if we are to see the world as significant of something unfamiliar, if we are ever to treat the objects of perception as symbolizing or suggesting things other than themselves. (p. 10)

Cobb (1993) uses a framework of human ecology to describe the development of imagination. She views imagination as a "bioaesthetic striving" in which "the child must transcend nature psychologically and semantically before he can know the nature he perceives in cultural (i.e., human) terms" (p.18). Cobb's extensive review of the role of imagination in the development of artists and scientists offered me a rich context from which to consider how close contact with the natural world sustains the sense of wonder throughout the life cycle.

These scholars and others broadened my ability to look back at Denzel, to better understand the points at which he had and had not made contact with storybooks and other kinds of classroom texts and to clarify my observations about my own imagination. By the beginning of the new school year, I believed that the next step would be to begin watching children.

Research Design

In the years since 1995 I have continued to inquire into the workings of imagination, focusing on the children in my primary classroom. Using ethnographic methods I have collected data very widely. My data include transcripts

of audiotapes of classroom interactions and interviews and fieldnotes from both structured and unstructured classroom experiences. Structured experiences included activities such as sharing time, science lessons, math lessons, and reading lessons. More unstructured expressive times came when my students chose their own activities, such as dramatic play, music, art, and block building, with very little orchestration on my part. In both structured and unstructured class time I acted as a participant observer, actively taking fieldnotes on an Alpha Smart Pro and/or audiotaping our classroom interactions. For classroom events in which I was directly involved either as a teacher or as a co-actor, my fieldnotes were taken later in the day when I was not teaching, from as little as thirty minutes later to as long as six hours later. Often, if there were details of physical description or dialogue that I believed were significant and a tape recorder was not going as the event was unfolding, I would jot down snatches of conversation on sticky notes to use as prompts for my later writing. Generally my students knew that I regularly recorded in writing or on tape what they said and did.

Imagination as a Research Tool

While the purpose of my research was to follow the workings of imagination in my classroom, I also found that my own exploration of imagination enabled me to use the imaginative process itself as a kind of metacognitive tool in two areas. It is no surprise that by closely studying my own imaginative life I increased my capacity to employ that process as a teacher and a researcher. Thus, I found myself developing a research ethos that incorporated imagination into my stance as a participant observer and into my point of view as I worked with my data. Later in this paper, the reader will see that I made decisions about how to participate in my students' learning from an imaginative standpoint, participating both as a child engaged in a performance and as the teacher engaged in scaffolding young children from one kind of expressive work to another. Further, throughout the process of making sense of what my students were doing, I worked hard to imagine myself into their positions as social actors and students of literacy.

Data Collection in the Classroom

The problem of researching something as intangible as imagination prompted me to begin watching what children were doing in a different way. Instead of identifying a specific question in thinking about literacy, I began simply to look for evidence of imaginative work wherever and whenever it occurred. One might characterize this as watching for what Dyson (1993) would term the unofficial work of children, except that I made new spaces for imagination to emerge in my classroom, thus bringing it into the official realm. I wanted to get a broad picture of imagination from the child's perspective, and so I changed my practice to accommodate my research question.

To help me achieve this goal I created a classroom environment where my students had an unusual amount of room to flex their imaginative muscles, as it were, so that I would have opportunities to observe and document their work. There were times when I joined them in their exercises: participating in their dramatic play, painting with them at the easels, joining in their fantasy games, at all times eavesdropping on their conversations, and collecting what they left behind.

Data Analysis

From 1995 to 1997, during the first part of my inquiry into imagination, I brought data from my first and second grade classrooms to the Brookline Teacher Research Seminar. The members of the seminar, who had been meeting weekly since 1988, had developed a protocol for discussing and reflecting on the data they presented to each other. The group's role was to assist presenters in coming to a deeper understanding of their data and their reasons for bringing it to the seminar. At different points in each school year, we wrote memos focusing in on key questions and issues from our research. Those memos were also presented and discussed. (For a more detailed description of the processes of the Brookline Teacher Research Seminar, see Ballenger, 1999; Phillips, 1992, 1993, 1996.)

Following my move to California, I continued the practice of transcribing and reviewing audiotapes and of writing focusing memos as organizing concepts emerged. Although I continued to collect data from all aspects of the school day, I began to sort and cross reference transcripts, fieldnotes, and classroom artifacts (originals and copies of work, photographs of children at work and of their artwork and constructions) for my questions, which were becoming more specific. When I began writing this paper in 1999, the process of sorting and resorting continued throughout the different drafts of this paper and was propelled forward by the writing process.

Participants and Setting

The children whose work will be cited in this study came from two different research settings. Denzel and two of the focal children, Emily and Sophia, were my students at a large public elementary school in Brookline, Massachusetts, an urban community on the edge of Boston. That school had a culturally and racially diverse population of more than 550 students in grades K-8. The remaining children cited in this study are students in a small, rural charter school on the central California coast. This school serves a relatively homogeneous Caucasian population and has approximately 150 students in grades K-8.

The physical design of my classroom in both settings reflected my longstanding belief that elementary classrooms should be richly provisioned and should provide many different kinds of spaces for learning and teaching. Thus, my classrooms included active play spaces adjoining one another that encouraged children to eavesdrop and extend their dramatic play and class work into different areas and media, as

well as quiet work tables where children worked alone or in small groups. The materials in the classroom were displayed on open shelves where children could easily handle them and included resource books, natural materials, the *tools* of the classroom and of study (for example, magnifying glasses, rulers, staples, scissors, hole punchers, tape, etc.), assorted papers and writing instruments, manipulatives, and a variety of art materials such as colored pencils, chalk, markers, crayons, pastels, paints, clays, brushes, stencils, and stamps. Although my students did not have assigned desks, they each had several cubbies where different kinds of ongoing work were stored. The classrooms also included a large meeting area, usually bordered by a small couch or comfortable chair. In this space whole class meetings, sharing and group discussions, and small and large group instruction took place; group stories and poems were composed; students presented their work; stories were read; and various kinds of manipulative games were played. Thus, the physical space of the classroom reflected my desire that my students and I be mutually aware of everything that was going on in the classroom.

Imagination and Identity

Building an Inside-Out Theory of Literacy

As a teacher researcher seeking to find some form of guidance in making an elusive and seemingly illogical process logical, or at least tangible, to myself and others, I have been continually drawn to conceptual positions that offer what I would call *inside-out* theories of literacy. In her work on the teaching of reading, Ashton-Warner (1963) described her discovery that to be successful with Maori children, she had to exploit what she called the "volcanic vent" of the child, the child's inner source of creativity and violence (p. 29). Ashton-Warner's conviction gave rise to her articulation of what she called the Organic Reading method and the use of the Key Vocabulary for teaching reading and writing. For Ashton-Warner, literacy was achieved by tapping into the center of her students' inner lives and using their hopes, fears, fantasies, and conflicts to make words and the act of reading *essential*:

> I see the mind of the 5-year-old as a volcano with two vents: destructiveness and creativeness. . . . And it seems to me that since these words of the key vocabulary are no less than the captions of the dynamic life itself, they course out through the creative channel. . . . First words must mean something to a child. First words must have intense meaning for a child. They must be part of his being. . . . Pleasant words won't do. Respectable words won't do. They must be words organically tied, organically born from the dynamic life itself. They must be words that are already part of the child's being. (p. 30)

Ashton-Warner's (1963) identification of "the dynamic life" of the child moves me closer to defining the process I am seeking to understand. Note here that the creative process produces words that are "the captions of the dynamic life," but as a teacher, Ashton-Warner is after the center of the child's being. She describes a classroom where rich experiences were offered in all of the arts with every experience intended to further what she called the alternating

processes of "intake" and "output," or "breathe in" and "breathe out" (p. 89). In other words, the first part of each day explicitly introduced the world of language and literacy to her students, while the next part called on them to make meaning of that world through expressive action. In addition, Ashton-Warner discovered the integral part that social and cultural factors played in literacy learning, complaining at one point that

> From long sitting, watching, pondering (all so unprofessional) I have found the worst enemies to what we call teaching. . . . The first is the children's interest in each other. It plays the very devil with orthodox method. . . . In self-defense I've got to use the damn thing. (p. 103)

Thus, the teaching of reading was tied both to the inner world of the child and to the outer world of the classroom where relationships powerfully influenced learning.

From a different tradition, Gee (1990) describes literacy as being a process that requires a student to essentially step into the shoes, for example, of a mathematician: to walk, talk, live, eat, and breathe mathematics. Within this framework true literacy is achieved when an individual begins to live in the body of a subject, identifying with it in a visceral, organic way and translating that identification into action in the world. It requires both mastery of the subject itself and a public presentation of self as expert: One must both believe and know, and one must also convince others.

Grumet (1988), in proposing a theory of *bodyreading*, unites the positions of Ashton-Warner (1963) as teacher researcher and Gee (1990) as sociolinguist. Grumet looks deeply into the meaning of reading as a broad cultural practice embedded in the particularities of each individual's social, physical, and emotional life—a practice that she believes has been cut out of the process of schooling. In Grumet's conception of the disjuncture between the individual and the school, she locates the center of learning organically, as do Ashton-Warner and Gee:

> In "bodyreading" I borrow this body-subject to run some errands, to bring what we know to where we live, to bring reading home again. To bring what we know to where we live has not always been the project of curriculum, for schooling . . . has functioned to repudiate the body, the place where it lives, and the people who care for it. (p. 129)

Here Grumet clarifies the importance of identity, drawing attention to the interaction between the dynamic inner life of the individual and the public world of school. She uses the image of reading as living in the body to convey the sense that reading is not a process that takes place above the neck but is rather an all-encompassing, mind-body activity.

In linking my questions about imagination with an inside-out theory of literacy, I seek to describe what entering a discourse through the imagination means and how that entry becomes public so that as a teacher I can see it happen and take it from one developmental level to another. Imagination is, in my opinion, developmental, although this is an informal assumption based on my observation of

children over the years. For example, consider the different uses of a pot and a pan in the life of a child. Toddlers, new to kitchens, can often be observed happily banging pots, pans, and kitchen utensils together in an exploration of the sounds that can be made and expanded upon. Later the pans serve as hats, guns, stools, and cooking utensils. Older children might use the pots and pans as real instruments in real parades, as hats, as swords in a swordfight, and as pots and pans in an imaginary kitchen. In addition, they will, lacking the real objects, use imagined pots and pans in their dramatic play. As they begin to make real life forays into cooking, they will use the pots and pans in their own kitchens to mix up special original recipes in their first attempts at cooking, but by that time the imaginary dramas of cooking, parades, fighting, and music are giving way to the experience of using realistic objects for their intended purposes. Although this is a very basic look at a developmental sequence, it suggests that imagination has a developmental path.

My inquiry into imagination, however, did not focus on defining a broad developmental sequence. Rather, I hoped to describe the formation of identity *through* imagination within the social context of my primary classroom. I wanted to understand how children's social interactions and semiotic contacts with the artifacts, processes, and symbol systems of instruction within a discipline did or did not evolve into identifications with that discipline. Cobb (1993) proposes that as children develop a continually wider ability to create ever greater complexity of *gestalten* in play, thought, and word, the shape and meaning of their perceptual world emerges, and the continual interplay of perceptual relations with environment sharpens the contours of their own images and deepens the reflections of the effects of their own identities on others.

Yet I know from my work with Denzel that this identification is, for some children, sparse and dispassionate. Denzel could learn to read the words on the page of a book, but he did not feel the imaginative and personal pull of those words. As his teacher I could not mandate that kind of engagement because that rupture in his identification with reading occurred before he even made an *approach* to the texts we were studying—at times before the book was even opened! Thus, his perceptual world, his understanding of what it meant to be a reader, was being powerfully influenced by a cultural space beyond the domain of my classroom. As Lave and Wenger (1991) point out,

> Activities, tasks, functions, and understandings do not exist in isolation; they are part of broader social systems of relations in which they have meaning. . . . The person is defined by as well as defines these relations. Learning thus implies becoming a different person with respect to the possibilities enabled by these systems of relations. To ignore this aspect of learning is to overlook the fact that learning involves the construction of identities. (p.53)

The construction of identity, therefore, is a dynamic, imaginative process of critical importance to engagement with learning, but it is also a highly

individual and indeterminate process. Therefore, as a teacher, I feel that it is crucial that my understanding of the relationship of identity to this process of becoming be expanded. There is a contact space *beyond text* that needs to be examined and described. For example, in my work I asked myself these questions as a point of entry into this kind of examination: When imagination is being used in the service of developing the identity of a scientist, how does that look? Where does contact begin?

Focusing in on Science

As was typical, I came across a part of the answer by observing my students. During a visit to the SciTechatorium, the hands-on science museum located on the campus of the charter school where I was teaching a kindergarten class, I observed two of my kindergarten boys spend three separate sessions at the museum over a 3-week period developing an elaborate fantasy around a large telescope that was part of an astronomy exhibit. The exhibit itself included the telescope, models of the space shuttle, a tile from one of the shuttles, posters of planets, the different shuttles, the sun, a timeline of space exploration, and so on. One day the two boys were starting to extend their fantasy to all parts of the museum and were running around as if chasing aliens. I approached them to curb this behavior based on my split-second conclusion that this type of pretending was hazardous in a place full of precious exhibits. In the midst of my intervention with them, I stopped, realizing the absurdity of what I was saying given my commitment to the place of wonder and imagination in the scientific process. I apologized for having interrupted and urged them to continue with their play but to try and limit their movement around the museum. They happily agreed and continued on while I ran to get a pencil and paper and began to take down their talk. After that incident I looked around and realized that every single child in my class was doing the same thing all over the museum. Some were more public about their fantasies, some completely silent, but all were building imaginary worlds using the exhibits in the museum as the catalysts, and most, in an incipient way, were assuming the role of the scientist in their explorations of those worlds.

Here is a transcript from four children working in a fossil exhibit. They were using small brushes to uncover molds of fossil remains that were covered with sand. Around them were books on dinosaurs and fossils, posters, and many different types of fossils:

CLARA: (Displaying a page of a book to the others. Authoritatively.) These are the animals we're looking for. I want you all to take a look.

MAURA: (Speaking with a British accent, and pointing to the fossil she is uncovering.) Look, Clara, over here, it's completely flat.

CLARA: I'm not sure what that is.

MAURA: This is way too special for people to have. (Picks up a book and points to a picture.)

CLARA: That is not the same as the picture.

MAURA: Oh my gosh! I think it's a T Rex! We're going to be famous!

These kinds of observations helped me to more clearly define the kind of work I had seen Emily doing 2 years earlier in her conversations with and pursuit of insects. When I recorded the field notes that open this paper I did so because I knew Emily was working with her imagination. However, my conception of the work she was doing was limited to simply taking note of her actions. I was not thinking at the time about the relationship between her imaginative work and the scientific process. Clara and Maura, however, and the dramatic play of my other students helped to direct my attention to the connection between imagination and the development of the scientist's persona.

Here, for example, Clara and Maura were working with identity on two levels. First, they were orchestrating a performance about the work of archaeologists and taking on what they perceived to be the appropriate tone and posture for that work. Then, as part of that process they were relating to their material, that is, the props in the museum, in a scientific way. Note Clara's statement as she compared the bones being uncovered to the drawing of the dinosaur in the book: "That [what Maura was uncovering] is not the same as the picture." Clara used her analytic skills to propose that the skeletal remains of the mold could in no way be the same as the animal illustrated in the book. As 5-year-olds, these girls were beginning to play out a process that Medawar (1982) points to in his description of the actions of scientists:

> Scientific reasoning is therefore at all levels an interaction between two episodes of thought —a dialogue between two voices, the one imaginative and the other critical; a dialogue . . . between the possible and the actual, between proposal and disposal, between what might be true and what is in fact the case. (p. 46)

I now see that like Maura and Clara, Emily also became the scientist in her play with insects and was using many of the tools that scientists might employ as she worked with them, with me, and with her peers. She observed her insects and bugs meticulously, sketched them and recorded details about their development (as I have described earlier in this paper), constructed elaborate environments for them, and spoke authoritatively about their habits. And while an observer might have mistaken her understanding of the role of fantasy when she was talking to her ants and inferred that she was completely immersed in pretending (as I most certainly would have prior to this study), Emily was quite clear about what she was doing. When asked if the insects really "talked to her," she admitted that it wasn't really "talk like people do" but that they were "telling" her things. Note the following exchange I had with her one morning before school:

> The principal and I are sitting on a desk chatting as the children begin to come in the room. Emily comes up to us and tells us that her preying mantis has died.
>
> TEACHER: Did she make an egg case before she died?
>
> EMILY: No, but I asked her if she had laid eggs. And she told me she laid them *before* I caught her.

What I had to conclude, after observing her for a school year, was that the telling came from Emily's close and continual observation of insects. The brief sharing time excerpt that follows reveals how systematic and analytic her observations were:

Sharing Time Fieldnotes:
Emily shares some crickets that she keeps as pets. Her knowledge about them is extensive. She speaks of the difficulty of telling them apart and points out that an injury "like if they have a lost wing or something, makes it more easy" to tell them apart. She hypothesizes that females are lighter color and have no wings.

Scientific Imagination

Emily's work was very congruent with the descriptions provided by scientists of their childhood experiences of the world. For those who are deeply involved in the study of the natural world, that study often begins at an early age and includes a close and organic relationship with the creatures and the phenomena of that world (Cobb, 1993; Fox-Keller, 1983; Holton, 1973). Yet a consideration of accounts of scientists working as adults in the laboratory (Fox-Keller, 1983; Holton, 1973; 1978; Ochs et al., 1996; Rothenberg, 1979; Salk, 1983; Wolpert & Richards, 1997) yields descriptions of imagination working in a different way, one that I believe is also reflected in children's imaginative work. In those accounts the I of self is described as moving into the body of the phenomenon under study. For example, as Sir James Black, a Nobel Laureate, states in discussing his work on beta blockers: "You then try and pretend that you are the receptor. You imagine what it would be like if this molecule were coming out of space towards you. What would it look like, what would it do?" (quoted in Wolpert & Richards, 1997, p. 126).

Holton (1978) describes how Einstein conceived of his own thoughts on scientific reasoning to be an intuitive/rational process in which experiences were related to assertions and axioms through a link that was highly intuitive and not easily tracked. Einstein proposed that that link could be seen in his use of an unconscious form "of mental play with visual materials" (p. 98). An often cited example of this kind of thinking is the following account of his work on the special theory of relativity:

> At that point there came to me the happiest thought of my life, in the following form: Just as in the case where an electronic field is produced by electromagnetic induction, the gravitational field similarly has only a relative existence. *Thus, for an observer in free fall from the roof of a house there exists, during his fall, no gravitational field*—at least not in his immediate vicinity. If the observer releases any objects, they will remain, relative to him, in a state of rest, or in a state of uniform motion, independent of their particular chemical and physical nature. (In this consideration one must naturally neglect air resistance.) The observer is therefore justified in considering his state as one of "rest". . . . The extraordinarily curious, empirical law that all bodies in the same gravitational field fall with the same acceleration immediately took on, through this consideration, a deep physical meaning. (Rothenberg, 1979, p. 113; emphasis in original)

As Emily talked with the insects she captured, lay nose to nose with them in the dirt, followed them around a play area, and allowed them to crawl

over her body, I believe she was taking on the role of scientist as observer, *and* taking on the position that Einstein and others describe, that is, working on acquiring the insect's, or object's, point of view. Her work was intuitive and rational, physical and imaginative. Thus, the intersection of imagination with identity, as illustrated in this discussion of science, has at least two dimensions that are important for my discussion here. First, the student takes on the role of the scientist; second, the student takes on the point of view of the object or text under study.

Imagination and Discourse Appropriation

> The sight of the eye rests on the object. The sight of the mind is never satisfied with that, but wishes to go through the object, relating, transforming, perhaps even eating it so as to make it a part of mind. (Nemerov, 1978, p. 90)

Although I have discussed the achievement of identity separately from discourse appropriation, it is clear that they are interdependent. As the student begins to take on the role and point of view of scientist, he or she also comes in contact with the language, tools, texts, and forms of inquiry specific to that discipline. Productive contact with those fuels an identification with the discipline, and so on. In my research on science talk (Gallas, 1995), I saw that my students began to identify themselves as scientific individuals by taking on the voice and the authority of scientists. I defined the process of appropriation at that time using Bakhtin's (1981) metaphor of the speaker "populating it [the word] with his own intention, his own accent . . . adapting it to his own semantic and expressive intention" (pp. 293-94).

My students engaged in that process through collaborative discussions with their peers—energetic, free ranging discussions that consistently employed imaginative devices such as metaphor and analogy to build scientific theories. However, as I expanded my observations of children's imaginative work in response to Denzel and linked those with my understanding of how children used many different forms of expression to deepen their learning (Gallas, 1994), I saw that the process of appropriating a discourse is one that involves both language and expressive action. Appropriating a discourse is a process through which children take control of their world of experience, in some ways metaphorically "eating" it as Nemerov (1978, p. 90) proposes, so that the events, texts, and tools they encounter in school become part of their consciousness and are re-expressed through the force of their actions.

If given the opportunity to place the world of school into an imaginative context, young children actively begin to appropriate the words, symbols, and tools of the different subject areas for their own purposes. That process of appropriation, though, depends upon the teacher's ability to provide a wide variety of props specific to the subject under study, independent time to use and explore the potential of those props, and an exposure to an array of cultural tools (Smagorinsky & Coppock, 1994) that further students' inquiries. Those

tools (writing, drawing, painting, construction, drama, movement, storytelling, and song) assist students in building the bridge between their experiences of the now of classroom texts they come in contact with through the process of instruction and the future of new texts that they themselves create. That kind of process, however, clearly requires that new kinds of expressive and temporal spaces be created within classrooms.

For example, in October of 1998, I observed an interesting phenomenon in my kindergarten classroom. One morning, a small group of girls noticed a large box of maps that had been placed prominently on a bookshelf since September, and they decided to go on a trip. They set up a row of chairs as if they were airplane seats, unfolded the maps, and spent about thirty minutes "going to California." Two weeks later the maps came out again, but this time about 14 children joined in the travel fantasy in groups of four and five, segregated by sex. As with the first time they lined up chairs and spent a great deal of time scrutinizing the maps. This time, though, they also began to make their own maps, drawing on their laps while they traveled, as if recording their itinerary (see Figure 2).

I talked to all of them quite extensively about what they were doing, and they were very able to describe what part of the journey they were on as well as the status of the other trips going on in the other groups. Essentially, though, my moves as a teacher, beyond the initial strategic placement of the maps as props in the room, consisted of talking with the children about their motives and intentions as they worked and then prompting them to share their new maps at the end of each day. The map work continued for about 5 days,

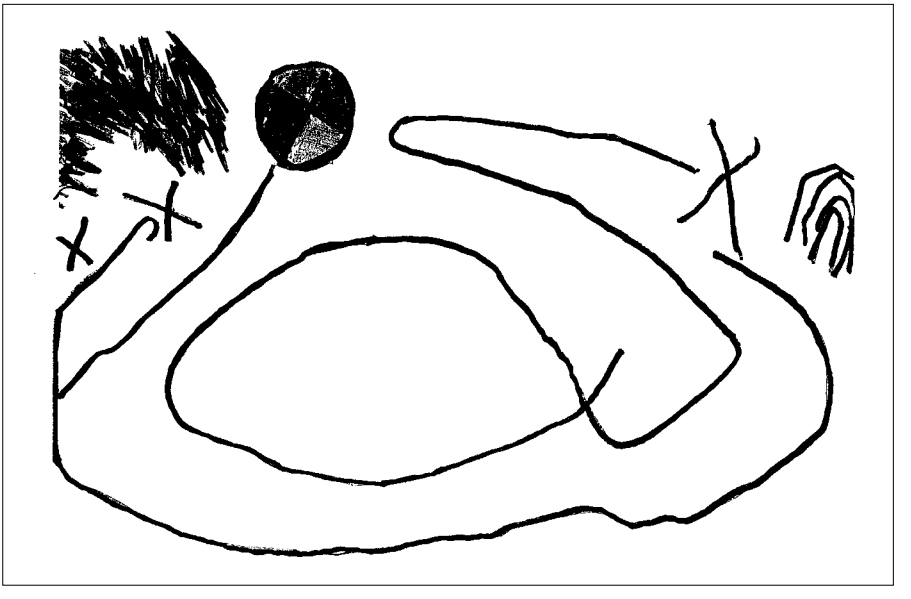

Figure 2. Travel map.

and the children produced piles of maps on their own, sharing them extensively at the end of each morning. Throughout the year they returned to the maps intermittently, always using them with three components—imaginary trips, the handling and reading of real maps, and the invention of new maps of their own. In March, during their last round of map work, two girls invented a new kind of three-dimensional map of which they made copies for me when they saw my evident interest in trying to understand what they were doing. Here is how they described their maps and their intentions in designing them:

> First we found the maps and then we wanted to make our own maps. So we copied from the maps how to draw. Then we started to go on a trip, and then we made calculators on our maps! The calculators reminded us of the telephone and then we put on a T.V. If we don't have a telephone, we couldn't call, and we needed to count stuff on the calculator. If we say something on it [keypad], like . . . "Is someone having a birthday party here?" . . . It will say "no," or "yes," and where it [the party] is. We also made a key for the whole world to unlock wherever you go, and to lock it back up whenever you go away.

The girls also added in a real writing pad for notes. All of these, including the keypad, calculator, telephone, and the T.V. screen were drawn or built onto the maps.

This mapmaking experience involved a blending of in-school and out-of-school worlds, the former rich in props, texts, and creative arts opportunities, the latter rich in technology, travel, talking toys, and birthday parties. In looking closely at the ways in which their maps evolved, I could see that these 5-year-olds were beginning to take control of the map as both a text and a tool, reconfiguring both the design and the future of maps in their lives. However primitive the prototypes they were creating, they envisioned maps as three dimensional, interactive tools existing in cyberspace with physical, personal, and social functions. This work was about imagination, and it was also about power, control, and worldmaking (Cobb, 1993).

Authoring

> Worldmaking is learning in the widest sense, but it is also an adaptation to environment as nature, a search for higher levels of synthesis of self and world drawn from the recognition that outer and inner worlds are interdependent aspects of reality, rather than independent states. (Cobb, 1993, p. 66)

Thus, I have observed that the process of discourse acquisition is on many levels simultaneously private and public in nature. When children's interactions with texts, props, and cultural tools are created with the awareness that they will have a more public viewing, their work moves into the realm of what I am calling *authoring*. The mapwork I have just described would not have continued over a 6-month period without the rich social interactions that surrounded it and propelled it forward. The children shared their work at the end of each day, which in turn fueled new and different kinds of work both with maps and in other parts of the classroom. This public display and interaction around work products shifted the focus for evaluation of the work from myself as teacher

to all of us as members of the classroom community.

This kind of sharing of work products is obviously not new to the field of language arts. Authors like Paley (1990) and Dyson (1993, 1999) have vividly described the kinds of texts that emerge from the interaction of young writers and storytellers with an audience. In writing workshops the public sharing of texts by student authors with peers is considered to be essential to the development of young writers. However, I seek here to expand the definition of *author* in this process, to illustrate the active point at which the literacy learner makes contact with audience and is in turn propelled forward in his or her understanding of a discipline by that audience. Those interactions are shaped by the social networks of the classroom and by the imaginative worlds of the students as they make contact around texts.

For the purposes of speaking about literacy learning, I believe the act of being an author must be distinguished from the process of authoring. Bakhtin presents the idea of author as "a creating, not a created, thing; he represents, but is not himself represented. . . . he exists primarily in the realm of 'I-for-myself,' which means that he is not part of the world" (cited in Morson & Emerson, 1990, p. 430). In this sense being an author does not necessarily include direct, personal contact with an audience, but Bakhtin also identifies a tension in his definition of the author. While the author's work is created apart from the world, it is also created with an awareness of a future audience and eventually comes in contact with a listener or a reader: "[T]he author senses himself not as a person executing a preformed plan but as a person at work over an incomplete task in an open world" (cited in Morson & Emerson, p. 430).

In the work my students were doing, this tension was not present. Texts were created in constant contact and collaboration with an audience, and that interaction was essential to the development of identity and sustained movement toward discourse appropriation. Thus, I put forth here the term *authoring* to signify the ongoing, public nature of that activity. I am defining authoring as the process of *metaphorically writing* the world in a way that gives that interpretation of the world weight, voice, and agency—a way that has the ability to influence the thinking, feelings, and actions of others.

Authoring represents a physical incarnation of imagination as it comes in contact with the world. It is distinguished from more internal, imaginative processes (for example, reverie and fantasy) because it is a public event in which an individual presents an original text to an audience. The text can be oral or written, a painting, a dance, or a song; it can be an explanation of the solution to an equation or the presentation of a theory in a discussion about the physical world. The author presents it to an audience in a public way, essentially for some kind of validation.

To me authoring represents a leap toward the core of discourse acquisition: One must believe and know, *and* one must convince others. In other

words, literacy encompasses a private and a public identity. Every painting, sculpture, performance, poem, story, and theory that is presented to an audience begins with an imaginative response to the world, but the desire to communicate that response also involves its own kind of "suspension of disbelief" (Coleridge, 1907). As Bauman (1977) points out:

> Performance involves on the part of the performer an assumption of accountability to an audience. . . . From the point of view of the audience, the act of expression on the part of the performer is thus marked as subject to evaluation for the way it is done, for the relative skill and effectiveness of the performer's display of competence. (p. 11)

Essentially the author risks failure and public humiliation in front of his or her peers. As any performer, public speaker, researcher, or teacher knows, that kind of risk taking requires a clear vision of the role being played, and a giant leap of faith about the merits of the performance and the intentions of the audience. It also is preceded by private rehearsal and a visualization of the performance before it occurs. Audiences are not always kind, and audiences of children can be especially brutal toward their peers.

Sharing Time and Performance

When I first began researching imagination in my classroom, I was fortunate to have a class of wildly creative first graders. Within that class a 6-year-old girl named Sophia became a focal child for me as I tried to document how children used the imaginative process in different areas of the curriculum. Sophia was a most remarkable child who seamlessly integrated her imaginative life with the realities of the world around her. Her work in every expressive domain was tremendously compelling; she had a great ability to capture an audience's attention through performance and hold it. For example, the following sharing time story offers a look into the ways Sophia used an improvised story as a vehicle for performance and social control:

Sharing Time: March 14, 1996

(Sophia begins by rubbing her hands together, as she smiles mischievously and slowly surveys the audience.)

SOPHIA: Once upon a time, there was a little girl named Sophia, and she called all of her friends. She called: [names of every girl in the audience].

AYASHA: No boys!

SOPHIA: And then I called all of the little boys to come and play with me.

(The boys cheer.)

SOPHIA: I called : [names of all of the boys in the class]. All the little boys were there, and Johnny went swimming. We were going to meet him there. Then we had a little party and we ran into the middle of the street. And the cars were going "Vroom, Vroom, Vroom!" and then *I* went out and put a little stop sign so the children could cross the street. We went to the beach and I jumped into the water, and it was so hot! And I got Brenden a sea star. . . . There was a little man there, who started walking down the beach. And all of the sudden the little man fell! He was so teeny, that teeny little man, that he fell into the sand and drownded! In the sand! And then I stepped on him. Then I picked him up by the foot, and threw him in the water. He said, "Help!" Then Ruth picked him up. She found a clam that was closed. She opened it up, and there wasn't anything inside, so she put the little man in, and threw him out to sea.

Then the little man's wife and family came. And there were thirteen of them! So we found thirteen clams, and guess what we did then?

ALL: What?

SOPHIA: We put all of 'em in a shell, and threw them out to sea with the little man!

Like all of her stories, this story was socially inclusive, but Sophia remained clearly in charge of the story and her performance. (Note, for example, her response to Ayasha's bid for control.) Here, Sophia took an everyday experience that all the children enjoyed and added an element of danger that she, as the narrator, heroically anticipated and resolved. The story also included violence, something Sophia, who was considered a diminutive, feminine girl, specialized in, a fact that constantly delighted and horrified the boys in her audience.

At the time I began to watch Sophia I was completing a study of power and gender in the classroom and had been working with the notion of performance and persona as a way to understand the dynamic social life of children in school (Gallas, 1998). I had been closely observing Sophia and two other powerful and imaginative girls who also used improvised storytelling to gain influence in the class. These girls solidified my belief that performance was an integral part of children's social interactions, but they also caused me to think more deeply about the concept of audience. I had learned that most children in my first and second grade classes were acutely aware of the reactions of their audiences to their social maneuvering. Some even knew how to control or manipulate their audience. Yet as first graders Sophia and her two classmates had an understanding of audience that was more fluid. They intimidated, cajoled, charmed, and repudiated their audiences depending upon their aesthetic and social purposes. Their understanding of the relationship between audience and performer stood out for me, but at that time those understandings seemed to be unrelated to my inquiry into the imaginative process.

In 1998 I moved to California and found myself teaching kindergarten in a small, rural charter school on the central California coast. My interest in exploring the manifestations of imagination continued in this new setting and I was able to expand my data collection to include 5-year-olds. The 20 children in my class were predominantly European American with one African American child and one child who was half Inuit and half European American. Socioeconomically, the children were primarily from middle- and upper-middle-class homes. Most of their mothers did not work outside the home and only three families included divorced parents. Of my 20 students, all but four had attended preschool for at least 2 years. The four children who did not attend preschool—Sabrina, George, Joe, and Margie—represented families with very limited incomes. I identify these children because, as the reader will see, their work in kindergarten, especially when considered in the context of this paper and of my evolving questions about imagination and literacy, provided a significant contrast to their peers.

In September of 1998, I began to tape sharing time. I sat and waited for the children's stories to emerge in my kindergarten and offered many different kinds of opportunities for storytelling and dramatic performances. Nothing happened. My students were active in drama and blocks—they were making up stories in the contexts of their play in those areas—but when faced with an audience of their peers they did not spontaneously tell a story about anything. In fact they had very little to say at all. There were, however, a few notable exceptions: Sabrina, Margie, George, and Joe.

The second week in school, Sabrina, Margie, and George began to use the last period of our morning, the part I called story and songs, for performances. These began one day in response to my query as to whether anyone had a song to sing for the class. I had said it could be a song they had already learned or one they just made up. In response, Sabrina immediately stood up and asked if she could sing "a song about love." She began to sing and directed me to play my guitar as she sang. As I changed chords, she very naturally changed her song lines to accompany me, completely improvising lyrics and melody. The other children were quite surprised and clapped when she was done. I then asked for another song, and Margie got up and sang a song about the sky and the clouds. When she was done, the children clapped and I asked Margie if she had made up the song or been taught it, and she said she had made it up. At that point George, who had pointedly said he did not like songs and had climbed up in the loft while the girls were singing, came down and signaled that he, too, had a song. He came over to me and directed me to play, and as I started he began to do a very beautiful martial arts dance. The children were completely taken aback and thought he was being funny, and some began to laugh. George stopped dancing and began to cry. When I explained to George that the children were just surprised by his dance, he dried his tears and said he'd try again. He had not drawn a distinction between the words *song* and *dance* and had interpreted the girls' songs and his own desire to move to my guitar chords as congruent. He then performed another dance that the other children were able to watch and appreciate.

This event began to recur regularly with the same three children as regular performers. The rest of the class continued to watch, but they were unwilling or unable to create these kinds of spontaneous texts. In light of my experience with children like Sophia and with other classes of young children in Brookline who moved easily into storytelling and performance, this class' silence and passivity surprised and puzzled me. However, there were a few differences between this class of kindergarteners and the children I had taught in Brookline that may have provided the contrast. These children were a year younger, and most had gone to traditional preschools that offered a curriculum focused on basic skills for early readers and writers. In contrast, the

children I taught in Brookline had experienced progressive, developmental kindergartens that focused on language development, socialization, and play.

Beginning the Authoring Cycle

Still, the efforts of Sabrina, Margie, and George now represent to me a first movement into the authoring cycle, one I was probably more able to see because of the accompanying silence of their peers. Sharing time, though, continued as it had been in spite of my participation modeling both the sharer's role and the audience's role: All of the children were unwilling or unable to create expanded verbal texts of any kind. Rather, they took a very passive stance, presenting an object to the class with a few short sentences, for example, "This is my rock. I got it at the beach," and then waiting for the class to respond. The children were still active in drama, blocks, painting, and unstructured dramatic play, but virtually all of their work in these areas was private work. Each time I attempted to pull the private dramas into the public space, they could not make the transition.

A few slight changes occurred in late October, initiated again by Sabrina and Margie, with the addition of Joe. These 3 children began to co-construct shared texts using the sharing child's toy or picture as a vehicle. Sabrina, Margie, and Joe would spontaneously create stories as part of their response to the sharer's text. For example, here are three sharing time texts that illustrate how this kind of response developed over a 3-week period:

Sharing Time: October 30

TROY: (Shares a picture of a spaceship from his art journal. He asks for questions or comments.)

SABRINA: (Stands up.) He and his Dad went out in space, and another ship came to find him.

JOE: Some aliens in my spaceship came, and we couldn't get down. We threw knives on the window. One dropped out of the window and we threw knives at it.

This brief exchange marked the first time that any child had attempted to form a story in the public space of sharing time. In this case Sabrina and Joe used the sharing child's picture as a springboard for very truncated stories.

Sharing Time: November 4

(Here, "Karen" refers to me. Margie is the sharing child. She also initiated the imaginative text.)

MARGIE: (Sharing a picture from her art journal.) This is my mom and me. I'm out in the field in my dress with my mom. Questions or comments.

LEILA: Karen, could you read what you wrote [on the picture]?

KAREN: (Reading the dictation on the picture.) I am going to get my bathing suit on.

ROBERT: Did you go boogie boarding?

MARGIE: Yes, and I got knocked off my board, and a wave as big as this school came and cracked me. And I could stand on my boogie board. And I did something you can't do that I did.

CHILDREN: What's that?

MARGIE: I can do a back flip on my boogie board.

CHILD: My brother can do that.

JOE: Once on my boogie board, I saw this big wave coming so I let go of the rope and balanced until I got on the wave. And the wave was bigger than this building. And the wave sailed all the way to [inaudible]. I surfed and it was as big as this whole class standing on top of the

whole class, standing on top of each other.

In this case Margie presented an initial explanation of her text and then, in responding to my reading of her dictation, developed a more expanded story line based on her original intention in drawing the picture. In response to her comment, Joe then improvised a story that paralleled Margie's. It was both responsive to the intention of her text and broader in its use of hyperbole.

And finally, the following text marked the beginning of a kind of interactive storytelling style that began to occur in different form through the agency of these four children with the addition of Dan:

Sharing Time: November 11

GEORGE: (Sharing a toy bat.) This is my bat, and this its tail. I got this at Burger King. Questions or comments.

DAN: Which Burger King? The one that has a lot of hamburgers?

GEORGE: The one with chicken.

SABRINA: What movie is he [the bat] from?

GEORGE: Anastasia.

DAN: Once there was a bat and he lived in the rainforest.

MARGIE: And a dinosaur came and almost ate him and he flew so fast he couldn't ate him.

SABRINA: One time there was Anastasia in the movie and the guy had a hat like that.

JOE: There was some long teeth sticking out of the tree, and it was a T-rex.

(George had been trying to speak but the speakers were coming in too fast for him to intervene.)

TEACHER: George, would you like to try one?

GEORGE: Yes. There was a dog named Ruby [the name of my Bassett hound], and a dog named Ruby found a bat. This bat. This one I have in my hand. (Smiles broadly, and the children laugh out loud.)

Developing an Awareness of Audience

During this same time period Joe, who is a gifted artist, began to use the sharing chair as a vehicle to feature his art and tell long stories that held the children enthralled. Following is an example of the kind of text he would create:

Sharing Time: November 19

JOE: (Sharing a book he has illustrated at home, quite long, perhaps about 20 pages of drawings.) This is a Utah raptor book. The kind like in Jurassic Park. This raptor isn't real. He's a robot.

(Children begin to comment and talk about the first picture.)

MARK: Can everybody hold their comments!

JOE: (Pointing to page 1.) Does he look happy? He ate a dinosaur. (Page 2.) He's dunking down, so nobody can see him. When people come by, he's jumping out. (Page 3.) You think that's how big a T-Rex is to a person? (Page 4.) Lookit what I got in there. Lookit what the man threw in there! Threw a bomb. Do you think it's going to blow up a robot? (Page 5.) Lookit! The toy robot. That's the thing his toy robot does. Lookit what's coming up ahead! A raptor shadow.

(The class's comments are getting quite rowdy with action noises going on and lots of talk about the art.)

JOE: I'm not going on until everyone is quiet. (The group immediately quiets.) (Page 6.) Do you think that thing is gonna kill . . . (Suddenly looks up at his audience, wide-eyed, making a funny face.) Whoops! I forgot to draw his head! (Lots of laughter from the audience.) (Page 7.) See, see him up in the tree? (Page 8.) Do you think he looks hungry? (Page 9.) Lookit what the raptor

threw on his arm. The raptor is up in the ceiling. There was this big rock on the ceiling and it fell on him. Some of his robot is crushed.

Joe's performances began to resemble the work that I had seen Sophia and her friends doing two years earlier in my first grade class in Brookline. Although Joe lacked Sophia's fluency and skill as a storyteller, his intentions in influencing and controlling the audience through his art were well defined. In this case he used the turning of the pages to control the pace of his narrative and the amount of time he had as the presenter, much as Sophia had used props to create tempo in her performances. Later, he stopped the momentum he had created to restore order so that the audience could once again focus on his drawings. As an artist he had learned through previous sharing experiences that his illustrations anchored his audience's attention and gave him status in the class.

Still, in spite of the storytelling performances of these few children, the rest of the class did not begin to make a similar shift toward creating public stories. However, a few things began to develop in the first week in December. Three girls—Clara, Bobbie, and Leila—found a box of blank cards, envelopes, shipping labels, and stationary in the writing center and began to use them, writing letters to each other and to their moms, stuffing the shipping labels (what they called checks) in the envelopes and sealing them. That same day, Leila and Bobbie were in the house with Sabrina, and I overheard their talking about their hotel and restaurant. They were lying on the floor dressed in bouffant skirts, hats, and high heels, staring at themselves in the mirror. I casually walked over and asked them if they needed a business manager to help them make a menu for their restaurant. After asking me what a business manager was, they were unanimously in favor of the idea, and I sat down with them and took their dictation, writing up a menu with prices. They then took an order from me, and I was served tea and muffins.

The next day at our reading meeting I showed the menu and asked the girls to describe their restaurant. I also asked the letter writers to describe their activities. At choice time that day things began to develop. Robert and Troy, who had never before shown an interest in the drama corner, went right to it, set the table for the restaurant, got me to tie carpenter aprons around their waists, went to the writing center and picked up some checks, wrote their names on the checks, and pasted them to the front of their shirts. Several other children went to the writing center and began to compose letters, mostly pictures for their mothers, using copious amounts of envelopes and stickers for stamps.

Again I visited the restaurant and asked for a table. The boys were quite surprised and asked me why I was there. I said I was there to eat and was waiting for a friend to join me. Robert escorted me to a table, gave me the menu, and waited for my order. I noted that he didn't have a pad to take my order on and went and got him a thick, short pad of paper. As I ordered from the menu, he carefully copied down the words

and prices, then tore the paper off the pad and passed it to Troy, who cooked the meal. By that time they were joined by Dan who served me my meal. Before I ate I asked for a telephone, saying I needed to make a call. Once again they were quite surprised, but they handed me the phone. Here is my text:

KAREN: Hello. Yes, this is Karen. Well, where are you? I've been waiting a long time, and I'm hungry. I don't care if you're stuck in traffic, we had a date and you're very late. Well, I'm just going to go ahead and order. Bye.

The boys had listened to the whole conversation, as had Sabrina, who had joined me at the table dressed in a hat, purse, gold sequinned shoes, and purple cape, and was waiting to be served. Dan served my "shrimp" and then went over to the phone, picked it up, dialed a number, and proceeded to have the following conversation:

DAN: Are you bringing that stuff we need? When will it get here? O.K. Tell me when you're here and I'll come and unload the truck.

A short time after, Sabrina asked for the phone, dialed, and began a conversation as her meal was served.

At the time I was only slightly conscious of the relationship between my decision to join in the drama with the children and my desire for them to bring their private dramas into the public domain. Later, in looking at the outcome of these series of events and in further defining what authoring meant to me, I realized that the teacher and the teacher researcher were acting in concert. I had joined in their dramas for the purpose of bringing them into the public, or official, world of the classroom. What I saw was that my performances enabled many children to expand their own performances, and further, that my request that the products or texts of their dramatic work be shared had a snowball effect. In essence, these 5-year-olds began to widen their lens and take notice of what was around them; they began to see what Joe, Margie, George, and Sabrina already knew, that there were personal and public benefits to working with an audience. Or perhaps I might propose that the other children began to remember what they had once known but had forgotten, or unlearned, in preschool.

Co-Constructing Performances

The following week, sharing time began to change. What changed, however, was not that the sharing children began to tell stories as I had expected, but rather that performances were co-constructed between the sharing child and the audience, using the object or picture that the sharing child was presenting. In most cases what was developing was a sort of comedic series of exchanges in which the sharing child played the fool while also explaining her picture or adding detail to her description of an object. The exchanges very much began to resemble the ways in which Sophia had used pictures, props, and the social dynamics of her audience to orchestrate a performance. This time, though, every member of the

audience participated in responding to the text and shaping the performance of the sharing child. The following example was orchestrated by Margie with the help of her audience:

Sharing Time: December 10

MARGIE: (Sharing her art journal.) This is me. This is my dog with a tree. These are the flowers and the little birdies. Questions or comments.
SABRINA: Where's the sun?
(Margie looks and points to the corner of the picture.)
MARK: (Applauds.)
GEORGE: Well, I used to have a dog but it's old.
THOMAS: Um, why is your head so tall?
(Margie turns the book around, stares carefully at the picture, looks up and laughs as she shrugs.)
LEILA: Um. Um. Where's your body? I see just your hair, but (Margie points to the body which is yellow and hard to see from the audience.)
JUSTIN: It looks like you're gone cause the sun, it's so bright!
JOE: You're disappearing!
MARGIE: (Turns the book around, stares at it for several seconds, looks up as if surprised.) Ahhh!
(The class laughs out loud.)
SABRINA: It looks like you're all yellow!
MARGIE: (Turns the book around, stares, looks up with the same look of surprise.) Ahhh!
(Once again the class laughs, this time louder.)
BRIAN: I can't see your eyes and your mouth.
MARGIE: That's because they're too light.
SABRINA: Are you throwing a ball for your dog?
MARGIE: Yeah.
SABRINA: I don't see the ball!
MARGIE: (Looks briefly at the book, then up at her audience.) Ahhh!
(The crowd laughs again.)
JOE: Where's your nose?
MARGIE: (Same routine.) Ahhh!
DAN: That's a good tree. But why didn't you draw the branches?
MARGIE: (Turns the book, stares harder, looks up, eyes wider.) Ahhh!
(The class breaks up. Boys are rolling on top of each other. Girls are hugging each other with excitement.)

In the days that followed, Margie's "Ahhh!" routine was adopted and adapted by a few other children for their own purposes. The children introduced extensive word play and verbal jousting around the definitions of what their objects or pictures did or didn't mean. The following text shows how those kinds of exchanges bordered on a kind of theatre of the absurd:

Sharing Time: December 17

SABRINA: (Sharing a stuffed toy.) This is my dog and I had it a very long time and I sleeped with it in my bed and my daddy gave it to me. Questions or comments.
DAN: (Very seriously.) It isn't a pet. I mean, it isn't a dog, it's a cat.
SABRINA: (Looking carefully at the toy, and shaking her head.) No, it's a dog. It has a tail. See! (Points to the tail.)
DAN: (Smiling and shaking his head.) No, it's a cat. It really is.
SABRINA: (Staring firmly at Dan and shaking her head in the negative.) It's a dog.
DAN: (Looking around at the audience that is starting to smile at the exchange.) Um. (Turning his gaze back at Sabrina and raising his eyebrows.) It's not a dog. It's a cat. And I like it.
CLARA: It's a dog, Dan.
BOBBIE: Yeah Dan, it really is a dog. You just *think* it's a cat.
THOMAS: I like it a lot. How long have you had it, cause it looks pretty old.
SABRINA: Thank you. Well, my dad got it at the store.
CLIFF: Sabrina, he asked how long you had it.
SABRINA: Well, he doesn't have any teeth.
JUSTIN: Where are his teeth? Is his mouth closed?
CLIFF: Does a robot control it?

SABRINA: No. There's no robot. It's not a robot! Silly!
LEILA: How long have you had that stuffed animal puppy?
SABRINA: For long, long, long, long, long.
GEORGE: (Hands placed sincerely across his chest.) I know it's a dog.
SABRINA: Thank you.
DAN: (Smiling slyly.) Dogs and cats both have tails, and all cats sometimes are black. And they have, they're like that. (Pointing to the toy.) Those are what cats look like. Well, it *is* a cat.
SABRINA: (Quite calmly.) No, it's a dog.

Sessions like this one continued and soon expanded to include all of the children in the class as both initiators and interactive audience members. By May many children who had been silent and self-conscious during more spontaneous performances were improvising songs and orchestrating dances and musical events. That signaled to me that the children had made a movement toward understanding their roles as co-performers as well as toward realizing the potential social benefits of the authoring process and further that they were comfortable taking the risks that those kinds of performances required. Both audience members and the sharing child created texts as they went along becoming mutually aware of both the pace of the exchanges and the uses of hyperbole, understatement, humor, and audience response.

Often these sessions ended with a breakdown of order and general hilarity that I could not control. My response to that loss of control was not teacherly in that I didn't try to wrest it back. Because I wanted these children to be more active in the development of the public discourse of the classroom during sharing time and our stories and songs meetings, I knew that using my authority to control the social outcome of the authoring process would derail their efforts. And a part of me liked the loss of control; it was funny and spontaneous and the end result was a kind of joyfulness that deepened the links in our community and expanded the children's expressive repertoire.

Readers of Bakhtin (1984) will recognize the elements of carnival in this description. Although my students were creating a carnival atmosphere in the style of kindergarten, the issues that surround carnival as a public event were obviously present in their work. Many of their exchanges used parody to propel them forward into laughter and disorder. In creating space for the idea of authoring, I was sanctioning what some researchers have characterized as a potentially dangerous textual space where children's meanings and intentions as authors can be destructive (Lensmire, 1994, 1997; Swaim, 1998). As control of the public discourse continually shifted from child to child through the authoring process, the established authority in the classroom, in this case that of the teacher, was purposefully undermined, making the dynamic both exciting and risky.

What I learned from those occasions, and what I have observed in this research, is that dynamic, dialogic communities cannot be created unless I, as a teacher, embrace the authoring process and all its risks. The process of creating improvised, collaborative texts served as a gateway to the development of my students' public identities as individuals

who influenced the thinking, feeling, and imaginative worlds of their peers. In essence we were creating a thought community (Fleck, 1979; John-Steiner, 2000; John-Steiner & Meehan, 2000) that propelled that development forward. As control over the public discourse moved from child to child to teacher to child and back again, every member of the community participated in constructing, critiquing, and reflecting upon the texts being created.

Look, Karen, I'm Running Like Jell-O!

Authoring, the development of a literate identity, the achievement of control over the structures of a discipline, in essence literacy learning as a whole, is an action-embedded activity. It begins not with teacher, environment, or texts but with the actions of the student in a complex social network. In this kind of framework, scripted pedagogical practices must be ready to give way when they encounter the action of children's imaginative responses to their meanings and purposes. Teacher, environment, and texts are factors that come in contact with the learner's intentions and actions, sometimes matching and sometimes not. How, then, to rethink Denzel? When Denzel ran past me and announced that he was "running like Jell-O," he showed me that his imagination was alive and well. I, out of all logical and methodological answers, finally saw that my failure with Denzel had not been one of technique or methodology but rather of understanding that true engagement with texts depended on the student's making deep, resonant, imaginative contact with those texts.

In the research presented here I have tried to make tangible some of the ways I have observed imagination at work in early childhood classrooms where literacy is an all-encompassing pursuit. However, I think it is important to re-emphasize the epiphany Denzel's words underscore: I still do not fully understand the ways in which Denzel, as a unique individual, imaginatively processed his world. I will never be able to claim that I have a complete understanding of any student's imaginative ethos. The inherent individuality of imagination as a mental activity is exactly the factor that relegates it to the margins of educational discourse. However, I have begun to understand more about how imagination naturally propels learning forward. I see now that discourse acquisition requires a kind of imaginative seizing and swallowing of a discipline and that this process is not developmental but rather is organic, occurring again and again throughout the lifespan as learners encounter new subjects and new challenges. This is not a process of mimicry or recitation, of repetition or filling in the blanks. It is a visceral, hard-won achievement, an achievement of imagination as it influences the development of identity and the creation of texts through the authoring process.

At every point in this research, children have offered public demonstrations of imagination at work in the service of their learning. Their actions have compelled me on a daily basis to imaginatively shape and research the

conditions of our public discourse and our textual understandings. Emily, Sophia, Sabrina, George, Margie, and Joe brought their dynamic inner lives into the classroom and made them public because a discourse space had been created for them to carry out their own purposes as learners. That discourse space was Denzel's legacy.

In attempting to describe and name the elements of the imaginative work that took place in that space, I have broken this dynamic and indeterminate process apart in order to propose a theory of action. As the reader may have observed, the structure of this paper implies that discourse acquisition begins with identity, moves toward discourse appropriation, and then culminates in authoring. However, as Binet (see Donaldson, 1963) proposes, a theory of action places an artificial order into mental life. I believe that the three elements I have described here are not a cycle but rather a dynamic that unfolds continually if conditions are created in classrooms where students have an opportunity to bring their lives into contact with curriculum. Implementing this theory of action requires a shift in point of view on the part of the teacher. Essentially, by postulating that literacy is a dynamic, inside/out process with imagination at its core, I am also proposing that teaching must reflect a similar position. It must become an imaginative, inside/out process that places student action and interaction at the center.

This paper was written to focus attention on the role of imagination in literacy research and learning by describing the points at which children's imaginative work intersects with core literacy activities. These points of intersection included listening to a story with engagement; using the language, point of view, and tools of specific disciplines; creating oral texts with an audience; and participating in a literate community that is creating its own signs and texts as ways of reading the word and the world (Friere & Macedo, 1987). My goal has been to initiate a discussion of what is not being spoken about in the field of language and literacy at this particular time in educational history. I am reintroducing into debates about educational policy important but indeterminate words that relate to learning with imagination, words like wonder, curiosity, doubt, intuition, and creativity. These are not words that fit well with mandated curricula and textbooks, basal readers, and standardized tests, but they are words that all children, most especially those who live outside of the mainstream of middle class America, badly need.

Writing as I am from the state of California, where curriculum is conceived and then legislated by policy makers in cooperation with textbook publishers, a state where schools may only buy instructional materials from approved lists, where literacy learning is expected to be programmed as if it could be doled out according to the tick of the clock in each school day, the notion of viewing literacy curricula as beginning with the imaginative life of the student moves from one that stands on the fringes of educational practice to a point of heresy. Too much is left to the

imagination, not only that of the child but that of the teacher. Teaching in this way is more complex and often unscripted; it requires a shift in position by teachers themselves. That is, we as teachers must believe and know, *and* we must convince others. But if language and literacy teachers do not rise up and begin to stand on the heretical edges of their profession, curriculum never "slips into the ground of our action" (Grumet, 1988, p. 131): It never takes into account the situation it encounters in the classroom. Rather than being pulled, body and soul, into the life of the classroom, students such as Denzel remain forever marginalized, living a vivid and dynamic imaginative life but never finding the bridge that connects that life to the world of school.

Author's Note

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References

ASHTON-WARNER, S. (1963). *Teacher.* New York: Simon & Schuster.

BACHELARD, G. (1971) *On poetic imagination and reverie.* New York: Bobbs-Merrill.

BAKHTIN, M. M. (1981). *The dialogic imagination: Four essays by M. M. Bakhtin* (M. Holquist, Ed.; C. Emerson & M. Holquist, Trans.). Austin, TX: University of Texas Press.

BAKHTIN, M. M. (1984). *Problems of Dostoevsky's poetics* (C. Emerson, Ed. & Trans.). Minneapolis: University of Minnesota Press.

BALLENGER, C. (1999). *Teaching other people's children.* New York: Teachers College Press.

BAUMAN, R. (1977). *Verbal art as performance.* Prospect Heights, IL: Waveland.

CADWELL, L. B. (1997). *Bringing Reggio Emilia home: An innovative approach to early childhood education.* New York: Teachers College Press.

COBB, E. (1993). *The ecology of imagination in childhood.* Austin, TX: Spring.

COLERIDGE, S. T. (1907/2000) *Biographia literaria.* In H. J. Jackson (Ed.), *Samuel Taylor Coleridge: The major works.* New York: Oxford University Press.

CORBIN, H. (1969). *Creative imagination in the Sufism of Ibn Arabi.* Princeton, NJ: Princeton University Press.

DEBONO, E. (1969). *The mechanism of mind.* New York: Simon & Schuster.

DEBONO, E. (1970). *Lateral thinking: A textbook of creativity.* London: Ward Lock Educational.

DE CHARDIN, T. (1960). *The divine milieu.* New York: Harper & Brothers.

DONALDSON, M. (1963). *A study of children's thinking.* New York: W. W. Norton.

DYSON, A. (1993). *Social worlds of children learning to write in an urban primary school*. New York: Teachers College Press.

DYSON, A. (1999). Coach Bombay's kids learn to write: Children's appropriation of media material for school literacy. *Research in the Teaching of English, 33,* 367-402.

EDWARDS, C., GANDINI, L., & FORMAN, G. (1993). *The hundred languages of children: The Reggio Emilia approach to early childhood education*. Norwood, NJ: Ablex.

EISNER, E. (1976). *The arts, human development and education*. Berkeley, CA: McCutchan.

FLECK, L. (1979). *Genesis and development of a scientific fact*. Chicago: University of Chicago Press.

FOX-KELLER, E. (1983). *A feeling for the organism: The life and work of Barbara McClintock*. New York: W. H. Freeman.

FREIRE, P., & MACEDO, D. (1987). *Literacy: Reading the word and the world*. New York: Bergin & Garvey.

FRYE, N. (1964). *The educated imagination*. Bloomington, IN: Indiana University Press.

GALLAS, K. (1994). *The languages of learning: How children talk, write, dance, draw, and sing their understanding of the world*. New York: Teachers College Press.

GALLAS, K. (1995). *Talking their way into science: Hearing children's questions and theories, responding with curricula*. New York: Teachers College Press.

GALLAS, K. (1997). Storytime as a magical act open only to the initiated: What some children don't know about power and may not find out. *Language Arts, 74,* 248-254.

GALLAS, K. (1998). *"Sometimes I can be anything": Power, gender and identity in a primary classroom*. New York: Teachers College Press.

GARDNER, H. (1973). *The arts and human development*. New York: Wiley.

GARDNER, H. (1980). *Artful scribbles*. New York: Basic Books.

GARDNER, H. (1982). *Art, mind, & brain: A cognitive approach to creativity*. New York: Basic Books.

GEE, J. P. (1990) *Social linguistics and literacies: Ideology in discourses*. New York: Falmer.

GREENE, M. (1995). *Releasing the imagination: Essays on education, the arts, and social change*. San Francisco: Jossey-Bass.

GROTOWSKI, J. (1968). *Towards a poor theatre*. New York: Simon & Schuster.

GRUMET, M. (1988). *Bitter milk*. Amherst, MA: University of Massachusetts Press.

HOLTON, G. (1973). *Thematic origins of scientific thought*. Cambridge, MA: Harvard University Press.

HOLTON, G. (1978). *The scientific imagination: Case studies*. New York: Cambridge University Press.

JOHN-STEINER, V. (1985). *Notebooks of the mind: Explorations of thinking*. New York: Harper & Row.

JOHN-STEINER, V. (2000). *Creative collaboration*. New York: Oxford University Press.

JOHN-STEINER, V., & MEEHAN, T. (2000). Creativity and collaboration in knowledge construction. In C. D. Lee & P. Smagorinsky. (Eds.), *Vygotskian perspectives on literacy research: Constructing meaning through collaborative inquiry* (pp. 31-48). New York: Cambridge University Press.

KELLOGG, R. (1967). *The psychology of children's art.* New York: Random House.

LAVE, J., & WENGER, E. (1991). *Situated learning: Legitimate peripheral participation.* New York: Cambridge University Press.

LEMKE, J. (1990). *Talking science: Language, learning and values.* Norwood, NJ: Ablex.

LENSMIRE, T. J. (1994). Writing workshops as carnival: Reflections on an alternative learning environment. *Harvard Educational Review, 64,* 371-391.

LENSMIRE, T.J. (1997). The teacher as Dostoevskian novelist. *Research in the Teaching of English, 31,* 367-392.

LEWIS, C. S. (1956). *Surprised by joy: The shaping of my early life.* New York: Harcourt Brace.

MEDAWAR, P. (1982). *Pluto's republic.* New York: Oxford University Press.

MORSON, G. S., & EMERSON, C. (1990). *Mikhail Bakhtin: Creation of a prosaics.* Stanford, CA: Stanford University Press.

NEMEROV, H. (1978). *Figures of thought.* Boston: David R. Godine.

OCHS, E., JACOBY, S., & GONZALES, P. (1996). "When I come down I'm in the domain state": Grammar and graphic representation in the interpretive activity of physicists. In E. Ochs, E. S. Schegloff, & S. A. Thompson (Eds.), *Interaction and grammar* (pp. 328-369). New York: Cambridge University Press.

PALEY, V. G. (1990). *The boy who would be a helicopter.* Cambridge, MA: Harvard University Press.

PAZ, O. (1990). *The other voice: Essays on modern poetry*. New York: Harcourt, Brace, Jovanovich.

PHILLIPS, A. (1992, April). *Raising the teacher's voice: The ironic role of silence*. Paper presented at the annual meeting of the American Educational Research Association, San Francisco.

PHILLIPS, A. (1993). Raising the teacher's voice: The ironic role of silence. In *Children's voices, teachers' stories: Papers from the Brookline Teacher Researcher Seminar* (pp. 1-8). The Literacies Institute, Technical Report No. 11. Newton, MA: Education Development Center.

PHILLIPS, A. (1996). *Turns in a conversation: A comparative study of interaction in three teacher-researcher groups*. Qualifying paper, Harvard Graduate School of Education.

RAYMO, C. (1987). *Honey from stone: A naturalist's search for God*. St. Paul, MN: Hungry Mind Press.

RICHARDSON, E. (1964). *In the early world*. New York: Pantheon.

ROTHENBERG, A. (1979). *The emerging goddess: The creative process in art, science and other fields.* Chicago: University of Chicago Press.

ROOT-BERNSTEIN, R. S. (1989). *Discovering: Inventing and solving problems at the frontier of scientific knowledge.* Cambridge, MA: Harvard University Press.

SALK, J. (1983). *The anatomy of reality.* New York: Columbia University Press.

SARTRE, J. P. (1961). *The psychology of imagination.* New York: The Citadel Press.

SARTRE, J. P. (1964). *The words.* Greenwich, CT: Fawcett.

SMAGORINSKY, P., & COPPOCK, J. (1994). Cultural tools and the classroom context. *Written Communication, 11,* 283-310.

STEVENS, W. (1960). *The necessary angel: Essays on reality and the imagination*. London: Faber & Faber.

SWAIM, J. (1998). In search of an honest response. *Language Arts, 75,* 118-125.

WARNOCK, M. (1976). *Imagination*. Berkeley, CA: University of California Press.

WARREN, B., BALLENGER, C., OGONOWSKI, M., ROSEBERY, A., & HUDICOURT-BARNES, J. (2000). *Re-thinking diversity in learning science: The logic of everyday languages*. Cambridge, MA: TERC.

WOLPERT, L., & RICHARDS, A. (1997). *Passionate minds: The inner world of scientists*. New York: Oxford University Press.

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