Ritualizing Expertise: A Non-Montessorian View of the Montessori Method

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This article examines the practice of Montessori education through the lens of ritual. Anchored by description and analysis of a lesson in an elementary classroom, the lesson is viewed as a series of f ritualized interactions in which both teacher and student act out multiple layers of expertise within the cultural frame of the Montessori method. Analysis is grounded in frameworks drawn from ritual theory (Bell 1992; Douglas 1973; Turner 1969) and explores the role of ritual activity in delineating both the contours of Montessori practice and the boundary between Montessorians and non-Montessorians.

Introduction: Culture, Method, and Practice

This article is about how teachers teach by practicing the Montessori method. It began as an attempt to examine the construction of Montessori teaching expertise as it occurs in practice. As a researcher trained in ethnographic methods who had gained access to observe a Montessori classroom, and as an educator congenial to what I understood to be the child-centered, constructivist bent of Montessori education, I was confident that I could capture the essence of the "method" from "the native's point of view" (Malinowski [1922] 1961, 25). I was wrong.

As the title suggests, I am a non-Montessorian, which is to say I am—or was, as will be explained later—a stranger (Spindler and Spindler 1982) to the ways of Montessori education. It was, indeed, the strangeness of what I encountered when I first visited a Montessori classroom in order to investigate schools for my then three-year-old son that prompted me to linger (first figuratively and now literally) in the environment. Having spent several years as a researcher attempting to make strange the familiar worlds of U.S. high school classrooms, I was initially baffled to find a classroom that was alien to anything I had known as a student, teacher, or researcher. From the way the classroom was organized—large, carpeted spaces punctuated by low shelves

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containing meticulously placed trays of "materials"—to the manner in which students and teachers interacted—minimal discourse, usually conducted in whispers—nothing was as it should be, at least not according to the classroom norms with which I was familiar. Equally baffling was the discovery that, despite its geographic and theoretical reach (Montessori is a worldwide movement with over 4,000 schools in the U.S. alone), both the method and the movement remain largely unstudied by mainstream educational researchers. My initial observations, coupled with the dearth of research on Montessori practice and culture, suggested that the cultural meanings of Montessori practice were worth a closer look.¹

My initial experiences as an observer in a Montessori classroom also suggested the importance of being an insider if one is to practice the Montessori method. That is to say, the "method," as Montessorians are quick to point out, cannot be reduced to a collection of instructional techniques or curricular objectives or didactic materials. Rather, the practice of Montessori education entails participation in a highly coherent and deeply textured culture. Within that culture—what I understand to be the values, beliefs, and norms shared by Montessorians—members construct the meaning not only of a particular type of teaching and learning but of a particular type of living. How they do it is the subject of this article.

While my status as a non-Montessorian precludes the sort of participation that would enable a complete portrayal of Montessori culture from an insider's point of view, I aim to capture some of the complexities of that perspective by focusing on the action of Montessori practice. Drawing from McIntyre's (1981, 187) definition of practice as "coherent and complex human activity . . . through which goods internal to that activity are realized," I elaborate a theory of practice in which the action of teaching is constitutive of culturally derived values, beliefs, and norms through which the "goods" of Montessori culture are realized. The "goods" or virtues of Montessori culture are defined in Maria Montessori's voluminous writings, which elaborate a holistic or "cosmological" worldview centered on concentration, coordination, order, independence, and respect. Those same goods are visible in the actions of Montessorians, who construct their practice within the cultural and technical bounds of the Montessori worldview. Relying on both a close reading of

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Montessori doctrine and a close analysis of an instance of Montessori practice, I highlight the relationship between the doctrinal and embodied dimensions of practice, attending especially to the manner in which actions constitute values, beliefs, and norms.

My central argument is three-pronged. First is that the Montessori method is an exemplar of a particular type of "coherent" (Elmore 2002; Newmann et al. 2001) practice, which is most obviously demonstrated in the consistency in language and behavior evident within as well as across classrooms and schools. Second is that the coherence of Montessori practice—both action and worldview—is located in Montessori culture. Like all teaching, the practice of Montessori education is best understood as "cultural activity" (Gallimore 1996; Hiebert et al. 2002), and the beliefs, values, and norms of the Montessori worldview are encoded in a distinctive set of cultural scripts that are known collectively as the Montessori method. Third is that those scripts—as encoded in the method—are enacted in the routines and rituals that punctuate life in Montessori schools. From the way a child learns to roll and unroll a mat or the intricate choreography of a lesson in hand washing to the larger ceremonies of the Great Lessons, ritualized activity is among the most distinctive features of Montessori education. In marking time, shaping space, and enacting values central to the culture, these rituals define the contours of Montessori practice and, in so doing, they illuminate both the coherence and complexity of the method.

The Window of Ritual

Ritual has been called the "least analyzed component of school culture" (Lankshear 1999, xiii). Indeed, a handful of empirical studies highlight the degree of neglect as well as promise inherent in cultural analysis animated by ritual. Turning an analytic eye to ceremonies such as pep rallies, masses, and assemblies, some of these studies (Lesko 1988; McLaren 1999; McQuillan 1994) highlight the power of ritual to affirm a collective ethos or moral order (Metz 1978) even in the midst of contradiction and conflict. Others (McLaren 1999; Quantz 2001; Quantz and Magolda 1997) expand the definition of ritual to include everyday classroom interactions (Goffman 1967), demonstrating how subtle and persistent the forces of culture can be.

Framed largely by the work of social anthropologist Victor Turner (1967, 1969), these studies emphasize the function of ritual in both articulating and mediating social conflict. That is, they use ritual to illuminate the socioculture context of schooling, focusing especially on the reflexive nature of school and society. Lesko and McLaren, in particular, show how some rituals, usually those performed by teachers, affirm social structure, while others, often those

performed by students, subvert or erase social divisions. Lesko finds reconciliation and unity in the formal ceremony of an all-school assembly or mass. McLaren, on the other hand, regards seemingly mundane student behavior, such as clowning or refusal to work, as the ritual enactment of resistance. Both show how ritual reflects wider sociocultural dynamics as well as how ritual can challenge the moral order by creating what Turner (1969) called a "liminal," or in-between, state in which prevailing social arrangements are temporarily set aside.

Where most studies of educational ritual focus on the phenomenon as a window into the social context of schooling, I use these frameworks to turn the spotlight inward, illuminating the "act of teaching" (Richardson 2002, 3) itself. Because mastering the technical dimension of the method constitutes the primary entry point into Montessori culture (one cannot be a Montessorian without knowing how to "prepare an environment," "give a lesson," or otherwise interact with students and the environment in the distinctive ways prescribed by the method), I concentrate on how practitioners use ritual to order their actions, to shape their practice, to cross the boundary from outsider to insider. By following a detailed rubric for how to interact with students and the environment, Montessorians construct a distinctive version of "good" teaching, which is grounded in an elaborated vision of "goodness" (Cossentino forthcoming). In both worldview and practice the virtues of concentration, order, independence, and respect are elevated as both the means and end of Montessori education.

Though ritual is a constituent feature of all cultures and can be found in all schools, I argue that ritual plays a special role in Montessori culture. Within the Montessori worldview, ritual serves as a symbolic link between the method as articulated by Montessori and its practice as enacted by Montessorians. Drawing from (and elaborating) Turner's notion of liminality, I examine the role of ritual in both highlighting the boundary between Montessorians and non-Montessorians and in creating symbolic space for practitioners to make sense of both the technical and cultural aspects of their practice. Drawing from Douglas's (1973) anthropological constructs of "grid," "group," and "cosmology," I analyze the means by which the rubrics of the method are embodied in the physical action of Montessori practice, which is nested within a discernable worldview, which itself is both defined and enacted in ritual activity. For Douglas, "grid" is associated with the symbolic structure of society—its creeds, rules, and formal organization. Cultures that rely on highly prescriptive rules for behavior, dress, and association, for instance, are said to have a high degree of grid. "Group," by contrast, is formed through voluntary association and is constituted in tight communal bonds. High group cultures are characterized by strong group identity and clear boundaries between insiders and outsiders.

Concentrating on the interaction of grid and group characteristics, Douglas uses these constructs to establish a continuum of social cohesion that characterizes types of social environments. From individualistic to communitarian, secular to sacred, highly rational to densely symbolic, the range of grid/group correspondence both predicts and manifests the role of ritual in a given culture. For Douglas, grid and group are complementary categories, constituting the warp and weft of the fabric of social life—the tighter the weave, the more ritualistic the society.

While ritual activity clearly abounds in U.S. public schools, Douglas's continuum helps explain the difference between spontaneous "ritualization" (Bell 1992) common to all cultural activity and those rites that arise out of tight alignment between grid and group. For instance, while ceremonies common to U.S. public school—commencements, pep rallies, assemblies—are designed explicitly to affirm the moral order, researchers have noted that many of the most potent examples of school ritual symbolize disruption rather than stability of grid/group arrangements (McLaren 1999; McQuillan 1994; Quantz 2001). Threats to the stability of both grid and group include increased size, diversity, and overt efforts to alter the structures and/or traditions of the culture. For the past century, ongoing efforts to reform public schooling coupled with rapid and dramatic changes in school conditions and constituencies have led to continuous challenges to the stability of grid and group arrangements. In addition to challenges wrought by constant innovation, the historic aims of pluralism, secularism, and (increasingly) inclusiveness indicate a relatively diffuse sense of both grid and group and low regard for ritual (Grumet 1977).

By contrast, Montessori culture is characterized by a high degree of both grid (evident in the rubrics of the method) and group (evident in the very notion that there is such a thing as a Montessorian), which, according to Douglas's system, suggests a high regard for ritual. Along with underlining contrasts between Montessori and non-Montessori educational culture, the constructs of grid and group also help explain variability within Montessori culture. Here I emphasize that Montessori culture is not monolithic. There are palpable distinctions from school to school as well as among larger segments of the movement.⁴ Montessorians vary in the degree to which they adhere to both the doctrinal and the traditional elements of the method. Where some insist on a strict interpretation of Montessori's writings, others favor a more liberal treatment of the rubrics, calling for wide latitude to innovate and greater involvement with non-Montessori approaches to education.

Debates among these wings of the movement are legendary (Applebaum 1971; Kramer 1976; Rambusch 1962), and, in their focus on the hows of Montessori practice, they highlight the role of action, especially symbolic action, in distinguishing among cultures that are more or less ritualistic. Debates among Montessorians focus on competing claims to legitimacy based

on the "correctness" of practice. While squabbles over how best to prepare an environment, interact with children, or introduce a new piece of material abound, there remains remarkable agreement on the end to which these actions are directed. In other words, regardless of the perceived correctness of practice, Montessorians the world over share a common worldview. The stability of the worldview, moreover, suggests that even the loosest segments of Montessori culture demonstrate a marked regard for cultural cohesion supported by the ordering and representational capacities of ritual.

Douglas also traces a close alignment between grid, group, and worldview or cosmology, arguing that attitudes toward the cosmos are embodied in ritual activity. High group/high grid cultures view the universe as ordered and active, sometimes controlling the actions of humans and at other times responding to those actions. Within Montessori cosmology, all things are connected (Montessori 1967), and individual action is understood to affect (and be affected by) larger chains of activity. At its core, the purpose of Montessori education is to bring human activity into accord with the natural order of the universe. For Montessori, the natural order of the universe is exemplified in the cardinal virtues of concentration, coordination, order, independence, and respect. Learning to practice these virtues is the focus of what Montessori called the first plane of development (birth to age 6).⁵ Subsequent planes of development are concerned with directing those virtues outward toward the betterment of one's community, the world, and, eventually, the universe. Moreover, those virtues or "goods," along with their development, are symbolized in the rituals of Montessori practice.

For example, a common Montessori classroom ritual is the child's silent placement of a hand on the teacher's shoulder to request attention.⁶ The action requires the child to walk over to the teacher (rather than remain seated with a raised hand), to touch the teacher without interrupting an ongoing conversation, and to wait until the teacher can conclude the ongoing conversation before being recognized. For outsiders, the sight of a child (sometimes several children) attached to a teacher while waiting to be acknowledged can be perplexing. But for insiders, the action is constitutive of the technical as well as moral "goods" of Montessori practice.

In part, the hand-on-shoulder ritual is an enactment of an expedient class-room norm; it is the way things are done in Montessori classrooms. It is a means of keeping the noise level low while managing interruption. But the symbolism of approaching, touching, and waiting goes deeper than managerial practicality; it maps a close relationship between the means and ends of Montessori education. Montessori referred to the embodiment of technical and moral knowledge as "linking hand and mind" (Montessori 1964, 1966, 1995), and touch, along with all of the senses, plays a central role in nearly all aspects of the method. When a Montessori child places a hand on a teacher's shoulder

and waits to be recognized, he is practicing the virtue of patience; he is achieving graceful human contact; he is acting out the value of respect, both for the needs of others and for work itself. The child probably does not understand the dense, symbolic meaning of the gesture at the moment she performs it, but with repetition, the gestures will become automatic, and their meanings will inscribe themselves into the child's consciousness. And, over time, he or she will become a respectful and patient person who is able to achieve a harmonious life. Of course, the ritual does not make the child respectful or patient or able to achieve harmony in life: the child, according to Montessori cosmology, must choose that path. The choice is made within a complex system of interactions between student, teacher, and environment, but the ritual helps to map the journey.

By inverting the traditional means of students' gaining a teacher's attention, the ritual also dramatizes a key distinction between Montessori and non-Montessori cosmologies. Again, the precise actions and their sequence are significant. The repeated pattern of approaching, touching, and waiting acknowledges the student's agency, establishing that students rather than teachers are authorized to interrupt, albeit in a proscribed manner. In contrast to the ritual of hand raising, which requires the student to remain seated at a distance from the teacher and authorizes the teacher to selectively respond to students, the physical intimacy entailed in approaching and touching symbolizes both the immediacy of the request and the expectation that the teacher will respond to all students, albeit in time and in turn. The ritual, in other words, inverts the moral order of the classroom.

Ritual inversion, which occurs throughout Montessori practice, is one way of creating liminal, or in-between, spaces, within which to acknowledge both disruption of an existing moral order and the presence of an alternative worldview. For teachers, crossing the line between old and new worldviews constitutes a central activity in becoming a Montessorian. The same rituals that guide students toward concentration, patience, and respect help to map a teacher's journey toward expert practice. My aim in this study was to use the "window of ritual" (Geertz 1973) to view the progress of that journey in cultural context. Through close analysis of the act of teaching, I attempt to discern what constitutes teaching expertise within Montessori cosmology and how expertise develops in accordance with that cosmology.

Data were collected during a two-week field study in a Montessori elementary classroom (ages 6–9), which marked the beginning of an ongoing period of participant observation in that same school. The school is a medium-sized Montessori school serving approximately 126 children from the ages of 18 months to 12 years. Williamsburg Montessori School is affiliated with the American Montessori Society (AMS), which situates the school on the more "liberal" end of the grid/group continuum (see n. 4). Despite its status as a

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relatively liberal Montessori community, I noted a palpable sense of "strangeness" on entering the setting. That strangeness ultimately enticed me further into the school; I note that the data presented here were collected during the first days of what has evolved into a three-year ethnographic study. Fieldwork entailed 10 full days of classroom observation and two two-hour interviews with each of the teachers in the room. I recorded microinteractions between teachers, students, and subject matter, paying special attention to instances of patterned, symbolic action indicative of ritual activity (Bell 1992). I noted an array of interaction rituals, such as greetings and table manners, as well as what appeared to be more elaborate classroom rites such as "giving a lesson," preparing and clearing lunch, celebrating birthdays, and repeated references to classroom activity as "work."

While my participation, particularly at the point at which data for this article were collected, was indeed limited by my status as a "non-Montessorian," it is important to note that my analysis of those data has been ongoing for more than three years. In January 2001, I first entered the environment guided by the hunch that Montessori classrooms were dense with ritual activity. Through observation, my initial goal was to identify, describe, and catalog a range of classroom interactions that might be considered "ritual activity." I also looked for instances of interaction that I, as an outsider, found especially "strange," and there were many during those first two weeks. The hand-on-shoulder ritual described above was, in fact, the first instance of "strange" behavior that began to make sense when viewed through the lens of ritual.

In July of that same year, my status shifted from primarily observer to participant-observer when I became the school's administrator (head of school). Reasoning that the strangeness I was experiencing as an observer was attributable to the "closed" (Douglas 1973, 32) nature of the culture, I accepted the position as a means of gaining entry. It bears repeating that my participation in the core instructional rituals of the culture is expressly prohibited. Nonetheless, the position has permitted ongoing observation of those rituals as well as access to the teachers and students who perform them. Most important, my participant role brought me into contact with the action of Montessori practice. In the ensuing three years, the "strangeness" of the environment has diminished for me, as I have immersed myself in the culture, recorded many more interactions in all of the classrooms of this and other schools, and become conversant in Montessori language.

Both the selection and the interpretation of the vignette that anchors this article have been shaped by my experience as a participant as well as an observer in this environment. The interaction depicted here involves a brief encounter between one teacher and one student and it lasted less than fifteen minutes. Yet in those few minutes a world of meaning was both constructed and conveyed. I present this small moment of classroom life—one of thousands

I have witnessed and hundreds I have recorded and analyzed—as a means of highlighting those elements of practice that illuminate more global meanings related to both the construction and interpretation of teaching expertise in Montessori culture. The focus on a single instance allows me to linger on the interactions that comprise the teacher's practice and to demonstrate how analysis animated by ritual helps reveal multiple layers of meaning embodied in the symbolic action that permeates the lesson.

I analyzed recorded classroom interactions by oscillating between grounded theory and conceptual frameworks derived from ritual theory (Bell 1992; Douglas 1973; Turner 1969). Interpretation focused on the enactment of teachers' technical and cultural expertise in classroom interactions. Along with cataloging instances of ritual activity, I attended to patterns of activity that were suggestive of symbolic coherence as well as symbolic density within and across rituals. That is, the hand-on-shoulder ritual was a feature of classroom activity within all six classrooms of the school as well as many Montessori classrooms worldwide. Similarly, the encoded "good" of respect for others' work enacted in the hand-on-shoulder ritual was also visible in other classroom practices, such as keeping a respectful distance between individual student work areas, a strict prohibition against interrupting students at work, or the sacredness with which the morning "work cycle" was observed.

In aiming to keep the focus on the act of Montessori teaching—and the goods enacted in and through that teaching—I highlight the link between practice and action. For theorists, practice is constituted in the union of intention and action. But for participants, it is the doing of Montessori practice (more than reflection on that doing) that reveals the potent role of ritual as both a mechanism of technical expertise and a marker of cultural competence. The hand, to borrow Montessori's image, is the gateway to the mind, and the distinctive categories of symbolic doing characteristic of Montessori ritual almost always involve distinctive physical activity. The actions of touching others in a particular way, handling objects in a particular way, walking around the classroom in a particular way, all enable the practitioners to construct a particular understanding of what it means to participate in Montessori culture.

For outsiders, however, who by definition do not participate in the symbolic action of Montessori practice, ritual serves as an "etic" (Harris 1964; Lett 1990; Pike 1967) construct. I use ritual as a window into the symbolic dimension of practice in order to make sense of a way of doing things that is alien to what I know from experience. Dwelling as I do on the border between insider and outsider, participant and observer, administrator and researcher, I aim to use my own liminal state as a non-Montessorian head of a Montessori school to gain a deeper understanding of "where the line is drawn" (Grumet 1988) and how that line matters to the development of teaching expertise.

What follows is a close look at a single instance of teaching practice in a

Montessori elementary classroom. I begin by describing and analyzing a complex series of interactions between Kristin, a novice teacher; Alex, a first-year student; and the materials that Kristin and Alex use to mediate a lesson in addition.⁸ Drawing from recent research on the problem of teaching expertise (Cohen and Ball 1999; Heaton 1999; Heibert et al. 2002; Lampert 2001), I elaborate a model of practice that highlights the unique quality of relationships between student, teacher, and environment evident in the action of Montessori practice. I then move on to examine the encounter as an example of ritualized practice. Focusing on patterns of formalized action and the symbolism embedded in those actions, I attempt to demonstrate how Kristin ritualizes her practice as a means of making sense of the technical and moral dimensions of her teaching. I also show how the rituals that unite hand and mind link the means and ends of Montessori education. As Kristin and Alex enact the cultural scripts of the Montessori method through the rituals of Montessori practice, they move closer to achieving the "goods" (McIntyre 1981), or virtues, that are encoded in both the action and the rubrics of the method. Finally, I conclude that performing the rituals of Montessori education enables practitioners to construct a holistic or cosmological version of teaching expertise that stands in stark contrast to the eclectic and pragmatic tendencies that dominate mainstream notions of practice.

A Lesson in Addition

"Alex wasn't really getting the concept of addition," Kristin told me. "He needs to get a concrete sense of what two numbers put together mean. That they make a different number."

This was how the lesson began, with diagnosis of student understanding. Not what needs to be covered, not even what mistakes Alex has made. Rather, Kristin's focus was on the conceptual target of addition. How to get Alex to understand the concept of addition?

Actually, this portion of Kristin's planning began weeks earlier as she noticed difficulties Alex was having with the five-bead chain. Six-year-old Alex was new to the Montessori environment, and Kristin was sensitive to the difficulties that were likely to coincide with his entrance into this setting. He had trouble concentrating. It was difficult for him "to block out the other sounds and focus on his work," Kristin told me. Some of Alex's difficulty was a result of the newness of the culture of the classroom, what Kristin understood as his failure to "normalize," but some—enough—stemmed from the fact that Alex did not understand the concept of addition. Kristin had been observing Alex's progress and noted increasing competency with counting. Now he needed to begin to make connections between the parts and the whole; without

this foundation, he would not be able to understand fractions or multiplication. So she returned to counting.

The lesson opens with Kristin sitting down next to Alex on the large green carpet that defines one of the central work areas in the classroom. Prior to her arrival, Alex has unrolled a white cotton mat upon which Kristin places a small round basket filled with white and brown rocks. Alex has his "math notebook," one of several black-and-white-marbled notebooks in which students record work for individual disciplines. Previously, Kristin has designed a similar exercise with smooth and rough stones, which here substitute for the Montessori "counters," or chips, traditionally used to develop competence in counting. The categories, she finds, and the tactile quality of the stones appeal to Alex. Handling the stones seems to keep his attention and also calm his busy hands.

In silence, Kristin places two piles of rocks on the mat. Without verbal cue, Alex begins making a string of white rocks. "Alright," Kristin whispers when all the white rocks are lined up, "so how many white rocks do you have?" Alex answers, "eighteen." Without emotion Kristin says, "that's right. Write 'eighteen' here," pointing to a heading she has written in the notebook, under "white rocks." He seems distracted and starts writing upside down. Kristen redirects, "Alex, let's try that again." He writes "18+."

"Now, count the brown rocks." He makes a string of brown rocks, and then writes the total in his book. "Now, what do you get when you put them together?" By asking this question, she is making a subtle conceptual link between counting and adding. She understands that Alex does not yet see the difference—that addition fundamentally changes the nature of the number, the composition of the set, the meaning of the pile of rocks. She signals this insight with the question "What do you get?" implying that what you get is something different. At this point, the color of the rocks signifies the difference between sets. Alex can make a new set by counting, by keeping focused on the concrete, which is enabled by two sets of different colored rocks. But Kristin wants him to cross over into the abstract world of symbols.

"Now," she says, moving him a little closer, "let's try something different. Six plus four." She writes "6 + 4" in the notebook. "Let's work only with the brown rocks." Silently, he puts away the white rocks and makes a pile of brown ones. Kristin does not touch the stones. "Now count out six rocks," she instructs. He begins moving rocks as he counts aloud: "one, two, three, four, five, six, seven, eight . . ." Kristin stops him by pointing to the number in the book and asks, "How many do we want?" Alex corrects by moving two rocks away. He then moves four more rocks from the larger pile to the smaller set of six. He counts aloud and gets ten. He tries another problem: "7 + 2." He repeats the mistake in counting. Kristin says softly, "Concentrate." This time he does it correctly. "OK," she says, "I think you got the hang of it."

She writes five more problems in the notebook. "I want you to try these all by yourself." "Without you here?" he asks. "Without me here," she answers.

Practice at "Mat Level"

In this small example of teaching practice, much is going on. So much, in fact, that it can be difficult to know where to begin a useful analysis. On a rudimentary level the encounter is a portrait of remediation. Kristin has identified a deficit in Alex's mathematical understanding, and she is attempting to remedy the deficit through a deceptively simple activity. But before Kristin can remediate, she must first diagnose, which makes this an illustration of the attention teachers pay to individual students and the consequences of noticing (or failing to notice) gaps in knowledge and skill. On another level, the vignette explores the concept of addition. Both the choice of materials and the structure of the lesson reveal Kristin's own understanding of the relationship between counting and adding, which informs her approach to Alex. On yet another level, this lesson is about concentration and the need for Alex to learn to stay focused on his work, to block out distractions around him, and to develop the ability to manage himself in time and space. It is also about how Kristin manages herself in time and space, what she says or does not say to Alex, how she modulates her voice, the pace at which she handles materials, how she responds to questions or interruptions. Practice is occurring on all of these levels, and most of the time it is occurring simultaneously.

Despite its richness, a great deal is missing from the above description. I have deliberately kept the focus on the microscopic interactions between Kristin, Alex, and the materials that mediate instruction because I want to highlight the complexity of those interactions as they occur on what I will call "mat level." Here I am referring to the white, rectangular mat that Alex unfolded at the start of the lesson and that delineates his work space from the rest of the classroom. Outside the bounds of the rectangle, a wider world of activity was under way. Throughout the room on this January morning, 35 students were moving independently through individual work cycles. At a nearby table, students were taking turns sharing a snack of cheese and crackers. A few feet away from Kristin and Alex, Marissa was using one of the "grammar boxes" to analyze sentences, and not far from Marissa, Matthew was reading silently. In short, the wider world of the classroom was buzzing with quiet, but palpable activity.

But inside the bounds of the mat, Kristin and Alex were engaged so fully in their work with the rocks that the world beyond the mat seemed to recede into the distant background. As an observer, I was so absorbed in the interactions that my notes scarcely acknowledge the presence of competing activity;

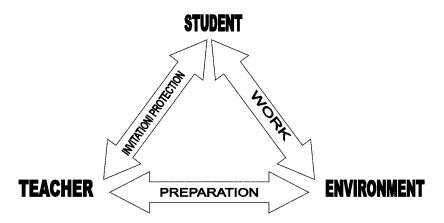


FIG. 1.—The "technical triangle" of interactions between student, teacher, and environment

I had to force myself to record what other students were doing while the lesson was under way. My "mat level" analysis concentrates on interactions between the student, the teacher, and the environment delineated by the mat on which Kristin and Alex work. Figure 1 illustrates a model of practice that occurs at "mat level."

The model of practice as a triangle is familiar to many (Montessorians as well as non-Montessorians) who study the work of teaching and learning and who seek a representation that captures the complexity and subtlety of the enterprise. As a form that is both dynamic and stable, the triangle depicts interactions between three central actors: "the student, the teacher, and the subject of their mutual attention" (Sizer 1984, 151). In all classrooms, practice occurs along all three arrows, and in all classrooms, the nature of practice can vary dramatically depending on the nature or circumstances of any of the three actors. Both teacher and student construct their practice within the variability and dynamism of the triangle of interactions.

In Montessori classrooms, however, practice is distinguished as much by the stability of the triangle as by its dynamism. Interactions occur in predictable and often proscribed ways, and for outsiders, those interactions can be perplexingly mysterious. It can be difficult to discern what, exactly, a teacher is teaching or how, exactly, she is teaching it, because she often uses means of interaction that are unfamiliar to those accustomed to traditional teaching. And when she does use traditional means, most notably language, she does so in a distinctive way. Similarly, unlike traditional classrooms, in which content is the third prong of the triangle, Montessori teachers rarely act directly on the subject under study. Rather, they act on the environment within which content is subsumed. A Montessori teacher interacts with the environment by

preparing it. A Montessori student interacts with his environment by working with materials as prepared by the teacher. And the teacher interacts with the student by first inviting him to work with the materials she has prepared, then protecting his concentration once he has engaged in work. It is the predictable yet unfamiliar manner in which these interactions unfold that can render the "method" incomprehensible to outsiders. A closer look at this model in action begins to reveal both the complexity and the coherence of Montessori practice.

In this case, Alex interacts with his environment both spatially and tactually. He begins by observing the bounds of the mat as a form of ordering his work space. Once defined, the mat becomes a staging area for precise interactions with concrete materials. Interactions with materials entail touching, ordering, and counting two sets of different colored stones. In the course of this touching, ordering, and counting, Alex is engaged in more sophisticated cognitive operations. He is developing sensory discrimination as he distinguishes between white and brown stones. He is demonstrating his understanding of the notion of quantity and, when he writes numbers that correspond to the strings of rocks he has counted, he is representing various quantities symbolically. All of these operations are necessary if he is to master basic numeration. If the content of this lesson were only the concept of addition, analysis of Alex's interactions with the materials that mediate instruction might end there. But Alex was also learning to concentrate, and engaging with the stones enabled that learning to occur by providing something concrete to concentrate on.

Kristin's interaction with the environment began well before the official start of the lesson, when she decided to substitute the brown and white rocks for the counters more typical of a Montessori counting activity. "He really seemed to like the stones," she told me in explaining her choice. "And since he hadn't been in the Children's House [an environment rich with 'sensorial materials' aimed at developing sensorial discrimination], I thought they [the rocks] would be more useful to him." Her interactions with Alex entailed inviting him to engage with the stones, and once he had done so, she practiced restraint in her intervention. The Montessori appellation of teacher as "directress" is clarified, in part, by what Kristin did not do. She did not order or count the rocks herself. Instead, she observed, projecting an air of patient expectation with Alex in a way that modeled the calm, focused demeanor she expects of all her students. She did not attempt to explain the concept of addition. Instead, she invited Alex to engage with the concept by way of the material. She did not praise Alex for arriving at the correct answer, and she did not chastise him for losing concentration. Rather, she protected Alex's focus on his work by minimizing distracting action and words and by modeling concentration herself.

Language was used sparingly and intentionally. Kristin first relied on gesture

to direct Alex's attention. And only when that seemed insufficient, she offered brief, simple admonition: "Concentrate," or "Let's try that again." The other function of language was to signal cognitive transitions. The question "What do you get when you add them together?" signaled that combining sets produces a different number. "Let's try something different," indicates a shift in operations. Throughout the lesson, Kristin's use of simple, spare language kept the focus on the material.

Minimizing talk and maximizing gesture are hallmarks of all Montessori classrooms, but it is a practice more common to the Children's House (the classroom serving 3-6-year-old children) than to the elementary classroom where this encounter took place. And that was by design. Kristin began her preparation for this lesson with the identification of a gap in Alex's mathematical understanding. She elaborated that preparation when she determined that the gap in Alex's knowledge and skill was not a deficit that could be remedied through direct instruction or the delivery of verbal guidance. Rather, she seemed to see it as a gap in experience. Had Alex had the indirect preparation with sensorial materials typical of work in the Children's House, he might have been much closer to mastering the notion of quantity and the skill of symbolization prior to attempting to work with the bead material. She also suspected that he would be able to sustain deep concentration. To address both deficits, she effectively took him back to the Children's House via the mat. In other words, Kristin did not offer Alex knowledge. She offered him access to this knowledge through a carefully orchestrated experience with his environment.

As an outsider, the model of Kristin's practice as a triangle of distinctive interactions demystifies her teaching. The schematic isolates discrete moves that, together, comprise her practice: In isolating discrete moves, I am able to identify what makes them distinctive. The triangle, in other words, helps me to "see" that Kristin's teaching entails something other than telling Alex about addition or directing Alex to complete math problems—actions that are familiar to me as both a student and a researcher in other classrooms but that are rarely featured in Montessori classrooms. Rather, the triangle helps me to see how Kristin makes intentional use of space, gesture, and language in an effort to help Alex understand the concept of addition. Once I notice how Kristin uses space, language, and gesture in her practice, I can begin to understand how those moves come together as a complex, finely calibrated system of learning and teaching. It is in visualizing the systemic and integrated nature of Kristin's expertise that I can begin to understand what makes those moves coherent as well as how that coherence is enacted in the practice of the Montessori method.

Another Look at Kristin's Lesson

By "zooming in" (Lampert 2001) on a single sequence of activity, "mat level" analysis reveals the subtle and complex triangle of interactions between student, teacher, and environment within which practice occurs. The tight focus helps reveal what a Montessori child does to learn and what a Montessori teacher does to assist the child in learning. For the child as well as for the observer, the mat helps eliminate distraction and focus attention on the precise work of the lesson. But in this and all classrooms, the action that occurs beyond the mat is just as important. Real classrooms are filled with potential distractions. Real teachers notice and respond to variable and multiple needs and diagnose various and multiple problems. To say that the world beyond the mat seemed to recede to the background is not to claim that all action ceased as the lesson was under way, only that for a few minutes it seemed to. Real practice, in other words, is constructed within a complex cultural context, and viewing the reality of Kristin's practice requires a wider lens.

In order to view the Montessori method in cultural context, I use the lens of ritual. That is, I examine the same triangle of interactions described above. Only now I regard those interactions as instances in which Kristin and Alex formalize their action in order to enact the technical and moral "goods" of Montessori education. Those actions serve as the principal scripts of Montessori practice. They are what identify practitioners as Montessorians. They express what Montessori herself referred to as a "cosmic" vision of education, and they constitute a practitioner's cosmology of learning, teaching, and living within the Montessori method. Where "mat level" analysis of Kristin's lesson reveals the technical dynamism of the triangle of interactions comprising Kristin's practice, cultural analysis contextualizes that triangle within the cosmological frame of the method.

When I refer to ritual in the context of educational practice, I am talking about both the action of teaching and learning and the messages that are embedded in that action. Those messages are constructed within and bound by particular cultures. For instance, within the culture of U.S. public schooling, the actions of calling roll, arranging classrooms in rows of stationary desks, and leading students through corridors in straight, silent lines embody a vision of education built, in part, around the values of efficiency and control. When teachers and students perform those actions, they are ritualizing those values and acting out the complex meanings of that particular vision of schooling (Grumet 1997; McLaren 1999).

These actions are considered rituals because they are recognizable as formal, symbolic, and invariant performances (Bell 1997; Kapferer 1981; Quantz 1999). As symbolic performances, they both construct and convey meaning. In other words, when students take their seats in desks that have been arranged

in stationary rows, they recognize that their movement will be curtailed. At the point of recognition, the arrangement of the room becomes a symbol of control. And at that point, both students and teacher take a number of important cues from the symbolic messages embedded in that arrangement. The arrangement may cue the teacher to assume an authoritarian stance toward her students. Likewise, it may cue the students to acquiesce to that authority. For students, the act of taking one's seat at the appointed moment in the appointed way signifies assent to the cultural and social norms of the classroom. Similarly, the act of refusing to take one's seat can signify resistance to those norms. The choices both teacher and student make each constitute a particular kind of participation in the culture of that classroom. In this case, they may act out affirmation or resistance. In all cases, it is the constructive and active capacities of the action that make ritual such a compelling and pervasive phenomenon. Ritual enables actors to make sense of the ways of their culture as well as their place in it.

When viewed within the wider context of Montessori culture, Kristin's lesson is replete with examples of formalized, symbolic activity. The treatment of the mat, the observation of silence, the proscribed use of language, indeed the "giving" of the lesson itself were all constructed as formal, patterned action. It is also possible to see that those actions embody a set of values, beliefs, and norms particular to Montessori culture. The cardinal virtues of concentration, coordination, order, independence, and respect are all evident when the triangle of interactions between student, teacher, and environment is viewed through the lens of ritual. Moreover, when Kristin ritualizes her practice, her actions blend technical goals with moral goals. That is, through ritual, she reaches simultaneously outward toward a "cosmic" (Montessori 1973) understanding of the whys of the Montessori worldview and inward toward a precise understanding of the hows of the method.

Ritualizing Technique

When sociologist Dan Lortie (1975) coined the term "technical core," he used it to refer to the instructional center of schools, those people and technologies responsible for the central activity of learning and teaching. For others (Cossentino 2004; Elmore 2003; Fenstermacher 2002; Shulman 1987), "technical" or "instructional core" refers to the methodological nexus of a teacher's practice. Technically competent practice entails the possession of a wide repertoire of actions aimed at supporting student learning and the ability to deploy that repertoire in appropriate ways in appropriate contexts. Kristin's actions visible at "mat level" suggest such a technical core. They suggest that Kristin has attained a degree of technical proficiency that allows her to deploy not only

a wide repertoire but also a subtle one. She appears to be in command of speech as well as gesture. She has planned and executed a lesson specially tailored to meet the needs of an individual learner. She does not appear hesitant or nervous in her interactions with either Alex or the materials. Rather, she projects the calm, "fluid performance" (Berliner 1994) characteristic of seasoned teachers. But Kristin is not a seasoned veteran of this or any other classroom. In fact, when this vignette was recorded, Kristin had not yet completed her training. What, then, accounts for her seeming technical competence?

One answer is ritual. Ritual was at work when Kristin confronted the instructional problem of how to get Alex to understand the concept of addition. In facing this question, her answer came not from whole-cloth invention but from the rubrics of the method. She did not labor to invent a new, entertaining way to explain the concept of addition to Alex. She did not puzzle over how to negotiate his consent to learn or worry about how to manage his tendency to distraction because the method presents clear prohibitions against this sort of behavior and just as clear directives for how to interact with both the environment and students. "Let all thy words be counted," Montessori (1964, 108)—quoting Dante—admonished, referring to the requirement of "carefully chosen words" if one is to give a "perfect" lesson. Those prohibitions and directives are visible in the rituals of instruction.

Prompted by Montessori's rubrics for giving a lesson—the specifics of which she deconstructed, diagrammed, and rehearsed during the prior ritual of training—Kristin's action followed a format designed to keep all attention focused on the materials rather than on herself. To achieve this focus, Kristin intentionally limits her speech, keeps her voice at the level of whisper, and offers simple, spare direction for Alex's manipulation of the stones. The lesson is brief, lasting only as long as it takes for Alex to tackle the work independently, and part of an intentional sequence known by Montessorians as the "three period lesson." Outlined in detail in *The Discovery of the Child* (Montessori 1966), the sequence consists of three segments: Introduction/Demonstration, followed by Practice/Assimilation, leading finally to Independent Expression/Assessment. Kristin's lesson comes at the midpoint in the sequence, after she had introduced the material in the form of rough and smooth stones, and just prior to her final directive to "try these all by yourself."

In following the precise actions of the lesson, both student and teacher acted out a central tenet of the method: that didactic material mediates learning by uniting hand and mind. In addition to the structural elements of the lesson, Kristin was following precise directives set forth by Montessori that the hallmark of interactions in lessons be "conciseness, simplicity, and objectivity" (Montessori 1964, 108): "If we showed them (children) exactly how to do something, this precision itself seemed to hold their interest. . . . The exact

way of doing it acted like a support which rendered the child stable in his efforts and therefore brought him to make progress in his development" (Montessori 1995, 186). Precision, as directed by Montessori and enacted by Kristin and Alex, was ritualized, which is to say it was enacted in a formal, symbolic performance. That is, the performance followed a form set by Montessori, embodied a set of distinctive cultural values, and had consequences. For Alex, two consequences of precision were mathematical understanding and concentration. That is, observing an "exact way" of interacting with materials provided him structure for his actions that therefore could serve the development of his understanding of the concept of addition. A similar kind of support was evident for Kristin, whose ritualization of interactions rendered her stable in her efforts to build technical competence.

The ritual began at the moment Alex unrolled the mat. At this moment, he (not Kristin) signaled the beginning of the episode of learning by marking both the space and time in which learning would occur. Interpreting it as a sign of readiness, Kristin only arrived to give the lesson when the mat was unrolled. She engaged in this ritual of commencement at least five times that morning. And each time she took her cue from the student, who took his or her cue from the ritual expectation that students will work in a particular way on white, cotton mats that have been unrolled and placed on the floor in a particular way.

When work was completed, those same children carefully, precisely, rolled their mats into cylindrical shapes and replaced them in one of the baskets that were designated for the sole purpose of keeping mats. Periodically, those mats were laundered by a parent volunteer and delivered to the front door of the classroom where the children took responsibility for returning each to its proper place. The mat, as it was acted upon in this classroom, was a symbol of precision, of the "exact way" things are done in Montessori classrooms.

Within Montessori culture, the value of precision is closely related to other "goods." The mat symbolizes order in its capacity to delineate the proper organization of the classroom. The repetitive motions of rolling and unrolling, of carefully arranging materials on the mat, and of protecting work as it is laid out on the mat ritualizes the act of concentration. Independence is ritualized when, without adult prompt, the children manage the care and arrangement of the classroom's mats. And the precision with which the mats are treated, the attention to how and where they are placed, also symbolizes respect for both the environment and the objects that are placed in it. Put another way, when students and teachers act upon the mats in the particular ways prescribed by the Montessori method, they are ritualizing concentration, coordination, order, independence, and respect. Even more important is the way in which the ritual connects these "goods" so that they are visible not as a collection of discrete habits but as parts of a larger, integrated whole. In

this way, the mat symbolizes what might be called the "end state" of Montessori education. When teachers and children act out these goods in their interactions with the mats, they are uniting the ends and means of learning. Ends and means were also united for Kristin.

Kristin's actions were not the result of the accrual of years of insight and experience. Rather, they were the result of following a precise script set out by Montessori. For outsiders, the emblematic actions visible in Kristin's lesson often prompt criticism. "She doesn't seem to care about him," commented a student in one of my graduate courses on instructional reform. Another observed, "She acts like a robot." "Who's watching all the other children while she spends so much time with Alex?" wondered a third. Joining a long line of critics who have dismissed the method as mechanistic and narrow (Kilpatrick 1914; Merrill 1910), these students were assessing Kristin's expertise in terms of a set of technical "goods" wholly different than those valued by Montessorians. 13 For these students, all of whom were elementary teachers practicing in suburban public schools, Kristin's actions violated a set of expectations regarding how teachers should interact with students. Rather than serving as primary motivator, Kristin assumed a neutral stance toward Alex. Rather than relying on improvisational discourse as the primary means of communication, Kristin adhered to a script that emphasized gesture instead of language. Rather than keeping all students uniformly "on task," Kristin expected students to be able to move through individual work cycles largely uninterrupted by adult command. And she enacted both her stance and her expectation through ritual.

Through ritual Kristin acted out a particular kind of expertise, and implicit in that action was a wider vision of what expert practice entails, a vision that for outsiders ironically can look more like incompetence than expertise. I note here that ritualizing technique is foremost a matter of proper adherence to the rubrics of the method, the "grid" of Montessori culture. Grasping the wider vision is achieved not through reflection but in the repeated performance of the actions prescribed by the rubrics. Like the hand-on-shoulder ritual described above, the Montessori ritual of "giving a lesson" inverts the traditional sequence of pedagogical activity: the lesson is initiated by the student rather than the teacher, is directed to an individual rather than the group, and is dominated by gesture rather than talk. Inversions such as this one redefine the goods of practice, and they abound in Montessori practice.

The ritual of bell ringing, to give another example, is inverted in Montessori classrooms through the use of a tiny bell, which can only be heard if the room is already relatively quiet. Bells are rung to call meetings to order and to signal transitions, such as the conclusion of a work cycle. Rather than demanding attention, the tiny bell issues a quiet invitation to attend, communicating once again the ritual expectation of agency on the part of students and the ritual

responsibility of teachers to respect that agency and to protect the concentration of children at work. Also like the hand-on-shoulder ritual, the symbolic density of the lesson is not necessarily evident to Kristin as she performs it. Rather, her commitments are encoded in her actions, which, over time, will inscribe them into her consciousness. The ritual, in other words, does more than represent a deep or wide repertoire. Rather, the ritual itself affects the development of her expertise.

By adhering to the rubric for how to give a lesson, a rubric that redefines prevailing conceptions of expertise, Kristin acted out that redefinition in a series of precisely calibrated actions that were deliberately designed to link the action and intention of Montessori practice. The rubric also enabled Kristin to act like an expert teacher even before she had internalized all the nuances of meaning embedded in those actions. At the same time, interacting with symbols like the mat offered Kristin a means of making sense of the nuances of the method. As it is ritualized in this setting, the mat serves as a boundary—"limen"—separating the lesson from the rest of the room, marking the focus of concentration, and underlining the precise moves entailed in "giving a lesson." In this way, the mat fosters a liminal encounter between the means and ends of the method.

Ritualizing Love

The relationship between means and ends is even more apparent when ritual is a lens for examining the moral dimension of Montessori practice, and the moral nexus of Montessori practice is love. Like technique, the presence of love in Montessori practice is not always easy to detect or define. But Montessori herself put it plainly: "The whole labor of life," she said, "which fulfills itself subject to its law and brings beings into harmony, reaches consciousness under the form of love" (Montessori 1966, 103). Echoed in the contemporary (to Montessori) theories of Gibran (1923), Fromm (1956), and, more recently Friere (1973) and hooks (2001), Montessori's "cosmic" vision of education is embodied in the practice of love. Love, in other words, both propels the action of Montessori cosmology and defines its own fulfillment. It is both process and product, beginning and end, a synergistic whole that is greater than the sum of its parts.

For outsiders attempting to make sense of the method, much has been made of the parts, often at the expense of the whole. Noting the sense of harmony that characterizes Montessori classrooms, some point to Montessori as a model of moral education. Yet, non-Montessori scholars have attempted to capture the moral and relational dimensions of the method mostly by avoiding the direct mention of love. Explicating an ethic of "care," Noddings (1992) pointed

to the manner in which the Montessori method teaches children to care for themselves, others, nature, ideas, and even objects. Martin (1992) used the vision of domestic affection of the *Casa dei Bambini* as a model for her conception of moral, humanistic education, which she called the "schoolhome." Csikszentmihalyi's (1990, 1997) research on positive psychology and "flow" gestures toward the harmonic and pleasurable dimensions of Montessori's vision of love, but the word itself appears only in discussions of sex or family. The concept of love, it seems, is too grand, too encompassing, and too "cosmic" to be the subject of serious scholarly investigation, at least in the context of schooling. So we focus on aspects of love: harmony, domesticity, care, discipline, and flow.

But for Montessori, the "cosmic" is precisely the point. She deliberately framed Montessori education as an ordered, cosmological system, even naming it as such. "Cosmic education," Montessori's term for the elementary curriculum, is yet another term that perplexes outsiders. In referring simultaneously to the process of learning to appreciate the order of the universe and the capacity to sustain that order, the concept highlights the coherence of the Montessori method and the manner by which practitioners embody that coherence through the ritual enactment of love.

Again, the mat is an accessible, if unexpected, symbol. When viewed as a piece of instructional apparatus, it is easy to see how the mat functions to focus attention and to symbolize precision, order, and concentration. But, when viewed in a moral context, the symbolism of the mat expands to include the virtues of patience, care, and respect. Even more important, the mat demonstrates how the technical and moral virtues of the method cohere in the action of Montessori practice. Rolling and unrolling a mat is done with a concentration so complete that it has the character of a "spiritual exercise" (Montessori 1995, 267). Guided by the outlines of individual mats, children move about the classroom gingerly, taking care not to disturb the work of others. Even the care with which the mats are maintained ritualizes a reverence for the work of the classroom, which is recognized and protected as much for the sake of the community as for the individuals who share that community.

Once the eye is trained to notice the messages embedded in classroom interactions, one can notice similar messages all around. Returning to the lesson, I see that Kristin loves Alex; more important, I see how she loves him by acting out these virtues. Her restraint with Alex may now be read as respect for his need to focus on his work so that he can develop his understanding of the concept of addition. Similarly, the absence of praise in her interaction with Alex communicates the desire for Alex to derive satisfaction from work itself rather than through external rewards. The timing of Kristin's arrival to give the lesson acknowledges Alex's need to be ready to receive the lesson. Indeed, the lesson itself becomes a ritual offering, a gift. And her decision to

give this particular lesson, based on close attention to Alex's scholastic progress, also conveys a message that links teaching and learning with order, engrossment, and respect, which combine to produce a version of love that is active, positive, and progressive.

The active, positive, and progressive orientation of Montessori's educational cosmology belongs to a category of practice known as "orthopraxis" (Smith 1979). Drawn from the Greek terms "ortho," meaning correct, and "praxis," meaning action, the term was coined to mark a contrast between belief-driven versus practice-driven religious activity. In orthopraxic traditions, correct actions (as opposed to correct beliefs) are encoded in ritual responsibilities (particular ways of praying, dressing, feasting, or fasting). Within the orthopraxic frame, practice not only supersedes belief, practice is the gateway to belief.

As encoded in the Montessori method, the practice of love is framed as a compassionate, liberating, selfless set of actions. In this version of love, concentration is the cornerstone of both attention and growth. Coordination is necessary for both sensory-motor development and graceful social interaction. Order in human activity is both a reflection and a means of sustaining the natural order of the universe. Independence is a pathway toward self-mastery. The precise set of actions aimed at developing concentration, coordination, order, and independence are aimed, ultimately, toward a vision of human progress that links love with attention, agency, and development. "Work," Montessori declared, referring to the symbolic density of activity in a Montessori classroom (and quoting Kahlil Gibran [1923], 28), "is love made visible." When ritualized in this way, it is clear that, for Montessori, love is not an emotion or a desire. Rather, the character of Montessori's regard for ritual is most evident when love is realized in action—in practice.

Montessori, herself, was attuned to both the technical and moral power of ritual. Here she describes how the prepared environment develops in children the "habit" of respect: "There is only one specimen of each object, and if a piece is in use when another child wants it, the latter—if he is normalized—will wait for it to be released. . . . The child comes to see that he must respect the work of others, not because someone has said he must, but because this is a reality that he meets in his daily experience. . . . Since this happens every hour of the day for years, the idea of respecting others, and of waiting one's turn, becomes an habitual part of life, which always grows more mature" (Montessori 1995, 223). The goal of instilling in the child the habit of respect is achieved through the deliberate design of an environment that invites the child to act in respectful ways. And when a child acts within this environment, waiting one's turn ceases to be merely an act of restraint. Rather, it becomes the ritual enactment of respect.

But how is waiting one's turn an act of love? Here the coherence of Montessori's cosmic vision of education becomes apparent. On the level of the

individual child, the coherence is revealed in two ways. First is the positive orientation of the action. The "idea of respecting others" is enacted spontaneously, which is to say, the child, guided by the ritual, chooses to respect. Second is the progressive orientation of the action. Montessori is clear that she expects the habit of respect to mature. Just as the child's psyche grows more complex with experience and cognitive mastery, so do her social and spiritual capacities. The spontaneous choice to respect marks a critical passage toward social harmony, which is both developed and manifested in the practice of love.

The relationship between respect and love is further elaborated in Montessori's characterization of the child as the "source of love" and the teacher as the "servant" of the child's spirit. In explicating her vision of the psychic relationship between teacher and child, the act of teaching itself becomes an act of love: "It is a level of love, which is no longer personal or material. To serve children is to feel one is serving the spirit of man, a spirit which has to be free itself. . . . When we nurture children, we nurture love" (Montessori 1995, 282). In order to serve the child's spirit, the teacher must respect the child as a developing human being (body, mind, and spirit). She must observe and protect his concentration so that he may direct that concentration toward the "complex formation of his psychic personality." In the case of Kristin's lesson, her commitment to Alex's psychic formation is evident in her attention to his scholastic progress, her gentle insistence that he learn to focus on his work, and her willingness to follow Alex's lead in the process. More important, her actions are explicitly dictated by the method. For Montessori, the inward turn, implied in Alex's development of his capacities for concentration and independence, is complemented by an expansive view of the social consequences of learning (or failing to learn) to love.

The intimate link between human development and social progress lies at the center of Montessori's conception of cosmic education (Duffy and Duffy 2002). In framing social progress as a movement toward peace, she articulated a "higher" (Montessori 1972, 67) form of love as well as an instrumental purpose for the practice of love. Love, in other words, is the end state of order and patience and respect and care. And the movement toward love is a lifelong project that begins at the moment of birth, is fueled by the developmental drive, and directed by intentional practice. If viewed as both a practicable action and as the driving force in the progress toward human harmony, then the leap between an act of respect and an act of love is a small one indeed.

Both are built on the premise of human perfectibility, which is achieved through action as well as intention. In uniting technical and moral goals of education, ritual offers both a means of achieving perfectibility and a vision of the end state of education. Montessori sketched the close alignment between the means and ends of cosmic education:

If the idea of the universe is presented to the child in the right way, it will do more for him than just arouse his interest, for it will create in him admiration and wonder, a feeling loftier than any interest and more satisfying. The child's mind then will no longer wander, but becomes fixed and can work. The knowledge he then acquires is organized and systematic; his intelligence becomes whole and complete because of the vision of the whole that has been presented to him, and his interest spreads to all, for all are linked and have their place in the universe of which his mind is centered. (Montessori 1967, 9)

In tracing a relationship between the vastness of the cosmos and the order of an individual child's mind, Montessori forged an explicit connection between the hows and the whys of Montessori practice.

The rituals that symbolize and enact that connection also link the universal to the particular. They map the progression from concrete to abstract operations. They unite action and intention in formal, symbolic activity. Within this framework, love is equally present as a cosmic task and in daily interactions between student, teacher, and environment. The repetitive act of waiting one's turn becomes the ritual enactment of respect. The daily act of giving a lesson becomes a ritual offering of attention as well as knowledge. And observing the precise sequencing of lessons and materials constitutes what Montessori herself called "passages" into greater levels of abstraction, independence, and morality. The practice of love, as it occurs in the rituals of instruction, unifies the technical and moral dimensions of the method and, in the process, elaborates both the complexity and coherence of the Montessorian conception of teaching expertise.

Conclusion: Ritualizing Expertise

To grasp the technical and cultural coherence of the Montessori method, one must ultimately arrive at the topic of love. And this presents outsiders with a two-pronged conundrum. First is our collective embarrassment at the prospect of even uttering the word "love," let alone examining it as a pedagogical destination. Second is that once we begin to talk about love in terms of cosmic order or perfectibility, we start to sound religious, which is, of course, a further embarrassment. To move closer to a holistic understanding of Montessori's unified vision of educational "goodness" is to run the risk of mistaking the unity for cultishness or even fetishism. The way out of the conundrum, however, is through a close examination of the action of Montessori practice.

This brief look at the practice of a single Montessorian only begins to suggest the coherence and complexity of Montessori education. I do not claim that Kristin's lesson represents all Montessori teaching practice or even standard

Montessori teaching practice. More sustained empirical attention to the action of Montessori practice is clearly needed to paint a complete picture of the phenomenon. Here I present a series of interactions between teacher, student, and environment as a glimpse into a world largely inaccessible to outsiders. Viewed through the window of ritual, those actions suggest an approach to practice in which the "goods" of culture (in this case Montessori culture) are constituted in "complex and coherent human activity" (McIntyre 1981, 87).

The coherence of Montessori practice is defined by a cosmology that honors exactness, is animated by a vision of harmonic living, and is acted out in ritualized interactions between students, teachers, and the environment. In this way, Montessori practice may be compared with the practice of Buddhism, Judaism, Roman Catholicism, or any of the world's religions that are cosmological and ritualized. But, unlike many religions, the Montessori method is not built on a foundation of a priori belief. Rather, it is built on a foundation of practice. While Montessorians may certainly be said to "believe" in spontaneous discipline or the value of the prepared environment or the importance of the senses in learning, they do not arrive at those beliefs through proclamation or spontaneous conversion. Montessorians arrive at their convictions through practice (Cossentino and Whitcomb 2003). Though ritual, Montessorians "act out" the traditional and doctrinal precepts of the method.

Like many cosmological, religiocultural systems, Montessori education ritualizes the boundary between insiders and outsiders. Crossing that boundary requires a lengthy initiation (two or three years), in which novices are gradually guided into the culture by means of the practice and eventual mastery of the technical dimension of the method. That is, they learn the hows of Montessori practice: how to observe children, how to prepare an environment, how to give a lesson according to the rubrics of the method. The whys of the method are also introduced, but their meaning is not revealed in lectures or readings. Rather, mirroring the method itself, Montessori cosmology is discovered in action, through manipulation, sequencing, and repetition—through practice. Taking its basic form from the earliest courses offered by Montessori herself, the ritual of "taking training" is a seminal rite of passage symbolizing both transformation and preservation. For most initiates, becoming a Montessorian entails substantial revision of existing understandings of teaching, learning, and the nature of childhood. Likewise, completing the passage not only grants membership in the culture, it binds members to one another in the ritual responsibility of preserving the culture. Those responsibilities entail adherence to both doctrine and tradition, which are enacted in rituals of Montessori practice.

Montessori's own sense of the constructive power of ritual is evident in her description of the progressive results of "work." "The 'good,'" she said, "are those who 'move toward the good,' built up through their own efforts and

through orderly and useful external works" (Montessori 1967, 307). Here she ritualizes the concept of work itself, elevating it as both a means of moving "toward the good" and a manifestation of goodness. Similarly, as an observer of Kristin's practice, I am able to detect, through the rituals of instruction, a movement toward the goods of Montessori practice. In symbolizing the virtue of concentration through intentionally ordered actions—the silent manipulation of stones, the careful modulation of voice and pace, the observation of the mat as the site of work—Kristin demonstrates (for herself as well as for Alex) what it means to concentrate, the importance of order, and her respect for Alex's work. In linking those actions with others designed to ritualize other goods, she demonstrates what concentration, order, and respect mean within Montessori cosmology. As she grows increasingly competent in the performance of these rituals, so develops her expertise as a Montessorian.

The most distinctive elements of Montessori practice—order, repetition, materialized abstraction, economy of movement and language, symbolic density—are also the defining elements of ritual. Together, they mark the boundary between Montessori and non-Montessori culture, and they create limina: moments of possibility in which "the world as lived and the world as imagined, fused under the agency of a single set of symbolic forms, turn out to be the same thing" (Geertz 1973, 112). To practice the Montessori method as a system of ritualized interactions is to create an ongoing series of moments of possibility. Within those moments, one ritualizes technique in order to delineate the actions that comprise the method. One ritualizes love in order to elaborate those actions so that they symbolize the moral implications of the method. In both cases, performing the rituals helps foster an integrated movement toward "goodness," at least Montessori's version of goodness.

In my own liminal state as a non-Montessori head of a Montessori school, I experience daily the power of ritual. Much of the time, I ritualize my outsider status by refraining from certain actions. I do not ring bells to call meetings to order. I do not refer to Maria Montessori as "Dr. Montessori." I have never given a lesson. And I do not handle materials or otherwise interfere in any of the school's environments without the express invitation to do so by a directress. I practice these rituals, in part, as a sign of respect, because to do otherwise would presume a cultural membership and expertise that I have not earned.

Yet, there are occasions when my position compels me to represent Montessori's vision. On those occasions, the rituals pull me into the culture. When I address a gathering of parents as "friends," or intentionally use a soft voice in conversation with a child, or lead a group of volunteers in sweeping the play yard, I experience these actions as the practice of Montessori education. And it is a practice that leads me "toward the good." That is, when I call parents "friends," in a very real sense, a group of strangers moves a step closer

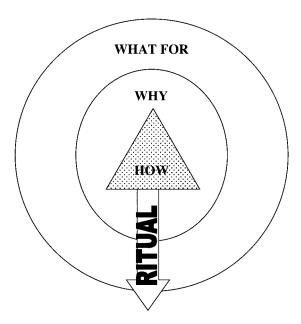


FIG. 2.—The unifying role of ritual in Montessori cosmology

to friendship. When I speak softly to a child, both of us may experience the encounter as peaceful and loving. When I lead a group of volunteers in sweeping the play yard, we are, together, engaged in the care of our community. In this way, we are, together, acting out Montessori cosmology. When I engage in these small moments—fleeting as they are—I catch what I take to be a glimpse of the insider's perspective.

For practitioners as well as observers, the rituals that punctuate life in Montessori classrooms offer a way into the culture, which in turn offers a way of making sense of the holistic and integrated nature of the Montessori method. In contrast to the prevailing view of teaching expertise as a large and diverse collection of "best practices," a cultural view of the Montessori method urges outsiders toward a revised view of the very meaning of practice. This vision of practice is governed by a discernable developmental theory, which itself is linked to an encompassing vision of social progress and moral/spiritual formation. Drawing from McLaughlin and Talbert's (2001) notion of "multiple and embedded contexts," figure 2 illustrates the Montessori educational cosmology as a series of concentric circles, each representing distinct conceptual contexts comprising the Montessori worldview. These contexts entail the how, why, and what for of Montessori practice.

At the center lies the technical core, the distinctive triangle of interactions

comprising the methodological nexus of a Montessorian's practice. Surrounding that core is Montessori's theory of human development or the "why" of Montessori practice. Encompassing a still wider sphere is Montessori's vision of educational purpose. The arrow labeled "ritual" represents the action of Montessori practice, which cuts through all three spheres, bringing coherence to the system in the form patterned symbolic action. While the system itself is conceived so that the how, why, and what for of Montessori cohere (how one should teach is always framed by how one learns), that coherence is made visible in action. As the crosscutting phenomenon of an action-oriented (as opposed to belief-oriented) system, the arrow is, notably, unidirectional. Pointing outward from the technical core, the rituals of Montessori practice map a progression that starts with technical proficiency and through action moves toward the fulfillment of the moral purposes of the method.

Within this frame, the eclectic and pragmatic concept of "best practices" is replaced by a singular notion of "good" practice driven by a holistic and normative conception of goodness, which is bounded by a closed culture that marks an impermeable boundary between insiders and outsiders. In other words, one comes to "know" Montessori's vision of goodness through enacting her version of good practice. There is no selection of moves based on disposition or convenience or special circumstance. There is little focus on the development of a distinctive stylistic signature. Even more important, one cannot become a Montessorian by espousing a "belief" in hands-on learning or child centeredness, or love, though these concepts are important to Montessori cosmology. Within the Montessori frame, knowledge and belief are holistic and interactive enterprises that can only be developed through practice.

This cosmological view of practice is both eye opening and off-putting. On the one hand, it honors the complexity of the enterprise of teaching while at the same time providing a degree of certainty with regard to what good teaching entails. It offers teachers a way of linking action and intention and a picture of the means and ends of education. On the other hand, Montessori cosmology, though expansive, is nonetheless singular and, by virtue of its high degree of both grid and group, exclusive. Access to the complexities of practice is limited to practitioners, which often renders the method incomprehensible to outsiders. Still, my experience as an outsider with unusual access to the interior of Montessori culture leads me to conclude that the example of Montessori teaching practice offers valuable insights for researchers as well as practitioners concerned with the development of teaching expertise.

First is the importance of acknowledging that teaching expertise (like all expertise) arises out of particular cosmologies and is constituted in particular cultural practices. Good practice is always connected to the "goods" of a given culture. Likewise, coherent practice may be viewed as a consequence of the intentional linkage between the hows, whys, and what fors of teaching. Ac-

cording to this model, coherence is located not in programming or policy, but in the act of teaching itself. A second insight concerns the act of teaching, which in the case of Montessori practice is formalized in the rituals of instruction. Here I echo recent calls for greater attention to what teachers actually do when they teach, and how they do it (Elmore 2002; Lampert 2001; Richardson 2002). These two insights suggest additional questions related to the relationship between educational culture and educational practice: What is the relationship between cultural cohesion and practical coherence? How can cultures that are inherently secular, pluralistic, and innovative achieve cohesion? How do belief systems and knowledge systems come together to shape educational worldviews? And how are those worldviews enacted in practice?

Answering these questions will require more sophisticated approaches to both culture and practice than those that simply call for "stronger" school culture and more "effective" teaching. As a phenomenon that explicitly links culture and practice, ritual offers great promise for both analyzing and structuring the complex cultural activity of teaching. The doing of Montessori education, like the doing of any kind of teaching (or, for that matter, any purposeful activity), entails a complex and dynamic blend of knowledge, intention, and belief. If we are to understand how to enhance expertise, how "quality teaching" develops, we must pay much closer attention to how those aspects of action interact and how they interact in context. Just as ritual provides the means of crossing the line between outsider and insider, it offers practitioners as well as observers a multidimensional view of where the line is drawn and what crossing that line entails.

Notes

- 1. See Rathunde and Csikszentmihalyi (forthcoming) for the only empirical investigation of Montessori education focused on culture as a constituent element of Montessori education
- 2. See Lillard (1972, 1996) and Montessori (1964, 1973) for insider accounts of "the Montessori way" and its encompassing approach to moral, social, and intellectual development.
- 3. Here I refer to "rubric" in its traditional, liturgical context: as a guideline for the precise moves of a particular rite. Rubrics, named so because they were set apart from text by virtue of their red ink, were inserted into prayer books and liturgical manuals to direct the action of those who performed particular rituals.
- 4. The distinction is most often played out among doctrinal disagreements between those Montessorians who associate with the professional organization founded by Maria Montessori, Association Montessori Internationale (AMI), and those who consider themselves the more "progressive" wing of the movement and associate with the American Montessori Society (AMS). In terms of grid, these distinctions are characterized

by the degree of adherence to the rubrics of the method as outlined in Montessori's voluminous writings. Those on the strict end of the continuum often regard themselves as guardians of Montessori's legacy as codified in Montessori doctrine. They aim for doctrinal fidelity, which is enacted in a "pure" interpretation of the method, and they claim their legitimacy based on a line of succession beginning with the founder herself. Those on the other end of the continuum aim for the freedom to innovate, claiming that the method is open to interpretation and adaptation based on the individual circumstances of schools and children. From these doctrinal differences arise equally palpable senses of group. Purists draw clear boundaries between insiders and outsiders based not only on whether one has taken training but whether or not that training conforms to expectations established by the grid. By contrast, progressives often seek to be inclusive, highlighting points of agreement between insiders and outsiders and adopting outsider language to describe insider phenomena (e.g., "head teacher" vs. "directress" or "early childhood" vs. "primary").

- 5. Montessori's developmental scheme divides human development into four stages or planes: birth–6, 6–12, 12–18, 18–24 years. Montessori education, training as well as school organization, is set up to correspond to these developmental stages.
- 6. While I have personally witnessed this ritual in six different Montessori schools in three separate regions of the United States and confirmed its practice in many others through conversations with Montessorians, I know of at least two schools that do not promote physical contact between teachers and students. Thus, while the ritual is, indeed, common, it cannot be considered universal.
- 7. See Cossentino and Whitcomb (2003) for a thorough treatment of transformative properties of Montessori teacher training.
- 8. I am grateful to the faculty and students of the Williamsburg Montessori School for allowing me to spend two weeks as researcher in the classroom described here. With permission, I use the real names of all participants in this study.
- 9. The "bead chains" or sets of "bead material" are used for the exercises of linear and skip counting the quantities of the squares and cubes of the numbers 1–10. The exercises, which are performed in the 3–6 and 6–9 classrooms, are designed to prepare students for later work in multiplication, squaring and cubing, as well as base numbers.
- 10. "Normalization," an especially perplexing Montessori concept, refers to the process of learning to attain and sustain deep concentration, an appreciation for order, and the sense of calm that seems to be associated with children engrossed in purposeful activity. The term alludes to Montessori's claim that the state of contentment brought on by deep concentration in meaningful work is the "normal" state of happy children, whereas behaviors that suggest distraction or disengagement are "abnormal." See Rathunde (2001) and Rathunde and Csikszentmihalyi (forthcoming) for more on the link between normalization and "flow" (Csikszentmihalyi 1990).
- 11. I use quotation marks to indicate spoken language and italics to indicate written language.
- 12. See Lampert (2001) for a thorough and comprehensible elaboration of this model using her own fifth grade mathematics class as a case study in the "problems of teaching and teaching with problems." See also Gordon (1993) and Neubert (1982) for elaborations on "the Montessori triad."
- 13. Insiders, by contrast, have raised questions about the "correctness" of Kristin's choice of materials, seeming to take for granted the moves comprising the lesson.

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