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EDITORIAL

How Is It That One Particular Statement Appeared Rather Than Another?: Opening a Different Space for Different Statements About Urban Mathematics Education

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Ever since I was provided the learning opportunity as a doctoral student of mathematics education at the University of Georgia to explore the philosophy of the French postmodern philosopher, sociologist, and historian Michel Foucault (see, e.g., 1966/1994, 1969/1972, 1975/1995, 1976/1990), I have been seduced into an intellectually reasoned different way of thinking about the human project of science and specifically, the human project of mathematics education science. The seduction, in actuality, was not all that difficult, given that in many ways the science of mathematics provides the roots of postmodern thought (Tasić, 2001). Postmodern thought in general, and Foucault’s philosophyscience (no hyphen, intentionally) in particular, for me, brings clarity to the fact that the project of science is “always already entangled” with philosophy (St. Pierre, in press)—a project that becomes increasingly dangerous when attempts are made to de-entangle (or make invisible) this inextricable entanglement.

This clarity of entanglement, in due course, brings an understanding that all science (social or otherwise)—thus, all knowledge—is a discursive formation (Foucault, 1969/1972). “Not an atemporal form, but a schema of correspondence

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1 Often the words postmodernism and poststructuralism are used interchangeably in the literature, but there are acknowledged differences in the terms (for a brief discussion see Peters & Burbules, 2004). Here, I use the term postmodern as an umbrella term for postmodernism and poststructuralism. It is also important to note that the term postmodernism “is what the French learned the Americans were calling what they were thinking” (Rajchman, 1987, p. 49). Foucault (1983/2003), for example, in an interview once remarked, “I have never been a Freudian, I have never been a Marxist, and I have never been a structuralist” (p. 84). And later in the same interview he sarcastically asked, “What are we calling postmodernity? I’m not up to date” (p. 92).

between several temporal series” (p. 74), discursive formations are the dispersion and redistribution of statements—“neither visible nor hidden” (p. 109)—that bring into existence the possibilities (and impossibilities) to speak particular knowledge discourses. But within a Foucauldian perspective, discourses are not the mere intersections of things and words that might be heard or read but rather discursive practices rendered irreducible to language or to speech that systematically form the possibilities and impossibilities of the objects, identities, activities, and so forth which might be (are) brought into existence (p. 49). Knowledge (“scientific” or otherwise), therefore, no longer maintains its privileged status as an “objective” reality but rather is subjected to and limited by the socio-cultural, -historical, and -political assumptions, conditions, and power relations (Foucault, 1976/1990)—in general, the discursive practices—available within a particular episteme (Foucault, 1966/1994). By episteme, Foucault (1969/1972) meant the set of relations that unite the discursive practices of a given period which give rise to the existence and operation of epistemological figures, sciences, and, at times, formalized systems. It, however, is not to be understood as a form of knowledge or type of rationality that crosses boundaries of various sciences but rather as “the totality of relations that can be discovered, for a given period, between the sciences when one analyses them at the level of discursive regularities” (p. 191). Through his archaeological analyses of discursive regularities, Foucault, asked: “How is it that one particular statement appeared rather than another” (p. 27, emphasis added)? Foucault described his analysis of statements as

a historical analysis, but one that avoids all interpretation: it does not question things said as to what they are hiding, what they were ‘really’ saying, in spite of themselves, the unspoken element they contain, the proliferation of thoughts, images, or fantasies that inhabit them; but on the contrary, it questions them as to their mode of existence, what it means to have them to have come into existence, to have left traces, and perhaps to remain there, awaiting the moment when they might be of use once more; what it means to them to have appeared when and where they did—they and no others. (p. 109)

The surveilled and disciplined (Foucault, 1975/1995) discursive formation mathematics education research, I believe, is riddled with statements of fictions, fantasies, and plays of power (Walkerdine, 2004) that are brought into existence, appear and reappear, and leave traces that too often lead to devastating consequences for children. Anyone who teaches (or has taught) mathematics to girls (or female students of any age) bears witness to the effects on children (and adults) of the lingering traces of the forever appearing and reappearing statement: sex differences in achievement in and attitude toward mathematics result from superior male mathematical ability. Likewise, for those who teach (or have taught) mathematics in racially, ethically, linguistically, and/or socioeconomically diverse urban schools (or schools in general) bears witness to the effects on children (and
adults) of the lingering traces of the forever appearing and reappearing statements: *white, non-Hispanic children and Asian children usually enter kindergarten with greater mathematical knowledge than black and Hispanic children and/or although low-income children have pre-mathematical knowledge, they do lack important components of mathematical knowledge.*

The three aforementioned statements are direct quotes from highly influential journals, policy documents, and handbooks; I, however, do not provide the customary citations of the statements here (see Martin, 2009a, 2009b, 2010 for an analysis of statements such as the latter two). My intention is not to indict those who spoke/wrote these particular statements; they did not bring these statements into existence. But rather to use these particular statements as an illustration of how statements within the episteme of modernity morph and proliferate, appear and reappear, leaving traces not only within the discursive practices of mathematics education research and policy and mathematics teaching and learning but also, and more importantly, within society at large. But what happens when different statements, different discursive regularities are made available that might betoken different possibilities for the discursive practices of mathematics education research, specifically, within an urban context? Opening such possibilities for difference within *urban* mathematics education research and, in turn, mathematics education policy and mathematics teaching and learning was the chief motivating factor behind the development of the *Journal of Urban Mathematics Education (JUME).*

This issue of *JUME* marks the close of its third year. As the Editorial Team looks forward to many more productive years, to commemorate the occasion, I summarize the scholarship made available over the past 3 years here. First, however, it is important to note that each member of the Editorial Team works within

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3 For instance, consider another such similar statement spoken/written in the early 1780s by Thomas Jefferson: “Comparing them by their faculties of memory, reason, and imagination, it appears to me, that in memory [Blacks] are equal to the whites; in reason, much inferior, as I think one could scarcely be found capable of tracing and comprehending the investigations of Euclid, and that in imagination, they are dull, tasteless, and anomalous” (as cited in Tate, 1995, p. 191). It is important to note that by quoting Thomas Jefferson, I am not suggesting that he brought the statement into existence—he did not—but to demonstrate that the appearance and reappearance of such statements are part of the consequentially limiting discursive formation of the “White male math myth,” which has become a meta-narrative (cf. Lyotard, 1979/1984) within modern Western culture (Stinson, 2010a).

4 The original Editorial Team included Lou Matthews, the founding editor-in-chief, and associate editors Pier Junor Clarke, Ollie Manley, Christine Thomas, and myself. In the summer of 2009, I became the editor-in-chief; Lou Matthews continues to serve on the Advisory Board. In the spring of 2010, Erika Bullock and Christopher Jett joined the Team as assistant editors, and later in the fall of 2010, Nermin Bayazit, Stephanie Behm Cross, and Iman Chahine joined the Team as associate editors.
different philosophical/theoretical paradigms; therefore, the aforementioned postmodern perspective regarding philosophyscience is my own, and not necessarily shared by all members of the Team. But what we do share unanimously is a desire to assist in providing different statements about and, in turn, the possibilities of different discursive practices for the children and adults who populate urban mathematics classrooms in the United States, and throughout the world.

Lou Matthews (2008), in his inaugural editorial, described the painstaking deliberations during the nearly two-year developmental stages of JUME. Deliberations that, although smaller in scale, appear to be similar to those during the development of the Journal for Research in Mathematics Education (JRME) in the late 1960s (Johnson, Romberg, & Scandura, 1994)—nearly 40 years later, the flagship journal of mathematics education research. Nevertheless, as we worked through the start-up logistics of a peer-reviewed, online journal; speculated about its long-term sustainability; and struggled with the multiple meanings of “urban”; we also decided on a mission statement that guided our work, and continues to do so today:

To foster a transformative global academic space in mathematics that embraces critical research, emancipatory pedagogy, and scholarship of engagement in urban communities.

But before I summarize the scholarship within its online pages, I provide a description of JUME by the numbers to illustrate its growth. In five issues (including this issue), we have published, in total, over 500 online pages of scholarly editorials, commentaries, public stories, research articles, and book reviews. Registered users\(^5\) of JUME have grown from 226 at the end of 2008 (the inaugural issue)\(^6\) to over 700 at the end of 2010, with nearly 200 registered reviewers\(^7\) and authors. And the total number of Web views of JUME content is approaching 12,000 as of December 2010.

Since the initial call for manuscripts in January 2008, JUME has received over 60 research manuscripts for double-blind peer review; 16 have been published, providing a research manuscript acceptance rate around 25%. In addition

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\(^5\) Initially, to gain access to JUME content, users had to complete a free registration process. Beginning in the summer of 2009, however, registration was no longer required. This change in registration process facilitated JUME content being available in Google Scholar Web searches. Nevertheless, the number of registered users continues to grow.

\(^6\) It is interesting to note that the sample journal Research in Mathematics Education, the prototype for JRME, was distributed freely to 150 persons by U.S. postal mail in 1967 (Johnson, Romberg, & Scandura, 1994).

to these 16 research articles, JUME has published 5 commentaries, 4 public stories, and 3 book reviews; these manuscripts (solicited and unsolicited) go through an open peer-review process conducted by members of the Editorial Team. In total, JUME has published 33 manuscripts, including the editorial of each issue. As JUME has continued to grow, we have added sections in hopes of increasing both the number of readers and those who might contribute manuscripts, adding the Public Stories of Mathematics Educators section with the 2009 Fall/Winter issue, and the Response Commentary section with this current issue.8

As mentioned previously, JUME has published editorials (Matthews, 2008, 2009; Stinson, 2009, 2010b), commentaries (Gutstein, 2010; Martin, Gholson, & Leonard, 2010; Tate, 2008), response commentaries (Battista, 2010; Confrey, 2010) public stories (Dawson, 2009; Hennings, 2010; McQueen, Shaheed, Gogings, & Chahine, 2010; Williams, 2009), and book reviews (Jett, 2009; Lemons-Smith, 2010; Wamsted, 2010). These scholarly contributions have been instrumental in the continued growth and success of JUME as an outlet of engagement for urban mathematics educators. Here, however, I summarize only the 16 research articles, authored by 37 education and mathematics education researchers, illustrating how these researchers, individually and collectively, provide different statements and, in turn, the possibilities of different discursive practices for students and teachers in urban mathematics classrooms.

By and large, theoretically and methodologically, the research articles can be characterized as being in the social-turn (mid 1980s–) or sociopolitical-turn (2000s–) moments of mathematics education research (Stinson & Bullock, 2010).9 Lerman (2000) described the social turn in mathematics education research as signaling something different; namely, the emergence of theoretical perspectives that “see meaning, thinking, and reasoning as products of social activity” (p. 23, emphasis in original). And more recently, Gutiérrez (2010) marked the sociopolitical turn in mathematics education research as signaling “the shift in theoretical perspectives that see knowledge, power, and identity as interwoven and arising from (and constituted within) social discourses,” asserting that researchers “who have taken the sociopolitical turn seek not just to better understand mathematics education in all of its social forms but to transform mathematics education in ways that privilege more socially just practices” (p. 4, emphasis in original).

8 To learn more about the types of manuscripts JUME accepts for publication consideration, see “Section Policies” under “About” on the home Web page: http://education.gsu.edu/JUME.

9 Erika Bullock and I recently identified four distinct, yet overlapping and simultaneously operating, historical moments in mathematics education research: the process-product moment (1970s–), the interpretivist-constructivist moment (1980s–), the social-turn moment (mid 1980s–), and the sociopolitical-turn moment (2000s–). Each continuing moment—hence, no end date—explores mathematics teaching and learning from different theoretical perspectives and employs different methodological procedures derived from a variety of academic disciplines.
The social and/or sociopolitical turns of mathematics education are clearly evident in the four research articles in the December 2008 inaugural Fall/Winter issue of JUME. Davis and Martin (2008) highlight how the test-driven instructional practices of the No Child Left Behind Act simultaneously reflect well-intentioned efforts of teachers and construct racial hierarchies that posit African American children as lacking in mathematical ability. Skovsmose, Scandiuzzi, Valero, and Alrø (2008) explore the mathematics learning experiences of five adolescents from a Brazilian favela, asserting that understanding learning as relating to both students’ past (background) and future (foreground) acknowledges that students’ sense making of schooling in general, and of mathematics education in particular, is not only cognitive but also sociopolitical. Leonard and Evans (2008) demonstrate that community-based field experiences in pre-service mathematics teacher education positively influences the beliefs of pre-service teachers about urban children and communities and increases their capacity to teach urban children in culturally sensitive ways. And Paek (2008) provides a review of 22 practices worthy of attention in her search for existence proofs of promising practitioner work of mathematics teachers in urban secondary schools.

The 2009 Volume 2 of JUME marked the first year in which both Spring/Summer and Fall/Winter issues were published; a total of six research articles are available. Rousseau Anderson and Powell (2009) employ critical race theory in an analysis of two school districts—one urban and the other rural—and suggest a “metropolitan perspective” within urban mathematics education research and policy that takes into account the interrelationships between urban cities and their suburban or rural neighbors. Gonzalez (2009) reports on the ever-developing identities of seven New York City high school mathematics teachers within a community of practice that focused on learning to teach mathematics for social justice. Kitchen, Cabral Roy, Lee, and Secada (2009) conduct interviews with 32 fourth-grade teachers from two urban school districts to determine what distinguishes “highly effective” from “typical” elementary schools by examining teachers’ conceptions of mathematics and student diversity. Pourdavood, Caringnan, and King (2009) describe the voices and practices of four mathematics teachers in a K–7 “Coloured” township school in the Eastern Cape of South Africa, underscoring the complexities between mathematics education reform and socio-cultural and -historical contexts. Esmonde, Brodie, Dookie, and Takeuchi (2009) investigate the racialized and gendered nature of groupwork in a heterogeneous urban high school mathematics classroom where students named interactional style, mathematical understanding, and friendships and relationships as the most influential factors in determining if a group works well. And Capraro, Young, Lewis, Yetkiner, and Woods (2009) extend the “achievement gap” conversation by suggesting that investigating early trends in mathematics growth enhances knowledge about the achievement of Black and Hispanic students.
The Spring/Summer and Fall/Winter issues of the 2010 Volume 3 of JUME contain three research articles each. Staples and Truxaw (2010) report on a Mathematics Learning Discourse Project in urban schools that increases students understanding of mathematics through emphasizing classroom discourse and higher-order thinking skills. Mosqueda (2010) examines how disparities in the mathematics performance of Latina/o students are exacerbated by the track placement of native and non-native Latina/o English speakers. Chahine and Covington Clarkson (2010) describe the cyclical process of a collaborative evaluation inquiry project that enhances urban elementary teachers’ opportunities to make informed decisions about their mathematics teaching practices based on the skillful use of data. Chu and Rubel (2010) open their conversation—between mathematics teacher and teacher educator—to a broader audience as they untangle the threads of their interwoven narratives about the development of culturally relevant mathematics pedagogy. Nzuki (2010) explores the racial, mathematical, and technological identity constructions of five African American high school students, revealing that the positioning and authoring of identities are influenced by how students negotiate and interpret the constraints and affordances in the figured worlds in which they participate. And Waddell (2010) investigates African American children’s convergent and divergent engagement with a standards-oriented mathematics curriculum, illustrating that students’ practices converge when teachers’ practices reflect the African American cultural dimension of social/affective interactions and diverge when students enact practices that reflect expressive creativity and nonverbal interactions.

Overall, the authors of the aforementioned research articles and of the commentaries, public stories, and book reviews noted earlier, as well as the Editorial Team, reviewers, and registered readers—a group that represents over 700 educators, from the novice to the accomplished—have opened up a different space in mathematics that embraces critical research, emancipatory pedagogy, and scholarship of engagement in urban communities. In short, individually and collectively, we have brought into existence the Journal of Urban Mathematics Education. Through its online pages, JUME makes available different research and scholarship and ultimately, different statements—thus, opening the possibilities of different discursive practices for urban mathematics education research and policy and, in turn, urban mathematics teaching and learning. In many ways, the people who have brought and continue to bring JUME into existence have adopted “a degree of social consciousness and responsibility in seeing the wider social and political picture (Gates & Vistro-Yu, 2003, p. 63) as they make (or did so long ago) the sociopolitical turn in mathematics education (Gutiérrez, 2010).

That is to say, most JUME contributors and readers, I believe, not only reflect on the social and political discursive practices and subsequent consequences of mathematics education but also take action through their work as teachers, teacher
educators, and/or education policymakers, researchers, and scholars in transforming mathematics education into more just and equitable humanizing possibilities. In a word, JUME contributors and readers, I like to think, engage in praxis: “reflection and action upon the world in order to transform it” (Freire, 1970/2000, p. 51). And given that “scholarship is activism” (E. A. St. Pierre, personal communication, June 2001), we, the Editorial Team of JUME, look forward to publishing more transformative “scholarly activism” (G. Ladson-Billings, personal communication, June 2010) in the years to come. Because at the end of the day, the discursive practices of the philosophyscience of mathematics education are always already open to radical and uncertain humanizing transformations.

References


