NOT-SO-STRANGE BEDFELLOWS: RACIAL PROJECTS AND THE MATHEMATICS EDUCATION ENTERPRISE[1]

Danny Bernard Martin

University of Illinois at Chicago

Critical scholars have argued the dangers of mathematics education becoming increasingly influenced by and aligned with neoliberal and neoconservative market-focused projects. While powerful, there are often peculiar responses to issues of race and racism in these analyses. These responses are characterized by what I see as an unfortunate backgrounding of these issues, on one hand, or a conceptually flawed foregrounding, on the other. Viewing mathematics education as an instantiation of white institutional space partly accounts for these responses. Also, because mathematics education research and policy can be deeply implicated in the production and reproduction of racial meanings, hierarchies, and identities, the enterprise of mathematics education is, itself, a type of racial project.

INTRODUCTION

In her analysis of the increased corporate influence on the affairs of Canadian universities, sociologist Janice Newson (1998) suggested that these external pressures have caused a fundamental shift in the way that the university functions, including matters of day-to-day operations, the production of knowledge, and the ability of the University to serve the broader public interest. According to Newson, there has been a shift in the university from a *social project* to a *market force*. She argues:

> these changes in university practices constitute a potentially, if not realized, significant transformation in the *raison d'être* of the university: from existing in the world as a publicly funded institution oriented toward creating and disseminating knowledge as a public resource—social knowledge—into an institution which, although continuing to be supported by public funds, is increasingly oriented toward a privatized conception of knowledge—market knowledge.

To support her argument, Newson examined the expansion of the post-World War II University in terms of its initial, and evolving, relationships to democratic and economic projects:

> the expansion of higher education in the late 1950s and 1960s was justified primarily in terms of two societal needs. On the one hand, massive financial investment of public funds was premised on the need for a highly skilled and well-educated work force to contribute to the economic health of the country. On the other hand, it was also emphasized that universities should play a democratizing role, not only by promoting opportunities for social, political, and economic mobility in society at large but also by

> providing an example of a public institution whose structures and practices conformed to democratic principles of governance. In fact, some commentators of that period refer to the university as a democratic social movement…. the university of the 1960s and 1970s could be viewed as having staged a contest between the two objectives of serving the needs of the economy, on one hand, and contributing to the political project of advancing democratic sensibilities and practices on the other. If anything, the democratic project of the university held a degree of pre-eminence over the purely economic project, at least in the interplay of political and cultural struggles that were taking place on campus…. And I am referring to related struggles concerning the independence of the academy from 'external' social, political, and economic pressures. Expressions of these struggles were reflected, for example, in… the insistence that the university must exist at arm's length from the 'military-industrial-complex,' which is to also say that the university should be wary of being tied to the market…. However, the salience in university affairs of the democratizing project and its apparent equality with the economic project of the university no longer describes the political and cultural situation of and within the academy. Something has changed…in the relative balance between these two projects.

Despite this shift from the democratic project to the market project, Newson made the keen observation that the relationship between the University and external, corporate influences is not a one-way relationship; the University has not been pulled unwillingly in the market direction. Newson pointed out the limitations of the one-way perspective by noting:

> Such a representation of the university's relation to its 'outside' is both disempowering and mystifying. It is disempowering because, in a practical sense, adapting to external pressures rarely offers much if any room for challenging the pressures themselves. It is mystifying because it camouflages the extent to which the university itself is implicated in the very social, political, and economic forces to which it then 'must' accommodate.

WHAT KIND OF PROJECT IS MATHEMATICS EDUCATION?

Cued by Newson's analysis, and realizing that the word 'university' could appropriately be replaced by 'mathematics education' in the excerpts presented above, I raise two questions relative to the enterprise in which we do our work. The first question asks, *what kind of project is mathematics education*? The first question, of course, necessitates the second question, which asks, *whose interests are served by this project*?

To be sure, my two questions are not new. Over the last two decades, a number of critical scholars have offered their own assessments of mathematics education (e.g., Apple, 1992, 2000; D'Ambrosio, 1985; Dowling, 1998; Ernest, 1991; Gutstein, 2008a, 2008b; Lerman, 2000; Powell & Frankenstein, 1997; Skovsmose, 1994; Skovsmose & Valero, 2001, 2002; Tate & Rousseau, 2002; Valero & Zevenbergen, 2004). Nielsen (2003), for example, in his analysis of university mathematics education, also invoked the idea of competing projects—he highlighted critical and

conservative projects in his analysis—and pointed out that such projects are all involved in a fundamental struggle to:

> dominate society and to that end give different interpretations of what is important in society. They all try to make their descriptions look neutral and objective—to look like the truth about our society…. In the words of discourse theory, these efforts are called *hegemonic projects* …. [the] point is that these struggles also extend to the arena of university mathematics education, and that this arena is both used as a resource and as a stake in the struggles. (p. 35)

Moreover, a number of scholars have also engaged in critical analyses of mathematics education in relation to market forces, market-driven goals, and increased globalization (e.g., Apple, 1992, 2000; Atweh & Clarkson, 2001; Atweh, Calabrese Barton, Borba, Gough, Keitel, Vistro-Yu, & Vithal, 2007; Gutstein, 2008a, 2008b). These scholars have provided compelling evidence that mathematics education and mathematics knowledge have increasingly been put in service to neoliberal and neoconservative projects and agendas. This has manifested itself, for example, in the prioritizing of mathematics knowledge in the development of military and national security technology as well as the commodification of learners as potential workers in these sectors (e.g. Domestic Policy Council, 2006; National Science Board, 2003; U.S. Department of Education, 1997, 2008).[2] Recently, we have witnessed the use of mathematics knowledge via financial engineering (i.e. mortgage-based securities, collateralized debt obligations, credit default swaps) to manipulate financial markets and the flow of global capital in ways that have benefited a few and devastated the lives of millions of others (e.g., Case, 2009).

Many of the scholars referenced above have extended their own analyses of the first question that I raised above to suggest the kind of project that mathematics education *should* be (e.g., D'Ambrosio, 1985; Frankenstein, 1995; Malloy, 2002; Skovsmose, 1994; Sriraman, 2008; Skovsmose & Valero, 2001, 2002; Tate & Rousseau, 2002). For example, based on his work with Latino youth in Chicago, Gutstein (2003, 2006, 2007) has argued that mathematics education should be a social justice project that resists neoliberal and neoconservative agendas and empowers students to understand and confront class-based oppressions created by differentials in wealth and power. According to Gutstein, students should do this by developing and integrating what he calls classical, critical, and community knowledge.[3]

As an outgrowth of his long history of activism in the American South, Bob Moses works with Black adolescents in the United States in the context of the Algebra Project (Moses & Cobb, 2001). Moses has argued for conceptualizing mathematics education as a civil rights project. Other scholars have made arguments supporting mathematics education as a broader democratic project (e.g., Malloy, 2002; Skovsmose, 1998; Skovsmose & Valero, 2002; Tate & Rousseau, 2002).

It is clear, depending on how the aims and goals of mathematics education are conceptualized and framed, that the enterprise simultaneously represents and serves a

host of competing projects, each of which calls for a preferred structuring of mathematics teaching, learning, curriculum, assessment, research, policy, and reform.

Retreating from Race?

In this paper, I would like to argue that although much of the research cited above has linked mathematics education to globalization and market-focused neoconservative and neoliberal projects—either as complicit in or as resistant to their oppressions—there are often peculiar responses to issues of race and racism in these critical analyses.[4] These responses are characterized by what I have come to see as an unfortunate backgrounding of these issues, on one hand, or a conceptually flawed foregrounding, on the other.

These responses are particularly true for analyses of mathematics education in the United States despite the salience of race and racism in almost every aspect of American life. These responses are even more curious given the scholarly attention that race and racism have received outside of mathematics education. This research suggest that racism is a *global* phenomenon, with geopolitical variations being found, for example, in South Africa, Brazil, India, Australia, New Zealand, and throughout the European Union (e.g., Macedo & Gounari, 2006; Winant, 2004). This ubiquity suggests that the meanings for race and racial categories are politically contested and re-created in any given sociohistorical and sociopolitical context through a process called *racial formation*[5] (Omi & Winant, 1994).

My comments are not meant to suggest that there are no references to race or discussions of the plights of various racial groups in mathematics education. This is clearly not the case, as reflected in numerous studies and reports that refer, for example, to "underrepresented" and "minority" students and so-called racial achievement gaps. However, racism, especially white supremacy (and colonialism), are rarely centered in the analyses, rarely theorized for conceptual clarity (see Martin, 2009a for a more detailed critique), and rarely theorized in relation to the market-driven goals of globalization and the neoliberal and neoconservative projects that mathematics education is said to increasingly serve.

In his discussion of mathematics education reform, markets, and educational inequality, Michael Apple (2000) only briefly mentioned deep structural racism and other processes of racialization (Miles, 1988) in his analysis. It was through a single footnote that he directed readers elsewhere for a more thorough discussion of the racial state. In a much earlier paper devoted to analyzing standards-based reform, Apple (1992) did entertain race, class, and gender intersections in his analysis. However, the word 'racism' appears nowhere in the text of his arguments. The text, *Internationalism and Globalisation in Mathematics and Science Education* (Atweh, Calabrese-Barton, Borba, Gough, Keitel, Vistro-Yu, & Vithal, 2008), contains twenty-seven chapters spread over more than 500 pages. A word search of the index revealed zero instances of the words *race* and *racism*.

Moreover, few of the most visible and most referenced research and policy documents in mainstream mathematics education address race as more than a categorical variable in reference to differences in achievement (e.g., National Research Counci1, 2001; U.S. Department of Education, 2008). The *Handbook of Research on Mathematics Teaching and Learning* (Grouws, 1992) and *Second Handbook of Research on Mathematics Teaching and Learning* (Lester, 2007) confine their discussions to a single chapter in the former case and a just few chapters in the latter, largely disconnected from the other chapters focused on teaching, learning, curriculum, and assessment. I would argue, based on my own work (Martin 2006, 2007, 2009a, 2009b), that mathematics teaching and learning, for example, can be conceptualized as *racialized forms of experience* and that this is true for all students. By this, I mean that the meanings for race in a given sociohistorical and sociopolitical context are highly salient in structuring the ways that mathematical experiences and opportunities unfold and just as salient in shaping beliefs about who is perceived to be competent in mathematics.

Without discounting the great importance of the work, even the math-literacy-as-a-civil-right perspective of Moses is tempered by the fact that mathematics literacy is deemed the key to participation in the very same technology-based opportunity structure critiqued by many critical mathematics educators. Moses' message about Black participation in this structure, as well as the prioritizing of Algebra in the mathematics curriculum and experiences of students, also shares much with the rhetoric found *in Final Report of the National Mathematics Panel* (U.S. Department of Education, 2008), which was convened by former Republican President Bush George Bush. The lack of a deeper racial analysis limits discussion of the fact that the access granted to Blacks and envisioned by Moses and others, rather than being democratic in nature, is likely to be selective and partial, in protection of white male privilege. My own view is that even if larger numbers of Black workers were to find themselves in the mathematics and engineering pipeline, they would only be absorbed into the workforce up to the point of not threatening the status of white workers. Examination of the public debate reveals the angst, resistance, and cries of racial preference that are often associated with the introduction of just one qualified Black person into a given context even when that context has been previously dominated by Whites (e.g., Berry & Bonilla-Silva, 2008; Bonilla-Silva, 2001, 2003).

Moreover, Moses' consideration of racism faced by Blacks in the United States is primarily historical, not accounting for the contemporary evolving, politically expedient forms of everyday, institutional, and structural racism in the post-Civil Rights era, including neoliberal racism and neoconservative color-blind racism. Nor does Moses interrogate the increasingly nationalist, nativist, and racist tones associated with reform rhetoric linking mathematics education, national security, and U.S. international competitiveness (e.g., Domestic Policy Council, 2006; U.S. Department of Mathematics Education, 2008). Analyses linking mathematics education to democracy and citizenship, in some idealized forms, would be

strengthened by pointing out the contradictions with democracy and citizenship as they are actually experienced in fundamentally racist societies (Du Bois, 1998/1935). Much in the same way that Critical Race Theory scholar Tara Yosso (2005) challenged Bourdieu's notions of cultural capital by asking, *whose culture has capital*? it is important to ask, *whose democracy*? and *democracy for whom*? Similarly, profound analyses of democracy and freedom cannot take place without equally profound analyses of racism and slavery (Patterson, 1991; Winant, 2004). As noted by Winant (2004):

> Racism has always been an issue of democracy, an indicator—the most reliable one we have— of democracy's limitations. Just as race and racism were central o the creation of modernity, the development of capitalism, and the elaboration of Enlightenment culture, they were also key to the evolution of modern forms of democracy…. It is not often recognized that democracy in the modern era was conceptualized as the opposite of slavery, that citizenship and social identity were for many centuries conceived in racial terms… (p. 111)

Furthermore, an explicitly racialized characterization of globalization by critical mathematics educators would seem to be warranted given sociological analyses, which suggest that:

> Globalization is a re-racialization of the world. What have come to be called "North-South" issues are also deeply racial issues. The disparities in status and "life chances" between the world's rich and poor regions, between the (largely white and wealthy) global North and the (largely dark-skinned and poor) global South have always possessed a racial character…. globalization is a racialized social structure…. It is a system of transnational social stratification under which corporations and states based in the global North dominate the global South…. [through] a worldwide pattern of employment discrimination, violence, morbidity, impoverishment, pollution, and unequal exchange that shares a great deal with its colonial antecedents. This global system of stratification correlates very well with racial criteria: the darker your skin is, the less you earn; the shorter your life span, the poorer your health and nutrition, the less education you can get. (Winant, 2004, p. 131-134)

Equally true, an explicitly racialized characterization of neoliberal policies and practices would acknowledge that these policies and practices are:

> predicated on the wholesale exclusion of most of the world population from partaking equitably in the world's resources, including education and health care, accelerating a downward shift toward unconscionable poverty and human misery. This form of blatant exclusion cannot be viewed as anything other than poster racism. The permanent status of underdevelopment affects mostly countries the dominant racialized discourse characterizes as '"nonwhite" and "other." In addition to the characterization of otherness in order to devalue other human beings, neoliberal policies implement racist practices by largely excluding millions of people from equal participation in the economic world (dis)order it imposes. (Macedo & Gounari, 2006, p. 12)

Turning the Gaze Inward

My comments thus far have focused on what I perceive to be limitations in analyzing the racialized nature of the external forces to which mathematics education must respond. In my view, there is even less evidence in the scholarly record—in both U.S. and international contexts—that critical scholars, particularly critical white scholars, have turned their analyses inward to examine the internal structure of the mathematics education to expose its own contributions, enactments, and validations of racial hierarchies and inequalities (e.g., Anderson, 1990; Powell, 2002). With respect to this last point, I raise the additional question, *how do race and racism structure the very nature of the mathematics education enterprise*?

On one hand, there is the possibility that mathematics education is a purely anti-racist domain, free from racial contestation, stratification, and hierarchies, and fundamentally different in character than all other racialized societal contexts. Under this assumption, there is no need to turn the gaze inward since the norms, ideologies, and institutional practices and arrangements are, in the best sense of the word, democratic in nature and all the actors in the domain exist free from oppression and are uninvolved in the racial oppression of others.

On the other hand, I suggest that a race-critical structural analysis would show, for example, that configurations of power and privilege in the domain are not simply the result of democratic principles, practices, norms, and access. In terms of knowledge production, a great deal of mainstream mathematics education research and policy, particularly in the United States, can be deeply implicated in the production and reproduction of racial meanings, disparities, hierarchies, and identities. For example, not only do scholarly interpretations of children's mathematical behaviors serve to inform societal beliefs about race, racial categories, abilities, and competence, I would argue that race-based societal beliefs about children from various social groups also serve to inform the ways that mathematics education research, policy, and practice are conceptualized and configured in relation to these children (Martin, 2009a, 2009b).

As I have noted elsewhere (Martin, 2009a), despite mathematics education research and policy feeding the public's common sense understandings of racial hierarchy and difference, *race* still remains under-theorized in mathematics education. While race is characterized in the sociological and critical theory literatures as sociohistorically and politically constructed with structural expressions, most studies of differential outcomes in mathematics education begin and end their analyses with static racial categories and group labels for the sole purpose of disaggregating data. One consequence is a widely accepted, and largely uncontested, *racial hierarchy of mathematical ability* that, in the U.S. context, locates children who are identified as Black, Latino, and Native American at the bottom and children who are identified as Asian and White at the top. Beliefs in so-called *racial* achievement gaps and subsequent attempts to close such gaps by raising Black, Latino, and Native American children up to the level of white and Asian children help to perpetuate this

hierarchy. Rather than challenging and deconstructing this hierarchy, many math educators take it as the natural starting point in their analyses. Disparities in achievement and persistence are then inadequately framed as reflecting race effects rather than as consequences of the *racialized* nature of students' mathematical experiences.

A cursory examination of the ways Black children in the U.S have been researched and represented in mainstream mathematics education research and policy further shows very clearly how mathematics education research is implicated in the production and reproduction of racial meanings, disparities, hierarchies, and identities (see Martin, 2009a, 2009b, 2009c for more details).

The dominant story line, or masternarrative, about Black children in both research and policy contexts is one that normalizes failure, ignores success, and uses white children's mathematical behavior and performance as the benchmark for competence and ability. This masternarrative has helped to support negative social constructions of these children. Mathematics education policy reports dating back 25 years have explicitly labeled Black children as mathematically illiterate (e.g., National Research Council, 1989). More recently, Black 12th graders have been told, in a very public fashion, that they are only as skilled and demonstrate math abilities at the level of white 8th graders (Thernstrom & Thernstrom, 1997). After their comprehensive review of over 16,000 studies, the members of the National Mathematics Advisory Panel reduced their research recommendation for Black children to issues of motivation, task engagement, and self-efficacy. These areas are important but they focus attention on Black children as though they are unmotivated, inclined to disengagement, and lacking in agency. Institutional and structural barriers inside and outside of school, including racism, that affect student mathematics achievement, engagement, and motivation received no attention in the report (Martin, 2008). Resistance and disengagement among some students may, in fact, be rational responses to oppressive and racist schooling practices.

In other research contexts, it has been claimed that poor (Black) children enter school with only *pre*-mathematical knowledge and lack the ability to mathematize their experiences, engage in abstraction and elaboration, and use mathematical ideas and symbols to create models of their everyday lives (e.g., Clements & Sarama, 2007). Left unanswered is whether researchers who report these findings understand, even partially, the "everyday lives" of Black children. As I state elsewhere (Martin, 2009b):

> Because the tasks, assessments, and standards for competence used to draw these conclusions are typically not normed on African American children's cultural and life experiences, once could argue that the … preferred ways of abstracting, representing, and elaboration called for in these studies and reports are based on the white, middle-class and upper-class children…. very little consideration is given to exploring patterns in the ways that low-income and African American children do engage in abstraction, representation, and elaboration to determine if these ways are mediated by their cultural

> experiences in out-of-school settings and whether preferred ways of engaging in these processes serve useful functions relative to those experiences. (p. 15)

In the U.S., it is only in the last decade or so that studies of mathematics learning and participation among Black children has focused on these children *as* Black children, situating their learning and participatory experiences within the network of meanings for race and the consequences of their racial group membership.

White Institutional Space

I contend that it is only within certain kinds of ideological and material spaces—contexts that sociologists have called *white institutional spaces*—that the peculiar responses to race described above and widespread beliefs in so-called *racial* achievement gaps can co-exist. The term *white institutional space* comes from the work of sociologists Joe Feagin (1996) and Wendy Moore, who, in her book *Reproducing Racism: White Space, Elite Law Schools, and Racial Inequality* (2008), examined the white space of law schools and how the ideologies and practices in these schools serve to privilege white perspectives, white ideological frames, white power, and white dominance all the while purporting to represent law as neutral and objective.

White institutional spaces are characterized by (1) numerical domination by whites and the exclusion of people of color from positions of power in institutional contexts, (2) the development of a white frame that organizes the logic of the institution or discipline, (3) the historical construction of curricular models based upon the thinking of white elites, and (4) the assertion of knowledge production as neutral and impartial unconnected to power relations.

In Martin (2008), I provide a more detailed discussion of how I believe mainstream mathematics education research and policy contexts in the U.S. represent instantiations of white institutional space. But I will say there that a structural analysis reveals that the pervasiveness whiteness—represented numerically, ideologically, epistemologically, and in material power—which characterizes U.S. mainstream mathematics education research and policy contexts bears a strong family resemblance to the manifestations of whiteness found in other societal contexts (Martin, 2008, 2009a). In Martin (2009b), I distinguish *mainstream* mathematics education research and policy as that which has relied on traditional theories and models of teaching and learning (e.g., information processing, constructivism, situated cognition) and research approaches (race-neutral analyses, race-comparative analyses) developed primarily by white researchers and policy makers to normalize the mathematical behavior of white children. Simultaneous to their use for normalization and generalization, these models have generated and validated certain conventional wisdoms about Black children and mathematics.

My characterization is not meant to imply that all mainstream mathematics education research and policy is detrimental to Black children. Meaningful and insightful research findings have sometimes led to the creation and implementation of policies

that have had beneficial effects for these children. Nor do I suggest that white scholars have not, and cannot, work in the best interest of children who are not white. However, the numerical dominance of white scholars, whatever their ideological and epistemological orientations, may insure that the perspectives of white scholars become the *only* perspectives that matter. In addition, it is quite possible that the critical stance taken by many liberal white scholars escapes self-interrogation. As noted by Macedo and Gounari (2006):

> many white liberals (and some black liberals as well) fail to understand how they can embody white supremacist values and beliefs, even thought they may not embrace racism as prejudice or domination (especially domination that involves coercive control). They cannot recognize how their actions support and affirm the very structure of racist domination and oppression they profess to wish to see eradicated…. By not understanding their complicity with white supremacist ideology, many white liberals reproduce a colonialist and assimilationist value system that gives rise to a form of tokenism parading under the rubric of diversity. (p. 32)

These sentiments were echoed by Liz Appel (2003) in her focused critique of liberal white participants in the movement against the prison industrial complex:

> many well-intentioned white folks wish to incorporate an anti-racist approach in their work. Seeking a quick resolve, the problem of racism is often superficially addressed, however. Focusing on tangible and visible solutions, they tokenize individual people of color... in an attempt to demonstrate the "diverse" nature of the struggle and those that make up the fight. This is not to say that every attempt to incorporate people of color is inherently racist and self-serving…. [But does] not the fact that whites are able to select people of color for inclusion… reaffirm our power and privilege? (p. 84)

In a field that increasingly purports to be committed to equity for all children, I am left to wonder why there are no explicit discussions of the pervasive whiteness in mathematics education research and policy contexts or of the fact that the norms and values of these white institutional spaces are increasingly being applied to populations of other people's children. Why are there no discussions of how mainstream mathematics education continues to socially blacken some children by producing research that implies their inferiority? Is it that the power and privilege characterizing white institutional spaces are so strong that they lead us to believe this state of affairs is normal and acceptable?

Why am I levelling these critiques of mathematics education and what is the relationship of my critique to the three questions that I have raised thus far in this paper: *What kind of project is mathematics education? Whose interests are served by this project? How do race and racism structure the very nature of the mathematics education enterprise?* My intent is not to implicate particular individuals. The individual psychology of this scholar or that one is not my concern. Rather, my goal is to examine, from a structural point of view, how mathematics education as an enterprise contributes to larger racial dynamics in society, locally and with respect to global racial hegemony.

In short, I wish to argue that the enterprise of mathematics education, examined in relation to well-known hegemonic projects; and examined for the ways in which it backgrounds and foregrounds race and racism can be conceptualized as a type *racial project*.

What is a Racial Project?

According to the sociological literature, a racial project is "simultaneously an interpretation, representation, or explanation of racial dynamics and an effort to reorganize or redistribute resources along particular racial lines. Racial projects connect what race *means* in a particular discursive practice and the ways in which both social structures and everyday experiences are racially *organized*, based upon that meaning" (Omi & Winant, 1994, p. 56). Moreover, there are competing racial projects such that the "discord and conflict among various racial projects construct the racial order visible at any given moment; over time they produce a deeply racialized society, as preexisting themes are reworked and social institutions reformed time and time again" (Winant, 2004, p. 53). As noted by Macedo and Gounari (2006), not all racial projects are racist. Those that are can be are characterized by their attempts to create or reproduce hierarchal social structures based on essentialized racial categories (p. 45). Sociologists have characterized several white racial projects that have figured prominently in the evolution of white supremacy and white identity in the U.S. These include the *far right*, *new right*, *neoconservative*, *liberal*, *neoliberal*, and *new abolitionist* racial projects. Defining characteristics of each are summarized below (Giroux, 2006; Omi & Winant, 1994; Winant, 2004):

> *Far right racial project*: Belief in an ineluctable, unalterable racialized difference between white and nonwhites. This belief is biologically grounded. Fascist elements maintain an insurrectionary posture vis-à-vis the state and openly admire Nazi race thinking, advocate racial genocide, and advocate establishment of an all-white North American nation. (Winant, 2004)
>
> *New right racial project*: Has its origins in resistance to the black movement of 1950s and 1960s. Has employed anticommunism, racism, southern chauvinism, states' rights doctrines, agrarian populism, nativism, and America First isolationism. Argues that white supremacy is not an excrescence on the democratic "American creed" but a fundamental component of U.S. society. Revives anti-immigration hysteria, targeting Latinos. Associates whiteness with capitalist virtues. Presents itself as the tribune of disenfranchised whites. Rather than espouse racism and white supremacy, espouses familiar "code-word" phenomenon to manipulate white fear. Accepts a measure of non-white social and political participation. Political success depends on its ability to interpret white identity in positive political terms. (Winant, 2004)
>
> *Neoconservative racial project*: Seeks to preserve white advantages through denial of racial difference. Racial difference is something to be overcome, a blight on the core U.S. values of universalism and individualism. Casts doubt on the tractability of racial

equality, arguing that the state cannot ameliorate poverty through social policy but in fact only exacerbates it. Argues that every invocation of racial significance manifests 'racial thinking' and is thus suspect amounting to a defense of the racial status quo. Defends the political and cultural canons of Western culture. Argues for 'color-blind' racial politics. Has served to organize and rationalize white working-class and minority middle-class resentments. Seeks to label Asian Americans and some Latinos as 'model minorities' and extend 'honorary white' status to distinguish them from the black underclass and to simultaneously exempt them from affirmative action. (Winant, 2004)

Neoliberal racial project: Rather than operating as a discourse of denial regarding how power and politics promote racial discrimination and exclusion, neoliberal racism is about the privatization of racial discourse. Asserts the insignificance of race as a category at odds with an individualistic embrace of formal legal rights. Dismisses the concept of institutional racism or maintains that it has no merit. Asserts that since American society is now a meritocracy, government should be race neutral, affirmative action programs dismantled, civil rights laws discarded, and the welfare state be eliminated. (Giroux, 2006)

Moreover, consider this partial accounting of how the *neoliberal* racial project evolved in the 1990s in the context of American politics:

In order to win the [1992] election and reinvigorate the once-powerful Democratic coalition, Bill Clinton believed he needed to attract white working class voters—the "Reagan Democrats." His appeal was based on lessons learned from the right, lessons about race. Pragmatic liberals in the Democratic camp proposed a more activist social policy emphasizing greater state investment in job creation, education, and infrastructure development. But they conspicuously avoided discussing racial matters such as residential segregation or discrimination…. Thus the surprising shift in U.S. racial politics was not… the Republican analysis which placed blame on the racially defined minority poor and the welfare policies which has supposedly taught them irresponsibility and dependency. The "surprise" was rather the Democratic retreat from race and the party's limited but real adoption of Republican racial politics, with their support for "universalism" and their rejection of "race-specific" policies.… This developing neoliberal project seeks to rearticulate the neoconservative and new right racial projects of the Reagan-Bush years in a centrist framework of moderate redistribution and cultural universalism. Neoliberals deliberately try to avoid racial themes, both because they fear the divisiveness and polarization which characterized the racial reaction, and because they mistrust the "identity politics" whose origins lie in the 1960s…. Unlike the neoconservative project… racial neoliberalism… does not claim to be colorblind; indeed it argues that any effort to reduce overall inequality in employment, income, education, health care access, etc., will disproportionately benefit those concentrated at the bottom of the socioeconomic ladder, where racial discrimination has its most damaging effects. In its *signifying* or representational dimension, the neoliberal project avoids (as far as possible) framing issues or identities racially. Neoliberals argue that addressing social policy or political discourse overtly to matters of race simply serves to distract, or even hinder, the kinds of reforms which could most directly benefit racially defined minorities. To focus too much attention on

> race tends to fuel demagogy and separatism, and this exacerbates the very difficulties which much racial discourse has ostensibly been intended to solve. To speak of race is to enter a terrain where racism is hard to avoid. Better to address racism by ignoring race, at least publicly (Omi & Winant, 1994, pp. 146-148)

Now, consider the proposition that contemporary mathematics education reforms have been aligned with, and can be implicated in, New Right, neoconservative, liberal, and neoliberal racial projects that continue to shape larger racial dynamics. How might one shed light on the racialized character of mathematics education reforms? Internationally, there are some interesting cases ripe for further critical analysis, including the introduction of Mathematical Literacy, *vis à vis* Mathematics, in post-apartheid South Africa (Julie, 2006) and the policies put in place to assist Ethiopian Jews in Israel (Mulat & Arcavi, 2008).

In the U.S. context, consider three major math reform efforts covering the last 50 years: the new math movement ushered in by U.S. reaction to the launching of Sputnik on October 4, 1957; the *Mathematics for All* movement of the late 1980s and 1990s; and the formation of the National Mathematics Advisory Panel by former Republican President Bush.

New Math in the Civil Rights Era

Although Cold War politics are put at the forefront of explaining the U.S. reaction to Sputnik, a number of race-based considerations are in order. First, the push to educate a generation of students who would help protect the U.S. from the Soviet intellectual threat did not include Blacks. Just over a decade earlier, African Americans were largely excluded from taking advantage of the GI Bill that helped many white males enroll in colleges and universities.

It is true that in 1954, just three years prior to Sputnik, the U.S. Supreme Court announced its decision in the case of *Brown v. Board of Education of Topeka*, ruling that separate educational facilities are inherently unequal, thus overturning its previous ruling in the 1896 case of *Plessey v. Ferguson* and paving the way for school integration. However, as pointed out by Derrick Bell (1980), it was *interest convergence* rather than moral compunction that explained this landmark decision. Interest convergence suggests that "gains for blacks coincide with white self interest and materialize at times when elite groups need a breakthrough for African Americans usually for the sake of world appearances or the imperatives of international competition" (Delgado, 2002, p. 371). As explained by Delgado (2002):

> the NAACP Legal Defense Fund had been litigating school funding and desegregation cases for decades throughout the South, generally losing or winning, at most narrow victories. Then, in 1954, the skies opened—the Court declared, for the first time in a school desegregation case, that separate was no longer equal. Why then? Bell pointed out that the country had just celebrated the end of a bloody world war against Germany and Japan, during which many black men and women had served gallantly. Having risked their lives for the cause of freedom, they were unlikely to return meekly to the former

> regime of menial jobs and segregated facilities. For the first time in decades, the prospect of serious racial unrest loomed. At the same time, the United States was in the early stages of a Cold War against the forces of monolithic, atheist communism, competing for the loyalties of the uncommitted Third World, most of which was black, brown, or Asian. Incidents like the murder of Emmett Till and the death sentence of handyman Jimmy Wilson splashed across the pages of the world news, reflecting poorly on America. The balance of interests shifted; elite whites now saw a powerful reason to advance blacks' cause. For Bell, the Brown decision came about when it did, not because of altruism or advancing notions of social morality. Rather, elite whites on the Supreme Court, in the State Department, and in other circles of power simply perceived that America's self-interest lay in publicly supporting blacks so as to gain an edge in the Cold War with Russia. (p. 372)

Of course, the desegregation ruling did not end racism or quell the racial climate. In August of 1955, fourteen-year-old Emmett Till was kidnapped, beaten, shot, and dumped in the Tallahatchie River allegedly for whistling at a white woman. In December of 1955 Rosa Parks, a Montgomery, Alabama seamstress, refused to give up her seat on the bus to a white passenger and is subsequently arrested and fined, giving rise to the Montgomery bus boycotts. And, on September 4, 1957, just one month before Sputnik, the Governor of Arkansas deployed National Guard troops to block nine Black children from integrating Central High School. It was not until 1964 that the 24th amendment abolished the poll tax and the Civil Rights Act increased Black access to voting.

An extended chronology of Civil Rights history in the post-Sputnik era, culminating in the death of Dr. Martin Luther King Jr. in 1968, shows that the new math reform movement was not an anti-racist vessel in the sea of racial discord characterizing that time. In fact, with its emphasis on the "best and the brightest," it was just another, although short-lived, mechanism for maintaining white privilege. If the nation was not willing to integrate Black children into their schools and other public institutions, it was certainly not willing to integrate them into the mathematics education reforms of the day.

Mathematics for All?

More recently, *Mathematics for All*, as one of most egalitarian movements in the field, seeks to reorganize and redistribute access and opportunity in mathematics (National Council of Teachers of Mathematics, 1989, 2000; RAND Mathematics Study Panel, 2003). In my view, it does so, and does so seductively, by appealing to liberal, neoliberal, and neoconservative racial projects.

In the liberal racial project, there is an underlying appeal to white middle- and upper-class consciousness to convince them that others must now share in the opportunities that they have long enjoyed; that is "their needs—for more and better jobs, access to education and health care…can be linked to those of the minority poor if the 'wedge issue' of race can be blunted" (Winant, 2004, p. 60). However, as noted by

Schoenfeld and Pearson (in press), the appeal to white consciousness early in the *Mathematics for All* was sometimes met by resistance, revealing the racial dynamics at play in public and political negotiations of democratic access. This was particularly true in California, where a number of other public initiatives invoked similar, race-based reactions:

> Simply put, the anti-reform forces in reading and mathematics grew strong at a time of the resurgence of the right wing in California politics. San Diego politician Pete Wilson had ridden "wedge politics" (appeals to the fears of the White middle-class voting majority regarding the rising populations and rights of minorities) to become mayor of San Diego. Wilson was a strong supporter of Proposition 187, a 1994 ballot initiative designed to deny illegal immigrants social services, healthcare, and public education. (The proposition won at the ballot box, with non-Latino Whites being the largest voting block in favor; it was later declared unconstitutional.) In 1996, California voters passed Proposition 209, which abolished affirmative action programs in public institutions (Office of Legislative Analysis, State of California, 1996). In 1998, voters passed Proposition 227, which "requires all public school instruction be conducted in English" (California Voter's Guide, 1998) and severely curtailed bilingual education. The [NCTM] *Standards* represented a clear tilt toward the "democratic access" view of education. Advocates of reform believed in "mathematics for all"—in particular that it was possible to achieve excellence *and* equity, without sacrificing one for the other. There are many who believe that the goals of equity and excellence are in tension, and that making mathematics accessible to many more students necessarily entails "dumbing down" the mathematics. If one believes this, then two consequences of the democratization of mathematics as proposed by reform are (a) a weakening of the mathematical preparation of our best students, and a concomitant weakening of the nation's base of mathematically and scientifically prepared elite and (b) a different demographic mix of those who are considered to be prepared for entry into elite institutions and professions. (p. 573)

Mathematics for All also aligns well with the neoliberal and neoconservative racial projects in that universal programs (i.e. Algebra for All) that supposedly work for all students are promoted in lieu of group-specific efforts and objectives (Winant, 2004). Merit and individual effort will determine success and failure and race-conscious interventions are frowned upon. Even the *Equity Principle* of the most recent NCTM standards document (NCTM, 2000) contains no explicit references to African American, Latino, Native American, or poor students. It is in these ways that the subtext of *Mathematics for All* rhetoric is about assimilation. In classical assimilation theory, assimilation is defined as "the decline, and at its endpoint the disappearance, of an ethnic/racial distinction and the cultural and social differences that express it" (Alba & Nee, 1997, p. 863).

Viewed more critically, *Mathematics for All* is also about nationalism because it appeals to U.S. international competitiveness and calls for strengthening of the scientific and technical (i.e. national defense) workforce in relation to real and

perceived foreign threats (Gutstein, 2008a, 2008b; Martin, 2008). Like assimilation, nationalism seeks to erase meaningful cultural differences among social groups and to silence internal racial identity politics in favor of collectivism. Moreover, some scholars suggest that racism and nationalism are intimately linked (e.g., Mosse, 1995). According to Miles and Brown (2003), "racism is implicitly defined as an excess of nationalism, therefore dependent on nationalism for existence-as-such" (p. 10).

So, while *Mathematics for All* in the U.S. has an equity-oriented veneer, it would appear that there are other ideologies at play that are not based exclusively on moral and humanistic concern for those who are marginalized in mathematics. In my view, it is inconceivable that the real goal of *Mathematics for All* is to contribute to the reconstruction of the opportunity structure in such a way that we move from an arrangement that has long served white males and the wealthy to an arrangement where Blacks, Latinos, and Native Americans share equitably in material benefits and power.[6] Very rarely, if ever, has it materialized that these groups have collectively enjoyed access to the best learning opportunities, best teachers, best curriculum, most funding, and greatest levels of social and economic reward. In view of these limitations, efforts like *Mathematics for All*, must be analyzed for their deeper racial content, racial signification, and hidden agendas despite their rhetoric about equity and access (Martin, 2003).

Mathematics Education and Nationalism

Similarly, a critical analysis of the *Final Report of the National Mathematics Advisory Panel* (U.S. Department of Education, 2008) report reveals how it, too, contributes to racial projects. The fact that former President Bush was able to successfully extend new right and neoconservative politics—characterized by nationalism, nativisim, security concerns, and anti-Muslim sentiments—into mathematics education with the formation of the National Mathematics Advisory Panel further reveals the connection between mathematics education reform and the larger racial politics of the day (Martin, in press).

In this report, the learning of mathematics in U.S. schools is linked directly to the preservation of national security. The third paragraph of the Panel's *Executive Summary* is very clear in making this link:

> Much of the commentary on mathematics and science in the United States focuses on national economic competitiveness and the economic well-being of citizens and enterprises. There is reason enough for concern about these matters, but it is yet more fundamental to recognize that the safety of the nation and the quality of life—not just the prosperity of the nation—are at issue. (p. xi)

Two key questions can be asked about the excerpt presented above. First, what threats to national security and quality of life in the United States is the report referring? Second, how is the identification of these threats related to "the organizing principles that generate, shape, and sustain white supremacy designed to exclude

other human beings by virtue of their race, language, culture, and ethnicity so that they can be exploited" (Macedo & Gounari, 2006, p. 3)? Macedo and Gounari's (2006) cogent analysis of the racialized nature of the "threat" is particularly helpful:

> The dichotomy [between "us" and "them"] has been astutely used by the Bush administration to conduct its war on terror and expand its imperial ambitions unimpeded by a domestic opposition. By constructing a terrorist enemy that encompassed all Muslims (a "group" that amounts roughly to 1.2 billion people worldwide and comprises numerous countries, societies, traditions, languages and lived experiences), the Bush administration, aided by a compliant media, exacerbated the racism present in U.S. society so that all Muslims became suspected terrorists. And it legitimized racist treatment of Muslims, as when "Muslim-looking" individuals are deplaned by major airlines because white folks fear of flying in their company. However, the same racial profiling was never applied to white males resembling Timothy McVeigh after the terrorist bombing of the federal building in Oklahoma City, where more than one hundred fifty people died, including women and children. The us-versus-them dichotomy … produces the "reality" of what it means to have different races." (p. 5)

Moreover, while *Mathematics for All* may promote assimilation and nationalism in more subtle ways, the discourse associated with the National Math Panel's final report is much more explicit. A word search of the document produced 21 instances of the word *American* (with repetition of some sentences), 11 instances (with repetition of some sentences) of the word *citizen*, only two non-repeated references to the word *minority*, and only one mention of the word *resident*. Moreover, while a search produced 98 instances of the word *quality* (i.e. excellence), the document contains zero instances of the word *equity*. Such references, according to van Dijk (2000), contribute to the discursive construction of the Other that is needed in nationalist and racist ideologies. This implicit distinction between citizens and non-citizen, American and non-American, despite the rhetoric about "all our people" is more clearly understood in the context of anti-immigrant policies and sentiments flowing from former President Bush's Republican Administration. This includes, as an example, the passing of the Secure Fence Act of 2006 (Pub.L. 109-367), which:

> allows for over 700 miles (1,100 km) of double-reinforced fence to be built along the border with Mexico, across cities and deserts alike, in the U.S. states of California, Arizona, New Mexico, and Texas in areas that have experienced illegal drug trafficking and illegal immigration. It authorizes the installation of more lighting, vehicle barriers, and border checkpoints, while putting in place more advanced equipment like sensors, cameras, satellites and unmanned aerial vehicles in an attempt to watch and control illegal immigration into the United States.[7]

In his official statement to the press following passage of the bill, former President Bush stated the following:

> This bill will help protect the American people. This bill will make our borders more secure…. We must face the reality that millions of illegal immigrants are already here. They should not be given an automatic path to citizenship; that is amnesty. I oppose amnesty.[8]

To the degree that mathematics education reform policies and rhetoric embrace and appropriate these nationalist sentiments, it is insufficient to focus on the market-focused goals of neoliberal and neoconservative projects. Simply put, race and racism matter.

CONCLUSION

Earlier in this paper, I raised three questions: *What kind of project is mathematics education? Whose interests are served by this project?* and *How do race and racism structure the very nature of the mathematics education enterprise?* A deeper structural analysis of the domain shows that it is an instantiation of white institutional space. An examination of both mainstream and critical research shows that there are often unfortunate backgroundings or conceptually flawed foregroundings of race and racism. An examination of mathematics education reforms shows that they have been aligned not only with neoliberal and neoconservative market-focused projects but these reforms have also been aligned with new right, liberal, neoconservative, and neoconservative racial projects. As a result, I claim that the enterprise of mathematics education is deeply implicated in the production and reproduction of racial meanings, hierarchies, and identities, making it a type of racial project.

NOTES

[1] This paper draws heavily from Martin (2008, 2009b, 2009c, in press).
[2] Efforts to shift the structure, ideology, and content of mathematics education toward or away from one project or another have not happened without contestation on many different levels (Schoenfeld, 2004; Schoenfeld & Pearson, in press).
[3] Similarly, Ernest (2002) has suggested empowerment for learners along three dimensions: epistemological, social, and mathematical.
[4] Research by senior scholars William Tate and Arthur Powell are notable exceptions along with the work of a number of emerging African American scholars and white scholars like Stinson and Jackson. See Martin (2009b) for recent work by these scholars.
[5] Omi & Winant (1994, p. 55) define *racial formation* as the sociohistorical process by which racial categories are created, inhabited, transformed, and destroyed.
[6] I am not suggesting that one form of racial hierarchy be substituted for another.
[7] Retrieved December 1, 2009: http://en.wikipedia.org/wiki/Secure_Fence_Act_of_2006)
[8] Retrieved on December 1, 2009 from http://georgewbush-whitehouse.archives.gov/news/releases/2006/10/20061026.html

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