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Lessons in Paradise: Envisioning a Black Liberatory Mathematics Education

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ABSTRACT

I use Toni Morrison's *Paradise* as a backdrop for framing a *Black Liberatory Fantasy* (Martin et al., 2019) that is rooted in what Dumas and ross (2016) have conceptualized as BlackCrit. The goal of the current undertaking is to evaluate anecdotes of this working idea of paradise, to merge it with more refined ones, and to dream even bigger about what paradise could look like for Black students in mathematics spaces. It is with this backdrop that I proffer how to fashion a Black liberatory mathematics education (BLiME), my conception of paradise, where Black students are expected to exist in their full humanity. I offer up five characteristics that inform the BLiME framework and are an extension of Morrison's (2019) writings on paradise: beauty, plenty, rest, exclusivity, and eternity. I contend that Ruby, Morrison's town in *Paradise*, had elements of these characteristics, but here, BLiME reimagines mathematics education as a full embodiment of what Ruby had the *potential* to be.

Keywords: race/racialization, antiBlackness, white supremacy, Black students, Black Liberatory fantasy

This theoretical essay begins by reconceptualizing the major events and motivations in Toni Morrison's 1997 novel *Paradise*. I assert that the lives of these Black characters are not disconnected from events that take place in the lives of Black folks within the United States and globally. I suggest here that *Paradise*'s all-Black town of Ruby was at one point a paradise of sorts, and draw on and reimagine its characteristics towards a potential in mathematics education that relies on more than traditionally academic or scholarly work. This move to center inspiration from other forms of cultural expression (e.g., the arts, literature, etc.) is a significant one because it supports the veracity of Blackness being multidimensional, as opposed to monolithic. It frees one to dream of possibilities that may not yet be fully realized or proved with the available methodological tools or empirical data. Thus, I use *Paradise* as a starting point to consider ways that mathematics teaching and learning might resist white supremacy and anti-Black racism (Ortiz & Ruwe, 2021; Davis & Jett, 2019a) through a Black liberatory mathematics education (BLiME), my conceptualization of paradise. Unlike Toni Morrison's somewhat cynical description of paradise as a place where a lot of people cannot get in, I am dreaming towards a space where Black students are expected to exist in their full humanity. BLiME foregrounds the potential that a mathematics classroom might be a space in which Black children are eager to attend and contribute.

Morrison's Paradise

Paradise is set in the all-Black town of Ruby, founded shortly after the US's Reconstruction era (ca. 1865-1877) in which many Black families were migrating out of the Southern states. Ruby began as a place where its residents could define their own collective destiny, and where its isolation and its citizens' beauty were quite evident. Like many of those small Black communities following Reconstruction, Ruby was "protective, God-loving, thrifty

but not miserly” (Morrison, 1997, p.160). Here, they valued dark skinned Black people (and often marginalized others) because of the sting of rejection they felt from other Blacks upon first leaving the south.

Outside of Ruby is a Convent that houses a crew of women who have fled their previous lives for one reason or another to live in what seems to be a safe haven for them; one of these women is white, but her identity is intentionally withheld throughout the story. The citizens of Ruby are dealing with many changes and conflicts in terms of religion, legacy, familial and generational differences, symbolized by the oven that sits in the middle of the town whose unclear engraved message remains controversial. The very conservative socialization practices, along with their pride of being independent from the outside world, are both benefit and hindrance. It is for this reason that the men of Ruby feel it their duty to murder the women in the Convent, because they wish to believe that the problems in Ruby are connected to the promiscuity and sinfulness of those recently arrived women. Prior to this time, there had been no death in Ruby itself, and no need for a cemetery. However, Ruby residents were not free from some developing issues (e.g., protecting the integrity of their space, promoting a desired, perhaps ahistorical legacy), and they eventually reproduced some of the same harm they wished to escape. That said, paradise for Black folks, broadly defined, can be understood as an escape from the overt antiBlack racism and white supremacy that is pervasive throughout US and global contexts and systems (i.e., mathematics education), but it is a project that requires consistent revision and analysis.

Extending Morrison’s Paradise Towards Mathematics Education

It is this ever-present potential that oppression and marginalization can evolve, as it did in Ruby, that interests me and prompts my inquiry into paradise. Theoretically, I draw from a

notion of Black Liberatory Fantasy (Martin et al., 2019) that is rooted in what Dumas and ross (2016) have conceptualized as BlackCrit. Briefly, in its framing ideas, BlackCrit states that antiBlackness is endemic, Blackness exists in tension with the neoliberal-multicultural imagination, and BlackCrit should create a space for Black liberatory fantasy. The first two framing ideas wrestle with the specificity of Black racialized beings' economic, political, educational, and sociological experiences and/or progresses in the US. Similarly, the last framing idea articulates this specificity, as well as a process by which we can begin to develop a working conception of paradise within mathematics education. More pointedly, liberatory fantasy allows me to begin to dream of a place that is unbounded by the difficulty of immediate repair or solution. Literature employs space outside of "reality," which may be the ideal space to start the paradise project. Thus, my approach to Black Liberatory Fantasy begins with an analysis and reimagining of life within Morrison's *Paradise*.

Theoretically influenced by BlackCrit, paradise (i.e., BLiME) does not dictate how Black people must exist in spaces of residence or learning, but attempts to capture their complexity in ways that have not always been salient in the neoliberal-multicultural imagination and the antiBlackness of US systems (Dumas & ross, 2016; Toliver, 2023). A Black liberatory fantasy posits that whatever it means to *be real Black* in the context of learning, as long as it does not bring harm to other Black people (Woodson, 2020), such as Black girls and women, Black LGBTQ, Black persons with disabilities, Black folx at all class levels, then it is acceptable in paradise. My project frames being real Black within the context of mathematics learning (Ortiz & Morton, 2022). This is no insignificant point because what it takes for one to be authentically Black within a space that is consistently constructed as white and male is a revolutionary act, and it is regarded as a fantasy because this complexity of Blackness has never been fully realized.

Thus, for Black students with natural hair styles (e.g., locs, afros, protective styles) to take up space in their calculus course is an ode to them being real Black, because antiBlackness and white supremacy has already mandated that a mathematician does not resemble these images (Moreau et al., 2010; Picker & Berry, 2000). For Black girls to engage confidently in mathematics discourse, for Black LGBTQ students to say the names of queer Black mathematicians like Ron Buckmire, or even for Black students to lead group discussions on mathematical tasks in African American Vernacular English is being real Black in a place that would rather they not exist (Ortiz, 2022). BLiME, however, views these acts as commonplace, not as resistance.

Perhaps one of the most salient aspects of what paradise could be for Black people is captured by Martin and colleagues (2019): “the framing and the practice of mathematics education that allows black learners to flourish in their humanity and brilliance, unfettered by Whiteness, White supremacy, and antiBlackness.” (p. 45). I suggest here that in Ruby, these ideas are foundational, and within BLiME, we move beyond how Kirkland (2021) describes schooling for Black children as places where “Black children are punished for not being white, for not being able to contort themselves into shapes that would allow them to fit within a system not designed to fit them” (p. 63), towards critical praxes of mathematics education that center the lived experiences of Black people (Alexander, 2019). Although in Ruby this meant isolation from white people, here I am not advocating for a complete separation from our less-melanated counterparts, but rather, a world that is free of white domination and one where Black people are not constantly defending their humanity and their brilliance against the tyranny of white supremacy.

What I propose here builds on the undergirding ideologies of Black education that have been commonplace in the pedagogy of US Black educators. For example, both Siddle-Walker (2013, 2018) and Givens (2021) contend that while the dominant narrative about Black educators pre-Civil Rights was that they were passive and powerless, the care and subversive acts of these educators impacted the lives of Black children by providing them with knowledge of self and their “real Black” ancestors. Johnson (2009) speaks of Black women educators like Anna Julia Cooper and Nannie Helen Burroughs whose educational philosophy, like many Black educators in the Reconstruction and Post-Reconstruction era (1875-1900), reflected racial uplift and self-help, the idea that our education is never just for ourselves but also for the Black community. They foreshadowed a paradise centered around the communal efforts and needs of the community, bolstered by the participation on behalf of parents, and they did not withhold valuable or rigorous instruction (Ortiz & Morton, 2022; Johnson, 2009; Matthews et al., 2021).

I would also suggest that elements of what I am proposing as foundations of this paradise existed within certain education models geared towards Black education. One example I pull from is the Freedom Schools of Mississippi¹. The open-ended questions of the citizenship curriculum familiarized Black students with the state’s political structures, the curriculum was intentional in teaching them about self, and it charged Black students to advocate for social change (Pinar, 2019). Another example, the Algebra Project led by Bob Moses, equated the learning of algebra to a civil right. It prompted student agency towards demanding the education

¹ Freedom schools were an educational model for Black children developed during the 1960s by the Student Nonviolent Coordinating Committee (SNCC). Perstein (2009) writes “Across Mississippi, freedom schools combined the civic curriculum centering on the movement with literary studies, journalism, creative writing, foreign languages, and other expressive endeavors. This combination both represented SNCC’s commitment to self-expression as a basis for political action and reflected a desire to offer disenfranchised Black youth the best of conventional American schooling” (p. 142). For more information see (Perlstein, 1990; Pinar, 2019)

that was owed them because of their humanity and their obligation to other Black people. More contemporary examples include current paradigm shifts articulating the mathematical brilliance among all Black students (Bullock et al., 2012; Gholson, 2013; Moses & Cobb, 2002) which aim to cultivate the inherent genius of Black students (Muhammad et al., 2022). More specifically, part of the paradise project that can be gleaned from previous conversations about Black education helps us to understand that brilliance is more appropriately understood as collaboration on behalf of the child, parents, teachers, peers, schools and communities (Gholson, 2013), and it is the community that illuminates or eclipses children's brilliance. Schooling within this described climate is the paradise that I wish to dream about and of which I can see remnants in Morrison's *Paradise*.

I conclude this section by firmly emphasizing that BlackCrit influences my paradise project because it reimagines fantasy from the vantage of Morrison whose paradise project ultimately failed because new forms of oppressions began to materialize. Although Ruby did not execute the paradise that the community had envisioned, its foundations (being real Black, being unfettered by white supremacist logic, never having to prove one's humanity or brilliance, doing no harm or perpetuating antiBlackness towards other Black folks) are a cornerstone of the mathematics education that Black children deserve. Hence, my claim is that the ontological—e.g., collectivity, harmony, and interdependence (King & Swartz, 2016) and epistemological—e.g., an Africanist intuition-reasoning combining heart and mind knowledge (King & Swartz) orientations and beliefs that are represented by Ruby's foundational ideas helped to facilitate the education of Black kids in the Algebra Project, in the Freedom Schools, and among Black educators, especially pre-*Brown vs the Board of Education* (1954). These beliefs support my overall extension of Morrison's notions about paradise into BLiME, not to compartmentalize the

teachings or alignments from historical moments into the five characteristics, but to honor these legacy antecedents.

Five Characteristics of Paradise

I build on five characteristics put forth by Morrison's (2019) writings on paradise-- beauty, plenty, rest, exclusivity, and eternity--and extend them towards a BLiME framework, contending that Ruby possessed elements of these characteristics but had, perhaps needed, to reconcile them in a way that would not compromise their residents' livelihood. In emphasizing that these characteristics constitute Morrison's articulation of paradise, I reimagine them with the prompt from BlackCrit by first describing each in terms of the novel, and then by inserting them into BLiME, recognizing that some may not yet be feasible in our current mathematics education system; I see this as acceptable within the context of fantasy because the work of the colonized is to dream of the annihilation of the work of the colonizer (Dumas & ross, 2016).

Briefly, beauty was inherent in the way that Ruby residents took pride in the appearance of their town, being told that one of the brothers and leaders of the town is constantly concerned with its cleanliness. We get a glimpse into the plenty in that none of the residents seem to be hurting for anything; they do not lack the necessities or seem to covet material things. Rest, in Ruby was a healthy balance between the necessary and the enjoyable (e.g., celebrations and peaceful moments). There was time for leisure and rest in Ruby before some of the major conflicts. As has been iterated above, exclusivity, a limitation on access into paradise, was evident in Ruby because this place was not intended for the masses. Lastly, while a valuable characteristic, any projections that I might offer about eternity are speculative in nature. Notwithstanding, a historical look at Black people's lives complements what I may offer as a futuristic one.

Beauty

One lesson that we can learn from these characteristics in tandem with mathematics education is first, that beauty is attainable. How do we take care of the space in which Black children learn mathematics so well that they desire to be present? Too often, the dominant demographics of any given US school are glaringly predictable when merely evaluating the appearance and aesthetics of the facility (Darling-Hammond, 2004). It is not uncommon to see dilapidated buildings full of Black students, and upon entry, the metal detectors that these students must pass through. In paradise, spaces of mathematics learning are aesthetically pleasing, full of images of diverse Black people and their art, imbued with images depicting Black history in both overt and covert ways, and rejecting, no pun intended, white space. From the words of the Black Power movement, Black is beautiful! Paradise prioritizes being real Black in the mathematics space such that Black Language (Ortiz & Ruwe, 2022; Smitherman, 2015), Black features, Black history (Siddle-Walker, 2000), and Black culture (Boykin, 1994) are all valuable and aligned with the beauty of the mathematics learning space.

Black children experience the beauty of paradise both in the aesthetics of the learning space, but also *within the mathematics* itself. Much like art teaches one to appreciate the strokes and the color selection of the painter, paradise allows Black children time to appreciate the beauty and elegance that exists within mathematical proof (Breitenbach, 2013) and within the patterns and numerical sequences manifested throughout nature. “A mathematician, like a painter or a poet,” wrote G.H. Hardy, “is a master of pattern” (Davis & Hersh, 1998, p. 173). These conceptions of beauty tend to be overshadowed by a mathematics curriculum focused on procedures and repetition, but paradise requires them in the uptake of mathematics.

Plenty

To the idea of plenty, I want to suggest that there be no limit to the affordances and opportunities offered to Black students. Consider Black students' access to high-quality content (Tate, 1995, 2005). I want to suggest that there is no cap on enrollment in effective mathematics classes, that there are enough resources (material and emotional) to be successful, and an infinite cadre of teachers who are competent in mathematics content. Black students' education has lacked these qualities for too long (Battey, 2012; Harper & Davis, 2012; Hope et al., 2015), and without the same abundance in resources as other students, it is much easier to misrepresent Black children's brilliance. I want to suggest that paradise within the existing mathematics education model allows Black children the freedom to choose to enter mathematics spaces, aware of the obstacles that they may face, yet fully equipped to navigate the spaces alongside caring teachers who affirm their Blackness and serve as conduits to the resources in which *they wish* to partake; it should be noted that these affirmations of their racial identity and history are part of what made the Freedom Schools so successful (Pinar, 2019). Emphasis on their role in making this decision is paramount because it is their autonomy that becomes the humanizing aspect of "plenty."

Despite the documented evidence that the resources provided to Black schools was minimal during segregation, it is important to note that this was one of the most fruitful times within Black education (Anderson & Byrne, 2004). Even without adequate resources, Black students were excelling because of dedicated Black teachers and communities. Had these teachers and students received ample resources (e.g., up-to-date books, calculators and technologies, equipment in science labs), they would have been even more exceptional than what is already captured in children's and teachers' accounts from that time period. Nowadays, we are aware that the supposed "achievement gaps" rather than signifying inherent deficiency in Black

children, reflect that there is disproportionate access to the aforementioned resources (Ladson-Billings, 2006; Martin, 2009). Thus, BLiME offers an infrastructure and support for these students that is never exhausted but is bountiful and plenty. Further, material resources for learning mathematics are plentiful not because Black students cannot learn without them, but because the community views these students as deserving and worthy. In other words, the community invests plenty of resources and time into the mathematics education of Black students because they deserve it, and their parents, teachers and the like believe in these students' potential.

Rest

Rest challenges the unnecessary stress placed on Black students because educators feel they are “so far behind” and culpable for a socially constructed achievement gap (Martin, 2009; Milner, 2018). It is a daunting disposition to always be considered less proficient than the curriculum or teacher dictates one should be. I am not advocating that we lower our standards for Black children, quite the contrary; I want us to observe that the curriculum is human-made and malleable (Felton-Koestler, 2017; Ortiz & Jessup, 2022; Pinar, 1994). There are concepts that can be cut out of an introductory algebra course and restructured if it means allowing students to maintain their mental composure. For example, fostering algebraic habits of mind such as doing-undoing (i.e., being able to complete and undo mathematical processes), building rules to represent functions, and abstraction and generalization (Driscoll, 1999) can be achieved in a way that does not overburden students and still promotes a substantive engagement with algebra.

Mathematics is not worth losing one's sanity in an attempt to cover everything that a state curriculum has deemed mandatory, especially in light of a global pandemic where Black families in the US, and people of color both nationally and internationally, have been disproportionately

impacted by death and joblessness (Karpman et al., 2020). Paradise recognizes that there are ways to be strategic in providing students a quality immersion into algebra, that which many Black scholars have argued is a civil right (Moses & Cobb, 2002), without asking them to sacrifice rest and endurance, especially when Black students are already grappling with being constructed as less than desirable mathematics students. Like Morrison's vision of paradise, BLiME prioritizes mathematics learning that never feels overwhelming or burdensome to these students, and recognizes that periodic breaks in support of self-care, productivity, and rest are necessary.

Exclusivity

I want to acknowledge that exclusivity has been a defense and resistance strategy for Black people that has afforded them safe-spaces (Deo, 2013). Thus, it is understandable why Ruby was developed in isolation from nonblack people groups. I want to maintain but flip this idea of exclusivity to posit that we think of it as excluding those who do not intentionally and whole heartedly love Black people or celebrate, in the words of Woodson (2020), Black humanity as an ontological reality. Thus, loving Black people recognizes first our humanity and that without any other accolades or traditional metrics of success or brilliance, we are already enough; I argue that Bob Moses was successful because the Algebra Project did not reserve algebra for those who "proved" themselves with traditional metrics, but he recognized the exclusion of Black and other youth of color from the learning of algebra as a violation of a civil right. Thus, if one's heart is not in it to love and see Black students do well in their mathematics courses, then there is no room for them to teach Black children in BLiME. If a teachers' first inclination is that those Black kids just do not want to learn, or that building their conceptual understanding of important geometric, algebraic, or other mathematics concepts is futile, then

they need to be excluded from the privilege of teaching these brilliant Black children. Further, if they do not believe that Black children's brilliance is axiomatic, and that their very humanity ascribes to them this brilliance (Leonard & Martin, 2013), then they should be excluded from working with Black children. While this does not constitute an exhaustive list, because any attempts to fully describe what it means to love Black children would be necessarily inadequate, BLiME employs a communal mechanism by which to remove those persons who help to perpetuate violence. Indeed, the hiring and recruitment of teachers who lovingly support Black students is a process of exclusivity.

Exclusivity as a part of paradise is perhaps the most personally intriguing of these characteristics. Building on Morrison's earlier perspective, in that there are a whole lot of people who cannot get into paradise, there is inherently a mechanism to keep out the undesirables and the riffraff so that they do not taint the atmosphere of those who are "deserving." Far too often, Black children have been treated as these undesirables within mathematics education (Ortiz et al., 2018; McGee & Martin, 2011). They are often excluded from the upper-level mathematics courses because they are seen to demonstrate cultural or other traits that may be deemed inappropriate within a mathematics class (Berry, 2005; Faulkner et al., 2014; Stinson, 2006). Now, it is not my take that we need more access into advance coursework for Black students, *per se*, but rather the opportunities that these courses offer in terms of preparation for subsequent courses, for potential college majors, and even their potential to cultivate in students a love for mathematics via the more engaging instruction that is often associated with these courses. A loftier requirement of BLiME is that these courses are not reserved for a select few who have been tracked into higher paths. Tracking has contributed to the harmful structures of mathematics education (Davis & Jett, 2019b), but BLiME redistributes the resources and infrastructure into all

classrooms so that there is no need for tracking and thus no exclusion of Black students (i.e., those who do no harm to their peers) from the aforementioned benefits.

Eternity

I associate the term eternity with the idea of longevity and endurance. Paradise suggests that there is a consistency within its domain, that the residents of paradise are recipients to the benevolence for a lifetime and beyond, thus no longer a dream deferred but a fantasy that will come to fruition. It recognizes that to be real Black may take on different meanings in the next decade or century, but that Blackness is abiding. Within this BLiME framework, it is understood that Black people will be present in the future, and I offer that paradise must consider the ways that Black students and Black people exist in a time beyond the present. BLiME makes the most of a people who were carving out a new way of life after generations of living in bondage and servitude, much like what we see in Ruby, and it embodies a hope that wishes to see Black people thrive communally and indubitably. A hope in this kind of eternity is not false hope, as Grant (2020) reminds us, but one that exist for the people, their peers, their eventual children and grandchildren. Eternity promises new directions for developing new narratives and traditions among Black people, ones that see their humanity accepted and appreciated equally alongside the humanity of others.

What this means for mathematics education is that the content that our students must learn cannot be static. While Black people will continue to encounter new issues and conflicts, as well as amplified renderings of historical problems, the curriculum will be updated to reflect these new-aged and time-specific problems. BLiME learns from the success of the Freedom Schools in Mississippi, partly from the implementation of self-study that helped students to reflect on why they were even enrolled in the Freedom Schools (Pinar, 2019); connectedly,

BLiME implores students to respond to the age-old question of “why are we learning this”.

BLiME recognizes that the answers to these questions continue to become more nuanced over each generation. Eternity teaches us that change is inevitable as even the language of mathematics is subject to change (Ernest, 1998). Temporality maintains that as Black people continue to exist in this world, systems of marginalization will self-regulate in directions away from equity (Martin, 2019). BLiME’s eternity allows for each generation to pose new questions about the relevancy of mathematics to address the concerns of Black people--much like how Alexander (2019) described Daija’s Awakening in the Afrofuturistic realm--to engage in projects that help to rectify issues within Black communities and to eradicate the intragroup tensions that arise from the internalization of white supremacy and anti-Black racism.

BLiME imagines beauty, plenty, rest, exclusivity, and eternity as significant, so that Black students never feel as though their academic experiences are a punishment for some educational figure’s detesting of Black people. Extending from BlackCrit, BLiME is a fantasy of the eradication of harmful prison and schooling regimes and the beginning of a “necessary chaos” (Dumas & ross, 2016), representing the beginning of the end and the first taste of freedom. In taking its cue from the Freedom Schools, BLiME foregrounds academic freedom, intellectual curiosity, and different thinking (Pinar, 2019) as manifested through these five characteristics.

Concluding Thoughts

The language of paradise is important for two reasons. First, it is a reminder that even goals with the best and purest intentions can go awry and perpetuate white supremacy and marginalization. Martin (2009, 2019) exposed these deviations “mathematics for all” slogan and in much of equity discourse. Whatever is considered profitable for Black students should be able

to withstand the critique of Black constituents (i.e., Black parents, students, teachers); BLiME sees the work of Black people in terms of a collective Black struggle towards that fantasy providing a ray of hope for larger systemic change (Dumas & ross, 2016). Secondly, paradise reminds folks to be in a state of constant reflection to ensure that we are not reciprocating some of the hateful rhetoric, policies, or conditions upon those that we assume we are protecting (Ortiz & Morton, 2022; Kirkland, 2021). To the point about eternity, paradise does not exist as such indefinitely; constant checking for the perpetuation of white supremacy within our pedagogy, policy, and curriculum, is necessary.

I am reminded of a line in OutKast's (1998) song *Da Art of Story Tellin* in which one young person asks another what she wanted to be when she grows up, and, like many other Black children, she replied "alive." This request is not aberrational given their global proximity to death, manifested in the US through the recent murders of Sandra Bland, Breonna Taylor, George Floyd and so many others, as well as in Brazil, the European Union, and abroad (Beaman, 2021; Groves Price & Moore, 2016); yet Black children deserve so much more than this, especially in the spaces which we demand they engage in rigorous mathematics thought. What might this look like for mathematics education to take its catalyst from these alternative forms of cultural expression to cultivate a space much like what the residents imagined to be a full embodiment of what Ruby had the *potential* to be, namely, beautiful, plentiful, restful, exclusive, and eternal. Black children run to this place because it is where they feel safe...and validated...cognitively challenged...and loved. None of these is compromised just for the sake of mathematics learning, it is these elements which make it most desirable.

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