

Remixing Wakanda: Envisioning Critical Afrofuturist Design Pedagogies

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ABSTRACT

While maker education offers a method for increasing interest in STEM domains among youth, underrepresented communities possess a rich cultural history of making and STEM practices too often ignored by popular articulations of making. In this paper we describe the 8-week ReMixing Wakanda Project, which brings together youth of color, artists, designers, educators, and researchers to construct a new vision for a culturally relevant and sustaining STEAM-centered learning and making framework situated in an Afrofuturist design aesthetic. Here we highlight how the design of the physical space, discussions with guest artists, and a collective art construction supported participants as they explored the past to confront the present and imagine futures for and by and about themselves.

KEYWORDS

Afrofuturism, culturally relevant pedagogy, STEM Education

1 Introduction

People and communities of color are heavily underrepresented in STEM fields [20]. And while maker education offers a compelling method for increasing interest in STEM domains among youth [14,18], underrepresented communities possess a rich cultural history of making and STEM practices that are too often ignored

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by popular articulations of making which legitimize only certain practices, repertoires of knowledge, and ideologies [4,24]. In this paper we describe the ReMixing Wakanda Project, which brings together youth of color, artists, designers, educators, and researchers to construct a new vision for a culturally relevant and sustaining STEAM-centered learning and making framework situated in an Afrofuturist design aesthetic.

Despite its long history in the African-diaspora, the box office success and cultural impact of the movie *Black Panther* has elevated Afrofuturism in the public consciousness. This rise in popularity of Afrofuturism offers a unique opportunity to engage young makers of color in critical design practices that disrupt dominant notions of what counts as STEM as well as who belongs in these fields, to define positive visions of a future for themselves and their communities, and to critically evaluate and challenge structural inequalities that pervade our social and political systems.

To this end, we draw from Critical Race Theory to frame our approach to design and in our analysis as we work to understand how students engage in envisioning their own futures. Particularly significant is the articulation of race as a social construction, challenge to hegemony, commitment to social justice, the role of experiential knowledge, storytelling, and counter-storytelling or counternarratives, and the significance of a transdisciplinary perspective [23].

In this paper we examine the critical design and Afrofuturist aesthetic practices at the heart of the ReMixing Wakanda project, describe the design of an 8-week implementation, and share data from one day of the workshop to highlight how young artists used African symbology, understandings of self and culture, as well as high-tech tools to craft new stories about themselves, their communities, and their role(s) in creating a better future. Ultimately, this project engages in appropriation of technology and science as a form of socio-political resistance which is significant in this context given “the extremes in brutality, subjugation and geographic scope” many communities of color have experienced historically [10:356]. In many ways, the critical designs, dialogues, and practices constructed throughout this project speak to Lorde’s notion of “master’s tools” [19] wherein she advocates for revolution through rediscovery, reinvention, and re-claiming of indigenous ways of thinking, knowing and being often discounted by dominant ideologies and hegemonic understandings of whose

knowledge is of the most worth and who is capable and permitted to thrive in formal STEM fields.

2 Afrofuturist Design

Perkins [22] defines design as “a structure adapted to a purpose.” Design is a conversation between the designer, building materials, and the communities, systems, and spaces in which the structure will exist. This conversation requires the awareness of, interaction with, and reflection on culture. Culture is in essence, “both a resource and an outcome of the designing process” [2:3].

Afrofuturism is a philosophical, literary and cultural aesthetic that shares features of Critical Design. Critical Design imagines potential futures that question “the cultural, social and ethical implications of emerging technologies” [9]. Similarly, Afrofuturism plays with science fiction, magic realism, and non-Western cosmologies to project forward from the lived realities and (deleted) histories of people of color. Dery suggests Afrofuturism wrestles with two paradoxical questions: “Can a community whose past has been deliberately rubbed out, and whose energies have subsequently been consumed by the search of legible traces of its history imagine possible futures?” Moreover, “isn't the unreal estate of the future already owned by the technocrats, futurologists, streamliners, and set designers—white to a man—who have engineered our collective fantasies?” [7:180].

In imagining *future* societies and technologies that center communities of color, and what Gilroy [12] calls “the Black Atlantic” or African diaspora, Afrofuturism questions and reimagines both the *present* and *past* at once seeing them as collections of objects, representations, and meanings that can be modified, mixed, and repurposed [16]. Afrofuturism explicitly addresses systems of oppression by redefining these systems--and race itself--as technologies developed to divide and enslave communities of color. But like any technology, these systems of white supremacy can be “hacked into and rewritten” [17:13]. This hacking has an element of play to it. This play can be seen in contemporary comics, popular music such as Janelle Monae, and TV and films such as Black Panther and Luke Cage.

We see Afrofuturist design as a critical praxis, that is--“*reflection* and *action* directed at the structures to be transformed” [11:66] -- wrapped in comic books, superheroes, and science fiction. An aesthetic that offers powerful meaning for Black youth, who are not encouraged to aspire to be designers. A place to play and tinker with history and culture. These practices align well with making practices focused on ideating, designing, and building physical artifacts to address personally and socially meaningful problems [3,8,14]. When youth are invited to play with their history and future, through a critical making workshop: How might they rebuild and envision future selves and communities?

3 The ReMixing Wakanda Project

As Dery points out, “African-American voices have other stories to tell about culture, technology, and things to come” [7:182] and Afrofuturism provides an aesthetic and epistemological framework

for this creative and critical practice. Beginning with an existing Afrofuturist design process elaborate by Jennings and Fluker [17], and in collaboration with the art collective Black Kirby (composed of the award winning comic artists John Jennings and Stacey Robinson), local artists, computer scientists, and scholars, we developed and implement an 8-week Critical Afrofuturist Design Experience called ReMixing Wakanda.

Wakanda is a reference to the fictional home of an uncolonized African people in the comics and film of the Black Panther. Wakanda is a place of unmatched technology. Its people have their own unique aesthetic, art, architecture, government, and practices, yet these cultural artifacts are distinctly African. The ReMixing Wakanda project invites participants to create their Wakanda--to bring histories, family experiences, art, textiles, style, and technology together to create a new home that would address the problems they face and elevate the values they espouse.

The ReMixing Wakanda implementation described here took place at Teachers College, Columbia University, and involved five high school girls that attend a school located in Harlem, New York. In this implementation, participants worked with professional artists, designers, and educators to develop tangible artifacts that critically imagine a future. Designed artifacts often included computational components and drew on the experiences and values of their local community as well as ancient African practices and aesthetics such as Adinkra symbology and Sacred Geometry. While the project itself included a multi-week design process to create a complex artifact, in this paper we focus on only one day of the implementation and the three girls that attended that session.

3.1 Co-creating a Space for Afrofuturist Envisioning

As is the case with many maker activities, the goal of the first ReMixing Wakanda session was to introduce the students to the project, the facilitators and support team, and the materials and tools they would be using throughout the project. However, as the ReMixing Wakanda project aimed to engage participants in a critical design practice, we believed it was important for learners to define and create the context itself through a critical reflection on their family histories and present lived experiences. Specifically, we invite them to create their vision of Wakanda and alter the makerspace itself to align with that vision.

To assist in this “place making” [6] process we distributed a broad collection of comics focused on black superheroes, African American art books, figures and images from the movie Black Panther, a moodboard of traditional African symbols and black culture icons, and original African elements such as fabrics, crafts, and art pieces from a variety of countries of the continent among the technological tools of the makerspace (Figure 1). We also played hip hop, soul, R&B, and Afrofuturist soundscapes over speakers throughout the session. As participants arrived, we invited them to play with these materials, to read the comics, change up the music, and rearrange the surroundings however they saw fit.

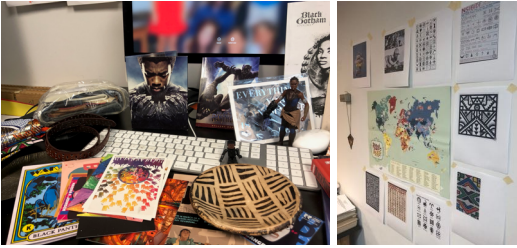


Figure 1: Afrofuturist and African artifacts placed among the technological tools of the lab (left) and a mood board of African symbols and black culture icons (right).

In the first session, comic artists John Jennings and Stacy Robinson shared with participants their visions about Afrofuturism and social justice, and explained how they use the African American experience as a source for creating visual communication. Stacey invited participants to define their histories in precise terms (e.g. specifying their country of origin rather than just “Africa”) and challenged them to examine and critique not just how the broader, white supremacist, American society attempts to define Blackness, but also how the diverse Black community represents itself through art, style and media (Figure 2).



Figure 2: Stacey Robinson (left) sharing his work and view on Afrofuturism (right).

These conversations empowered participants to engage in an honest reflection and dialogue around their opinions and perceptions as youth of color in New York City. For example, Aida (all names used here are pseudonyms), a tenth grader, expressed anger about how she is viewed as an “art exhibit” or “an alien” by white people as she walks through the city. “People try to touch my hair, put their hands on it. I don’t like that! [...] I am a person, I’m just like you, I’m just the opposite color!”

After the reflection with the artists about Afrofuturism as an expressive framework, a hands-on activity was introduced. The task was to design a representation of self in the form of a medallion. Comparing the artifact to the tattoos worn by all Wakandans in the Black Panther movie, the medallion would be a representation of their personal identities as well as their belonging to this emergent community of makers and activists.

We provided participants with blank, predefined shapes which would tessellate when combined. Participants were encouraged to experiment and play with their design by drawing on a paper version of the medallion. Eventually, facilitators would assist

participants in digitizing their drawings and then cutting and engraving them on wood using a laser cutter machine (Figure 3).

All three participants used the wall moodboard and also used their phones to search for maps, patterns, African symbols, and shapes. Designers engaged actively with the artifacts displayed in the room and incorporated several aspects, including Adinkra and Nsibidi symbols and textile patterns, into their creations. They not only used them as inspiration or reference, they extended their ways of thinking and making meaning of the world through them. For example, Aida included the Nsibidi symbols of *hatred*, *speech*, *congress*, and *reflection*. Tatiska included Adinkra symbols for *family united* and *love*. These symbols provided a tool for the designers to articulate not only the problematic world in which they live, but also visions of a future world they hoped for. Speaking of the *reflection* symbol, Aida passionately argued, “because you gotta look at yourself, look at your culture [...] you really got to learn who you are before you really go after somebody and why they live their life a certain way because you don’t know what they go through.”

Two of the designers also wrote their personal histories into their medallions. Tamia styled her medallion with reggae inspired patterns, shapes, and colors to represent her Dominica heritage. She also included an intricate drawing of a Hibiscus flower and recounted its role in her childhood, “Hibiscus takes part of most of my childhood because I used to play with it a lot. I used to cut off the stems, and use the white paste for glue when I needed.” Tatiska added her area code and the word “QUEEN” in bold letters to reference a poem she once wrote saying, “That’s my trademark. That’s my brand, right?”



Figure 3: Participants used a variety of resources to draw and design (bottom left) their medallion including smartphones (top left) and African symbols from the mood board (top right). Final tokens tessellate (bottom right).

Aida used the medallion to critically examine her own history with the continent of Africa, as well as her opinions and frustrations about its status in the world. After drawing a map of Africa on the

medallion Aida added lines emanating from the continent to, “represent how Africa is connected to the world—should be connected to the world!” She challenged economic injustice and what she saw as lack of action by its people claiming, “People don’t speak up! They don’t use their words. They stay silent and the only people who really talk are the wealthy!”

Once the tokens were laser engraved and cut the artifacts became part of the culture of the collective space being envisioned by the participants, artists, and project team. Medallions had a meaning individually but also took on new meaning when the tessellated shapes were combined into a collective artifact (Figure 3). And though each participant took their own medallion home, images of the collective artifact were shared by facilitators and guest artists through social media to mark the formation of the community. Afrofuturist and guest artist John Jennings shared a picture of the collective artifact on Instagram that included the comment “Today made me more hopeful for the future.”

4 Conclusion

Because making is an inherently social practice, a path toward equity must embrace both a broad range of participants and the cultural, political, social, and historical tensions of their communities.

Critical Afrofuturist Design is not a response to Whiteness, but rather a centering of Black, African, and indigenous histories, cultures, art forms, philosophies and technologies with a socio-political aim of resistance and survival. It is an essential creation of new cultural frameworks and counternarratives to essentialist understandings of race, gender, and class in educational spaces. In so doing these narratives become a “powerful site for intervention, challenge, and change” [15:5]. This is particularly salient in a world that seeks to erase, marginalize, and otherwise destroy histories and cultures of people of color—their very presence in the future is an act of resistance. As noted by Afrofuturist & speculative fiction writer Octavia Butler [5], “All struggles are essentially power struggles. Who will rule? Who will lead? Who will define, refine, confine, design?” The ReMixing Wakanda project was *not* an intervention brought to a group in need of an external savior. Rather it is a political articulation, made by Black youth from Harlem, of a future they will define, refine, confine, and design.

Criticality is a central facet to Afrofuturism especially with regard to understandings of race [1] and consequently was an indispensable tenet of this project. The materiality of the physical space co-constructed by the project team and participants, the passion and vision of the guest artists, and the medallion task became potential substances, tools, and media for “culturally sustaining” [21] forms of making, social activism, and political articulation as participants explored the past to confront the present and imagine futures for and by and about themselves. And while the medallions included personal and individual stories and histories, the process itself was a collective act, enacted by a community of practice in direct opposition to a more Western understanding of education and embracing the Bantu understanding of “ubuntu” which roughly translated means “I am because we are.”

Past and current experiences, including the historical narratives, systems of oppression, and dynamics of power, become the lens to imagine the new and project the future. This way, critical practices such as Afrofuturism open new dialogues between “the world as it is and the world as it could be” [13:160]. Current and past experiences faced by Black communities can gain renewed meaning through the critical design of artifacts that represent alternative futures for communities of color.

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