

Nnedi Okorafor's *Binti*: African Science Fiction and the Reimagined Black Girl

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Nnedi Okorafor's Binti unsettles harmful depictions of Black childhood and reconceptualizes the role of young Black females in racialized communities with an acute awareness of the challenges they encounter in the real world. Using the speculative form of Binti as an allegory for the present, this article turns to the character of Binti to highlight ways to overcome obstacles of exclusion and otherness. Inspiration is found in how Okorafor utilizes Africanfuturism as a framework that artfully integrates and retains African Indigenous cultures in a technologically advanced world. Additionally, childhood studies informs how this article examines the impact of Africanfuturism as a defamiliarizing strategy to address normalized (Western, white) childhood and notions of futurity for Black children and youth.

Key words: Black childhood; race; Africanfuturism; identity; science fiction; representation

Nnedi Okorafor's *Binti* (2015) is a science fiction horror novella about a 16-year-old African girl who is a mathematics genius. In this article, I show how Okorafor uses *Binti* to explore the ways in which popular images of young Black females can be reenvisioned and how science fiction and Africanfuturism are effective strategies to reclaim personhood and notions of futurity for Black childhood. *Binti* presents a reimagined future for the Black child (and the Black female in particular) beyond adult confines and beyond the stereotypes of an underachieving, hypersexualized, and unintelligent other. The article further explores how Okorafor uses the framework of Africanfuturism, which combines technoscience and traditional Indigenous African ways of knowing, to bridge the cultural divide between normative understandings of European cultures and African cultures. The power of science fiction to stimulate our imagination to envision a different future cannot be ignored. Locating the main action in a spaceship seems fitting in the

sense that it places Blackness in a future where the use of technology is an everyday occurrence, thus inviting us to think outside of society's preconceived and deterministic notions of Blackness and being an African.

Plot

Binti, the main protagonist, lives in an African community with resemblances to contemporary Namibia, but on a futuristic Earth-like planet with social structures that combine technocultural advancement and Indigenous practices. *Binti's* tribe, the Himba, is a minority group skilled in the construction of specialized communication devices, but which chooses to maintain a traditional lifestyle in their village. They are dominated and oppressed by the Khoush, a group that wields a significant amount of power over the planet's inhabitants. *Binti* runs away from her Himba tribe to attend university in outer space. While in transit to Oomza University, an alien species called

the Meduse attacks the spaceship. Many of the passengers are massacred, but Binti is spared. She is taken hostage and modified with Meduse DNA before being brought to the planet of Oomza and allowed to attend the university, where she is given the position of mediator between humans and Meduse. Binti stays for a year then returns to her home planet. We accompany her as she struggles to integrate into a world that is no longer as safe or predictable as the Himba had her believe before her departure to Oomza University, a complex world that forces her to recognize that there are multiple ways of understanding social reality, including how she sees herself. Her journey is one on which the reader also embarks, as Okorafor forces us to reexamine the dominant discourses surrounding young Black females.

Western constructions of childhood: Diverse childhood

In Western cultures, the dominant narrative of the child is one who is innocent, free of worries, vulnerable, and protected by adults (Ariès, 1962; Ennew, 2005; Jenkins, 1998; Rousseau, 1762/1889). The homogeneous figure of the child in human rights discourse does not, however, reflect the diversity of the material experiences of children and young people, including their differences in age, culture, or economic circumstances. One of the most significant challenges to understanding diversity in childhood today is the global marketing of Western norms around how children should be represented. These guidelines are circulated through transnational nongovernment organizations (NGOs), international law, and global media. For example, the United Nations' (1989) Convention on the Rights of the Child (UNCRC) defines individuals from birth to 18 years of age as children, and it constructs an idealized childhood model predicated on Western societies' understanding of childhood, which includes innocence and protection from adult worries and responsibilities. Children from non-Western cultures are considered diverse, a term that is multilayered and ambiguous. Diverse children are often viewed as being outside the normative spaces of childhood and family, and consequently outside Western adult imaginations of the innocent child (Bernstein, 2011; Montgomery, 2008; Valentine, 1996). In the majority world or global South, however, children are sometimes placed in challenging circumstances, including civil wars and poverty. In multiple regions, including Africa and the Caribbean, an individual over the age of 18 may not necessarily be considered an adult if they lack economic resources and capacity for financial independence (Evans & Davies, 1997; Twum-Danso, 2008). Conversely, children under 18 may be gainfully employed and contribute significantly to the household's disposable income and may also assume the role of primary caregiver of adult family members (Payne, 2012). Some children, such as soldiers, labourers, sex workers, and those who are homeless, have received considerable media coverage and been evaluated through a Western lens (Ansell, 2005; Boyden, 2015; Payne, 2012; Wells, 2015), but the contextual circumstances in children's and young people's lives should be considered in discourses about children and youth.

Unfortunately, the universal child and child rights discourses are dependent on the dominance of Western conceptualizations of the child. International media images and child-saving organizations construct diverse childhood as aberrant, and they obfuscate the root causes of the adverse conditions under which children are forced to live. The diverse child may experience multiple childhoods due to social and structural variables such as social class, geographic location, culture, gender, race, ethnicity, and history (Beazley, 2000; Chakraborty, 2016; James & Prout, 2015; Montgomery, 2008). Hence, universalism, the blurring of the line between adult and child, and the cultural relativity of the UNCRC have made it difficult for some non-Western cultures in the global South to fully embrace the scope and operations of the articles of the Convention within those nation states (Jefferess, 2002). It has also caused others to question the metrics used to judge this "universal child," and some, like Pence and Hix-Small (2007), point out that these metrics privilege Western constructs:

The Western-driven image of the child that dominates media, science and policy today is not valued for who she or he "is" but what he or she can "become" as part of a broader, global economic agenda. While

90% of the world's children live in the Majority World, over 90% of the published child development literature comes from the Minority World.... Minority World images and understandings dominate early years' discussions internationally. (p. 84)

In other words, a one-size-fits-all approach has been detrimental to a more nuanced understanding of non-Western cultures and childhoods. Such a narrow approach forecloses “other possibilities [and] other ways of understanding” (Pence & Hix-Small 2007, p. 84). The stories written for and about children and young people have impacts and implications for the way certain groups see themselves and are treated by others from different cultures or ethnicities. This is what Nigerian novelist and activist Chimamanda Ngozi Adichie addresses in her 2009 TED Talk, when she outlines how a single story is created and is invariably detrimental to racialized individuals. In Adichie's words, “Show a people as one thing, as only one thing, over and over again, and that is what they become.”

Historically, the field of childhood studies saw differences in childhoods with respect to the North American and European cultures versus non-Western cultures. However, recent scholarship suggests that, rather than assigning essential frameworks to the cultures in the minority and majority worlds, we instead look carefully at the expectations and lived experiences of different social classes, racial, religious, and ethnic groups, and girls and boys. This approach demonstrates that childhood as a category is not universal and the difference between children and adults in each culture or society cannot be read only from biological categories (Balagopalan, 2008; Chakraborty, 2016; Saldanha, 2002; Wells, 2015).

Despite the preeminent stature of the UNCRC, other non-Western cultures have formulated alternative child rights conventions that are specific in scope and reflect their unique cultural values and traditions. The African Charter on the Rights and Welfare of the Child (ACRWC; African Committee of Experts, 1990) is one such example. The ACRWC difference lies in its emphasis on the child's obligation to local community, state community, family, and African cultural values. The focus on children's duties and responsibilities highlights an attempt to articulate the values of communal cultures where access to rights is moderated by respect for parents and community elders. One of the primary goals of the ACRWC is to counter the Eurocentrism of the UNCRC (Cregan & Cuthbert, 2014). As Abebe and Ofosu-Kusi (2016) note, various research conducted in different African countries reveals that not all African childhoods are about narratives of victimization and loss, especially when taken from the context of multiple social, political, and economic realities. Abebe and Ofosu-Kusi argue that failure to acknowledge the wide experience in African countries misrepresents African childhood as diverse experiences that are no different from Western childhoods, with children from economically stable families that are experiencing opportunities and privilege while others, despite living in the same country, are poor and marginalized. This lack of awareness of similarities and parallel experiences of childhoods in African countries and Western countries perpetuates ideas of a deficit African childhood for all children residing on the African continent (see Said, 1978). Very little attention is given in the media to children's ability to thrive in the face of these adversities in African countries (Abebe & Ofosu-Kusi, 2016). Recent scholarship on African childhood from countries with diverse histories, social structures, and cultures, including Zambia, Rwanda, South Africa, and Ethiopia, has critiqued the tendency to flatten African children's varied experiences by promoting two main approaches. One is the “tribal child” highlighted by James et al. (1998), which exoticizes African childhood experiences as Indigenous and in this context is removed from technologies and modern infrastructures. The second homogenizing approach references the “crisis child” who lacks technological, economic, cultural, and political support. The ultimate effect is that these two approaches minimize the realities of African childhood and the impact of other generations' social transformation on children's lives, social contexts, and the opinions of African children (Abebe & Ofosu-Kusi, 2016; Ruddick, 2003).

It is against this backdrop of an understanding of Black childhood that 16-year-old Binti could be read as a rejection

of the stereotypes and essentialist tropes of Black childhood. Binti, being the second-youngest child and possessor of the talent to succeed her father as heir to the family business, was given an extensive education from an early age, which contradicts the notion of children as incompetent in adult matters. Her early exposure to technology as an astrolabe builder—typically an adult activity—does not make her innocent from a Western outlook that often views Black girls as older, less feminine, and more experienced in the ways of the adult world than girls in the West (Epstein et al., 2016, p. 5). In addition, from a white Western perspective, Binti's work in her father's shop places her outside the norm as a child labourer.

Binti's academic brilliance disrupts dominant discourses about Black females in North American culture, including discourses of Black girls being underachievers. Instead, Binti is cast as the hero and potential leader countering the disapproval of the village and family members. Binti's ability as an aspiring leader commands political attention at Oomza Uni and on the alien spacecraft and affords her the opportunity to negotiate peace. Yaszek (2015) suggests that “casting lead characters as scientists and engineers who actively create the theories, techniques, and things that can change race relations forever” (p. 2) ensures futurity for the Black race and the planet. *Binti* reimagines the young Black female as dynamic, generative, and capable of making meaningful contributions in society with a voice that advocates for change. Representations of Binti as a child prodigy and scientific genius challenge stereotypes of young Black females as poor role models, aggressive, and hypersexualized (Epstein et al., 2017, p. 4). In Binti's case, she is a mathematician and a master craft builder and is considered an exceptional talent in the intricate creation of the astrolabe communication technology.

I brought my astrolabe to my face. I'd made the casing with golden sand bar that I'd molded, sculpted, and polished myself. It was the size of a child's hand and far better than any astrolabe one could buy from the finest seller. (Okorafor, 2015, p. 34)

One could infer that Binti's early lessons in science, technology, engineering, and mathematics (STEM) developed her critical thinking skills, which affords agency (Law, 2007). Hence, the decision to leave home and pursue a higher education might have taken root at a very early age.

None of my family had wanted me to go to Oomza Uni. When I'd received the scholarship to study at Oomza Uni, I'd gone into the desert and cried for hours. With joy. I'd wanted this since I knew what a university was. (Okorafor, 2015, p. 28)

Working with complicated mathematical formulas and algorithms would likely have developed Binti's mental acuity and, as she grew older, the means to exercise agency as an independent thinker.

I powered up the transporter and said a silent prayer. I had no idea what I was going to do if it didn't work.... I was defying the most traditional part of myself for the first time in my entire life. I was leaving in the dead of night, and they had no clue. (Okorafor, 2015, pp. 9–10)

Binti breaks free of Black female stereotypes that are assigned to individuals and which designate the way one should behave within society (Foucault, 1995). Binti's family expects her to get married and settle down like her sister. Binti's rebellion and subsequent flight suggest nonconformity, which may force one to exist outside the normative boundaries of society, the outcome sometimes resulting in social isolation and feelings of otherness.

I was the only Himba on the ship, out of nearly five hundred passengers, My tribe is obsessed with innovation and technology, but it is small, and, as I said, we don't like to leave Earth. We prefer to explore the universe by traveling inward.... No Himba has ever gone to Oomza Uni. So me being the only one on the ship was not surprising. (Okorafor, 2015, p. 21)

***Binti*: Black childhood and personhood**

In *Binti*, Okorafor forces us to question how Black identities are perceived by others. Wells (2015) notes that race is a key factor in forming young people's lives. As she points out, "race structured children's lives regardless of whether or not they experienced themselves as racialized people" (Wells, 2015, p. 53). Representations of Black children and youth as outsiders or culturally marginal characters place them against an ideal standard they can never achieve. In the *New York Times* article "Let Black Kids Just Be Kids," Bernstein (2017) writes:

People of all races see black children as less innocent, more adultlike and more responsible for their actions than their white peers. In turn, normal childhood behavior, like disobedience, tantrums, and back talk, is seen as a criminal threat when black kids do it.

These essentialist tropes of Black childhood reinforce Black children's otherness and exclusion from participating in society in the way their white peers can. For *Binti*, prejudice from within society on the planet situated her as an embodied other. Everything about her was out of place: her dark skin covered with red clay and her exotic-looking clothing, which worked well in the hot desert but made her stand out in Khoush society.

I was the first Himba in history to be bestowed with the honor of acceptance into Oomza Uni. The hate messages, threats to my life, laughter and ridicule that came from the Khoush in my city made me want to hide more. (Okorafor, 2015, p. 29)

This revelation of death threats demonstrates the magnitude of *Binti*'s decision to venture out into the world alone, with no previous contact with a culture that is known for their marginalization of her people. Perhaps this is an attempt on Okorafor's part to highlight how much it takes to break out of systems that restrict the individual from growing. Sometimes it might cost the individual's life to be liberated, and risk taking is part of character development (see James, 2013).

Thomas's (2018) research highlights how racialized individuals are confronted with racism and erasure at the material level. Thomas demonstrates how popular media perpetuate the erasure of the "Dark Other." The racialized subject is always situated in a state of pathology, as villain and evil. Thomas writes:

Narratives with liberated Dark Others are rare and are rarely as popular as those that feature trapped dark subjectivities. This positioning occurs because subverting the traditional positioning of the Dark Other in the fantastic requires radical rethinking of everything that we know ... whether the story in question is a novel, a television show, or a comic book. The principles of the dark fantastic are so ingrained in our collective consciousness that when the expected pattern is subverted, audiences cannot suspend disbelief. (pp. 7–8)

According to Thomas (2018), it takes significant effort to defamiliarize Black negation from common perceptions. *Binti*'s challenges in Khoush society are no different as she attempts to navigate the uneven landscape of cultural and racial discrimination. When *Binti* boards the shuttle to leave her home planet, she experiences racial discrimination for the first time:

Who knew what I looked like to these people who didn't know my people so well? A woman leaned away from me as I passed, her face pinched as if she smelled something foul.... Two girls who might have been a few years older than me covered their mouths with hands so pale that they looked untouched by the sun. Everyone looked as if the sun was his or her enemy. (Okorafor, 2015, p. 11)

In this moment, *Binti* is forced to come to terms with anti-Black racism and the exclusionary tactics that are used to situate Black people as the Dark Other. Yet, from *Binti*'s perspective, her dark skin and the sun are vital parts of

her existence, a natural part of her environment. However, as Nxumalo and Cedillo (2017) point out,

there is also a gap in situated and responsive engagements with the specific environmental challenges that young children face in their particular locations.... Many differently located Indigenous knowledges are rooted in the intrinsic relationality of human and non-humans within the particularities of specific places. (p. 102)

Reflecting Nxumalo's and Cedillo's nuanced description of place-based childhood, a significant portion of Binti's life and identity is tied to the relationship between the individual and nature, but the Khoush are ignorant of the Himba's relational ties to the land. This knowledge gap on the part of the dominant group is causing the tension that Binti experiences in the spaceship that she is travelling in to Oomza Uni. Binti's childhood is understood best as a place-based environment where knowledge and ways of knowing are tied to the land. One could also interpret the Himba's relationship with the land as a decolonizing approach that recognizes the sacredness of the land to the identity and heritage of a group of people situated in a Black space. For example, the act of making the *otjize* and covering the body with this mixture of red clay and scented flowers in *Binti* could be viewed as "performance practices that make Indigenous life visible" and introduce the West to other ways of knowing (Cesaroni et al., 2019, p. 116). Through *Binti*, Okorafor seeks to eliminate the myth of maladjusted racialized others from the consciousness of racialized readers whose participatory engagement has been ingrained and historicized to observe mainly the destruction of the racialized subject. The Dark Other is redeemed in *Binti* by emphasizing the racialized other as a symbol of power and hope. For example, just before the spacecraft was attacked by the Meduse, there was a poignant moment when a student named Heru showed curiosity around the intricate patterns in Binti's braided hair.

"You have exactly twenty-one and they're braided in a tessellating triangle. Is it some sort of code?"

I wanted to tell him that there was a code, that the pattern spoke my family's bloodline, culture, and history. That my father had designed it, and my mother and aunties had shown me how to braid it into my hair. (Okorafor, 2015, p. 23)

The complex and sophisticated knowledge of science that is a part of the Himba culture is hidden in plain sight, such as the mundane hairstyles of the women—another way of highlighting the importance of other ways of knowing that are outside the realm of Western knowledge. Binti embodies the pride and academic brilliance of her people as she thinks about the codes that her father created to record her family history, a counter action to avoid erasure and misrepresentation. This perspective dispels the deficit notion of the tribal child that homogenizes the multifaceted experiences of African childhood to exoticism and being uninformed about the ways of the world, including technology (Abebe & Ofosu-Kusi, 2016). Binti's effectiveness as a scholar is reinforced throughout the novella. Her pride in her traditions and family values breaks away from the negation of the Black family as normative.

My mind was moving fast now. I was seeing numbers and then blurs. Good. I was my father's daughter. He'd taught me in the tradition of my ancestors, and I was the best in the family. (Okorafor, 2015, p. 31).

Binti's efficacy as a brilliant scientist and her evolving capabilities to realize her full potential and change the fate of her people permeate the novella. *Binti* signals a generative Black futurity (Yaszek, 2015).

Africanfuturism as a framework for the reimagined Black child

Binti's references to the education she received from her father as a child highlight how Okorafor reinstates

Indigenous knowledge as a valuable resource and a means to introduce Western scholars to other ways of knowing (Nxumalo & Cedillo, 2017). In this case, STEM fields are situated within the grounding of Indigenous knowledge as a focal point. The combination of braids and coding brings to the forefront two seemingly incongruous material items that showcase the ways Okorafor uses Africanfuturism to foreground Black intellectual abilities while problematizing their current reality. In an online blog, Okorafor (2019) states:

I am an Africanfuturist and an Africanjujuist. Africanfuturism is a sub-category of science fiction. Africanjujuism is a subcategory of fantasy. Africanjujuism is a subcategory that respectfully acknowledges the seamless blend of true existing African spiritualities and cosmologies with the imaginative.... Africanfuturism is similar to “Africanfuturism” in the way that Blacks on the continent and in the Black Diaspora are all connected by blood, spirit, history, and future. The difference is that Africanfuturism is specifically and more directly rooted in African culture, history ... and it does not privilege or center the West. (para. 6)

For Okorafor, African science and technoculture are interlaced with traditional practices and beliefs. In a 2016 interview with Qiana Whitted, Okorafor stated, “To be African is to merge technology and magic” (p. 209). Binti’s time at Oomza University was influential in who she was and who she was becoming. The core conflict hinges on the intersectionality of race, culture, and gender, which can be a source of strength as one builds resiliency from such experiences over time. Binti overcomes these obstacles of marginalization by holding on to her culture, which is rife with Indigenous knowledge of the land and its relations to the Himba people. She is strengthened and fortified by traditional practices and beliefs. The bond between the Himba people and the land reinforces the importance of Indigenous knowledge and practices to identity formation in non-Western cultures. Binti responds to the alien, Okwu’s, questions about her traditional customs as follows:

Okwu: What is that substance on your skin? ...None of the other humans have it ...

Binti: It is *otjize*, only my people wear it, and I am the only one of my people on the ship ...

Okwu: What is it?

Binti: Mostly clay and oil from my homeland. Our land is desert, but we live in the region where there is sacred red clay ...

Okwu: Why do you spread it on your skins?

Binti: Because my people are sons and daughters of the soil.... And it’s beautiful. (Okorafor, 2015, p. 47)

Binti’s realization that she didn’t need to fundamentally change who she was but be open to other ways of seeing and interpreting the world was a significant turning point in her growth. “And it’s beautiful” could be seen as her epiphany. The *otjize* is an important aspect of the Himba culture and closely aligned with their self-concept. Okorafor unsettles the typical colonial relationship to land by “considering how place can be encountered as more than a mute backdrop for young people’s discoveries” (Nxumalo & Cedillo, 2017, p. 104), thus implying that there are other ways of knowing. Stories such as *Binti* that merge Western and African Indigenous knowledge provide opportunities to understand other cultures and share common aspects of their humanity. The interplay between Africanfuturism, Afrofuturism, and science fiction is important in our understanding of *Binti*. Okorafor’s Africanfuturism combines conventional Western science fiction, African technoscientific traditions, and traditional ways of knowing. Africanfuturism may involve mythology and magic to explore ways that Africans can overcome alienation and the legacy of various colonial incursions in the past while striving to build new futures.

Afrofuturism is a multidisciplinary cultural movement based on a unique connection between people of the African diaspora and technology, fantasy, and science fiction. The term Afrofuturism was coined by cultural critic Mark Dery (1994) in reference to “speculative fiction that treats African-American themes and addresses African-American concerns in the context of twentieth-century technoculture” (p. 180). Nelson (2002) sees Afrofuturism as “sci-fi imagery, futurist themes, and technological innovation in the African diaspora,” which is presented in “original narratives of identity, technology, and the future” (p. 9). According to Womack (2013), Afrofuturism is a way of looking at future or alternate realities through a Black cultural lens. It is an artistic aesthetic that may include music, dance, visual art, and literature. Afrofuturism began as a scholarly theory of African American science fiction and a critical response to the works of African American writers and artists (Anderson & Jones, 2017; Womack, 2013; Yaszek, 2006). Over the decades, the term Afrofuturism as instead denoting a theoretical argument became a catch-all phrase for various works by Black creatives (Anderson & Jones, 2017; Elia, 2014). Given how racism affects cultural productivity, including decisions around marketing and publishing, African American literature and music in specific genres have ended up being relegated to niche markets and sections in bookstores as a subcategory called Afrofuturism, as opposed to the broader descriptions of science fiction and fantasy. Afrofuturism is now a designated cultural and ethnic product.

Africanfuturism and Afrofuturism texts are like conventional science fiction and fantasy texts. They focus on elevating Black people in roles that are aspirational and emphasize their humanity. They promote inclusivity and project racialized people into the future with positive outcomes. At their core, they are about the recognition and reimagining of oppressive pasts and a meditation on power and its ability to shape human consciousness. As a rule, Afrofuturism authors attempt to give young people a voice. Stories like *Binti* are often told from the point of view of the Black character (Imarisha & Brown, 2015). *Binti*'s experience on the spaceship with the Meduse and at Oomza Uni engenders her awareness of a broader social reality. Through counter storytelling, *Binti* changes the single story that dominates expressions of Black childhood as a place of violence, poverty, despair, and neglect (Bernstein, 2011; Elliot, 2013).

The location of a Black genius in the future suggests futurity and survival of Black people as generative citizens. This form of storytelling in the science fiction genre parallels traditional science fiction that locates primary protagonists with exceptional skills. Yaszek (2015) highlights the importance of the Black genius in the works of early Afrofuturists who established the genius as an essential feature of the Black hero. Yaszek's argument locates academic brilliance within a racialized history—the only Black figure who can succeed is the superhuman. Yaszek claims that Afrofuturists “treat such genius in a general way, as the birthright of Afrodiasporic people everywhere” (p. 2). By normalizing the ability to excel, Okorafor disrupts the white imaginary that Blacks do not have a relationship with technoculture and opens the imagination for countless possibilities. Okorafor makes *Binti*'s technoscientific ability a central part of the story as well as of her identity.

The representation of a hybridized *Binti* as an amalgam of technology and biological enhancements questions the present, reconstructs the marginalized human as more, and offers a possible new future (Haraway, 1991; Suvin, 1979). Delany (2012) states that “science fiction is not about the future; it uses the future as a narrative convention to present significant distortion of the present... Science fiction is about the current world—the given world shared by writer and reader” (p. 26). Armillas-Tiseyra (2016) sees science fiction and speculative narratives as a continuous invitation to theorize and question in a critical way the past, present, and imagined or possible futures. Moving beyond human through technoscientific changes interrupts normative Black childhood. It could also be seen as a way to avoid effacement and overcome exclusionary and anti-Black systems of oppression that plague Black children and youth in their social interactions.

Joy James (2013), in her discussion around Fanon's Black cyborg, suggests that to succeed Blacks must be willing to give up their humanity. In other words, to succeed one must be willing to give up an already precarious existence on the scale of human development: always becoming. A scale where Blackness is always positioned as less than whiteness—the supposed ideal. Okorafor (2015) reimagines even this, by making the Meduse's integration of their DNA with Binti's push her further along the evolutionary scale to become more than a marginalized human. The Meduse physically alter Binti to be stronger, with the capacity to communicate with both humans and Meduse. She is “no longer a conventional human,” similar to Fanon's Black cyborg, but a bridge to forge peace in the future (James, 2013, p. 63). Okwu explains to Binti that she was transformed “because you had to understand us, and it was the only way” (Okorafor, 2015, p. 82). Binti's hybridity forms a cultural link between humans and alien species in her role as intermediary and the first human to communicate with the Meduse on behalf of the Oomza University leaders. She now sees both perspectives. One of the tenets of critical thinking is the ability to understand another's point of view (Law, 2007). Many argue that unity can only be achieved by understanding the lens and contextual experiences of the racialized other (Delgado & Stefancic, 2012). Binti's innate skills as a harmonizer facilitate her transformation into an enhanced human. Binti's supernatural change becomes what James (2013) describes as “the new being, the rebel intellectual, [who] is now cyborg ... biological, mechanical, divine (p. 61). Despite hardships, Binti grows in her capacity as a Black intellectual and leader and transcends the limitations of being only human or less than human.

***Binti*: Reimagining Black futures**

Writer and filmmaker Kodwo Eshun (2003) notes that “science fiction was never concerned with the future, but rather with engineering feedback between its preferred future and its becoming present” (p. 290). For Eshun, Afrofuturism is an ideal way to reimagine Black futures. Okorafor uses a similar approach in *Binti* to inscribe the Black presence in the future, signalling that Black people survive and that technology is in the hands of Black cultures. This action disrupts the notion of the “digital divide,” often perceived as the “tech inequities that exist between blacks and whites” (Nelson, 2002, p. 1). The developmental and technological strength of Black subjects is clearly defined as something that existed in the past and the evolving present. For example, Binti found her *edan* when she was 8 years old while playing in the desert. The *edan* is a technological artifact with origins unknown:

I ... touched the *edan* in my pocket. I let my mind focus on it, its strange language, its strange metal, its strange feel. I'd found the *edan* eight years ago while exploring the sands of the hinter deserts. (Okorafor, 2015, pp. 16–17)

The speculative world of *Binti* imagines Black futures where technology is not restricted to the dominant group. Black subjects are immersed in technology with prospects of becoming stronger and better. Binti's tribe, the Himba, are master astrolabe builders and are the machines' major suppliers on the planet. Binti and her family are extraordinary creators of this cutting-edge technology, a communication device very similar to smartphones in contemporary society.

The travel security officer scanned my astrolabe, a full *deep* scan.... I had to give them access to my entire life—me, my family, and all forecasts of my future.... He'd coaxed it opened by whispering a few choice equations and his suddenly steady hands worked the dials as if they were his own. (Okorafor, 2015, pp. 13–14, emphasis in original)

Binti's tribe demonstrates technological innovations that belie stereotypes of non-Western societies' lack of technological skills and development. The astrolabe in *Binti* is not a new invention but occurs in relation to previously existing customs or practices. This restorying of the potentialities of African cultures “unsettles the

dominance of Euro Western knowledge in both normative and critical encounters with nature/culture” (Nxumalo & Cedillo, 2017, p. 99). The nature/culture tension arises from the ignorance of Western cultures about other ways of knowing, described as Indigenous cultures. Binti struggles with this dichotomy during her early encounters with other cultures, but when her life is in danger on the spaceship, she comes to realize that the traditional knowledge from her village is vital to her survival. The *edan* activates itself and prevents the Meduse from attacking her (p. 45), while the *otjize* (red clay) miraculously heals the injured Meduse (p. 48). And by making the astrolabe the central piece of technology in the novella (pp. 34–35), Okorafor is positing that scientific knowledge and creativity are not the domain of the West.

The insertion of this little-known fact into the story recovers the effacement of technological achievements by non-Western cultures, in this case from the Islamic world (Winterburn, 2011). Winterburn notes that the astronomical instrument was created around 1230 AD in Syria, and it predates the telescope’s use by over four centuries.

The astrolabe was known, at least in theory, to the ancient Greeks, but it was within the Islamic world that it developed into a precision calculating instrument and essential tool for any astronomer. The astrolabe was used in the Islamic world, and later in Europe for many centuries, for everything from astronomy to surveying to time keeping. An adapted form was even used for navigation. (Winterburn, 2011, p. 1)

Okorafor used poetic licence and made the astrolabes in *Binti* interactive and intuitive. In *Binti*, Okorafor projects a world where young people’s relationship with technology is significant and Black childhood is represented in context to their relationship to family and community. Binti’s employment in her father’s shop as astrolabe designer and builder is also part of community building, a social relationship that resonates with the underlying principles of the African Charter on the Rights and Welfare of the Child (African Committee of Experts, 1990).

Okorafor’s characterization of Binti embodies Africanfuturism as “literature of cognitive estrangement” (Suvin, 1972, p. 372) that uses “speculative technology” (Armillas-Tiseyra, 2016, p. 279) to question the likelihood of Black futurity. Suvin (1972) summarizes science fiction as a strange newness that distances or alienates the subject reader to the extent that the reader is engulfed in an imaginary world far removed from the reader subject’s reality. This projected “strange newness ... *Novum*” (p. 373, italics in original) is the technology that separates the imagined world from the reader’s empirical reality and facilitates defamiliarization, or emotional distance, which stimulates insight and openness to other perspectives that are both “cognitive and creative” (p. 374). Adejunmobi (2016) proposes that distancing the reader or viewer from their reality facilitates a critical perspective, that is, the purpose of the alienating effect or strangeness is to effect a paradigm shift rather than a distraction or an escape. As with Suvin’s cognitive estrangement, the speculative technologies in *Binti* introduce tension between the diverse array of knowledges that exist in various African cultures and the homogenizing of African cultures in the Eurocentric imaginary. *Binti* reveals that African cultures are a wide array of different experiences and knowledges that are valuable even from a Eurocentric perspective.

Conclusion

Representations of Binti as a brilliant scientist should not be lost on racialized youth reading the story and imagining themselves in a similar situation. In essence, Okorafor is seeking to expand speculation, or our ability to conjecture beyond technology, to imagining “possible alternate futures as well as critically reimagining the past” (Armillas-Tiseyra, 2016, p. 278). For Armillas-Tiseyra (2016),

it is this interweaving of old (familiar) and new (unfamiliar), rather than the fact of the speculative technology itself that produces the “strange newness” characteristic of the novum. The SF tropes ...

[in *Binti*] at once provide a critique of essentialist assumptions about Africa (in particular in relation to technology). (p. 279)

In this act of recovery, Okorafor relocates and repurposes technological and intellectual progress as the founding pillars of Western Greek and Roman thought to the ancient Islamic world and the African continent. By so doing, she is also reclaiming notions of futurity for Black children and youth and the notion of the marginalized other always being on the path to civility and humanity (Wynter, 2003).

Delany (2012) contends that “science fiction is a tool to help you think” (p. 13). And thinking is what Okorafor requires of both *Binti* and the reader—to think about possibilities; to reimagine a future for the Black child. The liberating impact of science fiction on the imagination increases the likelihood of building alternative futures that offer other possibilities. Bick (1989) declares:

This “playing” with possibilities makes science fiction an ideal medium within which the adolescent may imaginatively extend beyond known horizons. The many aliens who populate science fiction are the paradigms against which the adolescent measures his own degree of alienation. (p. 738)

Accordingly, Bick observes that representations of young people in science fiction place protagonists in spaces of malcontent and restlessness to facilitate development and growth. Bick’s comments are particularly relevant to *Binti* because, like any teenager, she is on a quest to find herself and establish an identity.

Binti could be read as an allegory for contemporary society. The story provides relatable and plausible situations and acts as a conduit to explore and identify transformation, resistance, and advocacy as key tenets when discussing young Black females’ representation in the face of marginalization. Afrofuturism and Africanfuturism facilitate innovative and intersectional approaches to the impact of race, gender, science and technology, and children’s rights. *Binti*’s story shows that Africanfuturism narratives have the power to shift perspective with respect to gender, science, history, geography, and our view of Black youth. The Black girl in popular culture is reimaged in a way that demonstrates Brown and Imarisha’s (2015) conceptualization of visionary fiction that presents inclusive and aspirational narratives, so Black girls and young women can imagine themselves in a different light. Visionary stories eliminate sexist tropes and troubling backstories rife with racial stereotypes, and they challenge the conventional portrayal of Black female characters. Characters are presented with specific challenges and unique narratives that explore experiences of intersectionality in a manner that is meaningful to racialized subjects.

Stories by Okorafor with alternative representations of childhood inspire us to rethink the present moment and envision a future in which Black people survive in a world where technology is firmly established as part of their culture as they build a better world in which their individual and collective humanity is recognized. Okorafor offers *Binti* for careful scrutiny, an invitation to seek understanding of our cultural differences and to challenge systemic structures that dominate the majority and privilege a few. Finally, as a visionary text, *Binti* repurposes images of the young Black female as worthy and smart. Challenging norms, Okorafor posits the notion that Black girls and young women can succeed in STEM by changing perceptions and expectations with stories of what Black girls can do.

References

- Abebe, T., & Ofori-Kusi, Y. (2016). Beyond pluralizing African childhood: Introduction. *Childhood*, 23(3), 303–316. <https://doi.org/10.1177/0907568216649673>
- Adejunmobi, M. (2016, Sept.). Introduction: African science fiction. *Cambridge Journal of Postcolonial Literary Inquiry*, 3(3), 265–272. <https://doi.org/10.1017/pli.2016.28>
- Adichie, C. N. (2009). *The danger of a single story* [TED Talk]. <https://www.youtube.com/watch?v=D9lHs241zeg>
- African Committee of Experts on the Rights and Welfare of the Child. (1990). African charter on the rights and welfare of the child. <https://www.acerwc.africa/acerwc-full-text/>
- Anderson, R., & Jones, C. E. (2017). *Afrofuturism 2.0: The rise of astro-Blackness*. Lexington Books.
- Ansell, N. (2005). *Children, youth, and development*. Routledge.
- Ariès, P. (1962). *Centuries of childhood: A social history of family life* (R. Baldrick, Trans.). Jonathan Cape. (Original work published 1960)
- Armillas-Tiseyra, M. (2016). Afronauts: On science fiction and the crisis of possibility. *Journal of Postcolonial Literary Inquiry*, 3(3), 273–290. <https://doi.org/10.1017/pli.2016.14>
- Balagopalan, S. (2008). Memories of tomorrow: Children, labor, and the panacea of formal schooling. *The Journal of the History of Childhood and Youth*, 1(2), 267–285. <https://doi.org/10.1353/hcy.0.0005>
- Beazley, H. (2000) Home sweet home? Children's sites of belonging. In S. Holloway & G. Valentine (Eds.), *Children's geographies: Playing, living, learning* (pp. 194–210). Routledge.
- Bernstein, R. (2011). *Racial innocence: Performing American childhood from slavery to civil rights*. NYU Press.
- Bernstein, R. (2017, July 26). Let Black kids just be kids. *The New York Times*. <https://www.nytimes.com/2017/07/26/opinion/black-kids-discrimination.html>
- Bick, I. J. (1989, June 1). Aliens among us: A representation of children in science fiction. *Journal of the American Psychoanalytic Association*, 37(3), 737–759. <https://doi.org/10.1177/000306518903700308>
- Boyden, J. (2015). Childhood and the policy makers: A comparative perspective on the globalization of childhood. In A. James & J. Prout (eds.) *Constructing and reconstructing childhood: Contemporary issues in the sociological study of childhood* (pp. 167–189). Routledge. <https://doi.org/10.4324/9781315745008>
- Cesaroni, C., Grol, C., & Fredericks, K. (2019). Overrepresentation of Indigenous youth in Canada's criminal justice system: Perspectives of Indigenous young people. *Australian and New Zealand Journal of Criminology*, 52(1), 111–128. <https://doi.org/10.1177/0004865818778746>
- Chakraborty, K. (2016). *Young Muslim women in India: Bollywood, identity and changing youth culture*. Routledge.
- Cregan, Kate, & Denise Cuthbert. (2014). *Global childhoods: Issues and debates*. SAGE.
- Delany, S. R. (2012). *Starboard wine: More notes on the language of science fiction* (rev. ed.). Wesleyan University Press.
- Delgado, R., & Stefanic, J. (2012). *Critical race theory: An introduction*. NYU Press.
- Dery, M. (Ed.) (1994, January). Black to the future: Interviews with Samuel R. Delany, Greg Tate, and Tricia Rose. *Flame wars: The discourse of cyberculture* (pp. 179–222). Duke University Press. <https://doi.org/10.1215/9780822396765-010>
- Elia, A. (2014). The languages of Afrofuturism. *Lingue e Linguaggi*, 12, 83–96. <https://doi.org/10.1285/i22390359v12p83>
- Elliott, Z. (2013). The trouble with magic: Conjuring the past in New York city parks. *Jeunesse: Young People, Texts, Cultures*, 5(2), 17–39. <https://doi.org/10.1353/jeu.2013.0014>

- Ennew, J. (2005). Outside childhood: Street children's rights. In N. Frost (Ed.), *Child welfare: Major themes in health and social welfare* (pp. 335–359). Routledge.
- Epstein, R., Blake, J., & Gonzalez, T. (2016). *Girl interrupted: The erasure of Black girls' childhood*. Georgetown Law.
- Eshun, K. (2003). Further consideration of Afrofuturism. *The New Centennial Review*, 3(2), 287–302. https://www.kit.ntnu.no/sites/www.kit.ntnu.no/files/KodwoEshun_Afrofuturism_0.pdf
- Evans, H., & Davies, R. (1997). Overview of issues in childhood socialization in the Caribbean. In J. L. Roopnarine & J. Brown (Eds.), *Caribbean families: Diversity among ethnic groups* (pp. 1–24). Ablex.
- Foucault, M. (1995). *Discipline and punish: The birth of the prison* (A. Sheridan, Trans.). Vintage. (Original work published 1975)
- Haraway, D. (1991). A cyborg manifesto: Science, technology, and socialist feminism in the late twentieth century. In *Simians, cyborgs, and women: The reinvention of nature* (pp. 149–181). Routledge.
- Imarisha, W., & Brown, A. M. (2015). *Octavia's brood: Science fiction stories from social justice movements*. AK Press.
- James, A., Jenks, C., & Prout, A. (1998). *Theorizing childhood*. Teachers College Press.
- James, A., & Prout, A. (Eds.). (2015). *Constructing and reconstructing childhood: Contemporary issues in the sociological study of childhood*. Routledge.
- James, J. (2013). Concerning violence: Frantz Fanon's rebel intellectual in search of a Black cyborg. *The South Atlantic Quarterly*, 112(1), 57–70. <https://doi.org/10.1215/00382876-1891233>
- Jefferess, D. (2002). Neither seen nor heard: The idea of the "child" as impediment to the rights of children. *Topia*, 7, 75–97.
- Jenkins, H. (1998). Introduction: Childhood innocence and other modern myths. In H. Jenkins (Ed.), *The children's culture reader* (pp. 1–36). NYU Press.
- Law, S. (2007). *The war for children's minds*. Routledge.
- Montgomery, H. (2008). *An introduction to childhood: Anthropological perspectives on children's lives*. Wiley.
- Nelson, A. (2002, Summer). Introduction: Future texts. *Social Text*, 20(2), 1–15. https://doi.org/10.1215/01642472-20-2_71-1
- Nxumalo, F., & Cedillo, S.. (2017). Decolonizing place in early childhood studies: Thinking with Indigenous onto-epistemologies and Black feminist geographies. *Global Studies of Childhood*, 79(2), 99–112. <https://doi.org/10.1177/2043610617703831>
- Okorafor, N. (2015). *Binti*. <https://publishing.tor.com/binti-nnediokorafor/9780765384461/>
- Okorafor, N. (2019, October 19). Africanfuturism defined. [Blog post]. <http://nnedi.blogspot.com/2019/10/africanfuturism-defined.html>
- Payne, R. (2012). Agents of support: Intra-generational relationships and the role of agency in the support networks of child-headed households in Zambia. *Children's Geographies*, 10(3), 293–306. <https://doi.org/10.1080/14733285.2012.693379>
- Pence, A., & Hix-Small, H.. (2007) Global children in the shadow of the global child. *International Journal of Educational Policy, Research, & Practice: Reconceptualizing Childhood Studies*, 8(1), 83–100. https://onlineacademiccommunity.uvic.ca/iqproject/wp-content/uploads/sites/3990/2018/12/10.Pence_Hix-Small_Global_Children.pdf
- Rousseau, J. J. (1889). *Emile: Or education* (E. Worthington, Trans.). http://brittlebooks.library.illinois.edu/brittlebooks_open/Books2009-08/rousje0001emile/rousje0001emile.pdf (Original work published 1762)
- Ruddick, S. (2003). The politics of aging: globalization and the restructuring of youth and childhood. *Antipode*, 35, 334–362.
- Said, E. (1978). *Orientalism*. Pantheon Books.
- Saldanha, A. (2002) Music, space, identity: Geographies of youth culture in Bangalore. *Cultural Studies*, 16(3), 337–344. <https://doi.org/10.1080/09502380210128289>

- Suvin, D. (1972, December). On the poetics of the science fiction genre. *College English*, 34(3), 372–382.
- Suvin, D. (1979). *Metamorphoses of science fiction: On the poetics and history of a literary genre* (G. Canavan, Ed.). Yale University Press.
- Thomas, E. E. (2018, Spring). Toward a theory of dark fantastic: The role of racial difference in young adult speculative fiction and media. *Journal of Language and Literacy Education*, 14(1), 1–10. <https://files.eric.ed.gov/fulltext/EJ1175839.pdf>
- Twum-Danso, A. (2008). A cultural bridge, not an imposition: legitimizing children's rights in the eyes of local communities. *The Journal of the History of Childhood and Youth*, 1(3), 391–413. <https://doi.org/10.1353/hcy.0.0023>
- United Nations. (1989). Convention on the rights of the child. <https://www.ohchr.org/EN/ProfessionalInterest/Pages/CRC.aspx>
- Valentine, G. (1996, October). Angels and devils: Moral landscapes of childhood. *Environment and Planning D: Society and Space*, 14(5), 581–599. <https://doi.org/10.1068/d140581>
- Wells, K. C. (2015). *Childhood in a global perspective*. Polity Press.
- Whitted, Q. (2016). To be African is to merge technology and magic: An interview with Nnedi Okorafor. In R. Anderson & C. E. Jones (Eds.), *Afrofuturism 2.0: The rise of astro-Blackness* (pp. 207–213). Lexington Books.
- Winterburn, E. (2011, January 17). Astronomical instruments through time. *BBC History*. http://www.bbc.co.uk/history/ancient/cultures/astronomical_instruments_01.shtml
- Womack, Y. (2013). *Afrofuturism: The world of Black sci-fi and fantasy culture*. Lawrence Hill.
- Wynter, S. (2003). Unsettling the coloniality of being/power/truth/freedom: Towards the human, after man, its overrepresentation-an argument. *CR: The New Centennial Review*, 3(3), 233–257. <https://www.jstor.org/stable/41949874>
- Yaszek, L. (2006). Afrofuturism, science fiction, and the history of the future. *Socialism and Democracy*, 20(3), 41–60. <https://doi.org/10.1080/08854300600950236>
- Yaszek, L. (2015). Afrofuturism in American science fiction. In E. C. Link & G. Canavan (Eds.), *The Cambridge companion to American science fiction* (pp. 58–69). Cambridge University Press.