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Binti's R/evolutionary Cosmopolitan Ecologies

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Okorafor's Binti *series consistently blurs the lines between human and other-than-human, between technological and natural/spiritual, between local and global in ways that refuse to extract or abstract humans from their entanglements with environments and others, writ large and small. Set in a post–climate change Africa embroiled in regional and interstellar conflict, the narratives' cosmopolitics are unrelentingly ecological, involving nonhuman participants and embedded in material particularities that shape conflicts and relations; at the same time, the ecology is always cosmopolitan, with those nonhuman actors exercising agency within complex worlds of difference that cross over and connect cosmos, polis, and oikos. Contrary to the sometimes-utopic connotation of both cosmopolitanism and ecology, however, such difference is neither subsumed to a harmonious whole, nor held in benign relativism. Rather,* Binti *depicts multispecies agency that is always in dynamic tension, driving r/evolutionary growth in posthuman relations and in the genres through which we imagine them.*

Keywords: African science fiction, cosmopolitanism, ecocriticism, environment and ecology, Nnedi Okorafor

"Only a ghost walks alone." —Nnedi Okorafor, *Binti: Home*

To speak of "cosmopolitan ecologies" is to intentionally put in tension (that is, both connected and stretched) two terms drawn from different traditions of inquiry and critique: one focused on human cultures, identities, and geopolitics, the other on material dynamics in nature. In their common usage, cosmopolitanism and ecology often seem to pull in different directions; yet maintaining a complete distinction of the natural from the human, the ecological from the political, is unproductive and perhaps impossible, as so many writers and thinkers have insisted. Nnedi Okorafor's fictive worlds thoroughly depict this sentiment, pervaded and animated as they are by deep entanglements between human and more-than-human, nowhere more so than her *Binti* series. Set in a post–climate change Africa embroiled in regional and interstellar conflict, the narrative's cosmopolitics are unrelentingly ecological, involving nonhuman participants and embedded in material particularities that shape conflicts and relations; at the same

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time, the ecology is always cosmopolitan, not only in scale but in diversity of human and nonhuman actors who exercise agency across complex connections of cosmos, polis, and oikos. Contrary to the sometimes-utopic connotation of both cosmopolitanism and ecology, however, such difference is neither subsumed to a harmonious whole, nor held in benign relativism. Rather, *Binti* depicts multispecies agency that is always in dynamic tension, driving r/evolutionary growth in posthuman relations. By the same token, Okorafor gives space to the various human, technological, natural, and spiritual actors constituting those relations by r/evolutionizing the genre itself, combining science fiction's techno-scientific speculations with African animist modes to create a more cosmopolitan narrative field of voices.

In the *Binti* series, the scope of belonging includes plants, insects, microbes, even land and water themselves; the novellas consistently portray the nonhuman as more than background or symbolism, but consequential participants in eco-political histories. Exactly how we represent and value nonhuman (both as individual actors and as larger ecologies) participation in the cultural, political, and social contexts of "cosmopolitanism" (and vice versa), however, bears critique. Debates typically center on a few key philosophical, ontological, and ethical questions about the category of "human" itself and how we by turns associate and dissociate ourselves from animals and our environment. There is no shortage of ruminations on this subject that cannot be fully rehearsed here, except to note the prevailing lamentation regarding the Enlightenment tradition of seeing humans as morally, intellectually, or spiritually distinct from and superior to nature. According to Kimberly TallBear, there is a growing "aversion to the human/nonhuman split because of an explicit understanding that it engenders violence,"[1] given that animals and environments are exempted from ethical consideration, as are people deemed less than human in some way. Instead, most ecocritics argue, we should recognize that because "the rights of humans and animals are inextricably interwoven, the righting of wrongs in relation to all living creatures, as well as to the extra-human environment, cannot be accomplished as long as we continue to treat these issues as discrete."[2]

Such arguments echo the work of feminism and postcolonialism in pointing to the problematic construction of "others," as well as their efforts to represent alternative epistemologies, ontologies, and relationalities that challenge repressive divisions. Indeed, concern for such "great divides" and their shared logic of exclusion and exploitation of "others" is the primary ground on which ecocriticism and postcolonialism come together; in their book *Postcolonial Ecocriticism*, Graham Huggan and Helen Tiffin assert that the major theoretical preoccupations of postcolonialism, "otherness, racism and miscegenation, language, translation . . . voice and the problems of speaking for others" all offer "immediate entry points for a re-theorising of the place of animals in relation to human societies."[3] As such, Allison Carruth suggests, "postcolonial literature and theory provide a valuable framework for

1 Quoted in Elizabeth DeLoughrey, "Ordinary Futures: Interspecies Worldings and the Anthropocene," *Global Ecologies and the Environmental Humanities: Postcolonial Approaches*, eds. Elizabeth DeLoughrey, Jill Didur, and Anthony Carrigan (New York: Routledge, 2015), 360.

2 Graham Huggan and Helen Tiffin, eds., *Postcolonial Ecocriticism: Literature, Animals, Environment*, 2nd ed. (New York: Routledge, 2015), 218–19.

3 Huggan and Tiffin, *Postcolonial Ecocriticism*, 152.

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ecocriticism by emphasizing the necessity as well as the difficulty of representing otherness,"[4] a key aspect of incorporating these others (human and nonhuman alike) into any cosmopolitan aspirations.

Even as these thinkers make the case for an equivalence between modes of repression and resistance for humans and animals/environments, important differences remain that complicate a seamless pairing: chiefly, the issue of agency. Intention sits at the foundation of much of our understanding and practice regarding rights, subjectivity, and ethical responsibility, and has been deployed as a clear means of bifurcation between human and nonhuman. How then do we incorporate the nonhuman into cosmopolitan relationships without accounting for their agency in such matters? Huggan and Tiffin acknowledge that "[a]gency has been a problematic issue for both postcolonial and environmental studies since, in the anthropocentric version of this problem, 'others' may speak but their speech is often pre-positioned so as not to be heard by those in power."[5] Beyond that, to assert nonhuman agency "invites allegations of anthropomorphism, potentially imputing to nonhumans a capacity for choice, decision-making and conscious planning often considered by human beings to be unique to themselves."[6] Yet they and others insist this understanding of agency is itself anthropocentric, expressed exclusively "in terms of linguistic and political subjectivities all rooted in the idea of intentionality."[7] However, "[i]f we define agency less by the essentialist capacities apparently required to effect change than by the effecting of change itself, we have not only a less anthropocentric but also a less circular definition of agency itself,"[8] which can incorporate the actions of animals, plants, environments, and so on. "To put it baldly," Cajetan Iheka writes, "the nonhuman can act and therefore has agency."[9]

Such a recasting of nonhuman agency has a deep history in literary traditions from which Okorafor draws heavily: namely, science fiction (SF) and magical realism, both of which regularly represent nonhuman actors, be they spirit or animal, earthly or alien. Speaking of magical realism as a prominent feature related to the animist mode in African literature, Iheka writes that the genre emphasizes an "aesthetics of proximity" between human and nonhuman, bearing "similarities and shared characteristics" that "dissolve or obfuscate the barriers between them." This emphasis on human proximity with nature reveals a recognition of the "animating powers" of nonhumans to "shape and influence humans."[10] Though the literature typically frames this nonhuman agency as spiritual phenomena, Harry Garuba insists the "animist mode of thought" in fact is deeply "embedded within the processes of material, economic activities and then reproduces itself within the sphere of cultural and social

4 Allison Carruth, "Compassion, Commodification, and *The Lives of Animals*: J. M. Coetzee's Recent Fiction," *Postcolonial Ecologies: Literatures of the Environment*, eds. Elizabeth DeLoughrey and George B. Handley (New York: Oxford University Press, 2011), 202.

5 Huggan and Tiffin, *Postcolonial Ecocriticism*, 208.

6 Huggan and Tiffin, *Postcolonial Ecocriticism*, 208.

7 Cajetan Iheka, *Naturalizing Africa: Ecological Violence, Agency, and Postcolonial Resistance in African Literature*. (Cambridge and New York: Cambridge University Press, 2018), 44.

8 Huggan and Tiffin, *Postcolonial Ecocriticism*, 208.

9 Iheka, *Naturalizing Africa*, 44.

10 Iheka, *Naturalizing Africa*, 22, 58.

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life."[11] As such, this animist impulse fully implicates nonhuman actors and forces in the full range of human relations as entities "demanding recognition of their interconnectivity."[12] Animism thus anticipates what has become a central tenet of material ecocriticism, the insistence that agency is "a pervasive and inbuilt property of matter, as part and parcel of its generative dynamism. From this dynamism, reality emerges as an intertwined flux of material and discursive forces."[13] In that way, animist thinking also intersects with critical posthumanism common in SF narratives, which deconstructs the autonomous subject through an understanding that "technosciences (especially immunology, molecular genetics, and ecoscience) are constantly producing new 'material-semiotic nodes' " that "challenge our conceptions of the sharp divisions between active subjects and passive objects."[14] At the same time, an animist sensibility expands that material posthuman dissolution of individual human autonomy by seeing every element comprising that "ecoscience" as both a conscious agent in its own right and animated by forces that exceed and entwine any individual within wider fields of interaction and being.

This animist proximity disrupts an anthropocentric worldview in literature that "rewrites the conventions of the social realist script (often solely focused on humans)"[15] and instead introduces a kind of "cognitive estrangement" of the sort Darko Suvin attributes as a defining characteristic of SF. For Suvin, estrangement comes from the introduction of a *novum*, an innovation that marks a clear distinction between the SF world and the "real" one. Of course, the *novum* and the estrangement do not sever the connection with our social reality entirely, but reflect it back to us from an alternative, often disruptive perspective. Moradewun Adejunmobi argues, "the 'cognitive estrangement' that Suvin also discerns in science fiction was already a feature of African magical realist and fantasy narratives,"[16] especially as they espouse the sort of cosmological worldview Wole Soyinka describes as "the continuing evolution of tribal wisdom through an acceptance of the elastic nature of knowledge as its only reality, as signifying no more than reflections of the original coming-into-being of a manifestly complex reality."[17] Of course, this "animist unconscious" turns the *novum* on its head as always already an aspect of reality; as Garuba claims, "Animist culture thus opens up a whole new world of poaching possibilities, *prepossessing the future*, as it were, by laying claim to what in the present is yet to be invented."[18] Because Okorafor's animist-informed SF proves particularly "apt at representing

11 Harry Garuba, "Explorations in Animist Materialism: Notes on Reading/Writing African Literature, Culture, and Society," *Public Culture* 15.2 (2003): 268.
12 Iheka, *Naturalizing Africa*, 22.
13 Serenella Iovino and Sepril Oppermann, "Introduction," in *Material Ecocriticism*, eds. Serenella Iovino and Sepril Oppermann (Bloomington, IN: Indiana University Press, 2014), 3.
14 Eugene Thacker, "Data Made Flesh: Biotechnology and the Discourse of the Posthuman," *Cultural Critique* 53 (2003): 80.
15 Iheka, *Naturalizing Africa*, 22.
16 Moradewun Adejunmobi, "Introduction: African Science Fiction," *The Cambridge Journal of Postcolonial Literary Inquiry* 3.3 (2016): 267.
17 Wole Soyinka, *Myth, Literature, and the African World* (New York: Cambridge University Press, 1976), 53.
18 Garuba, "Explorations in Animist Materialism," 271.

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nonhuman actors"[19] by diffusing human primacy within a more complex array of ecological, technological, and spiritual forces, she is able to activate and embrace the *novum* of reconfigured human/nonhuman relations yet to be invented or imagined by more strictly materialist SF.

The *Binti* series constellates these various traditions of representation and critique to disrupt Enlightenment anthropocentrism by focusing on the agency of the other writ large; or, more poignantly, the collective agency of complex posthuman relations that erode the discrete, autonomous subject altogether. The titular protagonist is from the beginning an outsider in many ways: as a young woman from a marginalized minority, the Himba, she bucks her culture's norms by leaving Earth to study on another planet. When the ship carrying her and other students is attacked by aliens called the Meduse, all the Khoush people (the dominant majority back on Earth) are killed, and Binti survives only because she is protected by an ancient object she once found in the desert. As the story progresses, she befriends one of the Meduse, Okwu, and negotiates a truce between them and the authorities on the university planet Oomza Uni. Upon returning to Earth with Okwu, Binti inadvertently reignites the interplanetary conflict and struggles to negotiate all the competing interests in pursuit of a lasting peace.

As she continues to exercise her own agency in ways counter to expectation, Binti's alienation from a singular cultural identity intensifies and she instead becomes enmeshed within larger, more complex networks of human and nonhuman relations involving aliens, plants, spirits, even microbes who are each actors in their own right. In this regard, the texts' animist foundations enable an increasingly posthuman scope as "similarities and crossovers among people, animals, and machines"[20] build up in the narrative, blurring the boundaries of both individual autonomy and humans as the species of subjectivity. *Binti*'s plot abounds with voices and decisions coming from those typically taken to be objects of human action rather than agents themselves. Okorafor imbues all the life of the novellas with histories, capacities, and consciousnesses that parallel, intersect with, aid, hinder, or bypass those of humans. Some Earth beings, for instance, have a much longer history of interaction with aliens than humans, but "the nonhumans who had had contact with extra-terrestrials never bothered to communicate anything to human beings."[21] Other creatures, like elephants, have become "great violent beasts" who variously avoid and attack people, "but only because human beings have treated them in a way that made using violence the only way for elephants to survive."[22] Still others have more ambiguous relationships with humans, like the wild dogs of the desert around Binti's home. While traveling through the desert, Binti's companion Mwinyi negotiates a tentative détente with the dogs: "I gave them one of the rabbits I caught. . . . I feed them and they stay and stand guard for a few hours while you and I get more sleep. . . . Wild dogs are free and playful, once you convince them not to attack you."[23] The language Mwinyi uses

19 Neel Ahuja, "Postcolonial Critique in a Multispecies World," *PMLA* 124.2 (2009): 559.

20 Andrew Pickering, "How We Became Posthuman: Virtual Bodies in Cybernetics, Literature, and Informatics, and: Silicon Second Nature: Culturing Artificial Life in a Digital World (review)," *Technology and Culture* 41.2 (2000): 393.

21 Nnedi Okorafor, *Binti: Home* (New York: Tor.com, 2017), 128.

22 Nnedi Okorafor, *Binti: The Night Masquerade* (New York: Tor.com, 2017), 36.

23 Okorafor, *Binti: The Night Masquerade*, 30.

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puts people and the dogs on equal ground, making it necessary to account for the interests and capacities of both. Nonhuman forces even play vital roles in creating and perpetuating human cultures in the novellas. This is particularly true of the Enyi Zinariya, the humans who first encountered aliens generations before anyone else; the legacy of that encounter includes an owl who is "the only animal alive from back when the Zinariya were among us. . . . [W]hen they left, she was given many things, including a task,"[24] to activate the genetic modification that allows them to access a collective memory and unique way of communicating.

This last example especially demonstrates what Iheka calls the "critical insight of indigenous cosmologies in Africa," namely, the recognition of "the capacity of non-humans—water, trees, and other inhabitants of the environment—to produce effects on the human."[25] Iheka's emphasis on the impact of water and trees might be drawn directly from the Himba culture portrayed in the narratives. Binti's is a desiccated future Africa; "There used to be more water here," she tells us, "Then the climate changed and it went underground or dried up and the rains fell elsewhere."[26] As a result, the Himba culture thrives in near-desert conditions only because of a close relationship with the "Undying Trees":

> They had thick rubbery wide leaves and trunks spiked with hard thorns that had lived longer than any generation could recall. Their ancient roots were so strong and they snaked so deeply beneath Osemba that the town's waterworks were not only built around them, they were built *along* them. The Undying Trees led the founders of Osemba to the only drinkable source of water for a hundred miles.[27]

Binti states plainly their deep dependence on these plants: "because of them, we can live here. . . . We respect them."[28] The role of the Undying Trees fits the understanding of agency as actor fully well, but the capacity and relationship Okorafor assigns them goes much further. Binti's family home is appropriately referred to as "the Root," with the house's foundation itself built into the root of one of these trees. The family has dwelt in the house for many generations, and "Even the bioluminescent plants growing on the outside walls and the roof were generations old. . . . The Root was old and more like a self-sustaining creature than a house."[29] When Binti's village is attacked as part of the Meduse-Khoush violence, her family instinctually takes refuge in the cellar, deep within the tree's roots. The structure is firebombed, but the tree "enclosed and protected" its inhabitants.[30] Binti's mother explains, "The Root had a spot. I could wake it, if I gave from my own life force. . . . That's how the Root knew to protect its people." Her father adds, "The Root is true Himba."[31]

24 Okorafor, *Binti: Home*, 154.
25 Iheka, *Naturalizing Africa*, 58.
26 Okorafor, *Binti: Home*, 59.
27 Okorafor, *Binti: Home*, 114.
28 Okorafor, *Binti: The Night Masquerade*, 74–75.
29 Okorafor, *Binti: Home*, 61.
30 Okorafor, *Binti: The Night Masquerade*, 131.
31 Okorafor, *Binti: The Night Masquerade*, 134, 131.

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The relationship and proximity between people and plants depicted here suggests an animist understanding of mutuality that "puts pressure on the ideas of human exceptionalism and absolute distinction from other forms of life," instead alluding to an "ethic of multispecies entanglement,"[32] reminiscent of what Kate Rigby observes in Australian aboriginal understandings of "country":

> Country is a spatial unit, extending under the ground, into the sky . . . which is forever in the process of being (re)composed through the dynamic and by no means always harmonious or predictable interactions of its human and nonhuman denizens. Country is sentient, agentic, and speaking matter, and its ongoing vitality is sustained through practices of care that are inextricable socially and ecologically, practically and ceremonially.[33]

Indeed, the Undying Trees embody "sentient, agentic, and speaking matter," and through them, the narrative engages an animist spirituality of "nonreductive materialism" that emphasizes "connectivity, . . . trans-corporeality, material agency, and an ethics of more-than-human 'mattering.'"[34]

That mattering, in part, stems from a recognition that "Spirits live in everything,"[35] a consistent motif in the series most exemplified by the "current" that exists in and animates everything in Binti's world. Binti's mother states, "We all have current running through us, that's why we're alive"[36]; using this current allowed her to bond with the tree and give it her own life force. Binti's own ability to control current makes her a "master harmonizer"; those like her possess an especially potent "gift to bring harmony so delicate that we can make atoms caress each other like lovers."[37] The texts often describe the invocation of current in spiritual terms, such as when she describes: "My body was pulling something, energy from the ground. From the earth, from deep. My body was touching the Mother, nudging her awake, then telling her to come." The Mother is herself a spiritual creation, animated by the Seven who "called into active being" microorganisms within "rich red clay that had soaked up the rains. . . . That clay was Mother, *otjize*."[38] Throughout the novellas, Binti covers her body in the red *otjize*, deeply connecting her with her land and culture, with the microbes that represent the origins of all life, as well as with the Seven and the current that run through it all. This animist spirituality radically decenters human exceptionality while simultaneously imbricating people thoroughly with their material world.

Crucially, however, current is not solely metaphysical, but concurrently a physical force thoroughly imbricated with mathematics and technology. Harmonizing through the current involves both ritual and science, putting oneself in a mathematical trance by "treeing" equations that conjure and manipulate the current. Similarly, life itself is

32 Iheka, *Naturalizing Africa*, 23.
33 Kate Rigby, "Spirits That Matter," in *Material Ecocriticism*, eds. Serenella Iovino and Sepril Oppermann (Bloomington, IN: Indiana University Press, 2014), 284.
34 Rigby, "Spirits That Matter," 284.
35 Okorafor, *Binti: The Night Masquerade*, 74.
36 Okorafor, *Binti: The Night Masquerade*, 134.
37 Okorafor, *Binti*, 62.
38 Okorafor, *Binti: Home*, 155.

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described as mathematically and spiritually animated by this force: "Binti's mother [was] singing mathematical equations to a large grasshopper that had flown into the cellar, holding her hand out for it to land, and watching it slowly fold its beautifully decorative wings as if to show her its mathematical pattern."[39] That same mathematical foundation extends to aliens and their technology as well. On a Meduse ship, Binti senses "the current all around me. These people had deep active technology built into the walls and many of them had it running within their very bodies . . . it was part of their biology."[40] At one point, she has an epiphany: "It's all mathematics . . . Life, the universe, everything."[41]

Merging as it does the spiritual and material, technological and organic, human and nonhuman, current acts as a central component of the narratives' posthumanism. Summarizing N. Katherine Hayles's foundational work on posthumanism, Andrew Pickering notes its debt to cybernetics, which

> (1) emphasized the feedback loops running from the environment through the human body and back again, thus challenging our ideas about human boundaries and autonomy; (2) understood the brain as a neural network, a logical diagram, potentially realizable in all sorts of materials, not just organic ones; and (3) formalized what brains and machines do in the same informatic-theoretic terms."[42]

Building from such a foundation, the posthuman sees "a radical equivalence between self, body, and environment" with "nature, the human, and the technological as differently realized, but fundamentally and qualitatively similar material constructions."[43] Ted Geier adds that in a posthuman understanding, "humans are nonhumans —discreet [*sic*] bodies on one scale, swarming mixes of other objects and bodies at another, technologically articulated and inconsistently whole or 'true' as individuated, free wills."[44]

For his part, Iheka believes that "the technological advancements at the heart of the posthuman idea make it unsuitable for the African context" given the "unequal access to equipment of technological mediation" and that "reliance on the West for these technologies has been indispensable to their exploitation by their unequal partners in the Global North."[45] This may be true enough, but Okorafor seems intent on using the SF genre to project and prepossess a future in which African peoples like the Himba are not shut out of technological agency and its posthuman possibilities. The Himba create "astrolabes," devices peoples all over the galaxy (including the domineering Khoush) depend on for communication and identification. Binti's family

39 Okorafor, *Binti: The Night Masquerade*, 138–39.
40 Nnedi Okorafor, *Binti* (New York: Tor.com, 2015), 60.
41 Okorafor, *Binti: The Night Masquerade*, 148.
42 Pickering, "How We Became Posthuman," 392.
43 Paul Outka, "Posthuman/Postnatural: Ecocriticism and the Sublime in Mary Shelley's *Frankenstein*," in *Environmental Criticism for the Twenty-First Century*, eds. Stephanie LeMenager, Teresa Shewry, and Ken Hiltner (New York: Routledge, 2011), 31, 33.
44 Ted Geier, "Noncommittal Commitment: Alien Spaces of Ecocosmopolitics in Recent World Literature," in *Ecocriticism and Geocriticism: Overlapping Territories in Environmental and Spatial Literary Studies*, eds. Robert T. Talley Jr. and Christine M. Battista (New York: Palgrave Macmillan, 2016), 57.
45 Iheka, *Naturalizing Africa*, 160–61.

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are especially adept at making these devices and pass on "three hundred years of oral knowledge about circuits, wire, metals, oils, heat, electricity, math current, sand bar." Her abilities as a master harmonizer mean she can "communicate with the spirit flow and convince them to become one current," a vital operation in the construction.[46] Similarly, the Enyi Zinariya are "old old Africans" that "have technology that puts yours to shame and we've had it for centuries," thanks to a visit from aliens who collaborated with them "before other people on Earth even had mobile phones."[47] The visiting aliens endowed them with "a living organism tailored for our blood . . . Biological nanoids so tiny that they could comfortably embed themselves into our brains. Once you had them in you, it was like having an astrolabe in your nervous system." Once part of them, the technology is "passed on to offspring through their DNA."[48] Both peoples, then, have long histories of technological sophistication integrated with their ecological, cultural, and even bodily selves.

What these alien-implanted, DNA-modifying nanoids exemplify, however, is technology not merely produced, possessed, or controlled by human autonomy. Rather, Okorafor's posthumanist depiction follows Hayles in understanding technology as part of complex forces that transform human bodies and eco-technological relationships. Technology both uncovers and creates "transitional, transformative, mutating potential" that might "challenge us to find the supposedly definite boundary of the human at all," either from technology itself or from other species through genetic manipulation and the like. This fluidity repositions human being and agency as subject to "contingency and emergence," opening new and contested "possibilities for the emergence of new relationships between human and machine, biology and technology, genetic and computer information."[49]

That *Binti*'s Africans integrate and are integrated with both nature and technology in this way is no small matter. Eliding the technological from the novellas' challenge to anthropocentrism would in fact reconstitute the human/nonhuman division by reifying a sense of nature as "pure," unaltered by human agency, while paradoxically refiguring Africans themselves as autochthonously part of nature, unmediated by technological sophistication. Rather than venerating a romantic or nostalgic vision of ecological harmony premised on overcoming human corruptions, *Binti*'s cosmopolitan ecology engages a posthuman reality where "cyborgs, feral and queer animals are complemented by genetically engineered organisms (GEOs) within a new, globalised frame of reference."[50] In one scene, Mwinyi wistfully explains the behavior of "Icarus" grasshoppers who fly into fires at night:

> "Then they fly out of the flames and dance with their new wings of fire and fall to the ground wingless. The wings grow back in a few days. Then they do it again. The zinariya says that some woman genetically engineered them as pets long ago." . . .

46 Okorafor, *Binti*, 31.
47 Okorafor, *Binti: Home*, 127–28.
48 Okorafor, *Binti: Home*, 129–30.
49 Thacker, "Data Made Flesh," 80–81.
50 Greg Garrard, *Ecocriticism*, 2nd ed. (New York: Routledge, 2012), 180.

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> "[C]an you harmonize with them? Ask them why they do it?" I asked, coming back to the fire.
>
> "Never bothered. I doubt they know why they do it, really. It's how they were programmed by science, I guess."
>
> "Well, maybe," I said. "But I'm sure they rationalize it somehow."
>
> "True. I'll ask one someday."[51]

There is no sense of indignation regarding these modified grasshoppers, only curiosity; these creatures are not victims of their engineering, but capable of enjoying and validating their behavior just as humans might. Even more pointedly, Binti repeatedly praises the genetically engineered ships that humans use to travel across the cosmos:

> The ship was a magnificent piece of living technology. Third Fish was a Miri 12, a type of ship closely related to a shrimp. Miri 12s were calm creatures with natural exoskeletons that could withstand the hardness of space. They were genetically enhanced to grow three breathing chambers within their bodies.
>
> Scientists planted rapidly growing plants within these three enormous rooms that not only produced oxygen from the CO_2 directed in from other parts of the ship, but also absorbed benzene, formaldehyde, and trichloroethylene. This was some of the most amazing technology I'd ever read about.[52]

When the ship is attacked by the Meduse and everyone but Binti is killed, she and the ship form a bond; the ship too "experienced tragedy that day," and now "This interstellar traveling beast holds a part of my soul."[53] She goes on to call them "the finest technology, the finest *creature*, this planet has ever produced . . . I wish I were on her now, her peacefulness swallows everything bad."[54] The texts ultimately make little distinction between being "naturally" evolved or technologically engineered (or spiritually created, for that matter); all are included within the same animist ecology of relationships that thoroughly blur the lines between them.

Greg Garrard's mention of the "globalised frame of reference" for such boundary-obfuscating beings and relationships bears repeating here; indeed, Binti's affiliation with the Miri 12 ships both stems from and enables her desire for a more expansive global/cosmological milieu that extends far beyond the confines of the Himba. As the texts relay several times, the Himba exercise a strict self-imposed hermitry in Osemba. "We Himba don't travel. We stay put," Binti tells us.[55] Though the Himba are aware of the galactic "neighborhood" this future humanity is now in

51 Okorafor, *Binti: The Night Masquerade*, 32.
52 Okorafor, *Binti*, 19–20.
53 Okorafor, *Binti: Home*, 36, 51.
54 Okorafor, *Binti: The Night Masquerade*, 50.
55 Okorafor, *Binti*, 12–13.

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relationship with, they "don't like to leave Earth. We prefer to explore the universe by traveling inward,"[56] grounded in the ecologically particular places with which they are thoroughly intertwined through their shared deep history. Their sense of identity and culture is anchored to their particular place; Binti informs us, "Our ancestral land is life," symbolized and directly embodied by their practice of covering their bodies with *otjize*, an unction made from the "red land" where they live. For that reason, to "move away from [the land]" is to "diminish," and Binti's choice to leave Earth to study on another planet means "denying the most traditional part of myself."[57] On her return to Earth, her family greets her with hostility regarding her decision to leave, calling her "polluted" and selfish, arguing she should be "ashamed" for bringing "dissonance" and that "You'll always be alone if you don't stop this and come home."[58] The Enyi Zinariya, who are more outwardly connected to the universe through their technologies of communication, see the Himba as "so inward-looking . . . cocooned around that pink lake." One of them chastises, "You people are so brilliant, but your world is too small . . . One of you finally grows beyond your cultural cage and you try to chop her stem."[59] Although the Himba have developed a laudable ecological and posthuman sensitivity and practice within their place, the texts ultimately characterize them as problematically limited, especially in their relationships with other people. They misunderstand and stereotype the Enyi Zinariya as "desert people," and Binti's Enyi Zinariya friend Mwinyi complains, "'Your people are rude. . . . Small-minded insular people,' he muttered. 'I can speak their language, they can't even greet me in mine.' "[60] The Himba similarly mistake the behavior and agency of elephants, as Binti learns in her conversation with Mwinyi:

> "I've never seen one, but I hear they hate human beings! The Khoush say they kill herdsmen and maul small villages on the outskirts of—"
>
> "And they always kill every human being they come across, right?" he asked, laughing.
>
> I pressed my lips together, frowning, and unsurely said, "Yes?" . . .
>
> Mwinyi groaned. "Haven't you learned *anything* from all this? What'd you think I was a few days ago? What did you think of all Enyi Zinariya?" I didn't respond, so he did. "You thought we were savages."[61]

The implication of such chastisement seems to be less a full upbraiding of the Himba's attachment to place and more a caution against their pious insularity and efforts to ensure a sort of purity with regard to the people-place relationship.

In short, the Himba are ecological, but not cosmopolitan, refusing meaningful interactions outside those clustered around their own lake. Mwinyi's complaint about their "rudeness" suggests a failure to be culturally cosmopolitan, familiar and willing

56 Okorafor, *Binti*, 21.
57 Okorafor, *Binti*, 13, 9.
58 Okorafor, *Binti: Home*, 72, 74.
59 Okorafor, *Binti: Home*, 127, 96.
60 Okorafor, *Binti: The Night Masquerade*, 76.
61 Okorafor, *Binti: The Night Masquerade*, 34–35.

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to interact with difference. Such an understanding of cosmopolitanism might resonate with Kwame Anthony Appiah's definition of it as "cultural contamination" that defies isolation and homogeneity; "we do not need, have never needed settled community, a homogeneous system of values, in order to have a home," Appiah insists.[62] Appiah's formulation implies an important place for mobility and transgression of boundaries at the heart of cosmopolitanism, which itself is a consistent part of Okorafor's oeuvre and an important element of Binti's own journey in the series. Nina Glick Schiller and Andrew Irving assert, however, that "equations of mobility and cosmopolitanism or of subaltern positioning and cosmopolitanism are too readily made" and that it "does not inevitably accomplish [or depend on] displacement."[63] Rather than necessitating deracination or cultural hybridity, the "global enmeshment" of lived cosmopolitanism "demands a new form of cosmopolitan politics that is both attentive to our plural, discrepant conditions" but simultaneously "open to a critical negotiation of its relation to the nation" and other local places.[64]

To say the Himba are not cosmopolitan, then, is not because they are entrenched in place or culturally static, but because they fail to engage the political aspect of such relations, to be subject to what David Harvey calls "the essential cosmopolitan question": how can so many people (human and otherwise) "occupy a globe in such a way as to not destroy each other; how can we create peaceful ways of being together?"[65] For the Himba, the answer seems precisely *not* to be together, to remain isolated from the outside world as much as possible. The central conflict of the series begins when Binti decides to bring a befriended Meduse to Earth as an ambassador; she muses, "Bringing Okwu in peace to the land of the people its people had fought would be one of the ten good deeds [professor] Okpala had insisted I perform within the academic cycle as part of being a good Math Student."[66] However, Okwu's presence stirs old tensions between the Meduse and Khoush, which erupts into violence centered around Binti's village. The Himba leaders hope to simply avoid the conflict by retreating inward and refusing her request to help broker peace by invoking the "deep culture" to harmonize an end to the fighting; ultimately, they abandon Binti to her fate when she confronts the warring parties on her own and she is killed (though later resurrected). Despite their desire to be quarantined from the danger, much of the Himba village is destroyed, including Binti's home with her family huddled in the basement.

More damning and damaging than not pursuing cultural diversity, then, is the Himba's misrecognition of their "situational mutuality"[67] that should engender an

62 Kwame Anthony Appiah, *Cosmopolitanism: Ethics in a World of Strangers* (New York: Norton, 2006), 112–13.

63 Nina Glick Schiller and Andrew Irving, "Introduction: What's in a Word? What's in a Question?" in *Whose Cosmopolitanism: Critical Perspectives, Relationalities and Discontents* (New York: Berghahn, 2015), 3.

64 Gyan Prakash, "Whose Cosmopolitanism? Multiple, Globally Enmeshed and Subaltern," in *Whose Cosmopolitanism: Critical Perspectives, Relationalities and Discontents* (New York: Berghahn, 2015), 28.

65 David Harvey, "What Do We Do with Cosmpolitanism?" in *Whose Cosmopolitanism: Critical Perspectives, Relationalities and Discontents* (New York: Berghahn, 2015), 51.

66 Okorafor, *Binti: Home*, 21.

67 Nina Glick Schiller, "Diasporic Cosmopolitanism: Migrants, Sociabilities and City Making," in *Whose Cosmopolitanism: Critical Perspectives, Relationalities and Discontents* (New York: Berghahn, 2015), 105.

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"obligation to others."[68] Schiller and Irving write that cosmopolitanism primarily involves the possibility of "partial, fleeting, uncertain and fragile domains of commonality, expressed as empathy, recognition and sociability," a kind of "openness that expresses human aspirations for justice and equality."[69] Lacking such openness limits the Himba's ability to understand and confront the larger forces and histories they inevitably become swept up in. In their attempted isolation, they fail to recognize or act on their "shared vulnerability,"[70] forestalling the possibility of what Ulrich Beck articulates in his "Cosmopolitan Manifesto": "new, transnational communities arising from shared risk experiences" and attendant political struggles.[71] The Himba stance of sequestration in a bounded place shirks an understanding of ecological relations as part of political ones, which necessarily link local conditions with more global (and in this case, galactic) forces. Binti's own broadened understanding through her travels and growth, by contrast, increasingly discredits Himba insularity as insufficient. In the end, Okorafor refuses to fetishize their hyperlocal (albeit deeply ecological) culture and uses Binti herself to advocate a more cosmopolitan approach.

From the outset, the story arc is driven by Binti's desire to transcend the boundaries and restrictions of her community and heritage by leaving to study on Oomza Uni. In contradistinction to the Himba, the uber-cosmopolitan Oomza Uni is replete with different peoples from all over the galaxy—a literal universe-ity. Listening to the devices that allow teachers to speak in many languages simultaneously, Binti "smiled, delighted. The way people on Oomza Uni were so diverse and everyone handled that as it if were normal continued to surprise me. It was so unlike Earth, where wars were fought over and because of differences and most couldn't relate to anyone unless they were similar."[72] A cosmopolitan multiplicity of peoples is so central to the character of the planet that the book makes almost no mention of the native inhabitants; rather, "Here, everyone was everything,"[73] a place open to everyone to dwell and develop connections.

In that effort, the planet must accommodate "people of many shapes, sizes, organisms, wavelengths, and tribes,"[74] engineering a complex ecology and environment with buildings and spaces adapted to their various biological needs for atmosphere and so on. For her part, Binti is able to find clay suitable to make *otjize*, which maintains a connection with her sense of identity while simultaneously deterritorializing that identity from a singular place. Smelling the mixture she made on Oomza Uni, she:

> saw the tall trees of the forest where I collected the clay, the piglike creature who foraged in the bushes. I saw the face of Professor Okpala, the large pitcher plans that grew beside

68 Appiah, *Cosmopolitanism*, xv.
69 Schiller and Irving, "Introduction," 3.
70 Iheka, *Naturalizing Africa*, 164.
71 Quoted in Ursula Heise, *Sense of Place, Sense of Planet: The Environmental Imagination of the Global* (New York: Oxford University Press, 2008), 123.
72 Okorafor, *Binti: The Night Masquerade*, 102.
73 Okorafor, *Binti: Home*, 34.
74 Okorafor, *Binti: Home*, 34.

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> the station, my classmates, like Haifa and Wan. However, I also saw the Root. And the faces of my family, the dusty roads of Osemba and its tranquil lake.[75]

Such moments in the narratives suggest the possibility and benefits of multiple belonging, of connection to people and place beyond one's ostensible homeland and the possibility for a more cosmopolitan character to ecologically embedded communities and relations. Geier suggests that such "strange alien spaces of ecocosmopolitical expression imply an expansive global sense of 'international interspecies coexistence,' given the flexibility, even inadequacy, of nationality and interactivity without sacrificing the sincerity of . . . the aspiration to workable community."[76]

This expanded sense of belonging (both culturally and materially) is further expressed in Binti's own body, which embodies the notion that "[w]e become who we are through multispecies aggregations."[77] She gains a capacity to communicate with the Meduse by being physically transformed by their leader: in order to have her "speak for" them in the negotiations at Oomza Uni, it replaces her hair with *okuoko* tentacles, which allow her to sense their feelings and thoughts. Later, she learns that she has Enyi Zinariya heritage and activates the "nanoids" that give them their unique capabilities as well. Lastly, after being killed in a flare-up of the Khoush-Meduse conflict, her body joins with microbes from inside the creature New Fish, the newborn Miri 12 daughter of the ship she originally took to Oomza Uni, which reanimates her and connects her with its mind and body. New Fish tells her, "When your body was placed in my breathing chamber, my microbes went to work. You are probably more microbes than human now. . . . That is the 'deep Miri' my mother said would happen." The bond is so deep, they are considered a "paired" creature together; as New Fish says, her body is "[y]our body too, now."[78] Having become "something more again," Binti ruminates: "This time, I was so changed that I could fly through space without dying."[79] A doctor on Oomza Uni sums up her hybrid state this way: "Your DNA is Himba, Enyi Zinariya, Meduse . . . and some, but not much, New Fish . . . so this blend is what makes you, you. So you are different from what you were born as."[80]

In keeping with a posthumanism informed by an animist impulse, Binti's "aggregations" are not simply physical or genetic, but spiritual and discursive as well. Soon after first gaining her *okuoko* but before being joined with New Fish, she has a vision of:

> *Flying, falling, ascending, traveling through a planet's ring of brittle metallic dust. . . .*
>
> *"Who are you?" a voice asked. It spoke in the dialect of my family and it came from everywhere.*
>
> *"Binti Ekeopara Zuzu Dambu Kaipka of Namib, that is my name," I said.*

75 Okorafor, *Binti: The Night Masquerade*, 27.
76 Geier, "Noncommittal Commitment," 70.
77 Anna Lowenhaupt Tsing, "Strathern beyond the Human: Testimony of a Spore," *Theory, Culture & Society* 31.2–3 (2014): 230.
78 Okorafor, *Binti: The Night Masquerade*, 157, 161.
79 Okorafor, *Binti: The Night Masquerade*, 169.
80 Okorafor, *Binti: The Night Masquerade*, 191.

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Pause.

I waited.

"There's more," the voice said.

"That's all," I said, irritated. "That's my name."

"No."[81]

Later, having been resurrected and paired with New Fish, the vision comes true as she flies the Miri's body through the rings of Saturn. When asked again by the voice from everywhere, she responds, "'Binti Ekeopara Zuzu Dambu Kaipka of Namib, that is my name,' I blurted before I let myself think too hard about what was happening. 'No,' I said. 'My name is Binti Ekeopara Zuzu Dambu Kaipka Meduse Enyi Zinariya New Fish of Namib.'"[82] By this point, she has come to fully understand herself as a "figure" in the way Donna Haraway defines it: "material-semiotic nodes or knots in which diverse bodies and meanings coshape one another. For me, figures have always been where the biological and literary or artistic come together with all the force of lived reality. My body itself is just such a figure, literally." Speaking of the microbes that no less thoroughly have shaped her physical being, Haraway reminds us, "I became an adult human being in company with these messmates. To be one is always to *become with many*."[83]

Binti's own "becoming with many" disrupts her singular subjectivity as Himba, even as human or an individual at all. She initially balks at any notion that she has been changed, maintaining that "a part of me may now have been Meduse, but I was still human"; and later, "I am Himba, even if my hair has become *okuoko* because of my actions and even if I have Enyi Zinariya blood. Even if my DNA is alien." [84] Eventually, however, she falters in that certainty, "feeling exposed and foundationless" because she "had not taken my place within the collective" of the Himba and because she does not "understand what is happening to me."[85] At the end of *Binti: Home*, she is left with only questions: "I was Himba, a master harmonizer. Then I was also Meduse, anger vibrating in my *okuoko*. Now I was also Enyi Zinariya, of the Desert People gifted with alien technology. I was worlds. What was home? Where was home?"[86] At the same time, her multiplied identity challenges notions of individual agency as well, derived as it is from transformations and accumulations at least to an extent beyond her control. Her Enyi Zinariya nanoids were passed down genetically, her *okuoko* were the result of being "stung" by one of the Meduse, and the Miri microbes were joined to her dead body, reflecting Third Fish's designs and desire that "our union would bring Miri 12s forward."[87] These transformations, engendered both biologically and technologically, reflect the posthuman understanding of the body as a kind of "information" that can be manipulated, a "programmable information

81 Okorafor, *Binti: Home*, 8–9.
82 Okorafor, *Binti: The Night Masquerade*, 169.
83 Donna Haraway, *When Species Meet* (Minneapolis, MN: University of Minnesota Press, 2007), 4.
84 Okorafor, *Binti: Home*, 12, 130.
85 Okorafor, *Binti: Home*, 148–49.
86 Okorafor, *Binti: Home*, 161–62.
87 Okorafor, *Binti: The Night Masquerade*, 151.

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pattern"; as Eugene Thacker writes, "Change the code, and you change the body,"[88] in this case to an "interspecies subject"[89] that seems to defy categorization.

Binti finds her new liminality at times confusing and alienating, but the narratives suggest it is just such a posthuman breakdown of singular subjectivity that enables the collective, dispersed being and coalition of consciousness necessary for fully achieving a cosmopolitan ecology. Indeed, she has been physically transformed into a kind of "biomedia"[90] encoded to facilitate the communication needed to understand and negotiate agency distributed across so many places and beings. Okorafor's literature consistently portrays the importance of wide-ranging communication; for her, meaningful discursive interaction provides a foundation for at least the possibility of humans and others working together with the intention to address histories of conflict and exploitation. As with agency itself, Rigby sees communication as a constituent aspect of an animist materialism, where "the world appears not merely or principally as a series of causal relations, but rather as a nexus of communication."[91] Throughout the series, Binti takes on a primary role as communicator and harmonizer, whose capacity to translate between species comes precisely from her bodily accumulations from them (Meduse, Enyi Zinariya, and Miri 12). Binti's liminal bodily subjectivity mirrors Rosi Braidotti's cosmopolitan figuration of the "nomad," defined as a traveler in our globalized world who remains resistant to "steady identities." As a polyglot, the nomad exists "in between languages," constituting "a vantage point in deconstructing identity." The multilingual nomad is perpetually "in transit between the languages, neither here nor there,"[92] and instead "stands for moveable diversity; the nomad's identity is an inventory of traces."[93] These traces mark a strong correlation between multiply fluid geography and multiply fluid identity, empowered by physical and linguistic mobility. Similarly, through her travels, Binti becomes a sort of piecemeal posthuman conduit for communication across the boundaries and distrustfulness that pervade her cosmos, allowing her to (at least attempt to) facilitate and foster more cosmopolitan relations across many peoples/species, places, and scales.

Importantly, however, though Binti is centrally and uniquely positioned in the texts as someone capable and willing to communicate across many groups, this capacity is not exclusive to her or to humans in the novellas. Though, as Iheka argues, too much emphasis on agency "expressed in terms of linguistic and political subjectivities" may problematically link agency back with intentionality, many species do have "a shared communicative trait" with humans,[94] and Okorafor imbues nearly all the creatures in *Binti* with the ability to "speak" with those who are willing to listen. In one telling incident, Mwinyi recalls how an elephant taught him about being a harmonizer who could speak with animals:

88 Thacker, "Data Made Flesh," 86–87.
89 DeLoughrey, "Ordinary Futures," 367.
90 Thacker, "Data Made Flesh," 86.
91 Rigby, "Spirits That Matter," 286.
92 Rosi Braidotti, *Nomadic Subjects: Embodiment and Sexual Difference in Contemporary Feminist Theory*, 2nd ed. (New York: Columbia University Press, 2011), 39.
93 Braidotti, *Nomadic Subjects*," 41.
94 Iheka, *Naturalizing Africa*, 44.

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> "They rushed up to me," he said. . . . "I heard her charge, 'Kill it! Kill it!' I looked up and I answered her. 'Why?!' I shouted. She stopped so abruptly that the other ran into her. . . .
>
> "When they all recovered, she spoke to me, again, 'Who are you? How are you able to speak to us?' And I told her. . . . She and I spoke that day about tribe and communication. And for many years, we met there when the moon was full, as we agreed. . . . When it wasn't a full moon, I was able to call Arewhana, that was her name, from far away. She taught me how to do it. It was something she said I could do with larger, more aware animals like elephants, rhinos, and even whales if I ever ventured to the ocean.
>
> "Arewhana taught me so much. *She* was the one who told me I was a harmonizer. And she was the one who taught me how to *be* a harmonizer."[95]

Though anthropomorphized, Okorafor's portrayal on this interaction follows Iheka's assessment of "strategic anthropomorphism" as "the deployment of narrative strategies as well as the so-called 'human languages' for critiquing environmental challenges and staging sustainable lifeworlds."[96] By allowing elephants, aliens, Miri 12s, and others the capacity to communicate, the texts give direct voice to the distributed agency of environmental relationships, the opportunity for all actors to articulate alternative perspectives and claim a place within a "world environmental citizenship"[97] of shared ecological and cosmopolitan space.

Binti's own characterization as a figure of multiplicity comes to a head during the climactic moment of conflict between the Meduse and the Khoush, when she marshals her communicative capacity to invoke the Himba "deep culture" to attempt to harmonize a peace between the warring factions. Normally, only the collective efforts of the elders can call forth the deep culture, but when they refuse to help, Binti realizes, "I'm a collective within myself," so she can incite the deep culture on her own. When she does so, she describes, "I pulled from deep within me, from the earth beneath my feet, from what I could reach beyond the Earth above . . . speaking the words to power."[98] Her ability to "reach beyond the Earth" comes in part from her imbrication with other collectives like the Enyi Zinariya and the Meduse, who both have methods of communicating across great distances, even from one planet to another. Indeed, as her bodily, cultural, and discursive accumulations push her further and further beyond the isolated village of Osemba, Binti increasingly represents the possibility and imperative of "thinking at planetary scales" offered by "multispecies ontologies."[99] Unlike the rest of the Himba, Binti sees herself as part of, and actively pursues, wider networks of history, conflict, influence, and interdependence.

Such cosmopolitics decenter, but do not entirely elide, the localism favored by the Himba and the particular brand of deep ecology and place entrenchment they represent. In her foundational work on scale and environment, *Sense of Place, Sense of Planet*, Ursula Heise writes that a sort of "eco-cosmopolitan environmentalism" might be needed to "engage with steadily increasing patterns of global connectivity." Such

95 Okorafor, *Binti: The Night Masquerade*, 35–36.
96 Iheka, *Naturalizing Africa*, 14.
97 Heise, *Sense of Place, Sense of Planet*, 57.
98 Okorafor, *Binti: The Night Masquerade*, 116–17.
99 DeLoughrey, "Ordinary Futures," 362.

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global networks are often disparaged as a kind of "deterritorialization," but might also "become the basis for cosmopolitan forms of awareness and community, both ecologically and culturally."[100] Such a global view, "complete with its reach into space and other planets, informs a more nuanced ecological perspective in many ways."[101] Heise also insists, "This deterritorialization of local knowledge does not necessarily have to be detrimental for an environmentalist perspective, but on the contrary opens up new avenues into ecological consciousness . . . a sense of how political, economic, technological, social, cultural, and ecological networks shape daily routines."[102] Kate Rigby sees such a planetary awareness connected with Val Plumwood's notion of a "philosophical animism" that is " 'place-sensitive' rather than 'place-centric' or 'place-bound,' entailing journeying no less than abiding."[103] These interpenetrating and mutually influencing scales are central to Okorafor's depiction of cosmopolitan ecology, as the agency and interests of myriad species intersect in complex relations, histories, and geographies from Osemba to Oomza Uni. The cosmopolitan impulses of Binti's journey to discover a wider world and peaceful coexistence with diversity are grounded by an ecological underpinning to many of the connections and conflicts she encounters. It is worth noting, for instance, that the Meduse-Khoush war began generations before over water, which the Meduse worship as a god but do not have on their own planet.

At the same time, given the animist strain in the texts, *Binti*'s cosmopolitan scale of relations inherently includes nonhuman actors and their interests as participants in the polis. Here Okorafor's cosmopolitan ecology seems to exceed in scope Heise's eco-cosmopolitanism, in that the ecology itself (animals, land, water, plants, spirits, microbes) claims direct constituency in the cosmopolitics. Where "eco-cosmopolitan" uses *ecology* as an adjective, labeling a sphere of shared human concern over environmental problems at many scales, Okorafor's "cosmopolitan ecology" engages both terms equally, portraying all the ecological constituents as having interests and agency that must be part of the cosmopolitan solidarities and contestations. By so thoroughly enmeshing Binti within multispecies ontologies, ecologies, and plots across all scales (from microbial to interplanetary), the narratives draw attention to the way "power in a multispecies world is redirected on scales and in spaces that often elude perception. The evidence is . . . written in the dirt, which our shit combines with bacteria, weeds, and worms to make the soil out of which empires and their discontents grow";[104] and equally, it is written at the scale of empires and planets, bringing conflicts and technologies to bear on soil and water.

When the Meduse then attack Binti's ship on the way to Oomza Uni at the beginning of the series, it is because "In your university, in one of its museums, placed on display like a piece of rare meat is the stinger of our great chief," leaving a "scar that would always remind it of what the human beings of Oomza Uni had done to it for the sake of research and academics,"[105] a move echoing the colonial and postcolonial indignities faced by countless creatures and indigenous communities (including the aforementioned elephants, who have now largely excluded themselves from

100 Heise, *Sense of Place, Sense of Planet*, 210.
101 Geier, "Noncommittal Commitment,"57.
102 Geier, "Noncommittal Commitment,"55.
103 Rigby, "Spirits That Matter," 284.
104 Ahuja, "Postcolonial Critique in a Multispecies World," 561.
105 Okorafor, *Binti*, 56, 84.

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interaction with humans except through violence). By giving voice and agency to the aggrieved nonhuman, Okorafor's world suggests that the peaceful interspecies cohabitation of the Himba sits alongside and within larger networks of relations rife with struggle that must be worked through rather than idyllically elided.

In the end, Binti is unable to stop the war between the Khoush and Meduse, a failure that speaks to the fact that these cosmopolitan ecologies are not always harmonious, either for herself or for others. The consequences of her various interactions linger and compound, altering her and her relationships. For instance, while she comes to revel in the "freedom" of space having been attached to New Fish, Binti is also physically anchored to the creature, a "paired person," unable to be apart more than "five miles on land and seven in the air" without the danger of pain and death.[106] Indeed, she is increasingly bound to all of her various constituent parts, burdened by their histories and beholden to them in her future. She is told, for instance, that any children she has will have "your *okuoko* because Meduse DNA is strong," and would also have the same New Fish microbes, with "the possibility that your child would be part of New Fish as well," physically anchored to the creature as she is. Upon realizing that "My past and present have become more and *now my future*?" she bemoans:

> I didn't go on my pilgrimage when I went home. That was supposed to complete me as a woman in my village. Instead, my mere *presence* started a *war*! . . . I *like* who I am. I *love* my family. I wasn't running away from home. I don't *want* to change, to grow![107]

Yet growth seems exactly the fate for Binti and the thrust of Okorafor's cosmopolitan ecology. Mwinyi says of Binti, "She's a master harmonizer, but what harmony did she bring? . . . Binti was . . . was more than a harmonizer. . . . Binti was change, she was revolution."[108] After the violence, Binti realizes:

> I felt good. About everything. The war had begun again, my home would never be what it was, but this, I understood more than ever now, was inevitable. Change was inevitable and where the Seven were involved, so was growth. My family was *alive*, the Enyi Zinariya were going to meet them and help Osemba *survive* and evolve. . . . Osemba would change and grow.[109]

What Okorafor envisions, then, is not the pursuit of harmony as a stable, unchanging environmental peace, which risks "quelling, certainly, the various competing human interests in play" in favor of the "correct" ecological arrangements.[110] Okorafor's commitment to both cosmopolitanism and ecology means forestalling dogmatic pronouncements about the proper form of human-nonhuman relations, embracing the "processual, socially situated, aspirational, self-problematizing, . . . incomplete and contested nature of any cosmopolitan claim,"[111] especially ones that take seriously the

106 Okorafor, *Binti: The Night Masquerade*, 194.
107 Okorafor, *Binti: The Night Masquerade*, 192–93.
108 Okorafor, *Binti: The Night Masquerade*, 135, 137.
109 Okorafor, *Binti: The Night Masquerade*, 155–56.
110 Geier, "Noncommittal Commitment," 70–71.
111 Schiller and Irving, "Introduction," 5.

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participation of nonhuman agents and the dynamism inherent in interspecies diversity. Rather, the hope is for r/evolution in the relations between human and nonhuman: revolutionary in the sense that it engages agency and desire, a will to change grown out of past conflicts and aimed at future hopes; and evolutionary in the sense that it imbricates human and nonhuman, biological and technological, material and spiritual in a complex and ongoing process of growth that exceeds our control even as it manifests through our interactions.

Binti is set in the midst of just such a dynamism—a world already fundamentally altered by climate change and imperialist domination of places like Binti's homeland yet persisting and evolving beyond that history. The series embodies a posthuman fiction "largely uninterested in utopian/dystopian environmental discourse" and instead is "busy asking local, political, and practical questions about how best to care for the fallen world that we make and that makes us."[112] The texts approach that opportunity for growth and care from SF's comic mode, which understands environmental degradation "not only as a narrative endpoint, but as the possibility of new beginnings—not the end of nature so much as its continually changing futures."[113] As a fusion of SF and animist magical realism, *Binti* not only speculates, but prepossesses such a future and its dynamic continuity with an African heritage of proximity with the nonhuman. As such, the texts portray a postcolonial situation not marked by deconstruction, incongruous fragments, or the play of absences; rather, they posit a genuinely *post*-colonial space for Africans and nonhumans to harmonize their ever-present differences, a space of presence and possibility itself grown from the loam of imperial and ecological conflict and r/evolving into an uncertain yet fecund future.

Seen this way, the form of *Binti* itself is cosmopolitan; as Robert Spencer argues, "Genuine aesthetic experience, by which I mean the disconcerting and frequently disorienting encounter with different voices and points of view . . . is a potential route to a cosmopolitan future."[114] Okorafor's animist SF gives space precisely to these alternate African and nonhuman voices with which she argues we must cultivate relations of solidarity. Through her fiction, Okorafor herself acts as a master harmonizer, bringing together diverse genres and modes of knowing to lay claim to an alternative future, in part precisely through a r/evolution of the very forms through which we might imagine it. Here, revolution alludes not only to the struggle for a new position for African traditions and cultures within SF, but also to the cyclicality those cultures might contribute to the evolution of the genre—reaching back to deep traditions of animist understanding to imbue SF with a new openness to becoming and possibility. The result is a more truly cosmopolitan SF, open to more voices (human and otherwise) that might contest and grow the future of the genre and the worlds it imagines. By gathering the whole cosmos within a single, disputed, vibrant, multilingual, multispecies polis, *Binti* invites readers to prepossess a flawed yet comic future of care that recognizes the posthuman possibility of an oikos coming into being that belongs to and is shaped by many.

112 Outka, "Posthuman/Postnatural," 45.

113 Ursula Heise, "Lost Dogs, Last Birds, and Listed Species: Cultures of Extinction," *Configurations* 18.1–2 (2010): 72.

114 Robert Spencer, "Whose Cosmopolitanism? Postcolonial Critique and the Realities of Neocolonial Power," in *Whose Cosmopolitanism: Critical Perspectives, Relationalities and Discontents* (New York: Berghahn, 2015), 38.

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