Science Fiction and Magical Realism:

African Environmentalism in the Organic Fantasy of Nnedi Okorafor

A thesis submitted in fulfilment of the degree of Master of Arts in the Department of English, University of the Western Cape

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Keywords

African literature, Amitav Ghosh, ecocriticism, *Great Derangement*, *Lagoon*, magical realism, Nnedi Okorafor, science fiction, *Who Fears Death*

Abstract

This is a work of ecocriticism—the interdisciplinary study of literature and environment—which takes as its point of departure the environmental and literary insights of Amitav Ghosh in *The Great Derangement: Climate Change and the Unthinkable* (2016). According to Ghosh the conventions of literary realism, and the context within which those conventions gained ascendancy, present a range of shortcomings in respect of the depiction of climate change in literature. This thesis brings Ghosh's insights about literary realism into engagement with critiques of realism pertaining to postcolonial ecocriticism and African literature. I make the case for African science fiction—a blend of science fiction and magical realism exemplified by the works of Nnedi Okorafor—as an environmental literary form par excellence, able to overcome the challenges identified by Ghosh and, moreover, able innovatively to depict a range of African environmental issues. I explore the ecocritical potential of Okorafor's fusion of magical realism and science fiction—two narrative forms with uncanny similarities that inhabit vastly different positions both within the African literary landscape and within the world of literary criticism—by taking as case studies two of Okorafor's novels, namely *Who Fears Death* (2010) and *Lagoon* (2014). Exploring how Okorafor puts to use the conventions and thematic elements of science fiction and magical realism in each novel, I find that her non-realist narrative modes, which incorporate African modes of apprehension of the world, create novels which address environmental concerns more rigorously than do realist novels.

Chapter 1: Introduction

Problematic Realisms: Insights from *The Great Derangement*

This study has as its primary focus the burgeoning genre of science fiction within African literature as it relates to ecocritical readings of African literature. It takes as its point of departure, however, a sustained critique by Amitav Ghosh which suggests that literary realism presents a range of shortcomings in respect of the depiction of climate change in literature. In *The Great Derangement: Climate Change and the Unthinkable*, Ghosh asserts that realism has played a significant role in furthering the belief, held by humans for the past three centuries, that the earth is a placid and inert system. This belief, according to Ghosh, among other associated ideas linked with the realist novel, renders the representation of climate change in realist literary fiction a challenging endeavour for the contemporary writer. The impediments to depicting climate change, as Ghosh puts it, "derive ultimately from the grid of literary forms and conventions that came to shape the narrative imagination in precisely the period when the accumulation of carbon in the atmosphere was rewriting the destiny of the earth" (7). To Ghosh, then, there is a decided relationship between the trends and practices of literary production and the broader context within which those trends and practices were gaining ascendancy. The increase in industrial greenhouse gas emissions—synonymous with the industrial revolution—has brought about significant changes to the world. It has changed how we produce and consume, how we move about, and, thus, our lifestyles and carbon footprints. These transformations have had knock-on effects in the world of literature. Art, as the saying goes, imitates life. What Ghosh has pointed out is that realism, the "trending" literary form as greenhouse gas emissions began to rise, failed to kindle or reflect a cultural awareness consistent with coming impacts associated with the rise in emissions and other anthropogenic activity. For Ghosh, this lack of awareness is

attributable to specific conventions of the realist novel, which is shown to be ill-suited to depicting the environmental threat of climate change. Literary realism is similarly ill-suited to addressing a range of other environmental concerns, not least of which is the anthropocentrism said to be at the root of ecological crises. Having established an understanding of the challenges posed by realism, this study sets out to examine two novels by Nnedi Okorafor, whose writing is seen as exemplary of an emergent movement of African science fiction narratives, and to ascertain the extent to which Okorafor's non-realist narrative modes, which incorporate African modes of apprehension of the world, create novels which address environmental concerns more rigorously than do realist novels. Okorafor describes her work as "organic fantasy," writing that it "blooms directly from the soil of the real" (278). The magical powers wielded by her characters and the fantastical properties of the creatures, says Okorafor, "are not simply whimsical phenomena that I cooked up," asserting that her non-realist tales have a "method, purpose and realness" (277). This study thus also undertakes to demonstrate how Okorafor's methods, characters, and creatures, serve to reveal a higher truth about environmental realities in African contexts.

This study comprises of five chapters. In the remainder of this introductory chapter, I shall contextualise Ghosh's observations about realism and its inadequacy in addressing climate change within a broader discussion about realism as the literary mode upon which ecocriticism was founded. I shall also consider the limitations of literary realism in addressing African concerns with colonialism, and conflicting ontologies, all of which are intimately connected with questions of environmentalism. I follow this up with a detailed examination of Ghosh's assertion vis-à-vis literary realism and the challenges its conventions pose to the depiction of climate change. In chapter 2 my focus shifts to Okorafor, whose work is exemplary and representative of African science fiction. Amid her views about genre, I

provide an overview of scholarly opinion about how she blends science fiction with magical realism. From here I explore these genres, highlighting the themes and conventions of each, before discussing their applicability to environmentalism. In chapters 3 and 4 I turn to the primary texts, two Okorafor novels, *Who Fears Death* and *Lagoon*, in which I undertake two separate ecocritical readings of each text, first focusing on the literary strategies, themes and conventions of science fiction, and then those of magical realism, assessing the ways in which each of these literary modes overcome the challenges identified by Ghosh. Chapter 5, the conclusion, is where I discuss the relevance and importance of this study to the broader contexts of both ecocriticism and environmentalism in Africa.

The Limits of Realism in respect of African Environmental Forms

For the purposes of this study, Ghosh's evaluation of realism in the age of climate change must be understood as a prominent thrust among other critiques of realism, specifically in relation to postcolonial ecocriticism and African literature. Prominent among these discourses, is how the priorities of African environmental writing diverge from ecocriticism as it emerged from an Anglo-American sub-branch of literary studies focused on nature writing. It stands to reason that the environmental concerns of African ecocritics would diverge from those of the Anglo-American writers, whose reflections on nature are today considered the founding statements of ecocriticism as a literary discipline. These divergences can be seen as central to William Slaymaker's assertion in 2001 that "there is no rush by African literary and cultural critics to adopt ecocriticism," (132) and diagnosing this supposed reticence as "ecohesitation" (133). In the introduction to *Natures of Africa: Ecocriticism and Animal Studies in Contemporary Cultural Forms*, however, Fiona Moolla points out that a conference on 'Literature, Nature and the Land: Ethics and Aesthetics of the Environment' had been held at the University of Zululand in South Africa in 1992, which

predates 1993, the year which Cheryll Glotfelty identified "as the year in which ecocriticism emerged as a clearly defined critical school in the Anglo-American academy" (2). Slaymaker's characterization of African scholars as reluctant latecomers to ecocriticism has thus been shown to be spurious. Notwithstanding this rectification, analyses of the works of nature writers from the north are still largely cited among the foundational texts of ecocriticism, and environmental concerns from that body of work has been influential to the development of the discipline. The content of environmental matters of concern to Africans remain, up to the present, largely different from environmentalism located in Anglo-American contexts. Twentieth-century African fiction has tended to focus on the land despoliation effects of colonialism and capitalism. What is less obvious is that the realism adopted by African writers, especially as it relates to elements of the natural world, also differs somewhat from the realist form favoured by early Anglo-American nature writers. Even Chinua Achebe's *Things Fall Apart*, an established title in the African literary canon, and the novel that set the precedent for serious African writers to adopt the realist mode, drew much scholarly commentary for the ways in which it diverged from European realism. At the heart of this commentary is that the realism in *Things Fall Apart* is drawn more from the cultural authenticity of its depiction of African traditional life and its worldview, replete, as it is, with proverbs and aphorisms, rather than from those elements—the prosaic, empiricism, rationality and progress—which align it to modernity and from which European realism gains its impetus. In his essay "Where Angels Fear to Tread," Achebe highlighted a key difference between African and European approaches to representational aesthetics, taking issue with a scholar who had said that "the trouble with what we have written so far is that it has concentrated too much on society and not sufficiently on individual characters and as a result it has lacked 'true' aesthetic proportions" (77). African realism, then, was writing which merely resembled the non-literary style of newspapers and anthropological accounts, yet also

sought to provide a more realistic account of Africa and the African cultural milieu than the realism written by Europeans. According to Gerald Gaylard, there is a "trajectory of transculturation" to be traced vis-à-vis the use of literary realism in Africa, from "its genesis from the primary mode of the western novel form to its utilization in anticolonial nationalist resistance literature during the 1950s and 1960s and transmogrification into the magical realism and postmodernism of postcolonial writing" (277). African narrative thus reflected a worldview initially seen to be at odds with the early ecocritical practice that sought to express its appreciation of nature through an emphasis on conservation, on the detailed descriptions of pristine landscapes untouched by humans as well as through an alignment with scientific knowledge. It is for this reason that Anthony Vital asserts that African ecocriticism "will need to be rooted in local (regional, national) concern for social life and its natural environment," and that it "will need too to work from an understanding of the complexity of African pasts" (88). African engagement with the environment thus diverges both in content and form from the originary texts out of which ecocriticism emerged. This divergence is at the heart of scholarship about the tension between what is now called "first-wave" ecocriticism and postcolonial studies, inasmuch the former's alignment with deep ecology and the appreciation of an unspoilt nature has been seen as part of a desire of the privileged to elide a problematic colonial history in which indigenous peoples, in Africa and elsewhere, have been dispossessed of their lands and their biodiversity irreparably altered. There have, of course, been methodological reasons proffered to explain first-wave ecocritics' preference for realist forms. In *Different Shades of Green: African Literature, Environmental Justice and Political Ecology*, one of the first book-length studies of African environmental literature, Byron Caminero-Santangelo points out that 'first-wave' ecocritics "embrace mimetic approaches to environmental representation, with a focus on the ways literary writing might break through culturally and politically inflected constructions of the

environment to achieve a clear, unmediated reflection of the natural world and to give voice to nature" (10). The implication here is that 'first-wave' ecocritics regarded politically and/or culturally modulated depictions of the environment as an impediment to the 'true' representation of nature, and that obtaining a "clear, unmediated reflection of the natural world" involved the use of detail gleaned from empirical observation as well as introducing and employing concepts from scientific disciplines such as ecology. There is likewise an implication that for 'first-wave' ecocritics, the purpose and method of ecocriticism somehow involved emptying literary reflections on nature of their cultural and political content, subscribing to a partitioning between the categories of nature and culture.

Excluding, or moving to the background, the cultural and/or political content of environmental writing involves moving to the foreground some other content. If that content is empirical detail about nature, it is most likely to be rendered as realist. In *Postcolonial Ecocriticism*, Graham Huggan and Helen Tiffin, drawing from Lawrence Buell's insights on the environmental imagination, likewise highlight this preference in early ecocriticism for realist forms. They make reference to "a set of aesthetic preferences for ecocriticism which is not necessarily restricted to environmental realism or nature writing, but is especially attentive to those forms of fictional and non-fictional writing that highlight nature and natural elements (landscape, flora and fauna, etc.) as self-standing agents, rather than support structures for human action" (13). It is here similarly inferred that realism has been a form preferred in ecocriticism because of its narrow focus on detailed descriptions of elements in nature and because it tends to keep ideas about nature separate from its involvement in the welfare of humans. In her essay, "Towards an ecocriticism in Africa," Chengyi Coral Wu points out that "ecocriticism has come under fire as a perspective that privileges white middle-class male values of environmentalism, and ignores class, racial and gender

difference, and the colonial/neocolonial violence perpetrated on colonial/postcolonial environments" (151). By implication, less attention is accorded those forms inconsistent with empirical detail and Western rationalism. Less attention is also accorded those forms breaching the partition between nature and culture, and narratives that emphasise the interconnections between humans and the natural world, or that reflect the animist beliefs of numerous indigenous cultures. It should be acknowledged that not all early ecocritics adhered to such approaches. Ecocriticism, after all, emerged as a principled and germane discipline, with different regional inflections. William Ruekert—who coined the term ecocriticism—framed his undertaking as an endeavour to "generate a critical position out of a concept of relevance" (107), rather than subscribe to the proliferation of "new critical theories and methods… … which are evermore elegant, more baroque, more scholastic" (106). As an emerging form of literary criticism, it represented move away from theory's solipsism. Consider also Lawrence Buell's description of the ecocritical movement as "energized by two chief ethico-political commitments: protection of the endangered natural world and recuperation of a sense of how human beings have been and might be imagined as (re)connected with it, notwithstanding the threat of the death of nature from industrialism and/or postmodernity" (640). Notwithstanding the multiplicity of early ecocritical approaches, the dominant position of Anglo-American texts led to an emphasis on unspoilt landscape and a valorisation of realist representation. This narrow focus on pristine nature can be found at work in the world of ecological practitioners and development organisation, where this emphasis has given rise to a so-called green vs. brown debate, which voices disquiet about environmentalism as an undertaking focused on green issues like the conservation of plant and animal species; yet one that ignores brown issues, such as poor sanitation, lack of access to clean water and the rights of people, especially in urban contexts, to a clean and healthy environment. In the literary world this emphasis on wilderness

untouched by human affect logically produced a marked influence on the theory and practice of ecocriticism during its incipient period. In "Theorizing Ecocriticism: Toward a Postmodern Ecocritical Practice," Serpil Oppermann notes that early ecocritics were at a loss for a "theoretical method" and "viable model of interpretation" for their discipline (105). In order to achieve what they were prompted to do in the discipline's definition—maintain a focus on the relationship between literature and the physical environment—they sought to bring ideas about literary aesthetics into dialogue with scientific concepts from ecology and conservation, and in order to do that, writes Oppermann, "they espoused literary realism as their method of analysis and situated ecocriticism firmly in realist epistemology" (106). What Oppermann is pointing out is not merely that realism was seen by early ecocritics as the appropriate literary form for their discipline, but also, by corollary, that they saw non-realist modes of writing as ill-suited to a marriage between literary prose and scientific concepts. Realist texts, then—consistent in style as they are with the rational and scientific discourses of non-fiction—were considered by early ecocritics as the "main game in town". Scholars motivating for the importance of postcolonial issues in ecocriticism have mentioned the centrality of realism in a problematic early ecocritical practice. In response to Slaymaker's observations about African writers and critics' 'ecohesitation,' Chengyi Coral Wu writes:

> I would suggest that what African scholars are sceptical about with regard to ecocriticism is not ecocriticism itself as an environment-oriented approach, but rather the methodologies or values and assumptions that Anglo-American ecocriticism tends to endorse and treat as universal. (151)

An awareness of how central realism has been to the methodologies, values and assumptions to which Wu is referring, calls for an attentiveness to how those values and assumptions are

encoded in environmental writings, with a view to identifying ideological and attitudinal constructions that are subtly elided. Ecocriticism has come a long way since there have been methodologically preferred literary forms and texts, and it has expanded significantly from an emphasis on conservation and biodiversity to include ideas drawn from environmental philosophy and from environmental justice. Much of this expansion, I would argue, is attributable to the influence of postcolonial studies on ecocriticism. It should be noted, however, that ideas about emptying texts of political or social content, and about the primacy of realism from the discipline's origin, often persist with great doggedness and remarkable subtlety.

Notwithstanding the methodological justifications discussed above, Caminero-Santangelo explains this preference for "mimetic approaches" among some early ecocritics as having to do with the desire to sidestep a deeply problematic colonial history. The environmental discourses underpinning the nature writing of Henry Thoreau and John Muir, focused as it often was on sublime wilderness of North America, facilitated the depiction of colonised territories as empty of the indigenous peoples who had originally populated those lands, justifying its theft. Indigenous people were similarly depicted as culturally backward, and developmentally on par with animals. In relation to Africa, the realist elements of environmental discourses likewise emphasise its alignment to rationality and scientific principles of empiricism in order to depict, by contrast, the worldview of African peoples as superstitious and unscientific, painting Africans as insufficiently competent to manage their environments and the main cause of environmental despoliation on the continent. No mention is made of the indigenous knowledge that had for generations guided the stewards of these lands. The realist form employed in such environmental discourses is explicitly aligned to scientific knowledge to lay claim to scientific objectivity and neutrality, the idea that the

claims, methods and results of scientific inquiry are supposedly free from perspectives associated with bias or self-interests, or indeed, cultural and political values. Such claims of objectivity and neutrality are, of course, spurious. The mimetic approaches referred to by Caminero-Santangelo play an integral role in positioning Africa as a location in need of the supposedly dispassionate and benign expertise of those in the West. He writes that:

> Over the last thirty years, many geographers and environmental historians have argued that traditional Western wisdom about environmental change and conservation in Africa has been a form of colonial discourse that works all the more effectively through claims to its scientific validity and/or its apolitical objectivity. Such wisdom celebrates Western environmental knowledge and denigrates indigenous environmental practice, suggesting that Africans do not understand or abuse their environment and that Western experts (or Africans guided by such experts) need to protect it. (3)

Caminero-Santangelo shows that there exists a well-worn and generally accepted outlook in the West regarding environmental management and conservation in Africa, which is little more than a colonial discourse which justifies the control of African resources by vested interests in Europe and the United States. Moreover, his insight highlights how realism's "claims to its scientific validity and/or its apolitical objectivity" serve both to conceal the true avarice of colonial exploits and justify the continued presence of Western influence in Africa.

Ghosh asserts, as I briefly noted earlier, that the conventions of the realist novel furthers an obliviousness to the dynamism and agency of natural and atmospheric systems that sustain us. Ghosh identifies, in addition, a range of generic conventions associated with

the realist novel—such as it favouring the probable and the prosaic, its alignment with bourgeois values and human timeframes, its focus on individuals rather than societies—which serves to inhibit the representation of the climate threat facing humanity. Had the realist novel not been so celebrated and central a form in literary aesthetic history, this might not pose such a problem. But in certain circles, the realist novel is deemed *most* worthy of our critical attention. Ghosh points out the paucity of literary works that both engage with the risk factors associated with climate change and are well-regarded by high-brow literary journals, citing as examples the *London Review of Books*, the *Los Angeles Review of Books*, and the *New York Times Review of Books*. Ghosh holds that in these publications, "the mere mention of the subject [of climate change] is often enough to relegate a novel or short story to the genre of science fiction. It is as though in the literary imagination climate change were somehow akin to extraterrestrials or interplanetary travel" (7). For these critics, climate change—a phenomenon for which there is an overwhelming scientific consensus—is as questionable and implausible an occurrence as any of the technological or biological novelties so central to science fiction. Given that there has, to date, been no reputable reports about visitors from other galaxies, and that, by contrast, news about climate change—causes and effects—daily rack up inches in even the most conservative of broadsheets, this attitude within the world of literature should certainly be seen as particularly mystifying. It stands to reason that Ghosh frames contemporary society's representational difficulties with climate change as a "crisis of culture," and holds that contemporary humans are living in a time when the literary forms taken seriously by our society are the very forms embroiled in the concealment of the proximity and vitality of nonhuman forces.

Insights of the Real: Challenges to Representing Climate Crisis

In *The Great Derangement: Climate Change and the Unthinkable*, Amitav Ghosh writes that "[t]he humans of the future will surely understand, knowing what they presumably will know about the history of their forebears on Earth, that only in one, very brief era, lasting less than three centuries, did a significant number of their kind believe that planets and asteroids are inert." (3) This seemingly prescient insight into the knowledge of humans in the future is distilled from the absolute preposterousness of a scene from *The Empire Strikes Back* (1980), in which Han Solo lands the Millennium Falcon in what he thinks to be a cave on an asteroid, only to discover that he had in fact landed the spacecraft in the throat of an Exogorth, or space slug, a creature later described as one of the most memorable life-forms in the film. Laughable as the scene may be, Ghosh is concerned with the moment when Solo discovers that he and his crew are perched on living matter. "Who can forget those moments," writes Ghosh, "when something that seems inanimate turns out to be vitally, even dangerously alive," citing as examples a dog's tail mistaken for a pattern in a carpet; a vine mistaken for a worm or worse, a snake; or even "a harmlessly drifting log [which] turns out to be a crocodile." (3) Seeking to contextualise this phenomenon to the experience of a collective, he describes how the village of his ancestors was drowned when the Padma River, without warning, unexpectedly changed course one day in the 1850s, with just a few survivors escaping to higher ground. The point of this reflection on the vitality and agency of a waterway is, for Ghosh, to illustrate how our present-day generation may be regarded by humans from the future, that people from our age lived in an era in which we—foolishly and mistakenly— believed that planets and asteroids are lifeless hunks of rock, that vines are merely vines, patterns in carpets just what they appear to be, and harmlessly drifting logs, innocuous pieces of driftwood without risk. In short, like Han Solo, we humans are blissfully and dangerously unaware of the dynamism of the rock upon which we are perched. Up until

very recently, we firmly believed in the absolute predictability of natural and environmental systems, and a blinkered segment continues to believe so.

How, one may well ask, is our blindness to the vitality and agency of natural and nonhuman forces attributable to the literary forms and conventions of our current era? To Ghosh, it is a patent matter, since it is abundantly clear that our blindness to nonhuman agency does not readily appear to operate in the sphere of nonfiction. If writers of fiction have, since storytelling began, been addressing problems in our society such as gender, race and class, why have they taken so long to tackle climate change, a problem that scientists have known about for over 40 years and which has been in the mainstream consciousness since the Rio Earth Summit in 1992? "Clearly the problem," writes Ghosh, "does not arise out of a lack of information," adding that "there are surely few writers today who are oblivious to the current disturbances in climate systems the world over" (8). The Intergovernmental Panel on Climate Change (IPCC), the world's most authoritative scientific body on the topic, is unequivocal about the scale of the problem, and about the whirlwind humanity can expect to reap – sea level rises, droughts, floods, vector-borne diseases and increased incidents of extreme weather events. With these unambiguous and indisputably life-threatening projections extant in the common consciousness, how is it that they hardly feature in the celebrated and venerated fiction of our time? "And if the urgency of a subject were indeed a criterion of its seriousness," writes Ghosh, "then, considering what climate change actually portends for the future of the earth, it should surely follow that this would be the principal preoccupation of writers the world over – and this, I think, is very far from being the case" (8). That an issue with the gravity of climate change is largely ignored in literature most certainly points to a compelling problem among a great many literary minds. The main problems faced by humanity—from gender to race to war—have been the very

issues reproduced in literary works since its inception. Indeed, the seriousness with which a work of fiction has been considered often depends on its willingness to tackle issues of global importance and gravity. How is it that the climate crisis appears to be suppressed in what is classed as serious fiction? One is tempted to reflect that the vested economic and political interests pushing climate change denial also somehow exert influence on what is considered serious among the literati.

Climate change is undoubtedly a serious problem, but, as Ghosh has pointed out, fictional narratives in which the topic is broached tend not to be seen as serious literature, consigned, as it were, to marginalised genres, such as science fiction. Ghosh is correct in identifying science fiction as one of the forms that is able to make a go of depicting elements of the climate change crisis, albeit only to point out that this particular genre is regarded with suspicion as a "low" genre. Numerous scholarly contributions have identified science fiction's suitability to engaging with environmental issues, a matter I shall deal with in greater detail. Other non-realist and speculative genres have similarly shown their usefulness to ecocriticism. In "On the Obsolescence of the Bourgeois Novel in the Anthropocene," an insightful commentary on *The Great Derangement*, McKenzie Wark writes "I would argue that some of the best responses to climate change, or the Anthropocene more generally, are science fiction, including work by Kim Stanley Robinson and Margaret Atwood." (Wark, "On the Obsolescence" n.pag.). The failure, then, is to take seriously such forms, to avoid relegating them to, what Ghosh calls the outhouse. Science fiction's credibility problem seems to be well understood. In *Reading by Starlight* Damien Broderick points out that "[n]on-realist codes of storytelling have been, since at least the nineteenth century, broadly restricted to childhood storytelling," and that "[t]o carry them into adolescence and adulthood is easily regarded as a sign of immaturity, of failure to take responsibility for one's

complicity and obligations in the empirical world" (11). It similarly does not help that covers of the early pulp sci-fi magazines were seen as indecorous and licentious, often featuring skimpily clad women in need of rescue from bug-eyed-monsters. It is therefore unsurprising that Atwood, whose speculative narratives have attracted high praise from the science fiction community, has sought to distance her novels from the science fiction label, in what appears to be an attempt to stress the validity and social relevance of her novels. In an article in *The Guardian* entitled "'Aliens have taken the place of angels," Atwood motivates for "a distinction between science fiction proper and speculative fiction," explaining that "the science fiction label belongs on books with things in them that we can't yet do, such as going through a wormhole in space to another universe," (Atwood, "Aliens" n.pag.) whereas "speculative fiction means a work that employs the means already to hand" (Atwood, "Aliens" n.pag.). While qualifying that there exists some fluidity among these labels, Atwood highlights the ability of these genres to do a range of things "that socially realistic novels cannot do," (Atwood, "Aliens" n.pag.) and principal among these things is to unpack the full costs and consequences of humanity's technological choices. Notwithstanding Atwood's distinction, for the vast majority of readers it is neither here nor there. Writing in the *SFE*, Peter Nicholls and David Langford point out that speculative fiction was at one point conceived as a subset of science fiction, but they go on to concede that "nobody's definition of 'speculative fiction' has as yet demonstrated any formal rigour," adding that "the term has come to be used with a very wide application as if science fiction were a subset of speculative fiction rather than vice versa" (*SFE*, "Speculative Fiction" n.pag.). Ursula Le Guin's commentary on this is empathetic, explaining Atwood's stance as one "designed to protect her novels from being relegated to a genre still shunned by hidebound readers, reviewers and prize-awarders. She doesn't want the literary bigots to shove her into the literary ghetto. Who can blame her?" (Le Guin, "Year of the Flood," n.pag.). By tackling this issue, Ghosh

highlights that there is a need, among both critics and scholars, to rethink what is considered serious literature, especially when it comes to science fiction and other genre fictions.

For Ghosh, obtaining an understanding of the disdain with which science fiction is currently regarded calls for an historical account of how literary realism came to supplant the romance as the favoured narrative form, and how it came to hold the lofty position it subsequently came to occupy. This historical account is also instrumental as a method for illuminating how literary realism came to be so deeply embroiled in the concealment of nonhuman agency and the temporal scales within which climate systems operate. While much has been said about science fiction as an escapist and frivolous genre, instead of attempting to question and discredit such claims, for Ghosh, the problem pertaining to the climate crisis lies with the conventions of realism, and he goes to some length describing how those conventions are in alignment with the zeitgeist of the period in which it was gaining predominance. Ghosh is not taking issue with the entire mimetic tradition as it stretches back to the Greek theatre and the writings of Aristotle and Plato. He is specifically concerned with the realist mode as it manifests in what he calls the "modern novel" in the 1800s (corresponding roughly with the European Age of Enlightenment), singling out writers such as Jane Austen and Gustave Flaubert. In order to obtain a clear sense of Ghosh's arguments I thought it prudent to first explore some definitions.

So what is the "literary realism" with which Ghosh is taking issue? In *The Concise Oxford Dictionary of Literary Terms*, Chris Baldick defines realism as a "term [which] refers, sometimes confusingly, both to a literary method based on detailed accuracy of description (i.e., verisimilitude) and to a more general attitude that rejects idealization, escapism, and other extravagant qualities of romance in favour of recognizing soberly the actual problems

of life" (212). Baldick similarly defines the novel as a literary genre that "differs from the prose romance in that a greater degree of realism is expected of it, and that it tends to describe a recognizable secular social world, often in a sceptical and prosaic manner inappropriate to the marvels of romance" (173). It is notable that both the novel and realism are defined in contrast to romance, which Baldick describes as relating "improbable adventures of idealized characters in some remote or enchanted setting; or, more generally, a tendency in fiction opposite to that of realism" (221). Romance, of course, was comprised of forms of fiction such as the gothic novel and the scientific romances, spawning such works as *Frankenstein*, *The War of the Worlds* and *Twenty Thousand Leagues under the Sea*. Such works are seen as canonical forerunners to science fiction, in the same way as tales of King Arthur's knights and Edmund Spenser's *The Faerie Queene* paved the way for fantasy. Baldick affirms that "several modern literary genres, from science fiction to the detective story, can be regarded as variants of the romance" (221). Baldick's definitions are consistent with Ghosh's assertions about how realism came to supplant romance as the literary form to be taken seriously. It makes sense that realism as a literary method, rooted in its practice of prosaic and detailed observation, and in its attitude of rejecting the extravagances and improbabilities of fanciful individuals operating in charmed settings, should come to be considered a form both more accurately reflecting real life as well as better suited to addressing matters of seriousness.

Ghosh points out that the improbable adventures and idealised characters in romances—as opposed to the prosaic realism of the novel—had initially been very much in the mainstream. "Before the birth of the modern novel," writes Ghosh, "wherever stories were told, fiction delighted in the unheard-of and the unlikely. Narratives like those of *The Arabian Nights*, *The Journey to the West*, and *The Decameron* proceeded by leaping blithely

from one exceptional event to another" (16). The novel, by contrast, as described by Ghosh, is characterised by "the concealment of those exceptional moments that serve as the motor of narrative", operating "through the banishing of the improbable" (17). To explain the concealment of exceptional events in the realist narrative, Ghosh draws on the work of Franco Moretti, one of numerous scholars who have sought to account for the trends in realism by looking at the context within which such trends occurred. For Moretti, the context within which the detailed accounts of the commonplace came to be preferred over the broad strokes of the exaggerated and implausible was one in which there existed a large and growing middle class, whose reading tastes called for a literary form that better reflected bourgeois values and lifestyles. This view prompts Ian P. MacDonald to describe the realist novel as "an interiorized, enclosed textual space, dealing with inns, mansions, carriages, and carefully tended gardens" (9). Moretti is not alone in this contextualisation of realism's growing popularity. In "African Realism: The Reception and Transculturation of Western Literary Realism in Africa," for instance, Gerald Gaylard likewise proposes that the rationality and predictability within which realism had its basis appealed to a growing bourgeoisie who sought "stability and certainty in the midst of industrialism's maelstrom, a quest for a secular humanist substitute for religion's ontological reassurance" (279). Gaylard thus points to a sense of anxiety and uncertainty among the bourgeoisie, brought about both by industrial modernity's high rate of change and by the reduced authority of religion to explain phenomena now accounted for through science. This is consistent with Moretti's assertion in *The Bourgeois: Between History and Literature*, that slowing down the pace of the novel answered the need for stability and certainty, something that was achieved through the inclusion of what he called "fillers," detailed portrayals and imagery of unremarkable elements of daily life. To Moretti, fillers reflect the commonplace activities of bourgeois lifestyles, suggesting that "all they have to offer are people who talk, play cards, visit, take

walks, read a letter, listen to music, drink a cup of tea…," and noting that while they may "enrich and give nuance to the progress of the story," they have negligible impact on the predetermined turning points of the plot" (71). "In this respect," writes Moretti, "fillers function very much like the good manners so dear to nineteenth-century novelists; they are a mechanism designed to keep the 'narrativity' of life under control; to give it a regularity, a 'style'" (71-72). The proposition is that obtaining of such control and regularity involves curtailing the implausible and improbable occurrences from the narrative. "Thus was the novel midwifed into existence around the world," writes Ghosh, "through the banishing of the improbable and the insertion of the everyday" (17). And banished along with the improbable were all depictions of nonhuman agency from the natural world—hurricanes and tornadoes, earthquakes, volcanoes. The side-lining of cataclysmic natural events thus rendered nature, in the modern novel, as mere backdrop to the lives of its characters.

The realist novel, then, in its effort to confront the world in a sceptical and prosaic manner that rejects far-fetched extravagance, is ill-equipped for depicting the radical nature of the climate events humanity is currently facing, such as extreme weather events like hurricanes and tsunamis. Such events are considered too improbable, too excessive, too "over-the-top" to be depicted in serious literary fiction, reinforcing the notion that the human/non-human divide will hold firm, that nature is static and inert, and that weather and the elements hold nothing to fear. As Ghosh suggests, "the currents of global warming [are] too wild to be navigated in the accustomed barques of narration" (8). Ghosh points out that the complicated terminology pertaining to climate change causes and effects poses further difficulties to its representation. "There can be no doubt, of course," he writes, "that this challenge arises in part from the complexities of the technical language that serves as our primary window on climate change" (9). For writers, such specialised jargon can certainly

serve as a barrier. Very few explanations are straightforward when it comes to the causes and effects of climate change. They are typically expressed in thoroughly abstruse scientific language. The carbon dioxide and other greenhouse gases largely responsible for global warming are measured in "parts per million". At the same time, we are told that our global carbon emissions exceed 40 billion tons per year. Attempts to understand who bears responsibility for those emissions involves interrogating data disaggregated to country categories ranging from "cumulative emissions" to "emission per capita". Our understanding of climate change impacts is based on global climate models, computer simulations that project the effects of increases in greenhouse gas concentrations on our atmosphere, oceans, land-surface and sea ice. Even our proposed solutions to the problem are couched in the highly complex legalese of international multilateral agreements, covering a variety of sectors ranging from trade to energy, covering a variety of disciplines from finance to engineering. It goes without saying that any author's attempts to integrate such information into fictional narratives could serve to tire and bewilder the reader, rather than enlighten and entertain. Elaborate and obscure descriptions and detailed material—data and statistics—can conceivably derail the tempo of the narrative's events or dissolve tension that has painstakingly been ratcheted. In the introduction to their book specifically about climate fiction, *Cli-Fi: A Companion,* Axel Goodbody and Adeline Johns-Putra confirm that "[p]articular difficulties in representing climate change in literary or filmic narrative result from the complexity of its causes and manifestations, and the discrepancy between its enormous spatial and temporal scale and that of individual human experience" (10). To put this temporal scale into context, the effects of climate action taken today—such as the dramatic reduction of global emissions—will not, in all likelihood, be witnessed by anyone for generations to come. Overcoming the temporal challenge has, for example, involved rendering discontinuous or intermittent timeframes, perhaps by jumping to events far into the

future, strategies more at home in futuristic narratives than in the realist novel. Similarly, with climate change's spatially dispersed impacts, a common approach has been to focus on a specific location where the suffering and chaos of specified climate change impacts—say ocean-level rise—is intended to be correlative with the multitude of corresponding sites elsewhere in the world—coastal cities—where such impacts will be felt.

I have earlier quoted Ghosh's view that climate change's representational challenges "derive ultimately from the grid of literary forms and conventions that came to shape the narrative imagination in precisely the period *when* the accumulation of carbon in the atmosphere was rewriting the destiny of the earth" (7, emphasis added). It is generally agreed that it was during the industrial revolution, in the mid-1700s, that human activities started adding significant amounts of carbon dioxide and other greenhouse gases to the atmosphere. The timing of the emergence of the realist novel is key for Ghosh's historical lens. He makes copious references about this timing. "Probability and the modern novel are in fact twins," he writes, "born at about the same time," (16) and that "the novel [was] midwifed into existence," at the same time as the improbable events from romances were being side-lined, "through the banishing of the improbable and the insertion of the everyday" (17). Ghosh points to the authors associated with this period, from the early 1700s to the late 1800s, when the conventions of the realist novel were progressively coming into vogue—from Defoe to Austen, from Flaubert to Dickens—and when a literary shift to the mimetic took place. Ghosh's historical lens gives a compelling account of how Enlightenment ideas—liberty, the valorisation of reason over superstition, empiricism, secularism, progress and modernity—had as discernible an influence over literary trends as over intellectual, political, social and philosophical spheres. The ways in which the sovereignty of reason, empiricism and modernity bolstered the popularity of prosaic narratives filled with intricate detail gleaned

from the senses, consistent with the values of an emerging middle class, has been considered by many literary critics. Notable among these is Ian Watt, who in *The Rise of the Novel*, refers to "favourable conditions in the literary and social situation" (4) to account for the timing of the emergence of the realist novel with writers such as Defoe, Richardson and Fielding. Through Ghosh's historical lens, such favourable conditions become apparent in showing how a readership growing comfortable and wealthy through emerging scientific and industrial innovations would come to consider such conscientiously credible and meticulously measured narratives as more progressive, up-to-date and thus more aesthetically pleasing than escapist tales about fantastical heroes overcoming otherworldly villains and creatures that science could not explain. While it may be apparent that ideas from the Enlightenment should register strongly among the favourable conditions referred to above, for Ghosh, the notion of liberty deserves to be dealt with in more detail. In "The Climate of History," Dipesh Chakrabarty's notable essay examining the idea of the Anthropocene, he writes that "[t]he mansion of modern freedoms stands on an ever-expanding base of fossil-fuel use" (208). Ghosh develops Chakrabarty's insight, asserting that the emancipatory ideals of the Enlightenment, reflected in the literary works emerging at that time, are part of what restricts our view of the climate threat. The idea of liberty and of individual rights are some of the most cherished ideas which have emerged from modernity, deeply entrenched in legal and political theories, inextricable from the concept of democracy and the organisation of modern nation-states. Closely aligned with desire and the pursuit of happiness, liberty is at the heart of our very culture. "Culture," writes Ghosh, "generates desires—for vehicles and appliances, for certain kinds of gardens and dwellings—that are among the principal drivers of the carbon economy" (9-10). Pointing at the consumption patterns and the luxury trappings of modernity to which we all aspire—sports cars and tropical holidays—Ghosh highlights how climate change constitutes a "crisis of culture". "The artifacts and commodities that are

conjured up by these desires," he continues "are, in a sense, at once expressions and concealments of the cultural matrix that brought them into being" (10). Of course, it was never considered that through these freedoms we would effectively be corralled down this pathway which has resulted in suffering for so many. Chakrabarty points out that before humanity's emissions rendered us a geological agent, "[p]hilosophers of freedom were mainly, and understandably, concerned with how humans would escape the injustice, oppression, inequality, or even uniformity foisted on them by other humans or human-made systems" (208). Instead, the paradigm of rights and freedoms have created a world in which the rights of individuals (not to mention corporations) to pursue their own interests is guaranteed even when the collective well-being is threatened. This emphasis, in turn, supports notions of Western Enlightenment's rational and autonomous individual subject which supposedly stands superior over and in contrast to objectified nature and nonhuman others. Even as Ghosh insists on our need "to find a way out of the individualising imaginary in which we are trapped," he acknowledges that effectively addressing climate change "may require us to abandon some of our most treasured ideas about political virtue" (135). Given how central these freedoms are to so much of the world's cultural identity, it is uncertain that we will abandon our most treasured ideas, no matter where they clearly seem to lead us. Writing in relation to this in *The Journal of Asian Studies,* Ghosh raises an ominous question: "What if drastic action on climate change can be achieved only at the cost of abandoning the emancipatory ideals that have come to undergird our thinking? The ethical and political dilemmas that this possibility conjures up are almost impossible to resolve" (953-954). This is most certainly an ethical conundrum. In Western societies, rights and freedoms are seen as sacrosanct, and it certainly seems unlikely that this will change anytime soon. While the frameworks of constitutional law make provision for the idea that the rights and freedoms of citizens should be balanced against and can be limited in favour of democratically defensible

purposes, such limitation clauses are generally very carefully drafted to safeguard against abuse and with an emphasis on maintaining the rights of individuals.

In the world of literature, Ghosh uncovers how this emphasis on the individual in secular life translates in the realist novel to an emphasis on the inner lives and moral struggles of its protagonists. For Ghosh this insight predates the publishing of *The Great Derangement*. In a 1992 essay/book review entitled "Petrofiction: The Oil Encounter and the Novel," (an essay that would become seminal to what is now called Petroculture Studies) Ghosh had questioned the paucity of novels with oil as their main theme, especially given that fossil fuels play such a central part in our lives. The book under discussion was Abdul Rahman Munif's *Cities of Salt*, and in his review, Ghosh had lauded it as a greatly significant work, given its attempt to pioneer literary production with oil as its central element. It turns out, however, that Ghosh's praise conflicted with that of John Updike, an acclaimed luminary among literary critics. Updike, whose review was written some years earlier than Ghosh's, turned out to be much less enthusiastic about *Cities of Salt*, writing that:

> It is unfortunate, given the epic potential of his topic, that Mr. Munif … appears to be … insufficiently Westernized to produce a narrative that feels much like what we call a novel. His voice is that of a campfire explainer; his characters are rarely fixed in our minds by a face or a manner or a developed motivation; no central figure develops enough reality to attract our sympathetic interest; and, this being the first third of a trilogy, what intelligible conflicts and possibilities do emerge remain serenely unresolved. There is almost none of that sense of individual moral adventure—of the evolving individual in varied and roughly equal battle with a world of circumstance—which since 'Don Quixote' (sic) and 'Robinson Crusoe,'

> (sic) has distinguished the novel from the fable and the chronicle; 'Cities of Salt' (sic) is concerned, instead, with men in the aggregate. (76-77)

While there is a lingering suspicion that there is much about Updike's tone with which Ghosh may seek to take issue, he concedes to Updike's notion of "individual moral adventure" as a sine qua non distinguishing the novel from other literary forms. "It is a fact," writes Ghosh, "that the contemporary novel has become ever more radically centered on the individual psyche while the collective—'men in aggregate'—has receded, both in the cultural and the fictional imagination" (78). The realist novel, after all, marked a move away from the archetypes represented by idealised characters, and as such, embraced the trend to focus on the particular qualities that marked characters as different from the stock varieties from epics, fables, legends and romances. To Ghosh, this trend in realism—a focus on the individual—serves as a further impediment to apprehending and addressing climate change, as it is, strictly speaking, not an issue each of us can tackle as individuals. Collective and coordinated action are required. "[A]t exactly the time when it has become clear that global warming is in every sense a collective predicament," he writes, "humanity finds itself in the thrall of a dominant culture in which the idea of the collective has been exiled from politics, economics and literature alike." (80) The implication is clear pertaining to the challenge posed by climate change. The emphasis on the individual, within the realist novel, is problematic for facing said challenge, as it divides humanity at a time when there is a need for it to stand (and act) united. It also reiterates that, as scholars, we need to start taking seriously those narratives that provide a focus on how societies—men in aggregate—interact with the world of nonhuman others and collective responses to ecological challenges. *The Great Derangement* represents a thought-provoking intervention in literary aesthetics and how critics value works of fiction. The interdisciplinary sweep of Ghosh's scholarship on the topic

of realism, his novelistic experience, and his insight into postcolonial issues renders his treatise thoroughly appropriate to this study. Among the razor-sharp insights emerging from *The Great Derangement* is the recognition that current global inequalities persist as a result of colonial exploits, and that forces exist with a vested interest in upholding those imbalances. Envisaging the wholesale rearrangement of power among nations that would accrue from equity in carbon budgets and consumption patterns, Ghosh points out that "global inaction on climate change is by no means the result of confusion or denialism or a lack of planning: to the contrary, the maintenance of the status quo is the plan" (145). In pointing this out, Ghosh provides a concrete option by which literary scholars can contribute to the climate change debate. When Ghosh asserts that "[i]f certain literary forms are unable to negotiate these torrents, then they will have failed—and their failures will have to be counted as an aspect of the broader imaginative and cultural failure that lies at the heart of the climate crisis" (8), it is not a statement made lightly. Ghosh's contention raises questions for ecocritics – questions about genre, about non-realist literary forms—science fiction as well as magical realism—about their reception in the world of scholarly literary criticism, and their ability to rise to the challenge, to overcome what he calls "the peculiar forms of resistance that climate change presents to what is now regarded as serious fiction" (9). Voicing agreement with Ghosh on how dominant modes of representation are mismatched to the climate threat humans face, historian Julia Adeney Thomas is unequivocal on what needs to happen next: "Now that their promise has foundered on the shoals of climate change," she writes, "we must bend our critical faculties and our imaginations to crafting radically new modes of representing our unprecedented condition and its sudden tipping points" (939). If literary realism—our most prominent and aesthetically celebrated literary form for portraying reality—has failed humanity in providing an unobstructed view of the threat which is climate change, it is time

for a change. We scholars and critics need to turn our critical attentions to fundamentally different and innovatively alternate methods for confronting the reality unfolding before us.

My assertion is that African science fiction should be seen as prominent among the radically new modes being called for. Its use of deep-time mythical figures as employed in magical realism in combination with the far-future extrapolations of science fiction renders it able to contain the *longue durée* associated with climate change impacts, and as I aim to demonstrate, goes some way to overcoming other challenges identified by Ghosh, by focusing on, inter alia, the interests of the collective rather than, necessarily, on the rights and responsibilities of the individual. And while Ghosh's argument centres primarily on climate change, I intend to show how African science fiction provides innovative techniques for responding to a range of environmental concerns, particularly those ensconced within the discourses of postcolonial ecocriticism. While there has, within African literature, been a relative dearth of science fiction narratives by African authors, the last decade has seen a decided uptick, with the preponderance of such authors combining science fiction plots with magical realist elements of folklore and indigenous custom. With the upsurge in African science fiction narratives in the last decade, academic scholars and literary critics have increasingly been taking notice of African science fiction.

Okorafor's Beacon: Alternate Apprehensions of the Real

Nnedi Okorafor, a diasporic writer at the vanguard of African science fiction's increased popularity, has been getting attention from academic and literary quarters, along with a slew of major literary awards. Much of this critical attention can be attributed to the relative novelty of science fiction works from African authors, as well as, to some extent, its alignment to the themes and discourses of Afrofuturism. Afrofuturism, which has gained

popularity with the 2018 release of *Black Panther*, is a cultural aesthetic originating among African-Americans in the United States, in which speculative fiction, among a range of additional art forms, appropriates, subverts and repurposes themes and imagery from science fiction and technoculture for representing topics relevant to black history and culture. While Okorafor was born and raised in the United States, her parents are Nigerian of Igbo heritage, and she has, since her youth, regularly visited Nigeria with her parents. Her stories are firmly based in Africa, to which she refers as her muse. Her prominence and importance in the world of African science fiction cannot be overstated. In a *Strange Horizons* article series entitled "100 African Writers of SFF," Geoff Ryman points out that "writers like Nnedi Okorafor and Sofia Samatar are beacons to young Africans. They take an active role in African publishing projects—Nnedi with Lagos 2060 and AfroSF and Sofia with the Jalada Afrofuture(s) anthology, which she helped edit" (Ryman "100 African Writers of SFF" n.pag). Notwithstanding the extent to which Okorafor's work has been identified with Afrofuturism, she has sought to transcend this label, coining, instead, the term "Africanfuturism", to be read as an aesthetic that does not privilege the West, centred as it is on Africans and their history, myth, culture and worldview as opposed to that of African-Americans.

Beyond Afrofuturism and the novelty of science fiction by African writers, much scholarly attention has been focused on how African science fiction incorporates figures from African myth and folklore as well as giving voice to distinctly African worldviews, elements traditionally associated with the magical realism of Amos Tutuola and Ben Okri. The works of Nnedi Okorafor stand out as exemplary in this burgeoning trend and her mixing of genre elements—of introducing elements of magical realism, a genre favoured by high-brow journals, into plots from science fiction, a literary form typically denigrated as frivolous and

escapist—represents a noteworthy development within the broader historical trajectory of African literature, as well as embodying a literary form which promises to be of great significance to African ecocriticism. This thesis brings a range of Ghosh's insights about literary forms into engagement with African literature and postcolonial ecocriticism. I explore the ecocritical potential of Okorafor's fusion of magical realism and science fiction—two narrative forms with uncanny similarities that inhabit vastly different positions both within the African literary landscape and within the world of literary criticism—by taking as case studies two of Okorafor's novels, namely *Who Fears Death* (2010) and *Lagoon* (2014). *Who Fears Death* is a postapocalyptic tale set in a far-future Sudan. The protagonist, Onyesonwu, the product of a militarised rape, embarks on a prophesied quest to do battle with an evil sorcerer, in an effort to head off a genocidal ethnic cleansing which threatens to erupt between two long-feuding tribes, the Nuru and the Okeke. *Lagoon* depicts the views of a range of characters—plant, animals, spirits and human, as it relates the chaos which ensues when an alien invasion occurs in the city of Lagos, Nigeria. In the next chapter I delve into a discussion about Nnedi Okorafor as representative of the bourgeoning genre of African science fiction, as well as unpack the genre definitions and theory of science fiction and magical realism.

Chapter 2: The "Organic Fantasy" of Nnedi Okorafor

It is not a straightforward matter for someone born in Cincinnati, Ohio, and who started out writing young-adult novels to become a beacon to budding science fiction writers in Africa. Okorafor has significantly grown the range of her writing, going to great lengths to grow speculative genres on the continent and underscore the African pedigree of her fiction. And how her range has grown. Her work, which spans short fiction and novels, as well as scholarly writings and those on her blog, nnedi.com, includes the following: The *Binti* Trilogy; The *Akata* series; *Zahrah the Windseeker*; *Chicken in the Kitchen*; *Kabu Kabu* (short stories); *The Shadow Speaker*; *Long Juju Man*; *Broken Places & Outer Spaces; Ikenga; Who Fears Death*; *The Book of Phoenix* and *Lagoon*. She has also written numerous short stories including, to name but a few: "African Sunrise", "The Go-Slow", "When Scarabs Multiply", "The Palm Wine Bandit", "Afrofuturist 419" and "The Popular Mechanic". She has even landed a deal authoring Marvel's *Black Panther* universe. Her work has attracted literary acclaim and recognition from diverse quarters. *Who Fears Death* won the 2011 World Fantasy Award for Best Novel, and *Lagoon* was also a finalist in, among others, the British Science Fiction Association Award. Other awards include: Hugo, Nebula, Locus, and Lodestar Awards, Publisher's Weekly Best Book for Fall 2013; an Amazon.com Best Book of the Year; a CBS Parallax Award; and the Wole Soyinka Prize for African Literature.

Okorafor's fiction does not lend itself to straightforward classification. In an interview with the *Daily Trust*, she describes her work as speculative fiction, which to her "includes science fiction, fantasy and magical realism" (Nnedi's Wahala Zone Blogspot, "Interview with Nigerian Newspaper, the Daily Trust," n.pag.). Given that she prefers to use the label of "organic fantasy," it becomes apparent, via numerous journalistic interviews, that she is

uncomfortable with labels and finds them restricting. Her role as one of the leading writers growing the genre of science fiction in Africa has been the topic of much discussion. Okorafor has, in her own writings, touched on many of the issues pertaining to the growth of the genre on the African continent in a 2009 article entitled "Is Africa Ready for Science Fiction?," originally posted on the Nebula Awards Blog. In it she poses this question to award-winning Nollywood director Tchidi Chikere, who replies:

> I don't think we're ready [for science fiction] in the primary sense of the word. We can hide it in other categories like magical realism, allegory, etc., but we're not ready for pure science fiction. Science fiction films from the West are failures here. Even Star Wars! The themes aren't taken seriously. Science fiction will come here when it is relevant to the people of Africa. Right now, Africans are bothered about issues of bad leadership, the food crisis in East Africa, refugees in the Congo, militants here in Nigeria. Africans are bothered about roads, electricity, water wars, famine, etc., not spacecrafts and spaceships. Only stories that explore these everyday realities are considered relevant to us for now. (Nnedi's Wahala Zone Blogspot, "Is Africa Ready for Science Fiction," n.pag.)

Chikere's view, then, calls for an acknowledgement of the differing context between Africa and industrialised countries. Notwithstanding her efforts to grow the genre and write for an African readership, Okorafor agrees. "In my observation, in Africa, science fiction is still perceived as not being real literature," writes Okorafor, "It is not serious writing, …audiences don't feel that science fiction is really concerned with what's real, what's present. It's not tangible. It's sport. Child's play" (Nnedi's Wahala Zone Blogspot, "Is Africa Ready for Science Fiction," n.pag.). There is an implicit (and sometimes explicit) expectation of African

literature to be serious, to deal, in one form or another, with the myriad social, economic, and political issues facing the various countries on the continent. There is likewise, for some reason, an expectation that those issues may only be effectively handled using literary realism. It would seem, then, that readers in Africa do not think of science fiction as a genre able to address the social and political problems faced on the continent. In a 2015 blog article, "African Science Fiction is Still Alien," Okorafor points out that Achebe's *Things Fall Apart* was one of the first African novels to attract critical acclaim overseas and become an internationally prescribed text in tertiary English literature studies, highlighting the precedent this set for success among African writers. As a result, the vast majority of African writers conform to literary realism. Nowhere is this illustrated as clearly as in the opening passages of a 2019 article by Joshua Yu Burnett. The article describes a meeting between Uppinder Mehan, co-editor of *So Long Been Dreaming: Postcolonial Science Fiction & Fantasy*, and Chimamanda Ngozi Adichie, in which Mehan asks Adichie about "the state of contemporary Nigerian science-fiction writing or at least writing that blurs the distinctions between realism and fantasy as in the works of Ben Okri and before him Amos Tutuola" (119). Adichie reportedly responded that "she was not aware of any," that "she was not sure of the necessity of such writing," and posing the question, "isn't realist fiction enough?" (119). Burnett appropriately titled the article, "Isn't Realist Fiction Enough?' On African Speculative Fiction," going on to express what he views as the troubling aspect of Adichie's "dismissal of speculative fiction's relevance to Africa" (119). Of course, it is neither Burnett's aim to take Adichie to task for her careless utterance, nor to ridicule her largely realist literary achievements and acute perception into Nigerian and American society. Burnett seeks, instead, to emphasise the current and future significance of speculative fiction to both literature and culture in Africa. According to Burnett, the "impulse to limit cultural imagination to any one particular box even one as broad as realistic fiction is troubling,

particularly in a country as staggeringly culturally, linguistically, and creatively diverse as Nigeria (let alone the rest of the continent)" (120). Burnett's point is rendered particularly salient when bearing in mind that the early literary works which gained significant international acclaim were those of Fagunwa and Tutuola, which appealed greatly to a culturally rooted oral tradition and deviated decidedly from mimetic realism. "To thus dismiss speculative fiction, or to relegate it as secondary in importance to realistic fiction within the African context," writes Burnett, "is to assume the essential superiority of the traditional Western realistic novel over other forms of writing and storytelling, thus replicating the most hegemonic and culturally chauvinistic impulses of Enlightenment epistemology" (120). Interestingly, this discourse connects with Ghosh's view about how science fiction is viewed by high-brow journals. It would appear that the same hegemonic centrism that sets the literary agenda in the colonial centres of London and New York continually extends its tentacles of influence into African literary territory. Okorafor has two key gripes with African literature being restricted to or corralled toward the mimetic impulse. "Africans are absent from the creative process of global imagining that advances technology through stories," she writes, and "Africans are not yet capitalizing on this literary tool which is practically made to redress political and social issues." (Nnedi's Wahala Zone Blogspot, "African Science Fiction is Still Alien," n.pag.). While the main issues addressed in Okorafor's narratives focus on race and gender discrimination—discourses that critique hegemonic centrism—certain issues are overtly environmental such as the resource curse of oil in Nigeria and the influence of multinational corporations and neoliberal organisations aided by Afropessimistic discourses generated by the triumvirate of big science, big business and global media.

It would be remiss, in any discussion about Okorafor, to neglect the topic of Afrofuturism, and how Okorafor's narratives fit into this framework. While it would be impossible to provide a comprehensive overview here, for the sake of contextualising elements of the literature review ahead, it is considered appropriate to briefly unpack it here. Afrofuturism is a term coined by Mark Dery in his 1993 essay, "Black to the Future: Interviews with Samuel R. Delany, Greg Tate, and Tricia Rose." Dery defines Afrofuturism as:

> …speculative fiction that treats African American themes and addresses African American concerns in the context of 20th-century technoculture — and, more generally, African American signification that appropriates images of technology and a prosthetically enhanced future. (180)

Afrofuturists seeks to address a discourse acknowledging that science fiction has traditionally been a genre dominated by white men. Writers and readers of colour have identified the problematic absence of black figures in science fiction stories, many of which posited a utopian future, which was post-racial, but not because the issue of race had been resolved, but because there were simply no blacks in that imagined future. (What happened to them?) Of particular interest in Dery's definition is the idea of "signification that appropriates images of technology and a prosthetically enhanced future," which, to many artists, means assimilating elements of science fiction—imagery and metaphors—and delivering new interpretations that both subvert its original meaning and furthers the discourse of the participation of blacks in a technologically-augmented future. A founding example of such signification is how Dery references the Middle Passage of the slave triangle when he writes that "African Americans, in a very real sense, are the descendants of alien abductees" (180). The appropriation and

assimilation of such techno-futures occur over a range of artistic disciplines, from literary works to elements of mainstream pop culture, such as reggae and hip-hop. Afrofuturism is, therefore, not merely a sub-genre of speculative fiction nor only a theoretical framework. "Because this kind of cultural production crosses conventional aesthetic boundaries," writes Lisa Yaszek, "Afrofuturist scholars must be prepared to work both within and without the academy" (42). Afrofuturism can thus best be described as a cultural aesthetic that involves the recovery of black identity through art, culture, and political resistance through the themes of, inter alia, science, technology and interplanetary travel found in science fiction. According to a 2003 definition provided by British-Ghanaian literary theorist and music critic Kodwo Eshun:

> Afrofuturism may be characterized as a program for recovering the histories of counter-futures created in a century hostile to Afrodiasporic projection and as a space within which the critical work of manufacturing tools capable of intervention within the current political dispensation may be undertaken. (301)

Afrofuturism thus hijacks futuristic themes and science fiction staples for the purposes of ensuring people of African descent are represented in techno-scientific futures. It also seeks to recuperate or revise an historical record about Africa and Africans, one that was largely written by Europeans and colonists, and in doing so claim greater dominance among blacks in writing about their future. And Okorafor is ostensibly in the thick of it. According to Okorafor she did not read much science fiction growing up, relating to Gwen Ansell that she felt "that I was not part of those stories; I didn't exist in them" (Ansell, "Nnedi Okorafor: Writing oneself into existence," n.pag.) In another interview, this one with Hannah Onifade, Okorafor similarly notes: "I was exposed to the genre of science fiction and its importance to

and popularity in society. Nevertheless, I couldn't relate to these narratives within the books and films because I never saw reflections of myself, my family, my cultures, Africa in those stories. When I read science fiction growing up, I felt more like a tourist in those stories than a citizen" (Onifade, "Exclusive Interview," n.pag.). She similarly says in an interview with Qiana Whitted, "I didn't even feel welcome in comic book shops! I'd take one look at the covers of the comic books, the shop owners and the customers and then walk right back out," adding that "[e]veryone was always white and male (or in the case of the comic book covers, targeted toward white males)" (212). It is this perception of failing to belong, along with analytical explorations her particular brand of speculative fiction enables, which appears to have found substantial resonance among the proponents of Afrofuturism. As a black female writer of speculative fiction, and because of the resonance her experiences have found with the purveyors of this aesthetic, she has become, willing or unwilling, something of a posterchild for Afrofuturism. Hardly a volume about Afrofuturism is published that does not make mention of her work. To Okorafor, however, it is just another label. At an informal Brooklyn Museum book club event, Okorafor bemoans to Natalie Zutter that in the developmental trajectory of Afrofuturism—primarily associated, as it is, with African-American artists and musicians—African artists appear to have been added merely as an afterthought. "I understand the necessity of it, I understand the uses of it," says Okorafor, "but I do not consider myself an Afrofuturist." (Zutter, "Masquerade, Initiation, and Sci-Fi," n.pag.). Therefore, notwithstanding that she finds labels confining, Qiana Whitted confirms that Okorafor "values the notion of Afrofuturism as a way of being for the indomitable female protagonists that so often populate the magical Nigerian landscapes of her stories" (207). Okorafor has since coined the term "Africanfuturism," presenting it as follows:

> 1. The term Afrofuturism had several definitions and some of the most prominent ones didn't describe what I was doing. 2. I was being called this word [an Afrofuturist] whether I agreed or not (no matter how much I publicly resisted it) and because most definitions were off, my work was therefore being read wrongly. 3. I needed to regain control of how I was being defined. (Nnedi's Wahala Zone Blogspot, "Africanfuturism defined," n.pag.)

She goes on to explain the difference between Afrofuturism and her coinage in her blog, writing that "Africanfuturism is specifically and more directly rooted in African culture, history, mythology and point-of-view as it then branches into the Black Diaspora, and it does not privilege or center the West." (Nnedi's Wahala Zone Blogspot, "Africanfuturism defined," n.pag.) Despite her protests, there are numerous scholars who, rightly or wrongly, read her work for Afrofuturist themes. Sofia Samatar's "Toward a Planetary History of Afrofuturism," for instance, reads elements from Okorafor's prose to motivate for the inclusion of African writers in Afrofuturism, identifying synergies and resonances between African diasporic themes and the tropes of speculative fiction. Samatar further argues for the retroactive inclusion of artists of African descent before the year 2000, citing Afrofuturism's distrust of dominant narratives of progress and development and its proclaimed intention of recovering counter-histories of African evolution. Louisa Uchum Egbunike similarly reads Okorafor's *Akata Witch* as exemplifying the capacity of Afrofuturist approaches in science fiction for challenging normative regimes and privileging African worldviews as part of an ongoing process of decolonisation.

Notwithstanding her aversion to labels, Okorafor acknowledges that the magical realism label may be more applicable to some of her writing than fantasy. In reference to

incorporating elements of myth in contemporary settings, Okorafor says that "those parts are not fantasy," adding that "[t]hey are real to communities; things I believe in because of my Nigerian culture… they're my realism" (Ansell, "Nnedi Okorafor: Writing oneself into existence," n.pag.). Similarly, in the Whitted interview, Okorafor asserts "the fact that I'm writing what is considered speculative fiction isn't really intentional" (208). At the Brooklyn Museum event scribed by Zutter, Okorafor suggests that the mixing of science fiction and fantasy is "culturally specific," explaining that in "non-Western culture, the mystical coexisting with the mundane is normal. That is a specific point of view; you take it and move it into the future, and you have science fiction with mystical elements in it" (Zutter, "Masquerade, Initiation, and Sci-Fi," n.pag.) The idea of the mystical coexisting with the mundane is reminiscent of Salman Rushdie's definition of magical realism, (quoted in Maggie Ann Bowers) the "commingling of the improbable and the mundane" (3). In "Organic Fantasy," Okorafor explains how these improbable and mundane elements combine. In one instance she describes the culture-hopping dissonance of a certain bus journey in Nigeria. She tells what it feels like listening to a Guns n' Roses album and reading a novel by Stephen King and Peter Straub whilst hearing her uncle's tales about cannibal headhunters, equating that experience with being a shape-shifter between cultures. In another anecdote, at a market in Abuja, she perceives the shock and outrage of a group of Hausa men who make plain their disapproval of the fact that she is wearing shorts. In the face of their astonishment and indignation, she is rendered as alien as a being from another world. "This is the heart of organic fantasy," writes Okorafor, "like most forms of fantasy, it has the power to make something familiar strange" (278). Okorafor's organic fantasy, then, is consistent with the cultural specificity of the African folktale, the didactic aims of which are often executed by means of talking animals, masquerades, ghosts, fairies, or demons.

Returning briefly to the challenges of writing science fiction for an African readership, the content of the genre is so often determined by its emphasis on technological innovation, rendering it somewhat irreconcilable with the unindustrialised lack of development with which African settings are so often associated. This brings us back to Nigeria as muse for Okorafor's writing. The impulse for these juxtapositions, for weaving different time-based threads, for mixing technology with the trappings of traditional society is rooted in her experience of Nigeria during her childhood visits. The contextual physical and material conditions that underpin these seemingly incongruous and contrasting elements are laid bare in "Is Africa Ready for Science Fiction":

> I can see how science fiction can be foreign to many Africans. Technology tends to play a different role on the continent. There is a weird divide and connection between the technologically advanced and the ancient. For example: People will have cells phones in rural villages yet have no plumbing or electricity or one will opt to buy a laptop instead of a desktop computer because a laptop has its own power supply, most useful for when "NEPA[1] takes the lights". (Nnedi's Wahala Zone Blogspot, "Is Africa Ready for Science Fiction," n.pag.)

Descriptions such as these are akin to magical realism's concern with the uneven spread of modernity, with what V. S. Naipaul has referred to as 'half-made' societies. On her early writings, Okorafor acknowledges that magical realism (a term she tends to use interchangeably with fantasy), as a genre, came most naturally to her. In "Organic Fantasy," she points to her early writings when she was in college, noting that "well-meaning

[1] National Electric Power Authority (NEPA) is the former name of the organisation governing the use of electricity in Nigeria, currently known as the Power Holding Company of Nigeria (PHCN).

professors worked hard to coax me away from writing fantasy" (276). She goes on to relate how she tried to "tone it down and write 'normal' fiction. Despite all of this effort, magic, mysticism and weirdness burst forth from my stories like wildflowers and spawning beasts" (276). It is plausible, here, to read Okorafor's well-meaning professors as analogous to Ghosh's high-brow journals. To many readers and academics, the standard for serious African literature was set with the literary realism of Chinua Achebe, and continues to be maintained by realist writers such as Chimamanda Ngozi Adichie, Helon Habila and Tope Folarin. As Okorafor notes, African writers tend to be corralled toward writing in the realist form, both by pressure from readers on the continent as well as through prizes and awards that specifically exclude speculative genres. Okorafor has gone to significant lengths to differentiate the science fiction she writes from its Western incarnation, to firmly ground her writing in Africa, saying that Nigeria is her muse. One of the ways in which she has done so has been to draw heavily from African folklore and mythology. Her narratives are replete with traditional Igbo and Yoruba figures, such as Ijele the masquerade and Mami Wata. Magic and technological items occur side-by-side in her narratives. This is a feature in *Who Fears Death*, where juju (magic) is the dominant technology while a cache of computer hardware gets left abandoned in a cave. On the mixing of magic and technology, Okorafor tells Whitted that technology "is just another form of juju," adding that "it's not the most powerful or useful. But really I don't feel I NEED to merge them. I feel they are naturally merged. Especially in African culture" (209). To Okorafor, the contradictions between the cultural influences of her upbringing, and the "series of cultural mixes and clashes between being American and being Nigerian," (276) inform the fantastic and bizarre elements of her narratives as well as the alien estrangement she often experienced in straddling these cultural settings. This, according to Okorafor, "allows one to experience even the most overdone ideas in fresh ways" (278). Okorafor invokes the regenerative character of the organic to

motivate for the fantastic and supernatural to recreate phenomena for which a hackneyed realism is ill-suited.

For all of science fiction's escapist and frivolous connotations, Okorafor's work has garnered significant scholarly attention. To some scholars, the use of magical realist elements confirms Okorafor's African pedigree. Ignatius Chukwumah, for instance, writes about one of Okorafor's early novels, *Zahrah the Windseeker* as "a new form of narrative in the Nigerian Literary tradition," (236) declaring that that Okorafor's writing fits in with a long tradition of Nigerian literature, pointing out the similarities to the magical realist mode employed in Amos Tutuola's *The Palm-Wine Drinkard* and in D. O. Fagunwa's *The Forest of a Thousand Daemons*. Chukwumah notes, however, that incorporation of the science fictional mode creates resistance to Okorafor's work being considered appropriate to Nigerian literature. In "Afro-Science Fiction: A Study of Nnedi Okorafor's *What Sunny Saw in the Flames* and *Lagoon*," Mary Bosede Aiyetoro and Elizabeth Olubukola Olaoye, similarly highlight likenesses to Fagunwa and Tutuola. Notwithstanding these likenesses, Aiyetoro and Olaoye do not see Okorafor's writing as magical realism, proposing that magical realism and fantasy are backward looking literature (as opposed to science fiction), even as they assert that African literature, including its science-fiction, can be jam-packed with mythological and folklore elements that are firmly rooted in the African oral tradition. Okorafor is commended for juxtaposing "mythical and traditional worldviews and events with modern references and occurrences" (237). Similarly confirming the African pedigree of Okorafor's prose, Aiyetoro and Olaoye hold that the science fiction element "introduces new possibilities into Nigerian fiction, demonstrating its capacity to appropriate western modes and tropes while simultaneously retaining and respecting traditional African ideas," adding that "this integration seems to provide a better springboard for the novel as a means for social

critique" (244). Writing in the *Los Angeles Review of Books*, Kinitra D. Brooks asserts that Okorafor's 2014 novel, *Lagoon* "establishes Okorafor as the inheritor of the mantle of Wole Soyinka, the celebrated Nigerian novelist whose themes center on the infinite beauty and destructive politics of his beloved country" (Brooks, "The Multiple Pasts," n.pag.). Indeed, it was for *Zahrah the Windseeker*—her debut novel—that Okorafor bagged the 2008 Wole Soyinka Prize for Literature in Africa. And Okorafor takes pains to claim Africa as her muse. In "Organic Fantasy" she affirms that "[a]lmost every story I write is set in the place where my parents immigrated from in 1969. The place that I have known in person since I was seven years old. The place where I have experienced my life's greatest joys and greatest terrors. The place where I have never lived. Africa, Nigeria to be exact" (276). In the write-up to an interview with Okorafor, Gwen Ansell explains how Okorafor's "tales have drawn on various African settings," and that Okorafor's work is "dubbed 'magical realist' *as* often as fantasy" (my emphasis) and that it "remixes multiple elements, including Igbo tradition, magic, alien landings…" (Ansell, "Nnedi Okorafor: Writing oneself into existence," n.pag.). Notwithstanding that the magical realist elements in Okorafor's work are noted by numerous scholars, most scholarship approaches her work strictly through the lens of science fiction.

A fair number of scholars have seen the ecocritical potential of Okorafor's stories. Notable among them is Dustin Crowley, who perceives how Okorafor blurs the boundaries between humans and nonhumans, of which the latter may range from animal to technological to spiritual entities that are not relegated to the backdrop, or to act as symbols for other humans. He also highlights how technological speculation enters into dialogue with African animist modes. Discussing nonhuman agency, he writes that "[s]uch 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" (239). Similarly notable is Alice Curry, who is one of the first critics to undertake an overtly stated ecocritical analysis of Okorafor's work, albeit only her young adult novels. Using Okorafor's own term "Organic Fantasy," as a point of departure, Curry asserts that "Okorafor's fantasy […] is entirely bound up with the natural world, more so for the very absence of ecological terminology" (38). The analysis relates to highlighting the absence of the nature-culture dichotomy in Okorafor's work. Curry organises her research around the concepts of "invisibility" and "hybridity" and so asserts "not only are Okorafor's novels highly ecoconscious but that they also model an animistic mode of being-in-the-world that successfully deconstructs the human-environment or culture-nature dichotomy, a dichotomy that has been the stumbling block for many western cultures in their attempts to envisage a more caring attitude towards the earth" (38).

Given how often Okorafor's narratives draw from actual current affairs, it is unsurprising that many of her stories tackle the problem of oil in Nigeria. Helen Kapstein's essay, "Crude Fictions: How New Nigerian Short Stories Sabotage Big Oil's Master Narrative" takes up the topic of the resource curse, pollution and the nefarious influence of multinational fossil fuel corporations. Her essay surveys a series of texts in relation to the resistance to oil production in Nigeria. Her focus is on emerging short stories that "call into question the dominant discourse around oil production nationally and internationally as they depict the complex, lived reality of a resource rich country riven by corruption, greed and poverty" (1). Two of Okorafor's short stories are examined, namely "The Popular Mechanic" (2007) and "Spider the Artist" (2008). In both stories Kapstein highlights how the Niger Delta "residents turn the conditions of production to their own uses and advantages even in circumstances of capitalist induced crisis and environmental degradation" (9).

Science Fiction: Disrupting our Habitual Perception of the World

It is acknowledged that both science fiction and magical realism are complex narrative forms, on which numerous full-scale treatments have been published. However, for the purposes of flagging themes, motifs and genre elements that will be utilised in the analysis of the primary texts, a wide-ranging overview of each narrative form is provided. These overviews will consist of genre definitions and surveys of salient themes, linking them to points raised by Ghosh.

Writing in *The Concise Oxford Dictionary of Literary Terms* Chris Baldick defines science fiction as:

> A popular modern branch of prose fiction that explores the probable consequences of some improbable or impossible transformation of the basic conditions of human (or intelligent non-human) existence. This transformation need not be brought about by a technological invention, but may involve some mutation of known biological or physical reality. (301)

Numerous scholars have pointed to the oxymoronic contradiction the two terms—science and fiction—present, with Gerry Canavan noting that the combination "suggests in miniature the internal tension that drives analysis of the genre" (ix). Istvan Csicsery-Ronay has referred to science fiction as an "oxymoron," noting that "somewhere at the heart of the tale is an absurd logical contradiction," (386). This contradiction points to some of the difficulty that comes with defining science fiction. Definitions are typically ungainly with multiple qualifiers, as they seek to delineate a narrative form that is both highly sophisticated and profoundly unwieldy, in that there are a dazzling variety of texts which have been filed under the label.

"All of the many definitions offered by critics," writes Adam Roberts, "have been contradicted or modified by other critics, and it is always possible to point to texts consensually called SF that fall outside the usual definitions" (1). "A definition of science fiction," writes Kingsley Amis in his 1960 publication *New Maps of Hell: A Survey of Science Fiction*, "though attempted with enormous and significant frequency by commentators inside the field, is bound to be cumbersome rather than memorable" (13-14). Yet definitions remain relevant and necessary to the scholarly inquiry of narrative forms. Very few latter-day studies fail to make mention of Darko Suvin's definition of science fiction as the literature of 'cognitive estrangement'. Referred to by Adam Roberts as the "respected elder statesman of SF criticism," (7) Suvin is seen as *the* leading figure in the development of theory and scholarly interest in this narrative form. According to Suvin's definition, science fiction is "a literary genre whose necessary and sufficient conditions are the presence and interaction of estrangement and cognition, and whose main formal device is an imaginative framework alternative to the author's empirical environment" (375). According to Perry Nodelman, the estrangement in Suvin's definition is "Suvin's version of Bertold Brecht's 'verfremdung,' usually translated as 'alienation'" (24) Suvin's concept of estrangement also corresponds to the literary notion of defamiliarisation, translated from *ostranenie* (making strange) by Russian Formalist, Viktor Shklovsky. It is described by Baldick as "the distinctive effect achieved by literary works in disrupting our habitual perception of the world, enabling us to 'see' things afresh…" (62) And this is exactly the effect Suvin attributes to cognitive estrangement in science fiction. It is this effect, along with another indispensable device—the novum—which combines to instantiate science fiction narratives, explained as follows by Damien Broderick in *The Encyclopedia of Science Fiction*:

> Cognitive Estrangement and the Novum. The former is distinctive in creating and understanding the imagined world as different from our own, by means of scientific observation, theorizing and empirical experiment. Such new textual worlds are set off from ours chiefly by means of a drastic disruption, an anomalous breach in accepted verities; in short, an intrusive novelty so strange, and at first inexplicable, that it deserves a category of its own: the novum. (*SFE*, "Novum" n.pag.).

Broderick provides examples of the novum device, such as the existence of alien beings from other planets, time travel, mutants or scientific breakthroughs such as interplanetary travel or artificial intelligence. The novum has been further distilled down to refer to either a technological or biological novelty—as opposed to the magical or supernatural—that is usually explained in scientific (or pseudo-scientific) terms. It is important to the definition that the novum plays a significant role in producing the alternate reality, bringing about what Broderick describes as "a drastic disruption," and "an anomalous breach in accepted verities," rendering the world in which narratives occurs as different from our empirical world. Notwithstanding Suvin's stipulation of an "imaginative framework alternative to the author's empirical environment," (8-9) Broderick affirms that "the novum is a device for casting light on ourselves," (*SFE*, "Novum" n.pag.) an assertion that has concrete implications for the analysis of science fiction narratives. The novum is at the heart of science fiction's disruptive potential. It represents the point of departure for the extrapolation, projection, analogy or speculation that delivers to science fiction readers the fresh perspectives on entrenched worldviews; the recognition that dominant political, historical, conceptual and philosophical ideologies are open to question.

According to Baldick, science fiction draws upon earlier kinds of utopian and apocalyptic writing. It refers to utopia as "an imagined form of ideal or superior human society; or a written work of fiction or philosophical speculation describing such a society" (269). For many scholars the concept of utopia is utterly central to the understanding of science fiction. Writing on the theme of utopia in the *SFE*, Brian Stableford and David Langford point out that while it has been asserted that all utopian narratives should qualify as science fiction, there is an argument to be made that "only those utopias which embody some notion of scientific advancement qualify" (*SFE*, "Utopias" n.pag.). Stableford and Langford, however, also point out writers in whose work existed an impulse for anti-technological pastoral, works they describe as having "glorified a life of noble savagery in opposition to the idea of utopia as a city" (*SFE*, "Utopias" n.pag.).

The dark side of utopia is dystopia, described by Baldick as "a modern term invented as the opposite of utopia, and applied to any alarmingly unpleasant imaginary world, usually of the projected future," adding that it is a "significant form of science fiction and of modern satire" (74). Numerous scholars have pointed to the dystopian aspects of Okorafor's narratives. Indeed, dystopia can be seen as highly applicable to African settings, especially when taking into consideration its colonial past and present-day postcolonial malaise. It is important to note that history and progress are important themes in dystopia. Writing in *Dark Horizons: Science Fiction and the Dystopian Imagination*, Raffaella Baccolini draws attention to the complex relationship between utopia and history, noting that dystopia is, in fact:

> …immediately rooted in history. Its function is to warn readers about the possible outcomes of our present world and entails an extrapolation of key features of

> contemporary society. Dystopia, therefore, is usually located in a negatively deformed future of our own world. In this respect, it clearly appears as a critique of history—of the history shaping the society of the dystopian writer in particular… Thus, dystopia shows how our present may negatively evolve, while showing a regression of our present it also suggest that history may not be progressive. (115)

Both dystopia and utopia can thus be seen as a critique of the present in which it was written. Utopia provides a description of the ideal society highlighting the contrast between that description and the context within which it was written. Dystopia similarly critiques the present in which it is written by projecting and forecasting a temporal progression toward a hostile and disagreeable future.

Tales of the apocalypse are another popular trope in science fiction. According to J. A. Cuddon "[t]he term 'apocalyptic' derives from the Greek apocalypse 'to disclose', and such literature typically comprises of prophetic or quasi-prophetic writings which tend to present doom-laden visions of the world and sombre and minatory predictions of mankind's destiny" (52). Apocalyptic and post-apocalyptic fiction are thus concerned with what is to be revealed about the end days. Writing of this kind is often concerned with technologies or practices that could have profoundly negative effects on our current civilisation as we know it, such as, perhaps, our energy regimes, or the failure to acknowledge nonhuman others and recognise our interconnectedness with natural systems. Apocalyptic literature, presenting as it does, visualisations of the end of the world, can serve as a warning of sorts to mankind.

The trope of apocalypse is one of the most obvious overlaps between environmental writing and science fiction. Ecocritic, Lawrence Buell has referred to it as "the single most

powerful master metaphor that the contemporary environmental imagination has at its disposal" (285). Apocalypse, like dystopia, highlights causality and consequences. Greg Garrard designates it "a genre born out of crisis," and that its rhetoric must, by necessity, "whip up such crises to proportions appropriate to the end of time," offering up as a contemporary example of this rhetoric at work, in Al Gore's *Earth in the Balance,* in which he quotes from Hosea 8: 7, "They have sown the wind, and they shall reap the whirlwind" (89). Given that Ghosh has identified humanity's literary response to climate change as a "crisis of culture," it would seem appropriate that literary responses to this crisis should put this master metaphor to use, and that critical attention and book reviews should strive to identify the environmental imagination in them.

Critical inquiry into the relationship between science fiction and environmental literary criticism is not new. Patrick D. Murphy is one of the earlier ecocritics to demonstrate the genre's willingness to engage with issues relating to the exploitative relationship between humanity and nonhuman others in the environment, as well as with the dire consequences and disastrous calamities that result from such exploitation. Ghosh's emphasis on recognising the vitality of the nonhuman others in the world can thus be expanded by focusing on an ethic of non-exploitation. Okorafor's writing is rife with nonhuman others who are afforded respect as components of a spiritual ontology.

Murphy points out that there are a range of conceptual tools used in the analysis of science fiction that are relevant to ecocriticism. In "The Non-Alibi of Alien Scapes: SF and Ecocriticism," (2001) he asserts that the practice of extrapolation in the reading and writing of science fiction is instrumental in prompting reflections among its practitioners about "the present and about this world in which they live," adding that "SF stories that emphasize

analogy between imagined worlds and the reader's consensual world encourage such thinking as well." (263) For Murphy, this signifies a definitive link between science fiction and what he calls nature-oriented literature, with extrapolation providing an unmistakable temporal connection between our actions in the present, and the ensuing material conditions of the future. He goes on to emphasise that science fiction both "directs reader attention toward the natural world and human interaction with other aspects of nature within that world," adding that science fiction "makes specific environmental issues part of the plots and themes of various works.

In *The Future of Environmental Criticism*, Lawrence Buell similarly observes that "science fiction has taken a keen, if not consistent interest in ecology, in planetary endangerment, in environmental ethics, in humankind's relation to the nonhuman world" (56). For Buell, literary projects that seek to consider and comprehend planetary creations constitute the last word in the theory of environmental literary forms and discourse, prompting him to note that "the genre that really specializes in world-making is of utopian narrative, meaning especially for the past half-century what is loosely called science or 'speculative' fiction" (56).

Murphy and Buell are by no means the only theorists to have made this link. The *Encyclopedia of Science Fiction* contains an entry entitled "Ecology," in which Brian Stableford discusses a range of science fiction works with ecological themes. These range from "fantasies of a mode of human life harmonized with Nature," to narratives "about a perfect insecticide which precipitates an ecocatastrophe by obliterating the pollinators of many plant species" (*SFE*, "Ecology" n.pag.). Stableford and Langford assert that early science fiction works about the environment were largely concerned with pollution and

tended to focus on smog and atmospheric pollutants. They also make special reference to a particular work of nonfiction that generated, among science fiction writers, significant impetus to deal with environmental issues:

> It was in the early 1960s that the problem was brought very sharply into focus, largely due to the publication of *Silent Spring* (1962) by Rachel Carson (1907-1964), which argued that pollution of a radically new type had begun, involving nonbiodegradable substances which accumulated in living matter to fatal concentrations. (*SFE*, "Pollution" n.pag.)

It is noteworthy that *Silent Spring* spurred this broader impulse among science fictions writers to take on environmental issues. Greg Garrard refers to it as "the founding text of modern environmentalism" highlighting that it "not only begins with a decidedly poetic parable, but also relies on the literary genres of pastoral and apocalypse" (1).

The influence of Carson's book on science fiction writers points not only to an attentiveness among those writers to the real-life discourses extant in that period, but also to her compelling use of pastoral and apocalypse, the alpha and omega of their art. It thus stands to reason that there was an uptick in science fiction works with ecological themes coinciding with the rise of the environmental movement in the United States during the 1960s and 1970s. Notable works with ecological themes include Frank Herbert's *Dune* (1965), which Buell describes as "an intricate investigation of the ecology of a desert planet," (57) and *The Lathe of Heaven* (1971) by Ursula K. Le Guin, which is a contemplation of scientific hubris. According to David Langford, climate change as a science fiction plot has been a highly expected development. "Owing to the increasing scientific consensus that our energy-

intensive technological civilization is measurably and, in all likelihood, irreversibly affecting Earth's climate," writes Langford, "consideration of climate change has become virtually inevitable in serious Near Future sf of the twenty-first century" (*SFE*, "Climate Change" n.pag.). Langford also holds up J. G. Ballard's *The Drowned World* in 1962 as having "a significant influence on the iconography of later sf climate-change scenarios" highlighting impacts such as "increasing heat, rising sea levels and the drowning of London" (*SFE*, "Climate Change" n.pag.). A leading figure in producing fiction about climate change is Kim Stanley Robinson noted for his novel, *2312* as well as his *Science in the Capitol* trilogy. In a *Guardian* article by Alison Flood, as far back as 2009, Robinson made an assertion that could almost be said to turn Ghosh's argument on its head. Writing about the range of things that could be reported on the news—from technological marvels to extreme weather events—"science fiction," he says, "turns out to be the realism of our time." (*Flood*, "Kim Stanley Robinson: science fiction's realist" n.pag.). What Robinson's observation asserts is that realism is outdated, no longer reflecting the reality of our current context. In his essay, "Ecocriticism, literary theory, and the truth of ecology," Dana Phillips echoes this sentiment, writing that "realism of the literary variety is a creed outworn, a nineteenth-century aesthetic unsuited for the production and the understanding of art at the turn of the millennium" (586). Robinson is, however, on the same page with Ghosh about the status of science fiction in the world of high-brow literature, reported by Flood as accusing "the Man Booker judges of neglecting what he called 'the best British literature of our time'" (*Flood*, "Kim Stanley Robinson: science fiction's realist" n.pag.).

It is not entirely clear why the release of Carson's book and the growing concern with environmental issues did not produce a similar impetus in realist literature, as was the case among science fiction writers. Carson had, after all, made the case that a topic—the

environmental impact of pesticides—which had previously been the sole domain of scientific discussions could successfully be broached using literary techniques, effectively injecting an emotional charge into a technical discourse. In doing so, Carson was violating a principle which dictated that science and literature be kept apart, a principle which Ghosh points out was maintained in mainstream literature, in its sidelining of science fiction. He reflects Bruno Latour's assertion that "one of the originary impulses of modernity is the project of 'partitioning,' or deepening the imaginary gulf between Nature and Culture: the former comes to be relegated exclusively to the sciences and is regarded as being off-limits to the latter" (68). I am also reminded of what C.P. Snow referred to as the 'two cultures', and his assertion that "the intellectual life of the whole of western society is increasingly being split into two polar groups," (3) in reference to a supposedly impermeable barrier separating literary intellectuals from scientists. It may not be readily apparent why the project of 'partitioning' is attributed to modernity. The answer may lie in the specialisation and compartmentalisation of knowledge that modernity promotes. Ghosh also highlights how notions of time and progress portend the negative implications for novelists unwilling to keep pace with modernity, who are therefore considered backward. "It is this conception of time," writes Ghosh, "that allows the work of partitioning to proceed within the novel, always aligning itself with the avant-garde as it hurtles forward in its impatience to erase every archaic reminder of Man's kinship with the nonhuman" (70). Thus, having sought to bridge the partition between nature and culture, Carson drew censure for her efforts. As Greg Gerrard reminds us, "when *Silent Spring* was published the agro-chemical industry reacted by criticising the book for its literary qualities, which, they implied, could not coexist with the appropriate scientific rigour" (5). It should thus be unsurprising that few realist writers had the appetite to weather questions regarding their scientific acumen. *Silent Spring* was, after all, a work of non-fiction that, according to Gerrard, "marshalled an impressive array of

scientific evidence," (2) even if it sought to make a moral argument. Its use of pastoral and apocalyptic imagery and rhetoric was instead copied by other non-fiction works, such as Paul Ehrlich's *The Population Bomb*.

But to return to science fiction, the number of environmentally-themed studies have grown steadily, both within the genre and literary criticism. "The precariousness of the human ecological situation," writes Stableford, "has gradually but inevitably become one of the major themes of sf" (*SFE*, "Ecology" n.pag.). Pre-empting Ghosh's reflection on science fiction as an outhouse genre, Buell has noted that science fiction "has taken a long time to win much respect from academic critics, including ecocritics,", adding that many critics still "think of it as pop stuff, not serious stuff." (56) The last decade, since 2010, has seen a growing number of scholarly publications linking speculative fiction with environmental issues. Academics have increasingly embarked on ecocritical analyses of science fiction works, even those in which the major plotlines are not necessarily overtly ecological. The prominent themes and discourses flowing from this groundswell are numerous, spanning various disciplines and theoretical frameworks.

Magical Realism: Ontological Disruption as Cultural Corrective

As noted earlier, Okorafor acknowledges the appositeness of the magical realist label to her work. Indeed, the elements from African myth and folklore—masquerades, shapeshifters and juju—are the supernatural components that coexist alongside the mundane in Okorafor's narratives. They are also the very materials that mark her work out as African. In his essay, "Magical realism and the African novel," Ato Quayson defines magical realism as "that mode of representation that challenges the Western tradition of realism, positing instead an alternative universe in which fantastical elements are placed side by side with the real in a

process of establishing equivalence between them" (160) As noted earlier about science fiction, magical realism similarly represents an enforced connection between two seemingly incompatible concepts. "On the face of it," writes Maggie Ann Bowers, "they (magical and realism) are oxymorons describing the forced relationship of irreconcilable terms" (1).

As a label used by publishers, magical realism has not always garnered favourable inferences, with some writers seeing it as signalling the third-world origin of its authors, and seeking, for this reason, to distance themselves from the label. That is not to say that magical realist fiction is seen as frivolous. Indeed, many magical realist novels have garnered serious critical acclaim. Ben Holgate points out that "nine writers who utilise magical realism in their fiction have been awarded the Nobel Prize in Literature over the past seven decades." Unlike with science fiction, writers of magical realism can be said to have struggled less to be taken seriously by the world of literary critics.

The term "magical realism" was coined by Franz Roh, a German art critic in his 1925 book *Nach Expressionismus: Magischer Realismus: Probleme der neuesten europäischen Malerei* (*After Expressionism: Magical Realism: Problems of the Newest European Painting*) to describe a distinctive post-expressionist painting technique. According to Cuddon "the term caught on in literary circles" and by "the 1980s it had become a well-established 'label' for some forms of fiction" (521) Among the canonical works listed by Cuddon to which the label has been applied is included *Historia universal de la infamia (A Universal History of Infamy)* by Jorge Luis Borges, *Cien años de Soledad (One Hundred Years of Solitude)* by Gabriel García Márquez and *The House of the Spirits* by Isabel Allende. Cuddon goes on to describe characteristic features of magical realism as:

> …the mingling and juxtaposition of the realistic and the fantastic or bizarre, skilful time shifts, convoluted and even labyrinthine narratives and plots, miscellaneous use of dreams, myths and fairy stories, expressionistic and even surrealistic description, arcane erudition, the element of surprise or abrupt shock, the horrific and the inexplicable. (522)

Okorafor's narratives undoubtedly adhere to a number of these characteristics. Her plots are certainly complex and complicated, consisting of supernatural occurrences alongside run-of-the-mill proceedings. Her narratives employ dreams and vision, esoteric information as well as the myths and folkloric stories rooted in African culture. Ato Quayson agrees that the magical features referred to in this narrative form are "elements drawn from mythology, fantasy, folk tales, and any other discourse that bears a representational code opposed to realism." (164) Such elements are not deployed willy-nilly, but tend to have significant strategic importance to the narratives, and their introduction may initially appear to be at odds with other quotidian elements of the story. Indeed, what seems to be the most distinctive feature of magical realism, is that the supernatural and magical elements— folklore, myths and fairy stories—are presented as ordinary and commonplace, with neither astonishment nor disbelief shown by narrator or characters. According to Bowers, magical realism "relies most of all upon the matter-of-fact, realist tone of its narrative when presenting magical happenings" (3). Magical realist texts thus count on the reader to maintain an acquiescent and blasé attitude to encountering supernatural elements occurring within the otherwise realist world of the narrative. Zamora and Faris have asserted that the supernatural, in magical realist texts, "is not a simple or obvious matter, but it is an ordinary matter, an everyday occurrence — admitted, accepted, and integrated into the rationality and materiality of literary realism." (3) Being grounded in the real world, as they are, magical realist texts use

elements of fable, myth and fairy tales, among others, as a method for finding different and innovative ways of depicting problems or scenarios in society. Bowers describes it as offering "a way to discuss alternative approaches to reality to that of Western philosophy" (1). The introduction of magical or supernatural elements into otherwise realistic environments is seen as disruptive to the world of the text, often facilitating its protagonists' ability to oppose forms of cultural and political subjugation, such as, for example, gender inequality, racism or the supposed superiority of Western philosophical ideas. "Because it breaks down the distinction between the usually opposing terms of the magical and the realist," write Zamora and Faris, "magical realism is often considered to be a disruptive mode. For this reason it is considered that magical realism is a mode suited to exploring … and transgressing … boundaries, whether the boundaries are ontological, political, geographical, or generic" (5). Okorafor's prose adheres to these ethics. The black women protagonists of her narratives unremittingly push back against gender and racial stereotypes and other forms of hegemonic centrism. Moreover, they do so by transgressing boundaries, flouting convention and rebelling against authority.

The disruptive potential of magical realism has led some scholars to refer to it as a postmodernist mode, or to draw parallels between the two, as questioning the veracity of one perspective over another tends to be a common strategy of both forms. Brenda Cooper points out that "magical realist writers spurn the conventions of classical realism and use many of the devices and techniques that have come to be associated with postmodernism." (23) Such techniques tend to drive an attitude of scepticism and include devices such as satire, pastiche, paradox and irony, involving themes like the spirit of carnival and a cacophony of discordant voices, along with the grotesque, the improbable and the blasphemous, as well as temporal distortion, mythic time or the fictionalising of historical figures or events. Through

lampooning an historical account, or by postulating an alternate version, a magical realist text calls into question the 'official version' of a particular historical occurrence or series of events. Bowers perceptively notes "it is understood that versions of history that claim to be the only truth are usually created by people in power in order to justify their position and maintain it" (77). The use of intertextual references is also a common strategy. Again, Okorafor's narratives employ many of these devices. As mentioned earlier her capacity for satire and irony have earned her, in the eyes of Kinitra D. Brooks, "the mantle of Wole Soyinka," not only for her political critiques, but also for her ability to inject parody and ridicule into scenarios. Okorafor also puts to use the spirit of carnival and the cacophony of discordant voices, returning again and again in her narratives to locations such as the marketplace, which has been identified with an African carnivalesque, and by switching between multiple focalisers in narration.

With the linking of two oxymoronic terms—magical and realism—terms that are ostensibly utterly opposed, magical realism is also well suited to depicting themes in which contradictory elements exist side by side, also referred to as an overlap of opposites. The linking of the terms serves to erode the distinction between the magical and the real. "Magical realism strives," writes Brenda Cooper, "with greater or lesser success, to capture the paradox of the unity of opposites; it contests polarities such as history versus magic, the pre-colonial past versus the post-industrial present and life versus death" (1). Okorafor's attempts to juxtapose technology and magic are a key example of this. Bowers has noted that "magical realist fictions are often set in rural areas away from influence over, or influence from, the political power centres" (32). As such, magic realism is seen as a tool for decentring such centres of political power, and often seeks to set up oppositions between dichotomies with view to privileging that which is on the periphery, as opposed to that which

occupies the hegemonic centre. Such oppositions and privileging may include: old over new; rural over urban; tradition over modernity; and precolonial belief systems, such as found in myth and folklore, over the hubris of late capitalism and its unalloyed belief in science and technology. Why, one might well ask, did the need arise for magical realism to reintroduce the fantastic and supernatural events from forms, like fairy tales and fantasy, when those forms had already been long in existence? "Before the birth of the modern novel," Ghosh reminds us, "wherever stories were told, fiction delighted in the unheard-of and the unlikely. Narratives like those of *The Arabian Nights*, *The Journey to the West*, and *The Decameron* proceeded by leaping blithely from one exceptional event to another." (16) Zamora and Faris suggest that magical realism is prompted by an "impulse to re-establish contact with traditions temporarily eclipsed by the mimetic constraints of nineteenth- and twentieth-century realism." (2) That Okorafor draws so freely from Igbo and Yoruba folklore certainly speaks to the desire to recuperate traditional ideas, such as those, for instance, denigrated as superstition during colonial encounters by both missionaries and the rationalism of the Enlightenment episteme. The urge to restore connection with tradition, within magical realist texts, may well take the form of superstitious village folk somehow getting the better of or outsmarting highly-educated urbanites. "In magical realist texts," continue Zamora and Faris, "ontological disruption serves the purpose of political and cultural disruption: magic is often given as a cultural corrective, requiring readers to scrutinize accepted realistic conventions of causality, materiality, motivation" (3). Bowers writes that magical realism is suitable for depicting "a particular attitude to non-scientific and non-pragmatic beliefs in a world which is universally influenced by science and pragmatism." (4) In *Who Fears Death* the use of magic (juju) is depicted as having outlasted the tech of computers and other present-day electronic gadgets, epitomising such an attitude to non-scientific and non-pragmatic beliefs. The idea is not to discredit science, per se, but to suggest that other modes of philosophical inquiry are *as*

valid as the rationalism and positivist thinking of the realist episteme. The use of folktales and fables, even theories acknowledged to be "old wives' tales" are exemplary in demonstrating such an attitude. The magical and supernatural elements in the texts are deployed to interrogate the ideological foundations of the political power centres, ideological foundations which are often grounded in positivist rationalism. Brenda Cooper supports this view. "Postcolonial writers are at pains to illustrate that their pre-colonial societies were not backward because they did not develop Western forms of technology," (221) she writes. She suggests further: "They show that magical beliefs had spiritual roots that acted rationally in keeping the society together" (221). Magical realism therefore exhibits the same attitude to political and ideological hegemonies. Bowers underscores that magical realism "offers to the writer wishing to write against totalitarian regimes a means to attack the definitions and assumptions which support such systems (e.g. colonialism) by attacking the stability of the definitions upon which these systems rely" (4). She also highlights magical realism's association "with fictions that tell the tales of those on the margins of political power and influential society" (33). This talks to why it has gained popularity among writers in postcolonial countries who, for instance, may seek to question and undermine the continued influence of their former colonial rulers. Okorafor's narratives similarly employ and deconstruct fictions that serves as justifications for subjugation. This suitability to postcolonial contexts has been a ubiquitous theme among theorists. Zamora and Faris are among those attesting to its appropriateness to postcolonial discourse. Brenda Cooper likewise writes that magical realism "arises out of particular societies—postcolonial, unevenly developed places where old and new, modern and ancient, the scientific and the magical views of the world co-exist." (216)

The matter-of-fact tone used by magical realist writers is said to be attributable to what is called “ironic distancing” between the viewpoint of the author and that of the societies aligned with the mythical or supernatural elements of the text. Brenda Cooper holds that “ironic distancing is a crucial feature of the magical realist narrative point of view,” pointing out that the authors are invariably educated within a Western context, and while there may exist inherited or historical links to the cultures depicted in their narratives, they tend to be largely disconnected from them. “Magical realist writers have an urge,” writes Cooper, “to demonstrate, capture and celebrate ways of being and of seeing that are uncontaminated by European domination. But at the same time, such authors are inevitably a hybrid mixture, of which European culture is a fundamental part” (17). Inasmuch as her narratives seek to celebrate elements from African myth and folklore, notwithstanding her Western education, Okorafor is most certainly a writer in this cast.

The links between magical realism and environmental literary criticism are by no means new either. In ecocriticism’s founding collection of essays, Cheryll Glotfelty’s and Harold Fromm’s *The Ecocriticism Reader* (1996), Paula Gunn Allen’s essay, “The Sacred Hoop,” was making initial forays into the environmental ethics inherent in the myth, folklore and sacred elements of Native American peoples, the very elements that tend to energise magical realist narratives. Leslie Marmon Silko, a magical realism writer in her own right, was doing likewise in “Landscape, History, and the Pueblo Imagination,” highlighting Pueblo belief that “the Earth and the Sky were sisters… As long as good family relations are maintained, then the Sky will continue to bless her sister, the Earth, with rain, and the Earth's children will continue to survive.” (267) Even in “The Bakhtinian Road to Ecological Insight,” Michael J McDowell offers up the view that “alternative values in the margin often rescue the dominant culture in difficult times,” (371) before making the case for the relevance

of Bakhtin's dialogical form—characterised by the interaction of multiple voices or points of view—to landscape writing. "Beginning with the idea that all entities in the great web of nature deserve recognition and a voice," writes McDowell, "an ecological literary criticism might explore how authors have represented the interaction of both the human and nonhuman voices in the landscape." (372) In relation to the use of postmodern devices and techniques by writers of magical realism, Brenda Cooper has identified how "the embrace of magic, and of the improbable and the blasphemous has led to the excavation of Mikhail Bakhtin and the carnivalesque, of the cacophony of discordant voices and the profane body" (23) In "Petro-magic-realism: toward a political ecology of Nigerian literature," Jennifer Wenzel describes magical realism as "a literary mode that combines the transmogrifying creatures and liminal space of the forest in Yoruba narrative tradition with the monstrous-but-mundane violence of oil exploration and extraction, the state violence that supports it, and the environmental degradation that it causes" (456). In "Of a Magical Nature: The Environmental Unconscious," Jesús Benito, Ana M Manzanas, and Begoña Simal assert that "[e]nvironmentality is…encoded in magical realism through both literal and metaphorical renditions of the frictions between the capitalist notion of progress and the survival of the earth as we know it, the spiritual wasteland resulting from the literal wasteland, human greed as the originator of devastation, and other environmental issues" (194).

While the range of scholarly articles engaging in ecocritical analyses of magical realist narratives is undoubtedly too numerous to mention here, there are two works of scholarship that I would like to highlight here. One of these—particularly relevant to the analysis in the following chapters—is Cajetan Iheka's *Naturalizing Africa: Ecological Violence, Agency, and Postcolonial Resistance in African Literature*, which is solely focused on African texts, of which magical realism makes up but a portion. Iheka makes the case that

African texts, especially those rooted in oral tradition and folktales, are particularly effective in depicting the entanglements of human with nonhumans, remarking that the "capacity of the magical or animist text to convey the multiple dimensions of Africa–material and supernatural–without privileging either makes the form amenable to the complex ecological interrogation" (16). Demonstrating how the overlap of opposites and the inclusion of nonhuman others are distinctive to magical realism's narrative conventions, he highlights the value of such texts as being "constituted by multispecies presences, human and nonhuman, visible and invisible, that shows the limit of the human person and his or her imbrication with various nonhuman forces"(17).

Ben Holgate's 2019 book *Climate and Crises: Magical Realism as Environmental Discourse* stands out as the sole full-scale monograph exploring the intersection between magical realism and ecocriticism. According to Holgate non-Western belief systems— such as Taoism, Buddhism and shamanism— explored in magical realism are well suited to the aims of ecocriticism. "This exploration of alternative ontologies and epistemologies in contrast to the Western scientific rationalism that underpins ecocriticism," he writes, "parallels the portrayal of the alternative belief systems that are typically present in magical realist fiction" (28). Holgate lists four shared aims of magical realist fiction and environmental literature: that they tend to hold a postcolonial view, pushing back against colonial influence; that they seek to counter hegemonic ontologies and epistemologies, such as positivist and scientific rationalism; that they maintain a focus on the interconnectedness of life forms, and that they espouse a transgressive character for dismantling binaries. Holgate's perspective is informed by the concept of "ecological imperialism," coined by environmental historian, Alfred Crosby, "whose work," writes Graham Huggan and Helen Tiffin, "reveals the historical embeddedness of ecology in the European imperial enterprise"

(3). Holgate points out that ecological imperialism—signifying a range of activities from the forceful seizure of land and natural resources to the imposition of foreign plants, animals and agricultural practices—was "premised on both ontological and epistemological differences about what it is to be human and animal" (82).

Okorafor's genre-bending prose demonstrates her adeptness at using iconic and culturally specific supernatural elements to highlight or address real-world political, social, and environmental issues, as well as to disrupt the Western episteme of the realist text, motivating for local solutions to said issues. The accomplishment of Okorafor's method is how well she situates magical realist elements within the tropes of science fiction. The post-apocalyptic desert wasteland, for instance, which serves as the setting in *Who Fears Death*, seamlessly combines the conditions of the pre-colonial past with that of the post-industrial present, and in doing so, both dismantles binaries and complicates Western notions of progress. The synthesis of these two genres makes Okorafor's writing an area rich with possibilities for environmental discourse, as the reader will see in the analyses which follow.

Chapter 3: Eco-reverence after Armageddon in *Who Fears Death*

The Quest for Post-Collapse Pastoral

Who Fears Death, published in 2010, is set in a post-apocalyptic Sudan approximately 100 years into the future in a place called the Seven Rivers Kingdom. Against the backdrop of a traditional and religious conservatism that is so often the hallmark of post-apocalyptic tales, *Who Fears Death* relates the story of a long-standing feud, between two tribes, the light-skinned, thin-lipped Nuru and the dark-skinned Okeke, in which the Nuru enslave and carry out acts of ethnic cleansing on the Okeke. The basis for the enmity between these two tribes, and the justification for the Nuru's genocidal intent is enshrined within a religious text called the "Great Book". We, the readers, are not made privy to the nature of the apocalyptic event, just that, in line with the offered cosmology, the Okeke—through their profligate attitude and practice toward the earth, water, air and sky—deeply offend the earth-deity, Ani, from Igbo cosmology, who curses them to be slaves to the Nuru. The setting in the narrative is a water-stressed primal desert, with rural agrarian economies, which conjures images of a future marked by the impacts of climate change. Along with deeply traditional and conservative forms of social organisation, the reader encounters a society where technology has largely been replaced with juju, a spiritual traditional form of magic. In this far future, sorcery is an accepted constituent of the cultural milieu, with the computers and digital technology of our contemporary times portrayed as outmoded and largely obsolete.

In the novel the reader meets Onyesonwu who is the product of a routinely organised campaign of militarised rapes in which Najeeba, an Okeke woman, is impregnated by Daib, a powerful Nuru sorcerer and military general. Okorafor drew the idea for these types of rape from actual events, which she read about in a 2004 *Washington Post* article, "We Want to

Make a Light Baby: Arab Militiamen in Sudan Said to Use Rape as Weapon of Ethnic Cleansing," in which journalist Emily Wax details how more than a million African families have been driven off theirs lands by Arab rebels called the Janjaweed, who routinely rape African women, both in "a systematic campaign to humiliate the women, their husbands and fathers, and to weaken tribal ethnic lines" (Emily Wax, "We Want to Make a Light Baby," n.pag.). Wax explains the strategy behind this genocide, pointing out that in Sudan, "a child's ethnicity is attached to the ethnicity of the father" (Emily Wax, "We Want to Make a Light Baby," n.pag.). In *Who Fears Death*, Onyesonwu, along with other offspring of this kind of miscegenation are referred to as "*Ewu*" and are stigmatised as "children of violence" through their sand-coloured complexion and freckles. Her social standing as *Ewu* effectively renders her a lightning rod for a range of ethnic, traditional, racial and gender prejudices, with the situation becoming all the more complicated when she learns she has magical shape-shifting powers, and that there is a prophesy about a tall *Ewu* girl who would rewrite the Great Book. As the narrative unfolds, Onyesonwu learns that her biological father, Daib, is spearheading renewed genocidal attacks on Okeke in the west, and the reader follows her as she trains to be a sorcerer and then departs with an entourage of friends, Binta, Diti, Luyu, Mwita and Fanasi, on a mission to confirm that the prophecy indeed refers to her, and then on to Durfa, the Nuru stronghold, to put an end to the genocide by doing battle with Daib.

On the journey to the west, Onyesonwu experiences a range of challenges, ranging from magical attacks by her father who has become aware of her existence, to her struggles to control her temper and her powers, as well as coming to terms with the knowledge that she is destined to lose her life in fulfilling her quest. A pervasive tribulation are the varied forms of intersectional prejudice she faces along the way, many cases of which are informed by the authoritative impact of the Great Book, the hegemonic influence of which she eventually

counters by rewriting it as prophesied, using Nsibidi, a south-east-Nigerian system of writing, seen as mysterious and magical, as it is said to be known only by the initiated of a secret society.

As a post-apocalyptic science fiction narrative with dystopian elements, *Who Fears Death*, largely cautions against prejudice and parochial attitudes associated with race and gender, yet broaches issues associated with cultural practices, modernity, religion and environment, among others. The variety of controversial issues broached dictates that it is not overtly environmental in its messaging. It does, however, provide intersectional insight into how overlapping systems of oppression such as those associated with race, class and gender are enmeshed with attitudes that are similarly oppressive to the natural world of nonhuman others or see it merely for its resource value. *Who Fears Death* also portrays how environmental discourse can be co-opted to justify both the control of one group over certain strategic resources, and environmental racism, involving the relegation of specific groups to areas with higher temperatures, less trees or less access to water. The desert setting of this far future narrative also enables speculation of what a world impacted by climate change may look like.

Sifters through the Ashes

Broaching as many controversial and topical issues as it does, *Who Fears Death* has attracted scholarly attention from a variety of sources. As is to be expected, a significant amount of that scholarly attention has been focused on issues related to race and gender, albeit from various genre theories—speculative fiction, Afrofuturism, fantasy—to tackle issues such as diversity and stereotypes. Given what Okorafor has herself said about genres, as well as the fact that she has referred to her work as “organic fantasy,” it is not unsurprising that scholars

have approached her work from such a variety of genre frameworks. Elin Isvind, for example, considers *Who Fears Death* an exemplary fantasy text, aiming her analysis on its ability to bridge cultural divides and its applicability to motivating for diversity and representation in the intercultural classroom. Natalie Ingram also reads Okorafor's work as fantasy, and likewise takes aim at colonial and patriarchal values, asserting that the mythical elements in *Who Fears Death* calls into question those values encrypted in the European tradition of the genre. Lola de Koning as well as Catharina Anna Dijkstra are among those scholars who apply the label of speculative fiction to *Who Fears Death*, similarly reading it as well-suited to challenging racial and gender stereotypes. Of common interest in these analyses is a focus on the concept of hybridity and how it problematises stereotypes and insular ideas about identity. Hybridity is, of course, a central technique for illustrating the overlap of opposites in magical realist texts. It is, however, no less at home in science fiction, having been used to excellent effect by Donna Haraway's "A Cyborg Manifesto," a declaration to which Okorafor has made intertextual reference in her young adult fiction. Among the controversial and topical issues alluded to above is the circumcision ritual Onyesonwu undergoes and the militarised rape by which she was conceived, creating a space for more pointed discussions on gender issues. In "The Unbearable Burden of Culture: Sexual Violence, Women's Power and Cultural Ethics in Nnedi Okorafor's *Who Fears Death*," Esther L. Jones explores how female sexuality, through genital mutilation and militarised rape, is used by repressive patriarchal societies to police cultural belonging. An element of Jones's analysis relevant to this study focuses on this genital cutting ritual, and highlighting how its depiction as a cultural rite problematises the universality of the liberal Western notion of bodily autonomy. Jones writes that "the liberal autonomous subject is [thus] not a universal category that can be applied in cultures where the health of the community is presumed to take precedence over individual behaviours" (76). Jones`s insight is relevant to

this study because it highlights how the rights of the liberal autonomous subject of Western culture tends to be privileged over that of the collective. The liberal autonomous subject of Western culture can be seen as synonymous with the individual on which such emphasis is placed in the realist novel, as per Ghosh`s critique. In "Creator/Destroyer: The Function of the Heroine in Post-Apocalyptic Feminist Speculative Fiction," Mary Margaret Hughes Patrick likewise delves into female sexuality. Zeroing in on the repressive and misogynistic aspects of the post-apocalyptic context (in which there is often the imperative to repopulate or rebuild societies), Patrick focuses on how women are instrumentalised for their reproductive abilities even as they hold the power to create a new alternate order to traditional patriarchy. Another scholarly contribution more or less consistent with this study is Miriam Pahl's essay, "Time, Progress, and Multidirectionality in Nnedi Okorafor's *Who Fears Death*" in which Pahl argues for *Who Fears Death* as a text that upsets hegemonic notions of time as progress. She reads the Great Book as a constructed discourse—of Africa as backwards—through which slavery and colonialism came into being, and which is being reversed or undone, as it were, by Onyesonwu's quest to rewrite it. As in this study, Pahl recognises the mixing of magical realism with science fiction but argues for this blending "as a means to uplift magical realism from a place in literary criticism that is bound to the past and to claim a seat in the white male dominated arena of science fiction," (208) a view with which I am not altogether comfortable. As pointed out in an earlier chapter, among the high-brow literary journals magical realism tends to be taken more seriously than science fiction, and is thus in no need of uplift. Notwithstanding this particular inconsistency, Pahl argues that *Who Fears Death* "transgresses national and genre boundaries" and that it "offers different readings to the different 'reading communities'," (213) exemplifying what she refers to as "a kind of multicultural openness" (220). In highlighting the trans-cultural appeal of Okorafor's fiction, Pahl is motivating for a reassessment of the criteria and standards by which literary works are

valued, drawing support from Eileen Julien's objection to the notion "that the European novel is the highest achievement in literature, setting the standards for other literatures" (212). Touching on some of the same issues as Pahl is Joshua Yu Burnett's essay, "The Great Change and the Great Book: Nnedi Okorafor's Postcolonial, Post-Apocalyptic Africa and the Promise of Black Speculative Fiction," in which he holds up *Who Fears Death* as a demonstration of the potential in speculative fiction "for examining possibilities that are not available within mainstream realist literature" (134). For Burnett, this means subverting the imperial impulses upon which mainstream speculative fiction have traditionally been built, to the extent that it expresses a truly postcolonial perspective. It could also, however, be read as subverting environmental discourses that have supported, and continue to support, colonial and neocolonial exploitation. Under Burnett's reading of the colonial encounter as an apocalyptic event, the post-apocalypse contains the potential to represent a truly postcolonial Africa free from colonial influence, a frame within which the use of juju—traditional magic—serves to undermine Western rationalism in the same way as Nsibidi—a precolonial African writing system—serves to undermine the narrative furthered by the Great Book. While Burnett makes no specific reference to climate change or any other environmental issues, he does point to the limits of realism for depicting contemporary global conditions. "Speculative fiction, such as that produced by Okorafor," he writes, "is, in its unfettering from the limits of realistic representationalism, […] uniquely well-suited for grappling with current neocolonial reality" (136). The current neocolonial reality to which Burnett refers most certainly consists of paradoxical elements which defy easy depiction within realist representation, such as, perhaps, the multifarious ways in which Africa continues to be exploited by its former colonists. Lisa Dowdall is another scholar recognising the ability of science fiction and fantasy to portray situations with which realist writing falls short, classing *Who Fears Death* among narratives "that thrive on the myriad possibilities within our lived

reality, which can only be fully explored outside the bounds of generic normativity" (2). Though she founds her analysis in the utopian locus of science fiction and fantasy—forms producing cognitive estrangement—Dowdall does argue for magical realism's function as a literature of the fantastic within modern African literature. Drawing from Brenda Cooper, Dowdall proposes that the configuration of the magical with the real represents the paradox of African contexts "more authentically than realist texts" (4) and that it "grasps the lived reality of hybrid societies, rejecting the positivist strictures of post-Enlightenment rationalism" (5) Dowdall situates Okorafor's appropriation and subversion of science fiction's tropes within the tradition of postcolonial voices 'writing back' to engage the power of imperial discourse. "If we accept John Rieder's claim that sf is a product of imperialism," writes Dowdall, "then Okorafor's trans-genre novels adopt the estranging techniques of sf and radical fantasy to write against global hegemony and stake a claim for Nigerian futures that deny the totality of European or American discourse" (5).

Science Fiction: Ecological Revelations from the Post-apocalypse

In exploring environmentalism in *Who Fears Death*, unpacking the trope of apocalypse, both in science fiction and earlier literature, should be an obvious starting point, especially given that it is also one of the most commonly-used tropes of ecocriticism. In doing so it is necessary to briefly discuss the roots of apocalyptic writing as a precursor to framing its operation within science fiction. It is also important to note that the tropes of science fiction form part of what is called the 'megatext', which is a collection of intertextual markers containing a range of rhetorical moves distilled from canonical science fiction texts. Understanding the historical context within which certain narrative themes emerge, as well as how they have developed over time, is key to meaningful analysis of such narratives.

The word ‘apocalypse,’ for instance, has its etymological roots in the Greek, “αποκάλυψη”, meaning to unveil, uncover, disclose or reveal which can be seen as a happy coincidence in relation to the Ghosh’s charge about the conventions of the realist novel serving to conceal rather than reveal the climate threat facing humanity. Often conflated with Armageddon, apocalypse has biblical roots and is strongly associated with dark and sombre prophecies about the fate of humanity following the final battle between good and evil described in The Revelation of St John, the final book of the Bible’s New Testament. In his entry for “apocalyptic literature” in *A Dictionary of Literary Terms and Literary Theory*, John Anthony Cuddon points out how literary engagement shifted the focus of apocalyptic writing to critiques about human conduct, writing that:

> The apocalyptic imagery in much of Blake’s poetry combines religious visions with a more secular anger directed at the injustices and depravations of the modern world; subsequently, apocalyptic writing has tended to blame man rather than God for bringing about the end of civilization. In the 20th c., and in the postwar period especially, visions of man-made apocalypses brought about by war, pandemic or environmental catastrophe are not uncommon, and abound in science fiction. (47)

With the thematic roots of apocalypse to be found in eschatology and millenarianism, it is to be expected that in science fiction an array of religious themes and symbolism tend to be retained. Cuddon’s identification of apocalypse, in the poetry of William Blake, as symptomatic of “a more secular anger directed at the injustices and depravations of the modern world,” (47) is indicative of how apocalypse came to be a trope of science fiction, with its emphasis on the consequences—intended and unintended—of technological development and modernity.

In her essay, "Destroying Imagination to Save Reality: Environmental Apocalypse in Science Fiction," Keira Hambrick draws from David Seed's *Imagining Apocalypse: Studies in Cultural Crisis* to unpack apocalypse as typifying two configurations, terminus and telos, with terminus, as its name implies, meaning a literal end or end-of-the-line, while telos points to a goal or ultimate aim or outcome. Elaborating further on how these configurations operate, Hambrick writes:

> When environmental discourse engages the concept of apocalypse as terminus, readers are admonished, scolded, and left feeling helpless in the face of absolute, inexorable crisis. Through the lens of telos, on the other hand, we expect that apocalypse is the culmination of history in a final goal or destination. In environmental writing, telos appears as the idea that our current paradigm ends, and we then rely upon our ingenuity and will to survive to eke out an existence within a new paradigm. If the world floods, we will learn to survive at sea, or use technology to adapt to hotter climates. (131)

Narratives in the configuration of terminus, which tend to be elegiac, relate how the world ends and are characterised by despair, as humanity has no recourse to preventative action and is ultimately wiped from the planet through an inexplicable plague or some interstellar threat such as the Chicxulub asteroid that wiped out the dinosaurs. Telos, however, focused on survivors trying to survive the post-apocalypse, is more common in science fiction narratives, even though humanity is often taken to the brink of extinction, as in Mary Shelley's *The Last Man* and in George R. Stewart's *Earth Abides*. Cuddon similarly points out that the emphasis in tales of apocalypse is often on what comes after, making mention of "narratives [that]

focus on the post-apocalyptic aftermath, which facilitates an exploration of what humanity might be like without the support – or constraints – of civilization as we know it", adding that such narratives have "close parallels with dystopian literature" (47). In *The Science Fiction Handbook,* M. Keith Booker and Anne-Marie Thomas point out that terminus and telos are configurations with a long tradition in written narrative, configurations which remains very much at work in science fiction narratives. "Ancient literature," they write, "produced by a low-technology human culture that was very much at the mercy of natural phenomena, is filled with tales of natural (or supernatural) disaster and its aftermath" (53). Humanity at the mercy of natural phenomena is most certainly an enduring theme in a well-rehearsed tradition of global flood myths, straddling the borders of fact and fiction, which exists in the historical lore of a wide range of geographic peoples from Peru to the Middle East to India. In *Who Fears Death,* I read it as telos (as opposed to terminus), as its characters look back to an old paradigm, referred to as "the Old Africa Era," (17) and as they eke out in a new paradigm as a low-tech (or post-tech) culture somewhat at the mercy of natural phenomena. Understanding this configuration helps in identifying how *Who Fears Death* conforms to similar narratives in the intertextual repository which is science fiction's megatext.

In *After the End: Representations of Post-apocalypse,* James Berger explores the rhetoric of this trope, illuminating how pastoral and apocalypse—both tropes of ecocriticism—represents two sides to the same coin. "The post-apocalypse in fiction," writes Berger, "provides an occasion to go 'back to basics' and to reveal what the writer considers to be truly of value" (8). With the emphasis on what comes after, the apocalyptic event often presents as a rather mundane or even anticipated occurrence as opposed to the dramatic and visual cataclysm generally associated with the day of reckoning. Consistent with this idea about apocalypse—very much applicable to *Who Fears Death*—is that of it being a

distinctive milestone along the historical trajectory. Berger also asserts that noteworthy events, such as the Holocaust and the bombing of Japan, taking on apocalyptic meaning. "They function as definitive historical divides," writes Berger, "as ruptures, pivots, fulcrums separating what came before from what came after. […] Previous historical narratives are shattered; new understandings of the world are generated" (5). It thus follows that in writings of the apocalypse the emphasis typically rests upon the extent to which these 'new understandings' contrast with the 'shattered historical' ones. Berger illustrates this point with specific and fitting reference to science fiction:

> In modern science fiction accounts, a world as urban dystopia or desert wasteland survives. Very seldom…does the end of the narrative coincide with the end of the world. Something is left over, and that world after the world, the *post-apocalypse* (original emphasis), is usually the true object of the apocalyptic writer's concern. The end itself, the moment of cataclysm, is only part of the point of apocalyptic writing. The apocalypse as eschaton is just as importantly the vehicle for clearing away the world as it is and making possible the post-apocalyptic paradise or wasteland. (6)

Who Fears Death conforms to many of these narrative features. The reader is not explicitly told the nature of the event that disrupts the historical trajectory, only that what s/he is seeing is what comes after the rupture or fulcrum. This event undoubtedly brings about revised understandings of the world, codified in what is known as the Great Book, which tells the reader about the Okeke, namely, that "during the Old Africa Era, they had done something terrible causing Ani to put this duty on their backs. It is written in the Great Book" (17). As Berger points out, the world, either as urban dystopia or desert wasteland survives. This is

invariably the case in order to explore whether survivors have learned from the folly that brought them to this wasteland.

Through a long list of post-apocalyptic narratives, the megatext of science fiction has a number of stock rhetorical moves. To understand these rhetorical moves, it is worthwhile surveying how post-apocalypse has been put to use in prominent science fiction texts. Under a theme labelled "Ruined Earth", in *The Encyclopedia of Science Fiction (SFE),* Peter Nicholls, John Clute and David Langford write about a "cultural amnesia" as one of the staples of the far-future post-holocaust scenario: "If humanity avoids extinction, the details of past technology and the fall of civilization are apt to become increasingly blurred – and often mythologized – with each new generation of survivors" (*SFE*, "Ruined Earth," n.pag.). Noting how the basic plot invariably includes "savage barbarism and a bitter struggle for survival, with rape and murder commonplace," (*SFE*, "Ruined Earth," n.pag.) followed by feudal and medieval forms of social organisation, they add that "often the new world is seen as more peaceful and ordered, more in harmony with Nature, than the bustle and strife of civilization," (*SFE*, "Ruined Earth," n.pag.) revealing a pastoral and possibly even utopian orientation of such narratives. A significant number of iconic exemplars have tended to focus largely on the aftermath rather than the cause in a way that is relevant to environmentalism. Booker and Thomas point to *Earth Abides* by George R. Stewart as a standout among these aftermath narratives. Here the survivors of a plague form a tribe that return to a hunter-gatherer lifestyle. Walter Miller's *A Canticle for Leibowitz*—lauded by Booker and Thomas as "the most critically respected post-holocaust novel of the 1950s,"—also portrays how a "nuclear holocaust has plunged humanity into a second Dark Ages" (57). Booker and Thomas similarly draws attention to "an agrarian, deeply technophobic society … [that] develops after a nuclear war" in Leigh Brackett's *The Long Tomorrow* (54). Nicholls, Clute and Langford,

citing both *The Long Tomorrow* and John Wyndham's *The Chrysalids*, typify such societies as "an antitechnological majority, usually medieval in social structure and rigidly conservative in outlook" (*SFE*, "Ruined Earth," n.pag.). "In stories of this type," write Clute, Nicholls and Langford, "technology is generally feared, since it was through technology that mankind almost destroyed itself" (*SFE*, "Ruined Earth," n.pag.). Of course, there are a range of post-apocalyptic narratives readily engaging themes pertaining to environmental despoliation, ecological crises and how humans interact with nonhuman others. Post-apocalyptic narratives also enable profound reflections on the folly or wisdom of technological progress, and about the type of lifestyles and societies we want to inhabit. In *Green Planets: Ecology and Science Fiction*, Gerry Canavan embarks on such a reflection particularly relevant both to post-apocalyptic narratives as well as to this analysis:

> Borrowing his categories from Auden, Samuel R. Delaney has written that two ideological positions are available to us in modernity, each one carrying either a positive or a negative charge. One can imagine oneself to be the citizen of a marvelous New Jerusalem, the "technological super city where everything is clean, and all problems have been solved by the beneficent application of science"– or else one can be a partisan of Arcadia, "that wonderful place where everyone eats natural foods and no machine larger than one person can fix in an hour is allowed in. Throughout Arcadia the breezes blow, the rains are gentle, the birds sing, and the brooks gurgle." Each position in turn implies its dark opposite. The flip side of the Good City is the Bad City, the Brave New World, where fascist bureaucrats have crushed the soul of the human, machines have replaced work and love, and smog blocks out the stars; the other side of the Edenic Good Country is the Land of the Flies, where the nostalgic reverie of an imagined rural past is replaced instead by a

> reversal of progress and an unhappy return to the nightmare of history: floods, wars, famine, disease, superstition, rape, murder, death. (1)

The Arcadia-New Jerusalem dichotomy, with its dark-light orientation, is a particularly powerful device for exploring humanity's interaction with the physical environment. It likewise shines a light on attitudes to scientific advancement. In science fiction, apocalyptic disaster can thus result both from a rejection of scientific truth—à la climate denial—or from an unalloyed belief in the potential of technological development, as often is the case in the science fiction narrative trope of the "mad scientist". Delaney's ideological positions also demonstrate that either ideological position can be viewed from a positive or negative point of view, with these viewpoints often mediated by a character's attitude to a range of thematically opposed preferences, such as tradition versus modernity, natural versus artificial or rural versus urban. An important part of the rhetoric in many of these narratives—particularly relevant to *Who Fears Death*—also centres on whether the post-holocaust society somehow repeats the errors, attitudes and prejudices of its predecessors.

It is clear that the societies in *Who Fears Death* conform, more or less, to many of the conditions described above, aligning to well-rehearsed rhetorical moves of the megatext. There is the scripted savage barbarism between the Okeke and the Nuru, with the Okeke needing to struggle for survival, contending with militarised rape and genocide attempts (8). Such atrocities are conventional features of post-apocalyptic science fiction narratives, signalling the breakdown of civilization with the loss of the rule of law and entrenched human rights. *Who Fears Death* stops short of peopling the wasteland with indiscriminate roving marauders seeking to rape, pillage and enslave, but only just. Notwithstanding the narrative provided by the Great Book—that the Okeke had been responsible for

environmental despoliation—it is the Okeke's lifestyles which are found to be significantly more in harmony with nature. Jhawir, the village where Onyesonwu and her mother settle after spending years roaming the desert, has a rather pastoral appeal, and can be seen as typical of Okeke villages and lifestyles. In terms of social organisation, power is centralised, with the responsibility of governance vested in a small group of traditional elders represented by the House of Osugbo, which is "Jwahir's tallest building and the only one made entirely of stone." (8) Their rustic lifestyle in scattered villages (read self-sufficient bioregional units) is marked by small-scale subsistence, with very little mention of trade over distances. While some mention is made of electricity, electronic gadgets are described as solar-powered. The Okeke live in rural communities, there are no shopping malls, but rather vegetable gardens and marketplaces that sell a range of live animals, including chickens, pet foxes, camels and cows. Modern medicine has been replaced by healers in small tents on the edge of the marketplace, stocked with "brown, black, yellow, and red vials of liquids and powders, various bound stalks and baskets of leaves." (28) The reader also learns of events such as the "Rain Fest Races," the mere label of which evokes the idea of an agrarian, though water-stressed society, in touch with the rhythms of nature: "The Rain Fest lasts four days and during those days no one works. Sprinklers made from capture stations are set up all around the market. People can huddle under umbrellas, watch singing acrobats, and buy boiled yam and stew, curry soup, and palm wine" (141). This description of the Rain Fest, complete with camel racing, similarly conjures images of Bedouin camel-breeding society. There are no traces of industrial mass-production. A blacksmith shop works bronze and iron as metalwork manufacturing here is done by hand. Details of past technology also appear to be lost, replaced by magic or "juju" as it is called. An example of this is when Mwita, Onyesonwu's life-partner, makes a rock fire which somehow produces "heat radiated from the softly glowing pile of stones" (183). While electricity and computers are cursorily mentioned,

technology occupies a marginal presence and there is no mention of any large technological apparatus beyond the capture station, a device used "to pull condensation from the sky for drinking water" (24). Most computers are described as old, ugly and with cracked cases, remnants from a bygone era. And the text also reveals a cache of hundreds of "computers, monitors, portables and e-books," described as "old and amazingly ancient things," which had been abandoned, "packed in a cave in the middle of nowhere and long forgotten" (356).

What informs the bucolic subsistence lifestyle of the Okeke? What shapes their traditional form of social organisation, their antitechnological bias, or at least their prudent and sparing use of the gadgets from "the Old Africa Era"? In science fiction the novum shines the light on society. That the apocalyptic event is not revealed to the reader corresponds with cultural amnesia alluded to in the megatext, with the only clues encoded in the Great Book. And with the Great Book referencing Ani, the earth-goddess, it is not unreasonable to deduce that the apocalyptic event was some sort of ecological collapse premised on an overdependence on particular classes of technology. The links to climate change and humanity's overdependence on fossil fuels are almost overwhelming. It is this ecological collapse and technological failure (the wrath of Ani) which is the novum, the "drastic disruption," or "anomalous breach in accepted verities," (*SFE*, "Novum," n.pag.) referred to by Damien Broderick that provides us with the answers, that accounts for the textual world so radically different from our own, or in Suvin's parlance, the "imaginative framework alternative to the author's empirical environment" (8-9).

As I have pointed out, the details of the fall of civilization are not known beyond how it is mythologised in the Great Book. What can be extrapolated is that the Okeke, as represented by the inhabitants of Jwahir, are a people who—through the catastrophic event

which delivers the narrative into the post-apocalyptic frame—have been returned to a keen awareness of their place within, and their dependence upon, nature. Indeed, their awareness is not merely premised upon their material conditions. It is deeply ingrained within their psyche, encoded as it is within their cosmology, and occupying a prominent place within their religious text, the Great Book:

> This first story we know from the Great Book. We retell it to ourselves time and time again when the world doesn't make sense.
>
> Thousands of years ago, when this land was still made of sand and dry trees, Ani looked over her lands. She rubbed her dry throat. Then she made the Seven Rivers and had them all meet, making a deep lake. And from this lake she took a deep drink. 'One day,' she said, 'I'll produce sunshine. Right now, I'm not in the mood.' She turned over and slept. Behind her back, as she rested, the Okeke sprang from the sweet rivers.
>
> …They were aggressive like the rushing rivers, forever wanting to move forward. As centuries passed, they spread over Ani's lands and created and used and changed and altered and spread and consumed and multiplied. They were everywhere. They built towers that they hoped would be high enough to prick Ani and get her attention. They built juju-working machines. They fought and invented among themselves. They bent and twisted Ani's sand, water, sky, and air, took her creatures and changed them.

> …When Ani was rested enough to produce sunshine, she turned over. She was horrified by what she saw. She reared up, tall and impossible, furious. Then she reached into the stars and pulled a sun to the land. The Okeke people cowered.
>
> …"Under the new sun, most of what the Okeke built crumbled. We still have some of it, the computers, gadgets, items, objects in the sky that sometimes speak to us. (99)
>
> Even "The Lost Papers", a part of the Great Book possessed only by an initiated few (read Dead Sea Scrolls), is not explicit on the Okeke's exact transgression against Ani, merely referring to them as "mad scientists". Listed in "The Lost Papers" are the supposed indictments proving the "fundamentally flawed" nature of the Okeke, "how they invented the old technologies like computers, capture stations, and portables. They invented ways to duplicate themselves and keep themselves young until they died. They made food grow on dead land, they cured all diseases". (364)

This creation myth which details how the Okeke "fought and invented among themselves," as they "twisted Ani's sand, water, sky, and air, took her creatures and changed them," is eerily reminiscent of and consistent with contemporary civilization, which, it would seem, was enough to draw Ani's ire. The novum, Ani's wrath, the rupture that separates the Old Africa Era from the postapocalypse, is shining its light on us. Shifted forward in time and backward in relation to our current view of civilization, removed from the rule of law to a context of violence and rape, we are estranged from the people in the text, only for recognition to dawn on us as we are informed of how they had bent and twisted Ani's sand, water, sky, and air.

Encrypted within these censures is a scathing critique of our current modernity, including skyscrapers and urbanisation, mining, dams, desertification, climate change, air and water pollution, satellites, the extinction of animal species, cloning and even genetic manipulation. Even the sun that Ani pulled to the land can be read as the increased temperatures climate change threatens to deliver.

In the incident where Onyesonwu, Mwita and Luyu, one of Onyesonwu's friends, find a cache of electronic hardware abandoned in a cave, there is also the suggestion that there were still those Okeke who were not entirely willing to relinquish certain trappings of modernity, seeking instead to hide them from Ani. The "wild creativity" expressive of the Okeke's technological development presumably represents indiscretions against Ani, the earth goddess in Igbo cosmology, an environmental signifier within which much of the ethnic elements of the narrative are rooted.

Who Fears Death, as a work of post-apocalyptic science fiction, thus yields traction for discussing a broad range of environmental issues—ranging from climate change to environmental racism—traction that may not necessarily be available to the writer of realist fiction. Ghosh points out the how the realist text struggles to overcome challenges associated with representing the temporal frame of climate change impacts, something this post-apocalyptic science fiction narrative achieves through its far-future desert setting. By looking forward some 100 years there is little need for the abstruse language of science and policy to fully appreciate how climate change impacts are likely to affect human lifestyles into the future. The post-apocalyptic frame and future setting certainly prompts the reader to engage in extrapolation, to imagine scenarios and futures, prompting reflections on what is possible, or more relevantly, what is desirable. Ghosh also asserts that in realist novels the natural

world is depicted as predictable and static, the mere canvas on which the human drama plays out. *Who Fears Death* can certainly not be said to treat the physical environment as mere backdrop. That Ani's wrath is the means by which the apocalyptic event is signified reinforces the idea of the earth as having agency to dispatch consequences upon a wayward and wilful humanity. Through the apocalyptic event there exists the potential for previous historical and hegemonic narratives to be shattered and for new understandings to emerge, learning from the folly of the past. The consequences of Ani's wrath thus shows an irretrievably altered dystopian lifestyle, thoroughly challenging in contrast to the comfort and safety afforded by the trappings of contemporary civilisation, striking an appropriately cautionary note about continuing on our current trajectory. It also, however, shows us the Arcadian ideological position, with lifestyles that are in tune with the environment and modes of living that are less invested in progress, technological development, industrialisation and growth. Like Delaney's Arcadia, there is no mention of machines larger than capture stations, and the reference to solar-powered electronic gadgets exhibits an awareness of the role of energy regimes in contemporary environmental crisis. As useful as they may be for broaching environmental discourse, however, the dystopian and Arcadian narrative themes are decidedly too extravagant and implausible for realist novels, and much better suited to romances and the end-of-the-world theme commonly addresses by science fiction. Both in Ghosh and in the definition by Baldick, probability is highlighted as an indispensable quality of realism. Due to their improbability, or how starkly they contrast with the present, these thematic elements would thus be unavailable to the realist writer. Moreover, the realist writer may not readily have available to her, those intertextual and rhetorical elements of the megatext with which science fiction readers are often so well-versed. Beyond the emphasis on contained temporal frames and the predictability of the natural world, Ghosh takes specific issue with the realist novel as the form which developed around, and continues to place

emphasis on, the presentation of individual subjectivity. The post-apocalyptic frame of the narrative takes us out of the individual imaginary, as apocalypse's end-of-days theme generally places its emphasis on the destiny and survival of nations, societies and humanity as a whole. *Who Fears Death* is thoroughly focused on ideas about the collective and the common good rather than the emancipatory ideals which inform the rights, responsibilities and 'individual moral struggle' with which realist narratives tend to be concerned. It is generally accepted that science fiction narratives are not known for their character development, routinely employing prototypical characters, such as scientists, heroes or damsels in distress. "There are some remarkable exceptions to this rule," writes Gwyneth Jones, "but it is true that sf relies, like the other popular fiction genres, on a set of stock figures, recognizable and emblematic" (171). *Who Fears Death* happens to be one of these exceptions, with Onyesonwu, the main character, depicted with extremely nuance and subtlety. But for all the character development that goes into Onyesonwu, and though the reader is made privy to a fair share of her individual moral struggle, her hybridity and in-between position within the narrative tells us more about the society within which that struggle takes place, and its problematic elements associated with prejudice and patriarchy, than it highlights her individual subjectivity. Through her participation in the circumcision rite and in embarking on the quest to rewrite the Great Book even though she knows that she is destined to die in the process, Onyesonwu repeatedly models the sacrifice of her individual rights and desires for the collective good. And then there are the high-brow literary journals indicted by Ghosh for failing to take science fiction seriously. It has been noted that science fiction has been seen as frivolous or escapist literary form. However, many of the issues and choices Onyesonwu has to negotiate are serious and solemn issues, and given that their depiction here is inspired by actual events demonstrates that *Who Fears Death*, notwithstanding its adherence to the non-mimetic conventions of science fiction, can hardly

be said to frivolous or escapist, and deserves to be considered, in academia and literary journals, very as serious literature.

Magical Realism: Eco-reverence, Proximity and Narratives of Misrepresentation

Reading *Who Fears Death* as a magical realist text likewise yields a range of opportunities to foreground environmental issues. In fact, that magical realist texts so often bring the supernatural into the material world make them apt for ecocritical evaluation due to their highlighting the presence of nonhuman others. With its focus on marginalised beliefs, magical realist narratives afford opportunities to focus on environmental ethics grounded in the traditional and spiritual beliefs of African indigenous cultures. This analysis thus foregrounds traditional environmental ethics in *Who Fears Death* by focusing on the figure of Ani, the Earth-goddess from Igbo belief, attentive to the behaviours and attitudes of key characters among the Okeke, and how those behaviours and attitudes are informed by their reverence toward Ani. This analysis also highlights that the presence of Ani and other supernatural entities counters anthropocentrism inasmuch as they decentre humans by emphasising the close interaction between humans and nonhuman others. The disruption of anthropocentrism is identified in a range of other instances of proximity enabled by the conventions of magical realism. It has been noted earlier, for instance, that magical realist texts are often set in rural locations, at times with view to privileging marginalised rural lifestyles over that of urban ones. This configuration can productively be applied in privileging lifestyles marked by tradition, simplicity and sustainability over those marked by industrialised modernity and disenchantment. In this analysis I look at how such lifestyles and settings in *Who Fears Death* afford depictions of multispecies presence in which the distinction between nature and culture is blurred, highlighting humanity's interconnectedness with the world of nonhuman others. *Who Fears Death* similarly affords various depictions of interspecies relationships, problematising the idea of human exceptionalism by drawing attention to spatial nearness and shared attributes between humans and nonhuman others. Magical realist texts' concern with what Brenda Cooper refers to as the "the paradox of the

unity of opposites," (1) is frequently a key element driving the hybrid nature of its characters. This analysis consequently examines the hybridity embodied in the figure of Onyesonwu, similarly highlighting the disrupting of boundaries between the human and nonhuman. Finally, another key convention of magical realism involves fictionalising or rewriting historical accounts and dominant narratives as a strategy for re-examining the veracity of those narratives as versions that justify and maintain positions of power. As such, I explore an interpretation of the Great Book as a critique of contemporary modernity, underpinned as it is by Enlightenment ideals of Cartesian dualism and on the pursuit of scientific knowledge which renders plants and animals objects of study to maintain an ideological and exploitative break between humanity and the world of nature. I follow this up with another reading of the Great Book as mirroring a neoliberal colonial discourse in which Africans are represented as unskilled and incapable of caring for their environments, and in need of Western experts to manage their resources, justifying the continued presence and influence of neoliberal exploiters in the figure of international environmental NGOs and multinational corporations.

As mentioned earlier, according to Ato Quayson, the magical features referred to in magical realism are "elements drawn from mythology, fantasy, folk tales, and any other discourse that bears a representational code opposed to realism" (164). Moreover, such elements in magical realism very often represent indigenous belief systems. In exploring environmentalism in the magical realist elements of *Who Fears Death*, the figure of Ani, the Earth goddess, may represent a key starting point. In the previous analysis I have made reference to Ani (or her wrath) as the novum—the apocalyptic event by which the postapocalypse is brought into being. Much of the analysis was focused on what the Okeke had done to provoke Ani's wrath. Ani's wrath, then, is meant to represent the *consequences* of the Okeke's actions. In this ecocritical reading, focused as it is on magical realist elements

of the narrative, it follows that there should be a stronger focus on the role occupied by Ani within the Igbo belief system. Indeed, the deployment of Ani within the text signals the opportunity to explore the ethics of a range of traditional beliefs that questions and contests the anthropocentrism at the heart of damaging attitudes to the environment. In Nigerian literature, specifically in Chinua Achebe's *Things Fall Apart*, an exemplar in African literature, Ani is described as "the owner of all land" (8), as well as "the ultimate judge of morality and conduct" (16). She is also described as the one who punishes those who commit offenses against the earth. In *African Culture, Identity and Aesthetics: The Igbo Example*, Dr. Uche Lynn-Teresa Ugwueze explains:

> The worst crime one may commit is that against Ani, the earth goddess. Ani (earth) is the ground upon which we stand. Ani (earth) therefore connotes a physical space and a supernatural presence. It is believed that if one offends God, he has also incurred the wrath of Ani (earth) who is capable of striking the person dead. One cannot offend God and be at peace with Ani. Therefore what God abhors is also frowned at by Ani. It is common to say, this is nso ani, which means, this is what the earth abhors. (82)

Ugwueze's explanation that Ani refers to both to the physical ground as well as to a supernatural presence makes clear any transgression against the earth is an abomination. That Ani is capable of striking dead someone who commits such an offence shows that transgressions against the earth are likely to be met with fatal consequences. Numerous African cultural beliefs embrace the idea of supernatural beings inhabiting physical objects, places, and creatures in nature. In *Magical Realism in West African Fiction*, Brenda Cooper points out that "African writers very often adhere to this animism, incorporate spirits,

ancestors and talking animals, in stories, both adapted folktales and newly invented yarns, in order to express their passions, their aesthetics and their politics," explaining this practice as a strategy to "illustrate moral points" and for "echoing the worldviews of the stories (40). This strategy is at work in both fiction and non-fiction. Take for instance the reverence displayed toward the python, in Chinua Achebe's *Arrow of God*, or the warning, in Wangari Maathai's *Unbowed*, not to collect dry wood out of the fig tree because it is considered "a tree of God" (44). It is undeniable that environmental ethics underpin Maathai's reference to this belief about fig trees. And it is therefore quite reasonable to read Okorafor's passion, aesthetics and politics as environmental in her deployment of Ani. Indigenous cultural values remain influential in African societies as do the environmental ethics entrenched in those cultural values, and these cultural values are clearly exhibited in *Who Fears Death*. Consistent with Ani's power and authority within Igbo belief, there is an unquestioning willingness on the part of the Okeke to accept the judgement represented by their curse. Despite their vilification by the Great Book's text, the Okeke are loyal and committed to the narrative of their inferiority to the Nuru. The Great Book is so rooted within the cultural consciousness that at six years of age, Onyesonwu, who has been raised in the desert, can boast of having read it twice. According to the text the Okeke retell its narrative to themselves "time and time again" (99), and that "it was well known that the Okeke were born to be slaves of the Nuru. Long ago, during the Old Africa Era, they had done something terrible causing Ani to put this duty on their backs. It is written in the Great Book" (17). Discounting, for a moment, the acts for which they have been judged, many of the Okeke appear to be, as I have noted in the foregoing analysis, a people at one with the natural world, presumably with such a deep reverence for the earth goddess that they stoically accept the curse of slavery to the Nuru that she has laid on them. And so, in contradiction to how they have been characterised by the Great Book, many of the Okeke encountered in the narrative are deeply embedded within

their natural environment. Female characters especially, including Onyesonwu's mother, Najeeba, are depicted as deeply spiritual, shown with the other Okeke women of her village going on a retreat, and having "walked into the desert for seven days to give respect to the goddess Ani," (17) praying with their foreheads to the sand. These retreats are rendered capitalised as "Holding Conversation" (16) with Ani or with the land, as acts of reverence, worship and prayer. Holding Conversation occurs at various points in the text. Following Onyesonwu's circumcision rite, Najeeba is seen to be retreating "into her garden to Hold Conversation with Ani … the Almighty and All-knowing Goddess" (49) Mwita also uses the phrase while speaking about how well butterflies are suited to the desert environment. "Butterflies understand the desert well," he says, "That's why they move this way and that. They're always Holding Conversation with the land" (57). In Alice Curry's analysis of Okorafor's young-adult novels, she identifies the permeable quality between the terrestrial and spiritual in traditional cultures, and in describing the environmental ethics depicted in Okorafor's narratives, appropriates from Godfrey B. Tangwa the term, "eco-bio-communitarianism" which refers to "a traditionally African mode of being-in-the-world in which human beings tend to be more cosmically humble and therefore not only more respectful of other people but also more cautious in their attitude to plants, animals, and inanimate things, and to the various invisible forces of the world'" (43). Curry's analysis is focused on Okorafor's young-adult books, *Akata Witch*, *The Shadow Speaker* and *Zahrah the Windseeker*, in which she describes Okorafor's writing as "entirely bound up with the natural world, more so for the very absence of ecological terminology" (38). While the adult themes in *Who Fears Death* undeniably demands characters with greater boldness and audacity, Onyesonwu and her mother, Najeeba, certainly correspond to the conduct described by Tangwa as cosmically humble and cautious in their attitude to plants, animals, and inanimate things. Najeeba demonstrates an at-one-ness with the natural world, having grown up

travelling the desert as a salt trader. After giving birth to Onyesonwu in the desert, Najeeba has the presence of mind to know that "the birth blood would attract wild animals" (27). She is able to raise Onyesonwu in the desert up until the age of six, and demonstrates a knowledge of desert plants through her ability to make cactus candy, which she sells in villages bordering the desert. Having been raised in the desert, Onyesonwu is similarly at one with the environment, and she is described as having "loved the sand, winds, and desert creatures," that she "learned to sing by listening to the wind," and sometimes, singing in the evening, "attracted owls from far away (30). While Onyesonwu seems to hold a somewhat jaundiced view of Ani, she is still shown to be someone who meditates before going to bed, and that even her dreams contain desert imagery. "Once in bed, I fell asleep and dreamed of soothing sand. Dry, soft, untouched, and warm. I was wind rolling over its dunes. Then I moved across packed cracked lands. The leaves of stubborn trees and dry bushes sang as I passed" (74-75). There is a clear and unmistakeable spirituality when it comes to Onyesonwu's and Najeeba's attitude and conduct toward the desert and the natural world, which seems to confirm Curry's view that Okorafor's writing is "entirely bound up with the natural world" (38).

On the face of it, these are qualities that show Okorafor's affinity for the natural world. They also, however, provide traction for a model of analysis well-suited to the magical realist texts, what Cajetan Iheka refers to as aesthetics of proximity, "which," writes Iheka, "juxtaposes the real and the supernatural in ways that dissolve or obfuscate the barriers between them and thereby rewrites the conventions of the social realist script (often solely focused on humans)" (22). According to Iheka, proximity, which can refer to spatial nearness or to similar attributes, counters anthropocentrism by highlighting interconnectedness between humans and nonhumans. For Iheka, the fusion of the real with the supernatural in

magical realism brings together the material and immaterial worlds, and decentres the human as they exist in close interaction with "nonhuman and supernatural entities." Iheka outlines what he refers to as an *aesthetics of proximity* (his emphasis) as a model for countering anthropocentrism: "[I]f colonial modernity elevated the human as the avatar, the center of the universe, often to the detriment of the nonhuman worlds, both seen and unseen, how has African literature reinstated the nonhuman in relation to the human?" (22) He goes on to list four dimensions of proximity as (1) multispecies presence, (2) interspecies relationship, (3) distributed agency and (4) indistinctness between human and nonhuman entities, asserting that depictions of these dimensions of proximity are commonplace in magical realist texts.

In terms of multispecies presence in *Who Fears Death*, a good example occurs in the marketplace. Onyesonwu lists the "chickens and pet foxes to chase," and "other children [at whom] to glare back." Highlighting the array of people and animals, Onyesonwu describes the marketplace sand as "sometimes damp with spilled camel milk; at other times it was oily and fragrant from overflowing perfumed-oil bottles mixed with incense ashes and often stuck to camel, cow, or fox dung" (8). The focus on the sand in the marketplace, in contrast with the untainted desert sand, brings to the reader's attention the intermingling of elements from nature and culture—perfumed oil with sand, and incense ashes with animal dung—blurring the boundary between the nature-culture binary. Explaining why marketplaces are ideal as staging grounds for interactions between humans, animals, spirits and other beings, Iheka points out that:

> …anyone familiar with an African market knows the crowdedness and jostling that characterize it. The African marketplace is a place where bodies touch freely and consistently. It is a confluence of animals, natural produce, herbal remedies,

> technologies, and, for the lack of a better word, things, which one handles, inspects, ingests, or puts on in the incessant mixing and mingling that takes place in the space. (31)

With the mixing of disparate elements, such as incense or perfume with the dung of various animals, marketplaces thus provide for multispecies interaction that does not privilege the human. It serves to highlight spatial closeness and demonstrate the enmeshment and interconnectedness between humans and other life forms.

Who Fears Death is also replete with examples of interspecies relationships, which highlight not only spatial nearness but also the idea of having common attributes. Njeri, the deceased wife of Onyesonwu's stepfather, Ogundimu, is described as having had the ability to speak to camels, as well as being a champion camel racer. One day, while racing, her camel fell and she was crushed under its weight. Ogundimu relates: "The camel she was riding refused to leave her side. It went wherever her body went. Days after she was cremated, the camel died of grief." (12) The camel's display of grief complicates ideas of human exceptionalism on the basis of emotion. Further examples of interspecies relationships occur when Onyesonwu and her friends, while travelling through the desert, are attacked by the most unlikely group of animals—a pack of wild dogs, two camels, five gazelles and seven hawks—working in cooperation with each other, robbing them of their food. When, at some later stage through their desert trek, they meet a trio of camels who communicate their intent to accompany them on their travels, Onyesonwu, in reference to the unlikely collective that robbed them, cites it as rule one of the desert that one does not turn down a travelling companion, and thus formally introduces herself, encouraging her friends to do likewise. On the desert journey undertaken by Onyesonwu and her friends, they

experience a similar vulnerability to the elements and predators as that experienced by other desert creatures. Onyesonwu and her friends are similarly shown to be internalising that vulnerability, acknowledging their need to forge partnerships with the camels, and to respect them as equals worthy of courteous greetings. These examples of interspecies relationships counter the anthropocentrism that underpins attitudes that are damaging to the environment, problematising the notion that human concerns should take precedence over that of nonhuman others.

In the figure of Onyesonwu, the notion of human exceptionalism is likewise undermined, and in descriptions of her, there is a blurring of the boundaries between human and nonhuman. Villagers describe her skin as looking "almost like camel's milk," (10) her hair as "oddly bushy, like a cloud of dried grass," (10) and her eyes as "like a desert cat's" (10). She is described as being quick, with a proclivity to scratch like a cat when men try to grab her in the marketplace. The boundary between human and nonhuman is eventually, however, entirely obliterated when Onyesonwu has her first shape-shifting or 'Eshu' experience, when, after touching the blood of a sparrow, she actually transforms into a sparrow, coming to her senses, naked and confused in the Iroko tree in the middle of the town. (15) It must be pointed out here that the Iroko tree, the site of her awakening to her shape-shifting ability, also has ecological significance in certain African cultures, with Iheka pointing the Iroko out that as an "abode of spirits," and thus to be treated with veneration. "The humans in this Yoruba traditional economy," he writes, "see an interconnection between their fate and that of the tree, which they protect and revere" (7). Some months later, Onyesonwu picks up a vulture feather, and this time is conscious of turning into a vulture, noting afterwards that she had to hop out of her clothes, "I *became* the vulture" (original emphasis 59).

The instances of proximity listed here serve increasingly to erase the boundaries between humans and nonhumans, countering anthropocentrism. Onyesonwu, however, does not merely blur the boundaries between human and animal, but transgresses a number of constructions within the logic of her society. She is *Ewu*, the product of a rape between a Nuru man and an Okeke woman, a status seen as bearing bad luck. Yet she is prophesied to rewrite the Great Book. As a woman, she is not initially allowed to learn magic, the Great Mystic Points, but against all odds she convinces Aro, the local sorcerer, to train her. Through her magic, and the ability to stitch together organic matter in order to heal humans and resurrect animals, she even transgresses the boundary between life and death. Onyesonwu's character is peppered through with the hybridity to which many of the scholarly readings refer. The multiple ways in which she transgresses boundaries along with the instances of proximity explored here go way beyond merely pointing to the ethics of a lifestyle in touch with the natural world. Their relevance to ecocritical enquiry is exhibited in how they highlight the subversion of binary dualisms and the problematising of a range of hegemonic centrisms.

Having discussed in the previous chapter how the Okeke have gone back to basics—touching on the ecological soundness of their bucolic lifestyles—I now consider a different reading and turn to the charge levelled against the Okeke by the Great Book. In doing so I return to the figure of Ani and find value in examining her indictment of the Okeke. I find in its depiction of the wrongs of the Okeke, *Who Fears Death* offers a potent critique of the anthropocentrism and the hyper-separation of humans from nature in contemporary modernity. The charge the Great Book levels against the Okeke is easily read to correspond to what Val Plumwood has referred to as the "illusion of disembeddedness" (97). In

Environmental Culture: The Ecological Crisis of Reason, Plumwood couches the critique against anthropocentrism as follows:

> To the extent that we hyper-separate ourselves from nature and reduce it conceptually in order to justify domination, we not only lose the ability to empathise and to see the non-human sphere in ethical terms, but also get a false sense of our own character and location that includes an illusory sense of autonomy. (9)

According to the text, the Okeke "spread over Ani's lands," emphasising that ownership of the physical land vests with the supernatural presence which is Ani, thus denouncing any claim by the Okeke to ownership of said lands, let alone any justification for domination. The Great Book says that they "created and used and changed and altered and spread and consumed and multiplied," signalling, possibly, production, manufacturing, consumption and overpopulation. The repetitive "and…, and…, and…" denotes a recurring and relentless lack of regard for limits. It charges that they "built towers that they hoped would be high enough to prick Ani and get her attention," an intertextual hint at the tower of Babel in Genesis 11, in which post-flood humanity sets out to build a tower into the heavens in a blasphemous and hubristic attempt to escape a second flood. The towers of the Okeke can be read as an attempt to put themselves on par with the divine, seeing themselves, at the very least, as superior to nonhuman others on earth. Finally, they "bent and twisted Ani's sand, water, sky, and air, took her creatures and changed them" (99). As I've already pointed out, this levels a critique at a variety of practices associated with contemporary modernity, ranging from urbanisation to mining, dams to desertification, climate change to air and water pollution, and experimentation on animals to cloning and genetic manipulation, along with any other endeavours that flow from conscripting scientific knowledge to management of the natural

world as resource. The Okeke are clearly depicted as people who have failed to see themselves as part of the natural environment before their illusion of disembeddedness has been dispelled. In this interpretation of the Great Book (and there are most certainly credible others) the charges levelled against the Okeke are read as Okorafor's indictment of Western rationalism and the positivist thinking ushered in by the Enlightenment which, with its emphasis on scientific knowledge of the earth, has rendered plants and animals objects of study, and has thus served to create an ideological break between humanity and the world of nature. This conceptual schism has been outlined by many a scholar, few as succinctly as John Berger, who describes the relationship between humans and animals as follows: "They (animals) are the objects of our ever-extending knowledge. What we (humans) know about them is an index of our power, and thus an index of what separates us from them. The more we know, the further away they are" (27). The Linnaean system of binomial taxonomy that emerged in the mid-1700s is emblematic of the ever-extending knowledge and power pursued through scientific knowledge during this period. Garrard, citing Val Plumwood's *Feminism and the Mastery of Nature*, also points out how humankind's primacy in the natural world has initially been, and to a large extent still is, buttressed by dominant philosophical ideologies, such as the mind-body dualism advocated by Rene Descartes in the 1600s. "Descartes hyperseparated mind and body," writes Garrard, "and denied to animals not only the faculty of reason, but the whole range of feelings and sensations that he had associated with thought. As a result, he saw animals as radically different from, and inferior to, humans" (25). Berger drives home a similar point:

> The decisive theoretical break came with Descartes. Descartes internalized, *within man* (original emphasis), the dualism implicit in the human relation to animals. In dividing absolutely body from soul, he bequeathed the body to the laws of physics

> and mechanics, and, since animals were soulless, the animal was reduced to the model of a machine. (21)

There is a plausible argument to be made that the Okeke's supposed transgressions—"created and used and changed and altered and spread and consumed and multiplied"—constitutes no more than normal development practice. What, one may well ask, did the Okeke do that was so bad? However, within the magical realist framing of these activities as a moral violation in the eyes of Igbo belief—along with a range of other animist belief systems the world over—Okorafor calls us to reassess the normality of our contemporary business-as-usual paradigm, and to examine the ideological platforms upon which this paradigm rests.

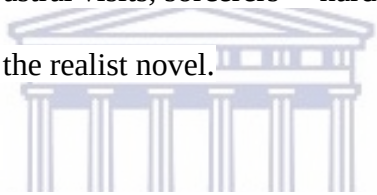
Having seen how the Great Book functions as a critique of modern-day industrial society, it is important to note, as I have hinted at earlier, that there are other ways of reading the Great Book, ways that render patently evident the need for its rewriting. I have pointed out earlier that magical realist texts often use the devices of parody, satire or pastiche, in the caricaturing or ridiculing of 'official' accounts as a way of calling into question a particular version of events. As such, the careful examination of texts or histories depicted in magical realist narratives can lead down productive avenues. The Great Book, as a genesis-type creation myth with biblical themes can be read as a dominant or authoritative narrative. (It could well be read as symbolic of the realist novel which exercises its hegemony over other literary forms.) According to the text the Okeke retell its narrative to themselves "time and time again" (99), and that "it was well known that the Okeke were born to be slaves of the Nuru. Long ago, during the Old Africa Era, they had done something terrible causing Ani to put this duty on their backs. It is written in the Great Book" (17). Despite their vilification

and status as cursed by the Great Book's text (reminiscent as it is of the notion of original sin) the Okeke are loyal and committed to the narrative of their inferiority to the Nuru. As pointed out earlier, it is deeply rooted within the cultural consciousness of the Okeke, justifying an environmental racism that allocates the best of the natural landscape to the Nuru. (11) The Nuru live in the west, the verdant part of the Seven Rivers Kingdom, while the Okeke live mainly in the east, in the desert. Those Okeke who choose to live in the west live in subjugation and servitude. Therefore, through the threat of violence, enslavement and genocide, the Nuru exercise a form of environmental racism against the Okeke. The narrative of history contained in Great Book provides a justification for the subjugation of the Okeke by the Nuru. It also justifies the genocide and rape perpetrated by the Nuru. Through the lens of postcolonial ecocriticism, the Great Book can also be read as a narrative justifying the ecological imperialism enacted on African and other Third World nations by former colonial masters. The version of history in the Great Book justifies the subjugation of the Okeke by reference to their ecological profligacy, much in the way neocolonial influences, in the form of reports by environmental NGOs and Bretton Woods Institutions justify industrialised nations' involvement in and influence over Third World nations by way of reference to a lack of capacity on the part of Africans to care for their environment. Just as the ecocentric spiritualism practiced by the Okeke is ignored by the version in the Great Book, the traditional indigenous practices of environmental stewardship are disparaged and maligned—by missionaries of the Great Western Creation Myth—as superstition in favour of Western managerial developmental models. In this way, 'official' reports about Africa —published by the World Bank and IMF—enable the neocolonial forces of multinational corporations to continue the looting of raw materials that has been going on since colonial days. Within the frame of this metaphor, the rape scene in *Who Fears Death* takes on a macabre character. The Nuru arrive on scooters wearing "expensive military attire… treated with weather gel to keep

them cool in the sun," (18) things the Okeke could never afford. If the Nuru represent the multinational corporations of the neoliberal present, the military attire may well represent the armed might with which they are backed up or even the armed forces of repressive regimes with whom they are often in cahoots. The military comportment could also merely refer to their top-down, hierarchical, and technocratic approach. Reference to weather gel that the Okeke can never afford points to the relative luxury and comfort enjoyed by the representatives of the multinationals. Of course the raping— "Repeatedly... Those men didn't tire; it was as if they were bewitched"—is read as the continued extraction of raw materials; oil, minerals, timber. The reference to the men as "bewitched," can be read as the spell of capitalism and its demand for continuous growth. The singing—"in the common language… so that Okeke women could understand"—refers back to the justification in those reports (the Great Book), a litany of capacity building, development objectives and public consultations which relentlessly drives home the narrative of African inferiority so that it is believed and accepted by all.

It is apparent from this analysis that reading *Who Fears Death* for themes and conventions of magical realism yields a wide variety of hooks upon which to hang established discourses within African and postcolonial ecocriticism. The magical realist elements overcome the challenges posed by realism for depicting climate change and other forms of ecological damage. Ghosh has pointed out realism's inability to depict the *longue durée* associated with climate change impacts. With its focus on indigenous belief, and in fictionalising a creation myth involving Ani the Earth-goddess, magical realist techniques allow a temporal distortion, taking us back to mythic time, and so, negotiates the temporal scales associated with depicting the slow violence of causal climate impacts and attitudes damaging to the environment.

Through the lens of magical realism, in *Who Fears Death*, there is a characteristic privileging of the peripheral rural settings of the Okeke villages over the power centres where the Nuru live. The elements in the text favoured by magical realist writers are the very elements that point to lifestyles that are more in tune with nature. Its protagonist, Onyesonwu, is identified with the outdoors and elements of nature, such as the desert or the forest, as is thus better suited to depicting lifestyles at one with the environment. For large portions of the story, she and her friends trek through the desert, literally living off the land. This is as opposed to the interiority of drawing rooms, parlours and other prosaic middle-class settings in the realist novel. The same can be said about the exceptional events that drive the narrative—shape-shifting, rapes, astral visits, sorcerers— hardly the regularity, probability and genteel pace associated with the realist novel.



The emphasis in magical realism on the unity of opposites undermines the emphasis on the individual in the realist text. The emphasis in *Who Fears Death* is, instead, on the stark contrast between the Okeke and the Nuru, and the schism in society informed by the narrative of the Great Book. Onyesonwu represents the unity of opposites between the Okeke and Nuru, and as noted earlier, representations of her 'individual moral struggle' are largely indicative of the multifarious and complex nature of the gulf separating these two communities. Onyesonwu's hybrid position, between Nuru and Okeke, as a woman who practices sorcery, and as the one prophesied to rewrite the Great Book is entirely tied up in healing the rift in that society. As noted earlier, her actions repeatedly undermine ideas associated with personal rights and freedoms, modelling instead—through participation in the circumcision rite and through her willingness to embark on a quest that she foresees costing her life—ethical behaviour that puts the collective welfare ahead of that of the individual.

This emphasis on the collective is, then, extended to the world of nonhuman others, similarly in ways that would be impossible in a realist narrative. Onyesonwu's hybrid position between human and animal—as the one who models to her friends respectful conduct toward the camels they encounter in the desert; as someone born and partially raised in the desert; as one described in terms aligned to nature; as a sorceress who can take the shape of animals and who can literally heal organic matter—is likewise tied up in healing the rift between humans and the natural world.

Finally, magical realism's concern with indigenous belief overcomes the tendency in realism, identified by Ghosh, to treat the natural world as mere backdrop to the drama of humans, an attitude at the heart of the rift between humans and the natural world. Nature is not relegated to the background in *Who Fears Death*, with animals, sandstorms and nonhuman others making significant interventions in the plot. As noted earlier, the figure of Ani from Igbo belief, signifies an opportunity to foreground environment. Through Ani's response to the conduct of the Okeke—"reared up, tall and impossible, furious"—I read nonhuman agency and causality personified as a vengeful deity, poised to deliver retribution for which humanity is ill-equipped. The increased temperatures associated with global warming are invoked in Ani as having "reached into the stars and pulled a sun to the land." In "Ani's sand, water, sky, and air," there is the reminder that humanity has been sorely mistaken in its claims to ownership of and control the elements of nature (99). None of this messaging would be available to the realist writer, for whom the non-empirical figure of Ani would be a non-starter. The charges levelled against the Okeke condemns a worldview in which the value of nonhuman organisms, species and ecosystems is dependent solely on their utility to humans. Western rationalism, positivist thinking, and Cartesian dualism are among

the Enlightenment ideas that support this worldview, while at the same time, informing the conventions of realism, which routinely touts the supremacy of rationalism and positivism along with other Enlightenment ideas over the ontologies of indigenous people in Africa and elsewhere in the Third World. Onyesonwu's magical shape-shifting abilities, and her pursuit of magical knowledge by apprenticing herself to Aro to learn the "Great Mystic Points," (109) espouses a deeper scepticism toward the rationalism and empiricism that underpins realist representation. Indeed, Onyesonwu's ability to heal herself and her friends, and even to resurrect a goat completely undermines the Western science at the heart of the realist episteme, as does the equivalence established by juxtaposing the existence of supposedly outdated computers and electronics on the one hand and the Great Mystic Points and juju on the other. Being grounded in the real world, as they are, magical realist texts use supernatural and paranormal elements opposed to realism as a method for finding different and innovative ways of depicting paradoxical truths in society, and there is none more so than the Okeke's paradoxical acceptance of the Great Book's curse, a state of affairs which mirrors the acceptance of many Africans that the continent's people, their knowledge and their methods are inferior to that of those from the United States, Europe and other industrialised nations. The magical realist elements in *Who Fears Death* thus prove greatly effective in depicting a range of environmental issues, including climate change, overcoming the challenges existing in realism pointed out by Ghosh.

Chapter 4: Ferocious Life Force and Complicated Designs in *Lagoon*

Close Encounters of the Third World

In *Lagoon*, published in 2014, aliens stage their 'close encounter' with the city of Lagos in Nigeria, as opposed to global metropolitan centres of world commerce, such as London, Paris, New York, Los Angeles or Tokyo, as is the custom of the alien invasion trope. Though alien invasion is a stock plot of science fiction, *Lagoon* also features figures from African folklore and indigenous belief more readily encountered in magical realism, and the interplay between these two modes makes for a complex text. One of the most striking aspects of the novel is that it is told from a wide variety of perspectives. Indeed, the opening scene, or prologue, is narrated from the perspective of an angry swordfish intent on puncturing the loading-pipe of an oil-rig. The swordfish, along with other inhabitants of the lagoon after which Lagos was named by Portuguese colonists, are the creatures favoured by the aliens for first contact. It is their world that is first to undergo the change the aliens claim to embody. It is their requests that the aliens grant and the waters of their habitat that are rendered pure and pollution-free. The environmental ethics displayed by the alien people raises serious questions about humanity's approach to nonhuman others and the natural world. Alien technology is, however, not the only otherworldly power at work. Included among the varied voices represented are figures from myth and folklore, such as Papa Legba, spirit of the crossroads and communication, and Mami Wata, a spirit of the waterways. These figures, in turn, point to environmental ethics grounded in the traditional and spiritual beliefs of African indigenous cultures. There is also a figure conjured from contemporary urban myth, The Bone Collector, a sentient stretch of road that attacks and consumes living creatures.

In the story, a woman and two men converge, seemingly by coincidence, on a certain spot on the cosmopolitan shore of Bar Beach. Adaora is a marine biologist, Anthony is a famous rapper from Ghana and Agu is a soldier, and each of them have mysterious powers. Following a bone-wrenching explosion (BOOM!) that marks the arrivals of the aliens, a wave rolls onto the shore, forms into a huge fist, and grabs the unlikely trio, dragging them into the water. These are the first humans singled out for contact with the alien representative, a shapeshifter who is later christened Ayodele. As is the hackneyed convention of science fiction, Ayodele wants to meet the president – ("take me to your leader"). This sets in motion a quest to arrange a meeting between Ayodele and the Nigerian president, which enables a broad-ranging view of Lagos, constituting a celebration of its entrepreneurial spirit and diversity as well as a frank exposure of its many problems. These problems include oil drilling and the pollution of the Lagos waters, ageing and poorly maintained road and electricity infrastructure, absent leadership, corrupt politicians and military officials, poverty, domestic abuse, immoral clergymen, intolerance toward the LGBT community, crime, kidnappings, 419-scammers, inequality, homelessness, prostitution, traffic gridlock, looting and riots.

Witnesses of the BOOM!

Among the scholarly commentaries on *Lagoon* relevant to the environmentalism at the heart of this study is that of Mary Bosede Aiyetoro and Elizabeth Olubukola Olaoye, who have assessed *Lagoon* and works by Okorafor in the context of science fiction's relative novelty in Nigerian literature. They explain the bourgeoning interest in science fiction by African writers as a "loss of confidence in the retelling of the past," and "a longing for the future represented by such narrative modes as science fiction" (227). Aiyetoro and Olaoye hold that the juxtaposition of traditional supernatural elements with the tropes of science fiction

renders Okorafor's work distinctively African, highlighting likenesses to the work of Daniel O. Fagunwa and Amos Tutuola. Their reading of Okorafor focuses on diversity and agency, pointing out how "*Lagoon* bustles with creatures, people, and animals who are all actively involved in the narrative" (239), but similarly asserting that the alien invasion "affords Okorafor the opportunity to covertly critique the disorderliness of present-day Nigeria" (240). However, Aiyetoro and Olaoye also read the arrival of the aliens as representing possibilities for addressing the myriad problems of Lagos, ranging from ending the country's dependence on fossil fuels to bringing about the restoration of public infrastructure, from the discrediting of conmen operating under the guise of Christianity to the inauguration of widespread tolerance and appreciation for diversity, citing that "the aliens' arrival instantiates other changes, too: for instance, a transgender group called Black Nexus gains the courage to appear in public without any attempt to disguise who they are" (241). Okorafor has held up science fiction as a narrative form that allows African writers to participate in what she calls the "creative process of global imagining that advances technology through stories," and which she asserts is tailor-made "to redress political and social issues" (Nnedi's Wahala Zone Blogspot, "African Science Fiction is Still Alien," n.pag.). Hugh Charles O'Connell reads *Lagoon* as starting to fulfil this potential of envisioning the future from an African perspective. For O'Connell, the arrival of aliens on the shore of Lagos enables an imagining of Nigeria as an innovative forerunner to other cities, leading the way by uncoupling itself from a global neoliberal development framework that causes more harm than good, notably framed as a break with "the conditions of capitalist realism" (292). O'Connell situates his argument in the context of addressing the "intertwining legacies of colonialism" (297) and the "the failure of neoliberal developmental policies (291). This resonates with the view of Matthew Eatough, who holds up *Lagoon* as an example of science fiction which presents a narrative strategy for representing "social agency within the *longue durée* of institutional

planning" (237), with specific reference to the Structural Adjustment Programs instituted by World Bank and the International Monetary Fund from the early 1980s. To Eatough, *Lagoon* and the emerging order of African science fiction, represents a continuum with non-realist works like Ben Okri's *The Famished Road* and Kojo Laing's *Search Sweet Country*, which is described as "challenging the epistemological realism wielded by both the official institutions of the nation-state—schools, the media, and so forth—and by the realist novel" (240). Also aligned with O'Connell's progressive imaginary is Dustin Crowley's reading of *Lagoon*, which identifies Okorafor's narratives as pushing back against Afropessimism, conceiving of the African city as "not a place of isolation or exploitation by the rest of the world but a cosmopolitan hub vital to global interaction," and as "urban centers of technology, communication, commerce, and travel" (268). Similarly in line with O'Connell is Esthie Hugo, whose reading of *Lagoon* also conceives of Lagos as a city "at the forefront of globalising modernity" (46). For Hugo, a key aspect informing this global trend-setting and innovation is "an animistic mode of thought," signalled by the presence of figures from indigenous belief, said to be "at the heart of its futuristic imagination" (48). Crowley likewise holds that the linking of African myth with contemporary technoculture problematises the notion of relegating African traditions and environmental ethics to the past. The ideas here are quite clear. The globalised neoliberal framework, to which African countries currently subscribe, continues to impose conditions which exacerbate problems that detrimentally affect the local populations of these countries, and the ethical conduct grounded in indigenous belief systems cannot remain relegated to the past. Indeed, indigenous belief systems are showing their worth in contemporary environmental practice. What these scholars agree upon is the potential and need for transformation, both in material terms and in representational discourses about Africa. "This transformation," writes O'Connell, "entails first, and foremost, putting an end to the oil trade and the rehabilitation of the oceanic environment" (298). Hugo

likewise points out that "a thematic concern with ecological degradation and sustainability is a notable thread that runs not only through *Lagoon* but all of Okorafor's work" (49). For Andrea Serrano, it is all about the environment, asserting that *Lagoon* "portrays a powerful image of the damage inflicted on the communities and the marine ecosystems of the Niger Delta," and that it "articulates a critique of the neo-colonial dynamics that are still perpetuated in the current capitalist world order" (1). To Serrano the depictions of myth, orality and indigenous cosmologies are intrinsic to African modes of storytelling, explaining their presence as an endeavour to "acknowledge and revalorize the literary depictions of other terrestrial beings, the earth, the wilderness," asserting that *Lagoon* "constitutes a celebration of all living beings; human and non-human creatures, even aliens and spiritual deities from West-African folklore" (18). Lagoon has thus garnered significant attention among academics as a literary text, directly addressing a range of ills—from a dependence on fossil fuels to social inequality—as well as countering negative stereotypes about Africa, by signalling the idealistic possibilities that frame the animism of African thought and tradition as a significant global intervention that models an innovative empathy in humanity's interactions with nonhuman others.

Science Fiction: Extra-Terrestrial Eco-Cognition

The theme of the alien invasion in science fiction narratives is first and foremost useful to environmental discourse inasmuch as these kinds of narratives have long been centred on challenging assumptions about the dominance and primacy of humans as unmatched life-forms in the known universe. Writing in the *Encyclopedia of Science Fiction*, Robert Killheffer, Brian M Stableford and David Langford write that "philosophers and theologians of the seventeenth and eighteenth centuries quickly recognized the challenge aliens posed to a range of precious received notions," and that early thinkers "fully appreciated the

fundamental threat that the idea of aliens posed to humanity's self-image as the crown of Creation with a unique place in the cosmos" (*SFE*, "Aliens" n.pag.).

Beyond threatening the exceptionalism of humans on Earth, narratives about alien invasion have also been seen as expressing anxiety about imperialism in a way relevant to postcolonial ecocriticism, with the extrapolatory framework of this trope dictating that humanity finally comes face to face with a society whose technological might and sophistication outstrips its own. Human technology has, after all, only recently become able to deploy interplanetary spacecraft—unmanned though they be—and has not, as yet, departed from our solar system. Therefore, it stands to reason that any society of life forms which is able to visit our planet, by necessity possesses technology superior to ours. *The War of the Worlds* by H.G. Wells is a seminal work in this category, which, according to Booker and Thomas, "established many of the conventions of the alien invasion subgenre," describing it as "a powerful critique of British colonialism that works through the reversal of asking British readers to view colonialism from the point of view of the colonised" (28). Wells reportedly alludes not only to the annihilation of the indigenous peoples of Tasmania, but significantly to the extinction of numerous animals, at the hands of European invaders with superior technology. Beyond its well-documented impact on the humans of colonised spaces, imperialism has wrought devastating damage on the environments of those colonised spaces. "Imperialism after all," writes Edward Said, "is an act of geographical violence through which virtually every space in the world is explored, charted, and finally brought under control" (225).

Anxieties that humans are neither central to creation, nor the most advanced creatures in the universe, brings into view humanity's vulnerability to technologically advanced

creatures from other planets who may seek to exploit the environmental resources of our world as colonial powers have exploited the resources of colonised territories. Insights about environmental messaging in the alien trope of science fiction extend well into mainstream culture. Iconic in this mould is the 1984 TV-series *V*, in which a lizard race disguised as humans arrive on Earth, their flying saucers hovering over Los Angeles and other metropolitan cities all over the world. Ostensibly friendly, they offer to share their technological know-how along with cures to cancer and other diseases, but it soon emerges that, having depleted the resources on their own planet, they are actually after Earth's water resources and harvesting humans as food. Similarly iconic is James Cameron's 2009 science fiction film, *Avatar*, in which humans are the colonial invaders of Pandora, a lush habitable moon of a gas giant in the Alpha Centauri star system, seeking to mine a valuable ore, unashamedly dubbed 'unobtanium' to denote its scarcity. The resistance mounted by the indigenous Na'vi gives credence to Cameron's assertion of it as an environmental fable, demonstrating that colonialism extends beyond occupation, to restructuring every aspect of the territory to facilitate the extraction of wealth, up to and including the eradication of deeply revered cultural symbols and beliefs.

The arrival of aliens in *Lagoon* likewise issues a significant challenge to anthropocentrism and the idea of human superiority. Technologically, the aliens in this first-contact narrative are consummately more advanced than humans, easily assume control of humanity's communication infrastructure and demonstrate out-and-out superiority in the control of organic and biological systems at the molecular level. *Lagoon*, however, does not rehearse anxieties of imperialism, issuing its critique through subverting established conventions of the trope, specifically the choices of its visitors from outer space. Contrary to common practice, in which the aliens position their ships over the established centres of

world commerce—London, Paris, New York, Los Angeles, Tokyo—they have chosen instead, Lagos, Nigeria. These aliens have no colonial ambitions. And instead of announcing themselves off-the-bat to humans, they have sought out, for their first engagement with earthlings, the creatures of the sea. Indeed, the novel opens depicting—with full subjectivity—the point of view of a swordfish who turns out to be the first earth life form with whom the aliens interact. Moreover, Ayodele, the alien ambassador, repeatedly confers personhood on the water creatures. "We landed in your waters," she says, "and have been communicating with *other people there* and they've been good to us" (37). She later confirms that there is an ongoing communication between their ship, "with the water and the creatures in the water," adding that "[w]e are communicative people" (43). Later still, in reference to the swordfish and a giant cephalopod, Ayodele says that "the people of the waters… they are tired of boats and human beings" (240). Their engagement with the sea creatures is by no means a mistake. It would appear that to Ayodele and her people, the animals are higher on the pecking order than humans. Looking at the Earth from outer space and seeing that two-thirds of the planet is made up of ocean, it may seem plausible that the life forms in those oceans should be the first to approach. Having gleaned their desires, the aliens enhance the sea creatures according to their wishes to the extent that when humans enter the waters, they find themselves at the mercy of sea creatures. While Ayodele and her people express an intent to occupy the mainland among humans, their stated intention is to also live in the waters, saying that "[t]hese seemed good places for us." (40). The aliens are justifiably wary of humans, having figured out enough about them for Ayodele to say to Kola, "[h]uman beings have a hard time relating to that which does not resemble them. It's your greatest flaw." (67) Later in the text Ayodele identifies humans as, inter alia, greedy, violent and insecure, and at some point later in the narrative she changes herself into a tiny monkey, "because she'd decided that she no longer wanted to be a human being" (153). Ideas of the

primacy of humans are tested in relation to the very conventions the alien invasion trope has traditionally been built upon. Discerning the ways in which Okorafor's aliens depart from the expectation of the trope are key to seeing how their choices and attitudes shine a light on humanity, to reading the critique of anthropocentric views that locate humans at the centre of creation. Remarking on the wide variety of depictions of aliens produced by science fiction writers, Killheffer, Stableford and Langford have pointed out that aliens have been deployed "in critiques of the chauvinistic and parochial assumptions embedded in human culture" (*SFE*, "Aliens" n.pag.). Okorafor's aliens make some rather counterintuitive choices, calling for a drastic rethink of what humanity values.

There are, of course, other conventions of the alien invasion trope that are similarly subverted in *Lagoon*. As pointed out earlier, the vast majority of alien invasions in foregoing narratives, both in literature and film, have been concentrated on large industrialised first world cities in Europe or the United States. And while the aliens do commit to living on the land, among humans, as well as in the water, their choice to settle in Lagos may be seen odd in relation those foregoing narratives. For one thing, Lagos is the most populous city on the African continent – and growing. According to a 2019 CNN report, "it has the highest urban population with an estimated population of 22 million people," and is "projected to become the world's biggest city by 2100" (Akorede, "Employees in Lagos" n.pag.). The city is often held up in Afropessimistic discourses for its crowdedness, its poverty-stricken masses, unequal society and for its acute housing shortage resulting in unhealthy and polluted slums with poor sanitation. Due to its congestion, poorly maintained roads, and inadequate road infrastructure, Lagos also has severe traffic problems, with associated noise and air pollution, as well as a high rate of fatal road accidents. These conditions, coupled with a general perception of the government as corrupt, often lead to protests and demonstrations. Such

protests are often hijacked by criminal elements—"area boys"—who foment and fan chaos, the perfect conditions under which to loot. The government, in turn, have repeatedly come under fire for using the military to quell such incidents of civil unrest. The idea of staging an alien invasion in Africa, however, is not new to science fiction. In the acknowledgements, Okorafor issues a word of thanks "to the South African science fiction film *District 9* for both intriguing and pissing me off so much that I started daydreaming about what aliens would do in Nigeria" (301). Critically acclaimed upon release, *District 9* stages an alien invasion in Johannesburg, but attracted much criticism for stereotyping Nigerians as pimps, prostitutes, drug dealers and even cannibals. *District 9* thus served as Okorafor's inspiration for writing what became an ode to, and celebration of, the people of Lagos. The aliens, then, choose the city of Lagos and its waters as their preferred new home, in spite of the myriad problems listed above. Understanding their choice is key to this analysis. Returning to Darko Suvin's concept of the novum, the alien life forms in *Lagoon* represent the intrusive novelty—in this case both biological and technological—that renders the world of the novel different to the empirical framework of the reader. It is also the device for casting light on ourselves. By interrogating the reasoning and actions of the aliens, we are able to look at ourselves with new eyes. That the aliens have chosen to settle in Lagos, coupled with their actions in the waters off the coast, reveals a thoroughly ecological outlook. If the ecological well-being of a given ecosystem is judged on its biological diversity, Lagos with its variety and diversity,—"a place of mixing" (7)—the entrepreneurial spirit of its people and their make-do attitude is adjudicated as desirable to these life forms from elsewhere. Okorafor signals this desirability by dedicating the novel to "the diverse and dynamic people of Lagos, Nigeria – animals, plant and spirit". This desirability is expressed in a number of ways in the text. Ayodele speak of Lagos and its waters as ostensibly "good places for us" (40). In her speech that is broadcast to all the televisions, computer monitors and mobile phone screens, Ayodele

repeats, “WE ARE GUESTS WHO WISH TO BECOME CITIZENS…*HERE*. WE CHOSE *HERE*” (111) (original emphasis). There is the inference here that the aliens see something of value in Lagos—“CONSIDER ME, CONSIDER US. AS YOU HAVE MUCH TO OFFER, SO DO WE” (112)—that they did not readily come across in the centres of world commerce that typically form the setting for this science fiction trope. Their ecological view accommodates a range of behaviours (red in tooth and claw) occurring in the natural world. “IN LESS THAN TWENTY-FOUR HOURS,” says Ayodele, “I HAVE SEEN LOVE, HATE, GREED, AMBITION AND OBSESSION AMONGST YOU… I HAVE SEEN COMPASSION, HOPE, SADNESS, INSECURITY, ART, INTELLIGENCE, INGENUITY, CORRUPTION, CURIOSITY AND VIOLENCE. THIS IS LIFE. WE LOVE LIFE” (112). This non-judgemental ethic, focusing solely on the variety of human existence, counters notions of Africa as a site of disaster, and holds it up as a place of value in spite of its infrastructural challenges. It also critiques an instrumentalist worldview that focuses on organisms in terms of their utility value, and reinstates the value accorded to the multivalent relationships between organisms and their environment. At some point Adaora speculates that the aliens chose the city of Lagos because, “If they’d landed in New York, Tokyo or London, the governments of these places would have quickly swooped in to hide, isolate and study the aliens. Here in Lagos, there was no such order” (64). It can be read that Lagos is valued—compared to those centres of world commerce—for being less dominated by those who would seek to make the aliens objects of scientific study or impose a managerial principle which values nonhuman organisms and natural systems for their value to humans rather than their intrinsic value.

That is not to say that Ayodele and her people are pleased to leave well enough alone where Lagos is concerned. Their ethic of care for the environment, for all forms of life not

privileging humans, is depicted through their interaction with the swordfish, encountered from the very first page, on a mission to spear and attack "the thing that looks like a giant dead snake" (3) That 'thing' is a loading hose to an offshore oil rig, the FPSO Mystras, a floating production storage and offloading vessel later described as "a spidery structure made of concrete and rusty steel. Anchored firmly to the seabed by steel beams, it was a decades-old monster, a hulking, unnatural contraption of production facilities, drilling rigs and crew quarters… a place a of noise and activity" (95). The rig's depiction makes clear that it is a blight on the aquatic landscape. The actions of the swordfish—based on actual events in Angola—is the scathing critique of oil drilling and production, illustrating, to begin with, the destructive and injurious effect of oil drilling on marine life, as readers are given a view on the swordfish's attitude to these harmful effects: "She is angry. She will succeed and then they will leave for good. They brought the stench of dryness, then they brought the noise and made the world bleed black ooze that left poison rainbows on the water's surface… Inhaling them stings and burns her gills" (3). Given a voice in the text, the swordfish's manner of expression as innocent and unsophisticated. Later in the narrative however—following attacks on human by sea creatures—a political and militant attitude is revealed, one of righteous indignation, as the swordfish is described by Hawra, the president's wife, as speaking "like a member of that group Greenpeace!" (262) Greenpeace, an international non-governmental environmental organization whose members are known for their direct action in protecting marine life by, for instance, physically intervening in and disrupting the commercial slaughter of whales.

The humans are shown to be culpable, oblivious perhaps, but by no means unaware of the damage caused by offshore oil rigs. The reader is made aware that at least some of Adaora's work has involved testing for water pollution (25). Later in the narrative Rafiu, the

engineer, expresses the sentiment that he "would never dislodge the guilt he felt for abandoning the oil rig when the hose was spewing oil into the water," and reflecting that he had "become an engineer to save the environment" (96). Even Kola, Adaora's eight-year-old daughter, is aware of the problem of the polluted waters around Lagos. "My mother says the waters are all dirty and dead because of the oil companies," she says to Ayodele (68). Showing that humans are aware of oil drillings deleterious effect demonstrates how pollution and other environmental damage has been normalised as an acceptable practice.

The critique of oil extraction is sustained when it becomes focused on how the aliens interact with the swordfish, especially in comparison with the swordfish's view of humans as the "burrowing and building creatures from the land," as those who "brought the stench… the noise… made the world bleed black ooze" (3). By contrast, the swordfish encounters the presence of the aliens as a "sweetness she smells," and whose "gentle movements are soothing and non-threatening" (5). The reader learns that the arrival of the aliens—signalled by the sonic boom—has rendered the ocean waters clean and clear. Distinguished from the stench, noise and black ooze, the swordfish experiences the depths where the aliens had landed as "[c]lean, sweet, sweet, *sweet*! Her senses are flooded with sweetness, the sweetest water she's ever breathed" (4). The alien ship is described as a "great shifting bar of glimmering sand… giving off the sweet, clean water" (5). As a result, the waters are transformed into a picture of biodiversity, and the swordfish "can see everyone swimming, floating, wiggling right into the glowing thing below. There are sharks, sea cows, shrimps, octopus, tilapia, codfish, mackerel, flying fish, even seaweed" (5). She sees it as "a giant world of food, beauty and activity," (5) and it reminds her of a "coral reef… blue, pink, yellow and green, inhabited by sea creatures of every shape and size" (5). In ecocritical terms, this can be read as a sublime underwater pastoral of sorts, depicted through the

subjectivity of the swordfish as "here in her home… something even wilder and more alive than her lost paradise" (5).

Beyond the work of restoring the waters to a pristine state, the ecological ethic of the aliens extends to undertaking consultations—an appreciation of local and indigenous knowledge—with the nonhuman others who inhabit the waters. For the swordfish, the "golden blob" which is the alien presence, "ascends to meet her," and when "it communicates with her, asking question after question… her apprehension shift[s] to delight. What good questions it asks" (6). The swordfish then undergoes a transformation, with specific attributes augmented in various ways. Her grey-blue skin is rendered impenetrable. Her "sword-like spear is longer and so sharp at the tip that it sings", her eyesight is enhanced, and she is given the ability to "make spikes of cartilage jut out along her spine as if she is some ancestral creature from the deepest ocean caves of old" (6). She is also trebled in size and doubled in weight, rendering her "no longer a great swordfish," but "a monster" (6). The swordfish's transformation is aimed at her ability to protect her environment, to resist humans polluting her waters. It also foreshadows what the alien elders tell the president, namely, that all the "offshore drilling facilities would be destroyed by the people of the water" (273). The figure of the swordfish lends itself to multiple readings. Her rendering as an "ancestral creature" speaks to a period "of old" when humans were very much at the mercy of the forces of nature and maintained a healthy respect for the creatures of the ocean. This is borne out by the description of Lagos's waters as "teeming with aliens and monsters," foreshadowing a later chapter when the humans in the story are very much at the mercy of the sea creatures, with the title of that chapter, "HERE THERE BE MONSTERS," emulating the legend that supposedly appeared on ancient maps, "*Hic sunt dracones*" (Here there be dragons). The swordfish, along with the giant cephalopod, resonate with other environmental iconography.

As mentioned earlier, the idea of a swordfish attacking an oil loading hose is based on actual events in Angola where, according to Forbes.com staff writer Christopher Helman, French oil giant, Total, reported in 2010 that a school of swordfish punctured oil hoses used in loading tankers at the Girassol field in Angola and that BP's Plutino FPSO was also attacked by swordfish in 2009. As for the figure of the giant cephalopod that attacks the president's men, it can be seen as casting umbrage upon the fossil fuel industry. Initially deployed in 2009 targeting Goldman Sachs in a *Rolling Stone* article, Matt Tiabbi described the investment giant as "a great vampire squid wrapped around the face of humanity, relentlessly jamming its blood funnel into anything that smells like money," (Tiabbi, "The Great American Bubble Machine," n.pag.). According to Rob Nixon, Tiabbi's depiction attained widespread resonance to the extent that it had become a general symbol of imperial overreach on the part of transnational corporations. "Within a year," writes Nixon—in reference to the Deepwater Horizon fiasco—"his deepwater image of life-sucking avarice would seem an uncanny foreshadowing of petroleum giant BP" (40). Through the actions of the aliens, their communication with and granting wishes to the creatures of the sea, I read the swordfish and the cephalopod as symbols of environmental resistance against both the fossil fuel industry and the hubris of humanity.

Of course, the deep water is not the only place affected by the deleterious effect of the oil industry. Returning to the aliens as the novum, shining a light on humanity, it becomes apparent that their disdain of the effects of oil extend to its impacts on Nigerian society. Addressing the Nigerian population via broadcast to phones and televisions, Ayodele issues a number of statements directly addressing the issue of oil. In seeming acknowledgement of the fact that Nigeria is Africa's largest oil producer, and as such, had been victim to toxic outside influence, Ayodele reassures the nation, "'WE DO NOT SEEK YOUR OIL OR YOUR

OTHER RESOURCES," (113) but makes clear the sentiment that oil is a problem to the people of Nigeria and that it is something they (the aliens) seek to fix. "WE COME TO BRING YOU TOGETHER AND REFUEL YOUR FUTURE, she says, "YOUR LAND IS FULL OF A FUEL THAT IS TEARING YOU APART" (113). Ecologically speaking, there are few places that have been as severely affected by the toxic influence of oil as Nigeria, and within the country, none as thoroughly impinged on as the Niger Delta. While it garners only a peremptory mention in the text, the Niger Delta represents an inextricable element of the discourse about oil in Nigeria. In his speech to the nation the president resolves that "[o]il could no longer be Nigeria's top commodity. It could no longer be a commodity at all… Even in the delta, all was lost" (273). Even such a brusque mention, however, warrants some discussion on what this may denote. In an article entitled "Oil exploitation and its socioeconomic effects on the Niger Delta region of Nigeria," Elum, Mopipi and Henri-Ukoha inform us that the Niger Delta covers an area of about 70,000 km2 and is home to more than 10 million people (12881). Unfortunately for its inhabitants, it has the ill-fated distinction of being the part of the country in which the greatest concentration of oil companies is actively drilling for oil, with more than one hundred oil fields and in excess of a thousand wells. The environmental cost of all this activity has taken the form of air, water and soil pollution. Contamination of the water and soil is caused by oil spillages as a result of aging and poorly maintained equipment as well as the dumping of waste oil. Cleaning up such spillages often takes a long time, involving a complex cocktail of hundreds of chemicals, many of which are highly toxic. Spillages polluting the soil cause severely damaging impacts on local agriculture. The pollution of waterways impact both on drinking water as well as on fishing activities. Air pollution is caused by the flaring of natural gas, a practice which is a highly regulated activity in industrialised countries, but which multinationals are allowed to get away with wholesale as a result of lax regulation by complicit and corrupt government

officials. The Ogoni people, an ethnic minority in Nigeria, are one of the groups that had been most severely affected and abused by the oil drilling activities of multinational corporations. “Shell, Chevron, and successive Nigerian regimes have siphoned $30 billion worth of oil from beneath the Ogoni earth,” writes the ecocritic Rob Nixon, “yet the locals still find themselves lacking a hospital, electricity, piped water, basic roads, housing, and schools” (108). The lack of social justice and the paradoxical nature of this state of affairs defies representation. “The socioeconomic and environmental costs of oil production,” write Elum, Mopipi and Henri-Ukoha, “can be extensive; these range from destruction of wildlife, biodiversity loss, air and water pollution, degradation of farmland and damage to aquatic ecosystems” (12880). With so much social and environmental damage accruing from oil drilling, it is a fitting assessment by the aliens that it is fuel that is tearing the country apart.

As mentioned above, Nigeria’s dependence on oil revenue is well documented. According to Rob Nixon, “Nigeria’s dependence on oil is absolute: it constitutes 96 percent of Nigeria’s export revenue and generates 80 percent of government income” (106). This dependence on oil revenue has led to Nigeria being seen as an exemplar of what is called the “resource curse,” an inscrutable phenomenon in which countries blessed with a wealth of natural resources are somehow less likely to experience economic development than countries significantly less well-endowed. “The notion of the resource curse,” writes Rob Nixon, “hinges on the paradox of plenty, whereby nation states blessed with abundant mineral wealth are too often concomitantly blighted” (69). A number of factors explain the resource curse, with the most common pointing to the lack of competitiveness, and thus underinvestment, of other sectors in the economy as well as mismanagement of funds. The effects of the curse are complex and interconnected, and includes excessive borrowing, government corruption and complacency, a neglect of education and infrastructure as well as

violent uprisings. “As a rule of thumb,” continues Nixon, “the greater a state’s reliance on a single mineral resource, the greater the chances that state is undemocratic, militaristic, corruption riddled, and governed without transparency or accountability” (69-70). And this is very much the state of affairs depicted in *Lagoon*. References to government and military corruption pepper the text. Demonstrating her insight into Agu, the soldier, and his predicament with his superior officer, Ayodele tells him: “You joined the army to protect [your family]. Now you understand your army is corrupt.” (53) Similarly, following her interaction with Lance Corporal Benson, Adaora’s reflections are instructive on how Nigerian citizens view their public representatives and armed forces. She seems incredulous that she had approached the situation with such naivety. “When,” she asks herself, “had the Nigerian government and military done anything for its people? They were all about covering their asses and stuffing their own pockets” (89). A significant proportion of government corruption in Nigeria is perpetrated by officials who, for a price, enlist military forces to protect the equipment and assets of multinational fossil fuel companies from vandalism and theft. Such vandalism, coupled with the theft of oil is called bunkering, and has become a common occurrence. It often involves puncturing one of the pipelines that criss-cross the delta and diverting the oil into unauthorised loading vessels to be sold. Due to the furtive and unregulated nature of the activity, it often results in spills. As pointed out above, this illegal activity often brings the military into conflict with citizens. Nixon writes about the devastation of the resource curse of oil, counting it as another instance of “slow violence,” and remarking that it brings “in its wake environmental wreckage, territorial dispossession, political repression, and massacres by state forces doing double duty for unanswerable petroleum transnationals or mineral cartels” (70). This practice is given expression in *Lagoon* when members of the armed forces, Private Akunna and Private Julius, are sent along with an oil worker and an engineer to see what “had gone wrong with the hose attached to the supply

vessel *FPSO Mystras*" (95). As if to prove the pervasiveness of the practice, of government officials lining their own pockets by allocating military forces to the protection of oil extraction infrastructures, the reader learns that Agu is familiar with the offshore oil rig, having "circled it on boat patrols plenty of times." (95)

Notwithstanding the numerous inferences and direct references to corruption, a sense of hope pervades the narrative and with the sense that this corruption is not seen as an insurmountable problem. While Adaora, for instance, had had a lucrative teaching job at the University of California, she is shown to have "opted to return home. Lagos was riddled with corruption but she couldn't imagine living anywhere else" (64). In the initial interview in Adaora's basement lab, Ayodele voices a similar sentiment. "We can work with you people," she says, "[a]nd we will" (40). The intentions of the aliens to make Lagos their home, their characterisation of themselves as "CHANGE" (113) and references to "infinite possibilities," (271) along with their intention to "BRING YOU TOGETHER AND REFUEL YOUR FUTURE," and "TO NURTURE YOUR WORLD," (113) all point to a utopian horizon of hope. Their repeated references to themselves as catalysts of change; as technology; as possibility; and as communicative, may point to a cipher of the unknown of which humanity is on the cusp, such as, for instance, to alternative and renewable energy sources; to the internet of things (IOT) and the fourth industrial revolution, to the event horizon of artificial intelligence, and to the possibility of developing nations leapfrogging a range of dirty technologies and practices. *Lagoon* is about imagining a Lagos, Nigeria, and Africa in Afro-optimistic and cosmopolitan terms, as vibrant places to live where problems associated with poor infrastructure are resolvable with the right amount of political will. It is about an alternative to "Nigeria's soul-crushing corruption" (275). It is about accepting each other as equals—human and nonhuman—and embracing diversity as indicators of balance both in

ecology and economy. The president encourages unity among the nation. “People of Lagos… look at your neighbour. See his race, tribe, or his alien blood. And call him brother. We have much work to do as a family” (278). The president’s utopian vision is deeply invested in nature and in a vision of a bountiful earth, an aspiration expressed with the forecast that “the land would be pure and palm nuts, cocoa and other crops would grow as they never had before,” and that “extinct creatures would return and new ones would appear” (279). Through the novum of alien invaders, *Lagoon* problematises anthropocentrism at every turn, making us aware of our nonhuman others. It deploys a cautionary yet hopeful environmental message about collective action for co-existence, demonstrating through the words of their ambassador, Ayodele, an exemplary attitude humanity should take in relation to the earth, “We do not want to rule, colonize, conquer or take. We just want a home. What is it *you* want?” (220) Along with the environmental ethics displayed by the aliens, there is similarly a demonstration of transparency and integrity, with clear statements of intent and reassurances that notwithstanding the skewed technological power relation, they do not seek to impose their agenda on earthlings, inviting, instead, an articulation of humanity’s desired conditions.

Through science fiction’s trope of alien invasion, ecocritical readings of *Lagoon* reveal it to be unequivocally environmental, with the aliens’ radically different approach to our planet’s creatures—human and nonhuman—highlighting the problematic anthropocentrism which informs humans’ attitude to the natural world. The arrival of benevolent aliens who model a respect for all creatures, not privileging humans, would most certainly be impossible in a realist narrative. Indeed, Ghosh makes reference to extraterrestrials as figuratively outlandish in a realist narrative, which, for that reason, may be an inadequate form of narration for the missed opportunities extraterrestrials bring to model a departure from environmental and social injustice. While there is no direct reference to

climate change in *Lagoon*, its engagement with and critique pertaining to the oil encounter highlight the environmental costs associated with drilling for oil, ranging from ecological damage, which impacts on the waters offshore, to the social and economic impacts, which take the form of polluted soil and waterways, loss of livelihood for farmers and fishermen, flaring of natural gas as well as the problems associated with the resource curse, such as underinvestment in infrastructure, education and strategic economic sectors as well as corrupt, repressive and undemocratic governance. In this way Okorafor is able to depict the multifarious manifestations of the climate change problem without needing to call on abstruse technical or policy language, demonstrating very simply the impacts of environmental ills on humans and nonhumans alike.

Lagoon goes to great lengths to depart from the emphasis on the individual which Ghosh identifies as a central tenet of the realist novel. Okorafor's ode to the city of Lagos essentially answers Ghosh's question regarding the paucity of literary works with oil as its central element. It will be recalled that it was this line of inquiry, and the literary opinions of Updike, that delivered up the insights about the realist novel's emphasis on individual moral adventure. The trope of alien invasion prompts planetary engagement, foregrounding the collective rather than placing an emphasis on the individual, as is the custom of the realist mode. In *Lagoon* the dizzying array of characters presented, and the brevity of our interactions with them similarly work to provide a cross-section of the people of Lagos—men in aggregate—signalling a concern with the collective rather than the individual.

The aliens in *Lagoon* are clearly a society with views very different to that of humans when it comes to interacting with the natural world. The decision by the aliens to settle in Lagos, and to facilitate a transition to a post-oil energy regime certainly seeks to effect results

that serve the common good of all Lagosians, not privileging humans. The environment in *Lagoon* is thus not relegated to being mere backdrop to the individual adventure of humans. From the very beginning of the story, it is the intent, actions and agency of an animal and other nonhumans that drive the narrative along with the human characters. Through the eyes of the aliens, I read an environmental ethic which affords to animals full 'personhood'. In having their requests granted by the aliens, the sea creatures in particular are enabled to mount resistance to the despoliation of their environment, and their contempt for humanity is often on full display in highly unpredictable ways that is at odds with the prosaic tempo of realist representation. The predictability of the natural world assumed by the realist novel is undermined by the actual events upon which the swordfish's random and unexpected attack on an oil loading hose is based. Multiple interspecies interactions and relationships, along with the communicative means by which the aliens mediate between animals and humans, distort the boundary between nature and culture. *Lagoon* thus demonstrates the range of ways in which science fiction narratives can overcome the challenges for realism, described by Ghosh, in depicting climate change and other environmental issues.

Magical Realism: Diverse and Dynamic … Animals, Plants and Spirit

Reading *Lagoon* for the themes and narrative strategies of magical realism provides opportunities to engage with a range of environmental discourses. In this analysis I explore how the novel's structure and use of multiple focalisers can be read as countering anthropocentrism, subscribing as it does to a thematic element frequently employed in magical realist texts, namely 'the carnivalesque' and 'the cacophony of discordant voices,' narrative strategies studied by Mikhail Bakhtin. In examining the depictions of talking animals and characters that shape-shift between human and animal form enables, I explore, once again the aesthetics of proximity, highlighting interspecies relationships, shared attributes and ways in which the boundary between humans and animals, and the nature-culture divide are blurred. While supernatural figures from myth also generally feed into ecocritical analyses that explore the aesthetics of proximity, in this analysis I take a closer look at certain folklore characters, unpacking their significance to indigenous belief and how such beliefs promote reverence toward the environment. Discourses about indigenous environmental ethics feed into postcolonial critique of Christianity as an anthropocentric religion, which, when introduced to Africans, was complicit with the dehumanising objectives of colonialism and whose missionaries denigrated indigenous belief systems as superstition. Through the magical realist lens of this analysis, I am also attentive to supernatural characters that flow from contemporary discourse such as urban legends or intertextual references, and so read The Bone Collector as representing problems in the urban environment, such as corrupt governments that fail to maintain key infrastructure.

The very structure of *Lagoon* enables an ecocritical reading, as the novel is broken up into a series of vignettes depicting a disorienting range of viewpoints through the use of multiple focalisers. The story is divided into three acts—WELCOME, AWAKENING and

SYMBIOSIS—subdivided into the vignettes depicting the outlook of various characters. Each act begins with a vignette portraying the outlook of an animal. First the swordfish, then a tarantula and then a bat. This narrative frame establishes a posture in which the voice and subjectivity of animals are given preference over that of humans. The priorities evoked by this structural feature, in which the voice and subjectivity of animals are given precedence over those of humans, is revisited repeatedly throughout the narrative. The number of focalisers is noteworthy, including, beyond the animals, a street urchin, a prostitute, a domestic worker, a kidnapper, a military official, a US tourist, a 419-scammer, a clergyman, a cross-dresser, the president and, of course, the main characters Adaora, Agu, Anthony and Ayodele. Beyond the humans, the vignettes feature a number of additional nonhuman characters drawn from African myth and folklore. These include Legba, the the Yoruba trickster god of the crossroads, Ijele, chief of all Masquerades, Mami Wata, a mythological aquatic figure, and Udide Okwanka, the spider artist who the reader later learns is the narrator. Another notable nonhuman character is The Bone Collector, a sentient road that feeds on living creatures. That such a dizzying array of characters—human and nonhuman alike—are given voice, counters the anthropocentric thinking which underpins damaging attitudes to the environment, affording representation for all voices without privileging humans.

This staggering assortment of represented voices does more than decentre dominant categories. It also mirrors the chaos and frenetic activity which ensues in the numerous subsequent chapters of the narrative, invoking the polyvocal and heteroglossic spirit of Russian formalist Mikhail Bakhtin's carnivalesque cacophony of discordant voices, thematic elements frequently employed in magical realist texts. Brenda Cooper describes Bakhtin's context, Russia in the 1930s, as "early capitalism's uneven development," and points out the

similarity between that context and "the Third World in late capitalism," as a reason for the applicability of Bakhtin's study of narrative to West African magical realism (23). "Bakhtin's deliberations on the novel," writes Cooper, "provide magnificent tools with which to analyse modern magical realism," adding about the carnivalesque, that it "becomes a fictional shorthand, invoking a tradition of cultural politics of resistance" (24). The carnivalesque is thus symbolic of the disruption and subversion of authority and officialdom, and was among Bakhtin's strategies for countering the conventions of socialist realism. In *Lagoon* the carnivalesque is employed to decentre humans and emphasise diversity, countering the dominant anthropocentric standard by giving equal voice to humans and nonhumans, and even giving precedence to nonhumans. This frenzied and chaotic spirit suffuses the narrative, from the spur-of-the-moment gathering that occurs outside Adaora and Chris's Victoria Island home to the chaos that reigns over the city as the Area Boys enact their various forms of civil unrest across the city. Even Bar Beach, which is marked out as the site for the aliens' initial contact with humans, is described in terms that deny privileging humans over birds, insects or even non-sentient garbage:

> In many ways, Bar Beach was a perfect sample of Nigerian society. It was a place of mixing. The ocean mixed with the land and the wealthy mixed with the poor. Bar Beach attracted drug dealers, squatters, various accents and languages, seagulls, garbage, biting flies, tourists, all kinds of religious zealots, hawkers, prostitutes, johns, water-loving children and their careless parents. (7)

On a number of additional occasions in the narrative the forming of crowds is an underscored feature, as when Anthony's fans gather outside Adaora's Victoria Island home. In the build-up to the gathering, the emphasis on crowds is stressed when Ayodele tells Anthony "[t]he

way my people operate, we need a gathering, first," and encourages him, saying, "[t]his house is a good location," and that he "will draw a crowd here" (54). As the crowd forms the "festive air" is similarly highlighted (86). And so, the crowd gathers there, in anticipation of a free concert, with local hawkers "selling bottled soft drinks, bags of 'pure water', cashews, peanuts and chin chin," (86) creating an informal marketplace and contributing to the carnival atmosphere. By the time Adaora gets back, the festivities have developed into full-blown carnival.

> The first thing Adaora thought as she got out of Benson's car was that the street outside her house had turned into a carnival. The very air smelled deliciously festive. There were vendors selling suya, fried plantain, boiled eggs, Fanta, beer. One woman had even set up right across the street from her house. She was selling fufu and what looked like egusi soup, jollof rice and other hot food items. And she was making a killing, from the looks of it. She had no less than ten people waiting to be served. (104)

I have discussed, in the previous chapter, the potential of marketplaces as sites for exploring proximity between human and nonhuman others. This potential of the marketplace is referred to in the text, when Adaora remarks that she wished her grandmother could have been alive to witness Ayodele's shape-shifting ability: "She was always sure the markets were full of them, witches, shape-shifters, warlocks, things like that" (29).

Talking animals is a staple of African orature and is equally at home in magical realist narratives. I have made reference to the structure of *Lagoon*, as a strategy for giving voice to those historically denied power. Giving voice to the swordfish—along with so many other

animal and figures from myth—harnesses magical realism's disruptive potential by granting nonhuman others full subjectivity, and in that way, counters the anthropocentric and depicts the interconnectedness of human lives with others. Giving voice and subjectivity to the swordfish and other creatures such as the bat and the tarantula produce indistinction between humans and these creatures. This indistinction is to be found at work in various scenes in *Lagoon*. Indeed, Ayodele repeatedly shape-shifts between human and animal form. She blurs the boundary between the human form and that of nonhuman creatures—lizard and monkey—and even that of the wave that drags Adaora, Agu, and Anthony into the water at Bar Beach. This blurring is also strongly at work with Adaora, whom we find being transformed into a mermaid/marine creature. The reader learns that when she is first taken to the reef-like structure that is the alien ship, "one of them had touched her arm and she watched as it became coated with lovely iridescent fish scales and her fingers webbed together" (24). When she has been taken to meet with the alien elders, she undergoes a dramatic transformation, developing webbed fingers, her lungs change into gills and her "legs were no longer legs," having been transformed into a "lunate caudal fin, like that of a sailfish, marlin or swordfish" (251). Her love for science is linked to her affinity for the water, for the sea, and is also linked to the story of her birth. "I was born with webbed feet and hands," she says, "and my legs were joined together by flesh… from the moment my mother first took me to the ocean, I could swim. No one ever taught me. I was … like a fish" (257). Adaora's powers and her dual citizenship to the world of humans and fish invokes the paradox of the unity of opposites. Her status as both marine biologist and sea creature situates her both as the autonomous rational subject and the object of her study. Her in-between position complicates this relationship, and can be read as suggesting that scientists take a more empathetic stance to the nonhuman others in nature with whom they come into contact.

The presence of nonhuman others from myth and folklore is a staple of magical realism, and has additional implications for postcolonial ecocriticism. The presence of figures from myth and folklore points to precolonial belief systems, and their presence in the narratives can be read as a critique of religion, specifically Christian missionaries of the colonial encounter, who denigrated and dismissed indigenous belief systems as superstition. Indigenous belief, however, has been shown to have been intricately tied up in maintaining the collective well-being of precolonial communities. The environmental dimension of this idea of maintaining the collective well-being is often ignored. Christian missionaries likewise failed to acknowledge how indigenous belief systems fostered a reverence for nature, and were thus integral to environmental ethics, the care of the land and waterways.

Take Legba, for instance, the trickster god of the crossroads, who is the Haitian Vodou equivalent of Esu (also Exu, Eshu or Eshu Elegba) in Yoruba cosmology. Legba is one of the Orishas, intermediaries between humans and the supernatural, and venerated for his power over specific elements of nature. According to Dele Meiji, with the arrival of missionaries in the 1800s, a translator of the Bible, selecting an equivalent Yoruba name for Satan, chose the name of an existing figure in the Yoruba cosmology, Esu, who along with his trickster attributes, has been associated with the devil ever since. Meiji writes that "the introduction of this Yoruba god into Christian theology, led to a misunderstanding of his function in Yoruba belief, leading many people to believe that aborisas venerating Esu are essentially devil worshippers" (Meiji, "Esu is Not the Devil," n.pag.). Notwithstanding his vilification in Christian belief, Legba epitomises a spirit of communication and contact, speaking all languages and is versed in all forms of communication. His presence in the narrative can be read as reinforcing an ethic of communication and interaction between

humans and nonhuman others in nature, a reminder, perhaps, for development practitioners, about the value of local knowledge in stakeholder consultations.

Mami Wata is another mythical character appearing in *Lagoon*. Known for her influence over the watery realm, she is often identified with crocodiles, fish and water snakes, and has, since the advent of colonialism, been identified with the figure of the mermaid. Reverence to her is said to deliver wealth. In the narrative, her reputation is likewise defamed by Father Oke, whose constant references to witches of all kinds, especially marine witches, is emblematic of a long tradition stretching to the present of proponents of Christianity denigrating indigenous belief systems as witchcraft. In the text the reader learns that Chris and Adaora's marriage had started going downhill when Chris, following a scary airplane flight, converts to Christianity. Chris is then inducted into this belief about marine witches by Father Oke. Adaora's occupation as a marine biologist is a key fact by which Father Oke convinces Chris that Adaora is a marine witch. Chris now believes that "there were white witches, physical witches and marine witches. All were evil, but the marine witch was the most powerful because she could harness water, the very substance that made up 70 per cent of an adult's body and 75 per cent of a child's" (17). As a result, Chris repeatedly accuses Adaora of witchcraft. When he is confronted with Ayodele as his spitting image, he immediately accuses Adaora of poisoning him. "You've poisoned me! Witch! I knew it! I am hallucinating because you've poisoned my body, o!" In the church, this attitude to indigenous beliefs escalate to gratuitous violence, as Father Oke reportedly engages in a practice called witch-slapping at the altar. In this scene, also rooted in a factual occurrence, Father Oke calls a young woman a "[f]oul devil" as he "slapped her across the face as hard as he could," while other congregants shout "Praise Jesus" (59). In reality, witch-slapping is merely one practice of a widespread social problem in Nigeria, in which supposed evangelical pastors charge

gullible parishioners exorbitant amounts to perform exorcisms on children, who, in turn, have been identified as witches to account for said parishioners' lack of good fortune. We see Father Oke enacting a similar swindle on Chris. We have learned that Father Oke is keen on keeping Chris reliant on him, as that is how to ensure Chris keeps making donations. Maintaining this reliance involves convincing Chris that Adaora is a marine witch. Even so, Father Oke's flawed logic is patently transparent. While he acknowledges the fact that Adaora is a highly qualified professional, he negates her learned status by framing her as morally deficient. "Look, Brother Chris," he says, "women are … weak vessels. It is identified in the Bible. Your Adaora is a highly educated biologist but she's no different from the others. She could not change herself if she tried" (35). Father Oke thus undermines her qualification as an oceanographer even as he uses it to prop up the claim that she is engaged in dark arts as a marine witch. Reading somewhat against the grain for ecological imperialism, this can be seen as analogous to the proponents of Western managerial developmental and environmental models—seeking to continue the plunder of raw materials—retaining a focus on the supposed "backwardness" or superstitious elements of indigenous environmental ethics, whilst ignoring their longstanding efficacy. As it turns out Mami Wata continues to play a role in contemporary environmental practice. In "Why Mami Wata Matter: Local Considerations for Sustainable Waterpower Development Policy in Central Africa," Richard B. Peterson reports on the role of narratives about Mami Wata in informing the development of micro-hydro projects in the Democratic Republic of Congo, where locals believe that an agreement with Mami Wata can translate into "good hunting,… good livelihood or… success in reaping the natural wealth also often to be found in the environments where the Mami Wata lives" (112). According to Peterson, such beliefs have implications on policy design pertaining to water sources, writing that "development agents and agencies would do well to take these mythological and spiritual dimensions of local

people's reality seriously rather than dismiss them as irrelevant, or simply as non-empirical phenomena and therefore without effects" (109). Mami Wata, however, is not blithely benevolent, and if agreements are not honoured, writes Peterson, "Mami Wata will go further, demanding the life, not just of anyone, but of a family member of the person who benefited from her intercession" (112). That Father Oke eventually gets his comeuppance by being seduced by Mami Wata, heading to the beach with her, never to be seen again, is not only consistent with Peterson's account of Mami Wata, but also confirmation of Okorafor's critique of Christianity as in cahoots with the colonial project. Moreover, Okorafor corroborates this critique in her blog, expressing her concern over "the strain of Christian fundamentalism running through Nigeria's veins," charging that it is "teaching Nigerians to hate their own indigenous traditions, spiritualities, and religions," and that it represents a "hatred of one's self in the guise of religion, brought or imported by outsiders and foisted upon people who are simply looking for God" (Nnedi's Wahala Zone Blogspot, "Insight into the Lagoon," n.pag.).

The presence of figures from indigenous belief systems then indeed provides an opportunity for performing a closer examination of Christianity as a metaphysics deeply embroiled and complicit in an exploitative and abusive colonial activity, and how its worldview counters and contradicts environmental ethics entrenched in indigenous belief systems. The contemptuous and dismissive ethos of the colonial encounter is alluded to in a note preceding the narrative, which explains that the city of Lagos "takes its name from the Portuguese word for 'lagoon'," demonstrating a cold and pragmatic approach to the dwelling of others by naming it purely in terms of how it may facilitate bringing ships toward the mainland, with the result that the Portuguese could ostensibly not be bothered to "come up with a more creative name" (Okorafor, *Lagoon*, n.pag). The Portuguese had neither regard for

the opinion of the locals, nor did they sufficiently value the idea of local knowledge "to ask the natives for suggestions" (Okorafor, *Lagoon*, n.pag). Zamora and Faris remind us that in magical realism, "magic is often given as a cultural corrective, requiring readers to scrutinize accepted realistic conventions of causality, materiality, [and] motivation" (3). The presence of supernatural figures such as Legba and Mami Wata in Okorafor's magical realism serves as an ontological disruption to the Christian worldview, prompting closer inspection of its political, material and environmental dimensions. For one thing, Greg Garrard identifies Christianity as a "dangerously anthropocentric religion" (88). Drawing on the arguments of Lynn White Jr., Garrard points to "ecologically damaging attitudes" entrenched in Genesis 1:26, that frames humanity as made in God's image, marking humans out as special and superior to other created beings and establishing the binary logic of domination between humans and nonhuman others. Garrard quotes from the King James Version, charging that the biblical text, "let them have dominion over the fish of the sea, and over the fowl of the air, and over the cattle, and over all the earth" establishes a veritable written authorisation for humans to exploit nature as they see fit (108-109). Such ecologically damaging attitudes should be viewed in contrast with the belief systems of indigenous peoples, whose veneration and respect for supernatural figures was exercised through a respectful attitude to material items in the natural world, an ethic consistent with that rendered by Alice Curry as "a traditionally African mode of being-in-the-world in which human beings tend to be more cosmically humble and therefore not only more respectful of other people but also more cautious in their attitude to plants, animals, and inanimate things, and to the various invisible forces of the world'" (43). This contrast is exemplified in Elizabeth DeLoughrey and George Handley's reading of *Things Fall Apart*, in which they point to an ontological shift among the villagers brought about by Christian missionaries arriving on African shores with colonial forces:

> …the villagers move from an ancestral conception of belonging to the land embedded in language and cosmology toward an abstract and delocalised Christian god imported by colonialism… Achebe's villagers are forced into a new ontological relation in which 'the justice of the earth goddess' and other deities of the natural world are dismissed by Christian missionaries as 'gods of deceit'. (7)

The inclusion of figures from African belief, myth and folklore therefore provides significant traction for reading environmental discourse in *Lagoon*. Magical realist narratives, however, also conjure supernatural creatures from contemporary conversation and idiom, such as, for instance, urban legends, political discourse or intertextual references. One such supernatural nonhuman character in *Lagoon* is a sentient "stretch of highway [that] has named itself "The Bone Collector" (120). To some extent a nod in homage to, and a play on Ben Okri's *The Famished Road*, this stretch of the Lagos-Benin Expressway is sentient enough to "stretch its old tired asphalt with ease and comfort," and dangerous enough in that it "collects human bones and the bones of human vehicles" (120). The lethal nature of this segment of highway is hinted at sporadically during the course of the narrative. The reader first learns about the perilousness of the road when Adaora remembers weeping for her father, who was "was killed along with thirty others during a botched robbery of a luxury bus on the Lagos-Benin Expressway, one of Nigeria's many, many, many dangerous roads" (8). The thieves had made the passengers lie down in the road when, unexpectedly, a speeding truck had run over everyone including the robbers (8). This occurrence, like so many of the incidents in Okorafor's books, is based on an actual event that happened pretty much as described in the narrative on the Lagos-Benin Expressway in August 2009. The vitality of this stretch of highway is revealed when Moziz, one of Ayodele's would-be kidnappers, accidently hits a

woman with his car. When Jacobs, his accomplice, gets out to ascertain her injuries, he hears something grumbling "like an enormous empty stomach and he looked around" (171). Whilst still undecided about what to do next, he discovers—like Han Solo in the throat of the Exogorth—that he is standing on living matter: "The concrete beneath Jacobs' feet shifted. No, not *shifted; softened*… From down the road came a deep guttural growl that intensified into a roar" (171). Trying to carry the woman to the car, he notices that the "road was trying to swallow her," and as he pulls "her body from the softening asphalt," he ignores "the angry roar of a creature denied a meal" (171). As people fleeing the city are gridlocked on the highway later in the narrative, The Bone Collector's full vigour and verve is highlighted, as it begins "shaking like a snake fighting a feisty rat," rearing up, knocking cars off itself and rolling "toward the fleeing people. When it got to them – well, you heard nothing but shrieks of agony." (206-207) One of the Lagosians fleeing the city, Udeh, reflects about the spirit "that was haunting the road, it was from here and had probably been here since these roads were built, maybe even before then" (207). This contemplation summons the image of colonial forces installing the minimum infrastructure required for extracting the wealth of local resources. The figure of The Bone Collector is symbolic of the conditions of fossil fuelled modernity in Nigeria, of poorly maintained infrastructure with "potholes… that are closer to craters" and of a poverty-stricken and dispossessed populace—radicalised by government corruption and apathy to public health and safety—"who waylay you like bandits and trolls from European fairy tales" (202). It symbolises the innate and random dangers of the unity of opposites that situates the trappings of modernity in rural settings or urbanised settings containing remnants of the past, what Zamora and Faris refer to as "a return on capitalism's hegemonic investment in its colonies," (2) delivering the perilous material conditions of a culture caught between tradition and modernity, its insatiable nature mirroring capitalism's insistence on continued growth and consumption.

It should be noted that The Bone Collector is the sole supernatural entity in *Lagoon* that is not explicitly drawn from myth or folklore, though there are obvious connections with the Yoruba god, Ogun, god of the road and metalwork, favourite of Soyinka. As Ogun-scholar, Sandra T. Barnes writes, "Ogun is popularly known as the god of hunting, iron, and warfare. Today, however, his realm has expanded to include many new elements, from modern technology to highway safety anything involving metal, danger, or transportation" (2). The presence of The Bone Collector, however, can also be read to represent the continued belief among modern day Nigerians, in the phenomenon of supernatural entities maintaining control over material conditions in the physical world. The Bone Collector thus maintains influence over this stretch of modern-day infrastructure in the same way as Mami Wata is said to maintain influence over the watery realm, and in the same way—as Harry Garuba's animist realism reminds us—that the "larger-than-life statue of Sango, the Yoruba god of lightning" presides over the offices of the National Electric Power Authority, "the major power generation and distribution corporation of the country" (261). As Brenda Cooper writes, "African writers very often adhere to this animism, incorporate spirits, ancestors and talking animals, in stories, both adapted folktales and newly invented yarns, in order to express their passions, their aesthetics and their politics" (40). In the text, Udeh watches as one of the aliens perform the selfless act of sacrificing itself to The Bone Collector, an act he sees as addressing "Nigeria's worst diseases – pervasive corruption and unsafe roads" (208). Through the figure of The Bone Collector, and Garuba's animist realism, urban ecology is brought into the realm of traditional environmental ethics.

In *Lagoon*, it becomes clear how the conventions and formal qualities of magical realism are used to counter the anthropocentrism so damaging to environmental thinking by

effectively decentring the human, both through Bakhtin's idea of the carnivalesque as well as through instances of proximity and shared attributes between human and nonhuman animals. Through the presence of supernatural figures from folklore and myth, a commonplace strategy in magical realist narratives, I read a sustained critique of Christianity as an anthropocentric worldview acting in lockstep with an exploitative colonialism, foisted upon African peoples. With this analysis it becomes evident how the introduction of Christianity brought about an ontological shift from an earth-centred animistic worldview that engendered great respect for nature and nonhuman others to an outlook that sees the natural world as created and to be valued solely for its utility to humans, and how Christian fundamentalism continues to be embroiled in exploitative practices in contemporary Nigerian society. *Lagoon* demonstrates that the animist worldview is not a remnant of the past, exhibiting its representational applicability to contemporary urban environmentalism, and countering what Weber called the rationalisation of modern life with Garuba's re-enchantment of the world.

The range of ecocritical discourses explored in this analysis demonstrates magical realism's capacity to depict environmental issues in innovative ways, and how magical realist elements overcome the challenges, described by Ghosh, to depicting climate change. Ghosh bemoans that the realist text fails to acknowledge the agency of nature, and routinely renders the environment as a thoroughly predictable backdrop to the human drama on which it is focused. As pointed out in the previous analysis, *Lagoon* is a story that fosters a keen awareness of the vitality and agency of nature, from the fist of water snatching up three human characters from Bar Beach, to the Lagos-Benin Expressway rearing up like a dangerous and feisty snake, elements of the environment are instrumental in, and highly influential in, moving the narrative along. As such, the narrative moves along at a frenetic

pace, in strong contrast with the genteel pace and regularity which Ghosh points out as associated with the realist novel.

Ghosh also bemoans the emphasis, in realism, on individuals and on Updike's individual moral adventure. In *Lagoon* the emphasis on diversity and the plurality of voices—human and nonhuman—ensures that an emphasis on any one individual's moral struggle so favoured by the realist novel is forestalled. The very aim of the narrative structure, along with the carnivalesque theme so frequently employed by magical realist texts, serve to portray a broad cross-section of the varied entities—animal, plant and spirit—inhabiting the city of Lagos. Indeed, this is a narrative very much focused on the collective, as is made plain in the dedication, "to the diverse and dynamic people of Lagos, Nigeria – animal, plant and spirit". Ghosh also points to the middle-class lifestyles reflected by realist text, which further a desire for certain types of homes, appliances and gardens. The repeated depiction of crowds and gathering, the use of Pidgin English, and the chaos which descends upon the city with Area Boys looting and pillaging is at odds with depictions of middle-class lifestyles and settings so favoured by the realist novel. Even Adaora and her husband's well-off middle-class home is violated. The Eko Island Hotel is depicted as a craven safe space for wealthy foreigners. Even Father Oke doesn't get to enjoy the luxury of his home which is contrasted with that of his impoverished neighbours.

Lagoon is peppered with unlikely occurrences that are at odds with the prosaic style and events of the realist novel. The varied and surprising ways in which animals interact with humans, as well as the incidences in which characters shape-shift between human and animal blurs the boundary between the nature-culture divide and highlight humanity's embeddedness in the natural world.

Finally, the inclusion of supernatural character from myth and contemporary imaginaries undermines the rationalism and empiricism at the heart of the realist novel, enabling engagement with ideas about environmental ethic grounded in the traditional and spiritual beliefs of African indigenous cultures. The magical realist elements in *Lagoon* are thus shown to overcome the challenges cited by Ghosh for depicting climate change and other environmental issues.

Chapter 5: Conclusion - Embracing the New Real

When William Slaymaker, some 20 years back, wrote about a lack of commitment among "African literary and cultural critics to adopt ecocriticism or the literature of the environment as they are promulgated from many of the world's metropolitan centers," (132) he sought to explain this state of affairs—ecohesitation as he called it—as an endeavour by black African critics to extricate themselves from the hegemony of Western literary theories. Since then, a critical mass of scholarly attention has sought to explain, if not recuperate, the position of African environmentalism. Some scholars have pointed to the numerous instances, preceding both Slaymaker's charge and the rise of ecocriticism in the West, when African literary criticism had in fact been quite pointedly focused on nature or environmental issues. Others have asserted that most African literature engages with the colonial encounter, rendering ecocritical concerns subordinate to issues pertaining to liberation and decolonisation. Rob Nixon, for instance, provides a list of reasons why the concerns of postcolonialists were at odds with those of ecocritics (236). Building on the arguments of Slaymaker and Nixon, Cajetan Iheka suggests that "postcolonial studies, from which African literary criticism derives its impetus, retained the anthropocentric leaning of the Western epistemology it critiqued" (8). Amid these arguments, there have been numerous others, ranging from ecological imperialism to environmental justice and political ecology, that have endeavoured—often with great insight—to conceive of an 'African ecocriticism'. Very few of these, however, have pointed to African literature's investment in literary realism as a reason for its perceived ecohesitation. Adherence to literary realism among African writers can be seen as rooted in the struggle for liberation from colonial powers. Steven M. Tobias has pointed out the controversy caused by the initial popularity of the fantastical and myth-ridden *The Palm-Wine Drinkard* by Amos Tutuola; how the Nigerian intelligentsia, on what seemed the eve of liberation, were horrified to be identified in global perceptions with a work

they described as “primitive” and “written in broken English by a lowly messenger” (66). By contrast, and as Okorafor has pointed out, the realism of Achebe’s *Things Fall Apart* is seen as having set the benchmark for serious African writers, and through prizes and awards that specifically exclude science fiction, realist representation in African literature continues to be incentivised. There persists the idea that for African writers to be taken seriously by their readership, those writers had best stick to realism, or be relegated to the fringes. An anxiety about a nascent turn to other narrative modes leads Chimamanda Ngozi Adichie to wonder “isn’t realism enough”?

It would seem that realism is *not* enough, even though realism is a prominent form in literature and will, in all likelihood, continue to remain so for the foreseeable future. As Ghosh has pointed out a range of challenges to depicting climate change exists in realist fiction, I have shown that further hurdles abound for realist writers seeking to accurately convey African worldviews, or those seeking to depict the paradoxical nature of neocolonial reality of the African Postcolony. Ironically it is the fantastical and myth-ridden influence of Amos Tutuola—he whose work so horrified the intelligentsia on the eve of liberation—that has, since the 1990s, inaugurated a turn from the mimetic that has been anything but fringe or escapist. While there are those who may still think of African science fiction as too frivolous to address the very serious problems facing the continent, there is a non-mimetic literary form among African literary works that *is* taken rather seriously, namely, magical realism. Ben Okri’s *The Famished Road* and Ngũgĩ wa Thiong'o’s *Wizard of the Crow* are cases in point. Magical realism is a branch of speculative fiction that is unequivocally seen as socially, politically and ethically engaged rather than escapist, and is celebrated and taken seriously for its lofty literary standard. Based on the scholarly engagement with her work, along with the notice taken in high-brow literary journals, Okorafor’s work is similarly being taken quite

seriously. One could almost assert that Okorafor has encased her magical realist narratives within the familiar tropes of science fiction, and that her work attracts a broader readership because of this. That readership potentially becomes broader with Okorafor's label, 'organic fantasy,' which links her writings to an additional genre, while drawing on local worldviews, spanning history, culture, cuisine, tradition and, of course, folktales, combining all these facets into one literary mode. This synthesis—what I have been calling African science fiction—holds the potential to demonstrate African literature's significant investments in environmentalism as well as to broaden the generic horizons of fantastic storytelling. Okorafor's African science fiction could well be the literary form that answers the issues raised by Ghosh. This is the science fiction that is increasingly being acknowledged by literary journals and academia, being welcomed into what Ghosh has referred to as "the mansion of serious fiction" (61). And this may well be the science fiction that convinces the literati that mansions are not universally representative of the human condition and that they should be viewed as elitist and unsustainable. Moreover, science fiction as Okorafor delivers it, is a literary form that caters for a broadening readership affected by an ever-accelerating globalisation.

As I have shown in my analysis, the science fiction tropes employed by Okorafor, hackneyed though they may be, do not enable an escape from reality. They demand to be taken seriously, backed up, as they are, actual occurrences. The postapocalyptic Sudan in *Who Fears Death* provides no escape from the real-life militarised rape and ethnic enmity which gave rise to the story. As shown by Emily Wax's article in the *Washington Post*, "We Want to Make a Light Baby," the events in the narrative are very real. Similarly in *Lagoon*, the city of Lagos is depicted without glossing over its numerous social, economic, and political ills—pollution and corruption—that flow from its dependence on fossil fuels. These

are therefore narratives that are neither frivolous nor escapist. Okorafor's use of science fiction tropes do not celebrate techno-scientism, nor do they subscribe to the hubristic belief that technology can solve all humanity's problems. It does not present the pursuits of science and technology as objective and apolitical. It shows, instead, that scientific and technological advancement cannot be depicted as free from the political, cultural and ideological contexts in which they emerge.

Ghosh bemoans that nonhuman nature is consigned to the role of a predictable and inert background in realist literature. Okorafor's African science fictions are not narratives in which nature is static and foreseeable. Swordfish attacking oil pipelines are very real manifestations of nonhuman agency. These are not narratives regulated by probabilities. Exceptional events, with nature as protagonist, are restored as the motor of the narrative. They are narratives that tackles environmental issues through a range of strategies that reflect the urgency of the problem. They are narratives that establish the clear and present danger about which the public are continuously being informed through the non-fiction treatises of our scientific communities. Instead of getting bogged down in the technical or policy jargon, they do something the scientists are ill-equipped for, use stories to make sense of the data and projections.

Ghosh takes the realist novel to task for reflecting middle class lifestyles, both in form, slowing down the pace through the filler of detailed descriptions, and in content, through the depiction of human drama played out in interiorised domestic spaces. These qualities, Ghosh tells us, inspire a cultural desire—through identifying with the characters—for homes, gadgets and standards of living which, if all its inhabitants aspire to it, one earth cannot support.

Okorafor's African science fictions are narratives largely devoid of filler, those detailed descriptions of everyday events reflecting bourgeois lifestyles. Where middle class or prosperous living is depicted, as with Adaora and Chris's Victoria Island home or Father Oke's walled magnificent compound, it is done to demonstrate contrast with a multitude of have-nots. Moreover, the living standards depicted extend from the bucolic survival of the post-apocalyptic setting to the various inhabitants of Lagos whose strategies for survival range from hawking and begging to prostitution and looting.

Okorafor's African science fictions are not overly focused on the individual moral adventure of its protagonists. In *Lagoon* the reader is hardly given an opportunity to get acquainted with one character before another is introduced, and the narrative concentrates on the main characters only enough to move the story along. Even in *Who Fears Death*, where the reader spends a great deal of time sharing in the inner personal and ethical struggles of Onyesonwu's interactions with her lover and friends, such interactions happen against the backdrop of a gruelling trek through the desert, staving off attacks from unlikely alliances of animals and learning to cooperate with others, hardly the stuff of bourgeois lifestyles. Spirits and animals are afforded subjectivity, and the personal transformation undergone by Onyesonwu reflects the collective transformation that will need to occur if the Okeke and the Nuru are to avoid repeating the errors of the past. Whether you read them as science fiction or magical realism, these narratives exhibit how the current trajectory of human behaviour and attitudes to nonhuman others forestalls the continued possibility of bourgeois lifestyles.

Okorafor's African science fictions are not invested in privileging Enlightenment ideas, such as reason over superstition, empiricism, secularism, progress, modernity and

individual liberties. The ubiquitous inclusion of figures from myth, folklore and traditional African belief challenges the Western rationalism and empiricism of the realist episteme. Notions of progress and modernity, so favoured by realism, are similarly taken down a peg. In *Who Fears Death* juju is depicted as a technology that outlasts contemporary computers and other electronic gadgets. Likewise in *Lagoon*, which introduces access to alien technology that outstrips that of humans, a bigger emphasis is placed on diversity, mutual respect and cooperation. Both instances foster a turn from scientific managerialism.

Okorafor's African science fictions do not promote a view that privileges individual liberties. Through according subjectivity to animals, plant and spirit in *Lagoon*, the emphasis is firmly placed on the collective welfare. Similarly, in *Who Fears Death*, Onyesonwu repeatedly models the sacrifice of her individual rights and desires for the collective good.

Okorafor's African science fictions are, then, narratives about the collective response, demonstrating humanity's interconnectedness with the environment around us, motivating for a keen awareness of, empathy for, and engagement with both human and nonhuman others. They warn us against the anthropocentric ideologies that decrees the world a stockpile of resources to be managed and rationalised, enjoining us to adopt a phenomenology that serves to re-enchant the world.

Okorafor's African science fictions are demonstrations of Africa's eco-determination, forging new understandings of the real.

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