

## introduction

Ryan Coogler's Afrofuturist film *Black Panther* was released to global acclaim in February 2018.<sup>1</sup> The film, inspired by the Marvel comic-strip series, casts Chadwick Boseman as T'Challa, the king of Wakanda, a fictional resource-rich African country that escaped colonial subjugation. Masquerading as another poor African nation, Wakanda maintains an isolationist policy to ensure that its technological prowess is enjoyed solely by its citizens, until, that is, the appearance of the antagonists, Ulysses Klaue (Andy Serkis), vibranium thief, and T'Challa's cousin, the American-born Eric Killmonger (Michael B. Jordan), who battles the king for the throne. While T'Challa prefers to maintain the status quo as he ascends the throne following his father's death, Killmonger plans to utilize Wakanda's resources to extend its influence across the world when he becomes the ruler of Wakanda temporarily.

The widespread enthusiastic reception of *Black Panther* was unique for a film depicting black people and centered on Africa. Usually, the most commercially successful of such films are critiqued for objectifying black bodies, for branding the continent as a site of disaster, and for distorting the history of black people. *Black Panther* was instead hailed from America to Zimbabwe. People of African descent commended the pan-African sensibilities of the film, including its use of isiXhosa, one of the national languages of South Africa. They also applauded the spectacular costumes, drawn from across

the continent, as well as the centering of black characters and cultural rituals. The movie's portrayal of strong black women was also celebrated, as was the configuration of the fictional Wakanda as a space endowed with stupendous wealth and unparalleled technological capabilities.

And yet, despite the film's achievements, including its positive representation of the continent's cultures and people, its futuristic vision relies on the illusion of infinite resources and reinstates the continent as a site of conflict fueled by resource control. Wakanda's wealth and its energy are derived from vibranium, to which it has exclusive access, and the film's conflict revolves around the struggle for control of this powerful resource. The struggle for vibranium endangers humans and environments, be it the explosion triggered by Klaue as he steals vibranium in Wakanda or the death of N'Jobu (Killmonger's father) in America for betraying Wakanda. The violence of the scenes set in the British Museum and South Korea, and even the fight between T'Challa and Killmonger, index this endangerment of environments. Spread across space and time, these scenes are linked by violence to human and nonhuman worlds due to the quest for vibranium. The violence in *Black Panther* resonates because the extraction of resources such as oil and uranium, echoed in the film's vibranium, has engendered similar social conflict and ecological degradation from the Niger Delta in Nigeria to Arlit in Niger. As I elaborate in the epilogue, the conflict in *Black Panther* reverberates with current problems on the continent, where disaster follows resource control. Coogler's futuristic Wakanda resembles Africa now.

The future promised by the film is not only implicated in the Africa-in-crisis trope; it also relies on an infinite supply of vibranium, which is not in keeping with the realities of our finite planet. Both T'Challa's isolationism and Killmonger's interventionism are undergirded by the same ethos: the limitlessness of resources. T'Challa's inward orientation is supported by the belief in Wakanda's sufficiency in the present and the future, while Killmonger sees no reason to hold back given the same infinite availability of resources. *Black Panther* must repress the stark realities of finitude and ignore the environmental cost of obtaining vibranium in order to present a nation of unmatched resources and advanced technological capabilities. We need to turn to African media to understand the socioecological implications of resource extraction on the continent and in order to begin the work of imagining eco-conscious futures that sidestep the repetition of the problematic present in *Black Panther*. This book takes a step in that direction.

*African Ecomedia* examines the ecological footprint of media technologies in Africa as well as the representation, in media, of ecological issues af-

fecting the continent, including degradation from oil and uranium extraction, dumping waste, and the politics of animal conservation. In focusing on the ecology of images and images of ecology pertaining to Africa, I address the limited attention given to African cultural artifacts in ecomedia studies.<sup>2</sup> In particular, I pay attention to the materiality of infrastructure, which has recently become a major focus of media studies. Brian Larkin, Lisa Parks and Nicole Starosielski, Jussi Parikka, and John Durham Peters are only some of the scholars who have called for an infrastructural disposition toward media.<sup>3</sup> Africa remains marginal to discussions of materiality in media studies and in the subfield of ecomedia studies, yet the fossil fuels and ore crucial to media's workings, like oil and coltan, are mined on the continent, and castoff electronic devices often end up there. I demonstrate Africa's centrality to the making, use, and disposal of media devices while highlighting important insights on the planetary crisis inscribed in African cultural artifacts—representational media in their own right—including film and photography.

These African cultural inscriptions provide the appropriate site for understanding the ecological footprint of media, and they offer inspiring examples of the infinite resourcefulness crucial for ethical living and media production in a time of finite resources. Cultural inscriptions here encompass film, photography, sculpture, and video art. In addition to demonstrating that the “promise of [media] infrastructure” is undermined in Africa by the ecological consequences of its ruins, I examine the ethics of representing those ruins and highlight alternative media practices suitable for an era of ecological precarity.<sup>4</sup> I analyze African media arts as employing network forms: in their entanglement of time past, present, and future; in their interconnection of spaces across boundaries; and in their depictions of the interrelationship between humans and animals.

Media, as Peters evocatively describes them, “are vessels and environments, containers of possibility that anchor our existence and make what we are doing possible.”<sup>5</sup> One of the things that media make possible is communication. Devices such as cell phones and computers have made keeping in touch with family members in Nigeria easy and instantaneous from my base in the United States. They also allow me to project African environments so that my students can at least glimpse a virtual reality of the continent's spaces. We rely on media devices to be informed of the ecological problems plaguing the world, especially in faraway spaces.<sup>6</sup> But as important as these affordances of media are, the devices at stake, from cell phones to computers, are implicated in ecological degradation.

These devices are made up of components that engender ecological degradation, including oil and coltan mined in Africa. As Stephanie LeMenager reminds us, “oil itself is a medium that fundamentally supports all media forms . . . from film to recorded music, novels, magazines, photographs, sports and the wikis, blogs, and videography of the Internet.”<sup>7</sup> As will become clearer in the pages of this book, the extraction of oil, among other carbon-based resources, entails serious ecological disturbance imperiling human and nonhuman lives across the continent. Unfortunately, the adverse ecological consequences of media do not cease with their production. In *Geology of Media*, Jussi Parikka asks, “what composes technology in its materiality and media after it becomes disused, dysfunctional media that refuse to die?”<sup>8</sup> If some of the compositional elements of media technologies are sourced from Africa, then the continent is also where some of these “dysfunctional media that refuse to die” go after their planned obsolescence. As we see in chapter 2, the recycling of these devices to obtain metals is a toxic enterprise that releases carcinogenic chemicals into the ecosphere. Burning the discarded devices to retrieve valuable metals involves chemical processes that expose human and nonhuman bodies to toxicity at such sites in Africa.<sup>9</sup> Media devices may be valuable facilitators of real-time communication and critical purveyors of modern life, but their toxic legacies also qualify them as “material participant[s] in the apparatus of destruction.”<sup>10</sup>

In addition to media arts and media devices, Africa’s extractive objects and agricultural products—media in the expanded sense—such as oil, uranium, coltan, and bananas are also complicit in ecological degradation. I embrace Peters’s expanded sense of media, which for him include “water, fire, sky, earth, and ether . . . that sustain existence.”<sup>11</sup> I illuminate other media that facilitate existence for Africans, and for people in other climes to which the continent’s oil, uranium, bananas, and coffee are exported. To be sure, these resources provide Africans with employment opportunities and generate foreign exchange earnings for their countries. These objects also position Africa in the world, linking the continent’s sites of extraction to other parts of the world where they are consumed. However, the benefits of these exchanges do not comprise the whole picture. Consumers in Africa often must pay more for goods they have directly produced or for those sourced from their environments.<sup>12</sup>

As chapter 3 shows, these objects come at a huge cost to their communities of extraction, where they leave behind devastated environments. Sean Cubitt’s work on uranium mining in Niger, for instance, reports that the “mines leach water from pastoral land and gardens; radioactive dust from the

open-pit mines settles over the parched landscape; and the air itself is laden with it.”<sup>13</sup> The situation is similar in the Niger Delta, which has recorded the devastating consequences of petro-capitalism, and the dissonance between the promise of modernity and the harsh realities of putrescence.<sup>14</sup> The scenario is worsened, from Niger to Nigeria, by the ineptitude and profligacy of governments that have relinquished their responsibilities as guarantors of people’s well-being and regulators of corporations. My point is this: media, broadly conceived, make possible communication and sustenance, but they are equally tethered to social and ecological degradation in Africa from their production, distribution, consumption, and disposal.

Ecomedia studies is primely positioned to scrutinize this contradiction—of the possibilities and problematics of media—by “balancing a consideration of media representations, media infrastructures, and media materiality.”<sup>15</sup> From its initial ecocritical investigation of representation, in nonprint media such as television and film, of the relationship between the human and non-human world, the scope of ecomedia studies has broadened to accommodate a broader array of materials—textual and visual—as well as to examine the infrastructures underpinning media technologies and to provide a heuristic for considering “the imbrication of media forms . . . within systems and environments.”<sup>16</sup> I favor an encompassing definition of ecomedia including textual materials such as literary texts and periodicals, film and photography, as well as mass media and new media technologies. Peters’s conceptualization of media as “not only devices of information” but “also agencies of order,” “civilizational ordering devices,” and as things “always in the middle” is particularly inspirational for the broad sense of ecomedia here.<sup>17</sup> Agricultural products such as bananas and mineral resources including oil and uranium are equally entangled in the complex web of ecomedia in this book.

Like the conventional media devices, resource media constitute the middle of a relationship between the site of extraction and the point of consumption, between Africa and Euro-America in this context. As civilizational ordering devices, they determine a nation’s position and disposition in geopolitics. Nigeria’s standing in the world is influenced by its oil deposits, making the country a strategic international stakeholder in the region. In this sense, talk of Nigeria’s diminished importance in the context of the United States’ growing oil independence and turn to renewable energy sources evidences the important value of oil as a medium of world-building. Similarly, developmental projects within the country are made possible by oil earnings, making oil significant for the country’s claims to modernity. Oil revenues not only provide the basis for Nigeria’s worldliness and its civili-

zational claims; they also enable the government to maintain fragile peace among competing interests within this geographic construction. Exported to foreign climes, resource media connect the continent to consumers across the world who derive sustenance from them. These users consume African media as food, as energy resources for powering their devices, and as (un)-seen components of their media technologies.

As the quintessential media predating mass and new media technologies, elemental media are indigenous inhabitants of the ecomedia sphere. Elemental media precede the arrival of media devices, media arts, resource media, and other recent immigrant arrivals threatening the survival of native ecomedia and the rest of the planet. These latter arrivals belong to the ecomedia corpus because their making, use, and disuse implicate them in ecological degradation and/or environmental transformation. In this book, media enter the orbit of ecomedia if they meet at least one of the following conditions: their infrastructural logic produces fire and/or other toxins that contaminate elemental media (including air, water, earth); they critique human exploitative relationships with the environment, and where possible propose strategies for eco-restoration. Ecomedia processes catalyze ecological consequences in the form of environmental degradation and/or advocacy for environmental awareness, renewal, and sustainability, making this media genre an assemblage of natural elements and cultural attributes with apparent superstructures and implicit infrastructures.

Media infrastructures work by invisibilities and forgetting.<sup>18</sup> Although they “have mediating capacities” and they “shape the nature of economic and cultural flows,” as Brian Larkin reminds us,<sup>19</sup> it is also true that they often repress the violence involved in their production, distribution, consumption, and disposal. This book turns to visual materials in order to counteract the invisibility and forgetting that infrastructures relish. Africa is the other repressed and invisible factor in the operations of media infrastructure as the continent remains at the margins of intellectual discussions and geopolitics despite its major contribution to global modernity and the supply chain. In foregrounding the continent and a visual archive, I intend to account for the socioecological costs of media processes and unearth what happens behind the scene of a global supply chain. There is a significant visual archive produced in and/or about Africa that needs critical attention for its engagement with critical issues concerning media, labor, toxicity, and ecology. This book begins the work of unpacking the complexities of the archive and hopes to precipitate additional work on other aspects of a growing corpus.

More specifically, the treatment of waste aesthetics and waste’s toxic im-

print on human and nonhuman bodies in the following pages shows one affordance of visual culture. Zooming in on visual materials enables me to conceptualize toxicity as a network form that spreads across bodies and spaces in African communities. I understand toxicity as the aftermath of the logics of capitalist accumulation and excessive consumption that has generated the Anthropocene, characterized by the alterations that humans have made for centuries and continue to make to the climate.<sup>20</sup> As Bill McKibben puts it, “we are no longer able to think of ourselves as a species tossed about by larger forces—now we are those larger forces.”<sup>21</sup> The Anthropocene has been subjected to critiques, the most prominent being that the term elides differences among humans, or as Joni Adamson puts it, the concept authorizes “the essentialized categories of the human.”<sup>22</sup> Some of these critiques indict the “rich, especially the rich in the wealthy industrialized countries, mainly in the West,” for being responsible for anthropogenic climate change that disproportionately impacts poor communities in Africa and elsewhere.<sup>23</sup> In one influential critique, Kathryn Yusoff demonstrates how the field of geology is yet to account for the expenditure of black and brown bodies in the Anthropocene, a mistake that necessitates her concept of “Black Anthropocenes.” Like Yusoff’s, this project is attentive to “inhuman proximity organized by historical geographies of extraction, grammars of geology, imperial global geographies, and contemporary environmental racism.”<sup>24</sup> Attending to the particularities of Africa in this book allows me to “provincialize” and to “pluralize” the Anthropocene.<sup>25</sup> Reframing Yusoff’s question—“Who then is objectified by geology’s grammar of materiality?”—this project of particularities, provincialization, and pluralization asks: Who then is objectified or rendered invisible by media studies’ grammar of materiality?<sup>26</sup> Answering this crucial question finds me attending to the social and ecological costs of global media production and consumption in Africa.

*African Ecomedia* uniquely brings together and intervenes in the fields of media studies, the environmental humanities, African studies, and the energy humanities. Recent interventions in media studies have turned to the waste emerging from the production and planned obsolescence of media devices including cell phones and computers. These studies have foregrounded the “gigantic rubbish heap” that media generate in their production, distribution, and consumption, as well as the off-loading of waste to out-of-sight locations in the Global South.<sup>27</sup> Interestingly, China has taken center stage in this discourse on the production of media devices and sites for the dumping of electronic waste. Less attended to is the fact that fossil fuel and mineral resources necessary for media production are mined in conditions that

imperil human and nonhuman inhabitants of African ecosystems. Furthermore, when electronic devices reach the end of their short life cycle, thanks to their planned obsolescence, some are exported to African locations such as Agbogbloshie in Ghana. Studies of these topics have either ignored or paid little attention to Africa, or have not engaged the rich representational media devoted to these issues.

Focusing on media arts including film and photography as well as resource media such as oil and uranium alongside their impacts on and implications for elemental media (fire, air, water, earth), this book offers a model for an ecological media studies for the twenty-first century. The accent on a supply chain network that begins with extraction and ends with disposal offers a comprehensive, encompassing account of media and positions the continent at the heart of the materiality discourse in media studies and related fields. In the process, my approach also yields a new interpretation of digital labor and the notion of free labor that broadens our understanding of these concepts (chapter 2). For digital labor, I make a case for apprehending the term outside the confines of the internet, in the sweaty, smelly dumps of Agbogbloshie. An infrastructural logic requires a broadening of the digital labor category to produce a decolonial conceptualization that keeps together hardware and software as well as intellectual and manual labor.

Although the notion of free labor implies unwaged work that is willingly given, I demonstrate that the African context puts pressure on the concept of “wages” and the voluntary nature of such work. Are the metal recyclers wage earners when their paltry earnings are determined by what they find rather than a predetermined payment for defined working hours or a particular task? How should we understand these earnings that are incommensurate with the toxic risk of electronic recycling? Can we still describe free labor as “willingly” or uncoerced, given that the contemporary worker, especially in Africa, has limited choices or no choice in a precarious economy characterized by high unemployment, “short term contract and employment at will”?<sup>28</sup> My conclusion from Agbogbloshie is that the toxic risks of metal picking and recycling qualify these efforts as free labor coerced from the worker by a global capitalist system. With its attunement to labor, materiality, and toxicity from an African standpoint, this book responds to the call for a greater interaction of African media studies and the mainstream media field for the transformation of both areas of inquiry.<sup>29</sup> I relocate Africa at the origin and conclusion, at the beginning and end, of media matter, so to speak.

The concentration on ecological issues in this book expands the purview

of African media studies. Many exciting projects have emerged in African cinema and the study of the Nollywood scene in Nigeria.<sup>30</sup> Photography in Africa has also received a good amount of attention, just as the broader visual art world on the continent has been the subject of recent studies.<sup>31</sup> A few of these studies also focus on media infrastructure in Africa.<sup>32</sup> Despite the prominent place accorded the environment in the materials studied in these books and the continent's disproportionate share of environmental risks, questions of ecology remain mute in these projects. This gap necessitates a comprehensive study of ecological dynamics in media culture beyond literature. *African Ecomedia* addresses this gap.

*African Ecomedia* also contributes to the visual turn in the environmental humanities. It expands on texts such as Sean Cubitt's *Ecomedia* and two collections on the subject, edited by Stephen Rust, Salma Monani, and Sean Cubitt.<sup>33</sup> Additionally, it builds on recent monographs, including John Parham's work on the intersections of green media and popular culture, LeMenager's study of the pervasion and perversion of petroleum culture, and Ursula Heise's demonstration of how cultural perceptions of endangered species and the environment shape conservation discourses and praxis.<sup>34</sup> *African Ecomedia* buttresses a central tenet of Elizabeth DeLoughrey, namely that "Anthropocene scholarship cannot afford to overlook narratives from the global south."<sup>35</sup> To use Scott Slovic's littoral imagery, these studies belong to "the vast sea of 'environmental studies'" in the humanities designed with the intention of helping us "understand our place on this planet."<sup>36</sup> Although we all share the goal of critiquing "slow violence" and accelerated forms of ecological violence, the margin of these projects—Africa—constitutes the center of my intervention.<sup>37</sup> In turning to the form and affective power of images, including the safari photograph that circulated following Cecil the Lion's death at the hands of an American dentist in Hwange Park, Zimbabwe, in 2015, I enrich and expand the purview of African and postcolonial environmental humanities beyond their literary predilections.<sup>38</sup>

African studies share with the environmental humanities the envisioning of solutions to intellectual and social problems, and my project continues that tradition. With the planetary crisis and the worsening rate of global inequality, prognostications of the future have increased. The prediction and imagination of future possibilities have been largely technocratic and economic, with the attendant risk of reifying the problems connected to global capitalism. The imaginative breadth and flexibility of media arts make them appropriate tools to think with for alternatives to the current scenario.

Negative assumptions about Africa, and blackness more broadly, have meant that the continent and its people hardly feature in forecasts of the future. My study positions Africa at the center of imaginative musings on possible futures unencumbered by climate change, among other aberrations of modern life.

Africa ought to be seen not only as a site of ecological degradation but also as a generative site for apprehending the ecologies of media alongside alternative media practices and modes of ethical living. Jean Comaroff and John L. Comaroff anticipate my move here when they suggest that we look to Africa for inspiring epistemological models.<sup>39</sup> Africa provides examples of what I call *imperfect media* in the epilogue—that is, low-carbon media practices and the infrastructures of finitude that are critical for ameliorating ecological precarity in the future. This book offers a decolonial vision of the future that takes Africa seriously in tackling the planetary crisis. In this vein, I offer a fresh perspective on the Africa-China relationship. The current discourse predominantly focuses on whether China is a colonial power or if the relationship is premised on a win-win paradigm for all sides (chapter 5). Existing scholarship, which I review in the final chapter, has yet to seriously consider the ecological impact of China's footprint in Africa, a step that I propose is necessary for complicating the binary framing of the Africa-China discourse. Another binary that I move away from is the tendency to understand the continent's urban spaces as sites of precarity or possibility. Moving from the representations of Johannesburg in South Africa to Lagos, Nigeria, I also show how artists appropriate the challenges and possibilities in African urban spaces for envisioning the sustainable city of the future.

In sum, this book positions Africa as the ground zero of the energy humanities. This emerging subfield probes the social, cultural, political, and environmental assemblages of the fossil infrastructures underpinning the global economy.<sup>40</sup> As Dipesh Chakrabarty puts it, the “mansion of modern freedoms stands on an ever-expanding base of fossil-fuel use.”<sup>41</sup> The touchstones of human civilization—freedom, modernity, democracy—are indissociable from the ascendancy of the oil regime.<sup>42</sup> Despite the saturation of fossil fuels in multiple facets of human lives, or what Bob Johnson describes as the “mineral rites” underpinning even the most quotidian of human activities, there exists an energy unconscious.<sup>43</sup> *African Ecomedia* joins the growing corpus interested in unraveling human entanglements with fossil fuels, cataloguing the social and ecological costs of that entanglement, and interpreting speculations of alternative futures. The media arts assembled in this study counteract the energy unconscious by making visible, legible, and ap-

prehensible the flow of energy in our lives, including our media cultures. They are also invested in bridging the distance between the sites of energy production in Africa and scenes of consumption in the West.

Africa deserves special attention in the energy humanities not only because the continent discloses the most visceral social and ecological costs of current energy regimes but also because its artistic expressions energetically model world-making scenarios oriented toward sustainable futures. As the energy humanities simulate a post-carbon future, the African examples here challenge the field to consider more seriously the afterlives of nonrenewable infrastructures dotting the continent's environment. Media studies, the environmental humanities and the energy humanities are attuned to the realities of our finite planet, even if the philosophical orientation of the modern world is the idea of infinite resources. The environmental degradation resulting from resource depletion also animates these interdisciplines. Africa's gift to these fields is the location of a comprehensive comprehension of environmental devastation resulting from resource extraction alongside existing and speculative infrastructures of finitude suitable for a diminished planet.

### **Insightful Reading: In Praise of Indiscipline**

The interdisciplinary orientation of this book is indebted to the fields of visual culture studies, postcolonial studies, African studies, media studies, and the environmental humanities. Visual culture lends itself to an interdisciplinary approach that locates cultural objects in their historical and environmental contexts.<sup>44</sup> I consider the constructedness of the images under investigation, the artists' choices, as well as the social contexts that render them as texts, bearing in mind that "the meanings of the image . . . cannot be completed within the text as a self-sufficient entity."<sup>45</sup> My method also involves attentiveness to what is outside the frame of these images, alongside the apparatuses of production, distribution, and consumption. This book is guided by conceptions of mixed media that have circulated in visual culture studies, including in the work of W. J. T. Mitchell, and of Marita Sturken and Lisa Cartwright. For Mitchell, "all media are mixed media, and all representations are heterogeneous; there are no 'purely' visual or verbal arts."<sup>46</sup> I also take seriously the idea that "image, text, sound, and objects also converge in the social production of meaning, and can no longer be studied in isolation."<sup>47</sup> By using African visual culture to challenge and redefine media concepts and theories, I resist the urge to ghettoize African media studies, and I join in "de-westernizing media theory to make room for African experi-

ence.”<sup>48</sup> My plumbing of the visual economy of African ecomedia in order to produce an interdisciplinary study necessitates a unique approach that I call *insightful reading*.<sup>49</sup>

Insightful reading is particularly important for some of the materials analyzed in this book. In the foregoing discussion of *Black Panther*, I mentioned that the film avoids the usual critique of black representations as objectifying the black body or working toward the exoticization of blackness or of perpetuating black suffering for the white gaze. From literary studies to the study of visual culture, it has become commonplace to argue that a work exemplifies the “postcolonial exotic” or poverty porn.<sup>50</sup> Some of the images in this book can be easily dismissed as poverty porn or iterations of the postcolonial exotic. In fact, some interlocutors at invited lectures have expressed discomfort at the exposure of black bodies in some of the photographs and questioned the rationale for including them. I take the objection to the depiction of black suffering seriously, but these images can be read for productive insights into the conditions that they present. As will become clearer in the pages of this book, exposure is a crucial strategy for tackling ecological violence.

Insightful reading makes a demand like that of Ariella Azoulay, who theorizes the civic duty that viewers owe to the photographed subject.<sup>51</sup> Azoulay’s civic duty is neither to look away nor derive pleasure from the suffering of the Other. The demand is much more for the cultivation of the civic skill to stay with and address the horrors of the photographed. Denying the audience of a photograph the role of mere spectator, Azoulay repurposes the disturbing image as “a tool of a struggle or an obligation to others to struggle against injuries inflicted on those others.”<sup>52</sup> Images offer aesthetic or perverse pleasures, but they do more than that. The lesson of Azoulay’s work, which is also my philosophy of reading, is that the image of suffering makes a claim on the viewer to act responsibly. For my purposes, the borderless citizenship animating Azoulay’s civil contract translates into a planetary citizenship with membership across spaces and species. Insightful reading presupposes a civil contract among the photographer, the photographed, and the viewer regardless of national, racial, ethnic, sexual, gender, and class affiliations. Viewers can be mere spectators, refuse to look, or responsibly engage with the claims being made by the photograph. Insightful reading serves the purpose of responsible engagement.

An investigation into the etymological root of “insight” is germane here: the word refers to inner sight, wisdom. Insightful reading demands that we not look away from the disturbing photograph or text but rather keep it in

sight, probe its provenance as well as its pedagogical function. It is possible to ask the following question of such a work: What can we learn from it that could undermine the degradation of the photographed subject? It is too easy to dismiss such representations because the issues they address do not necessarily disappear when we avoid them. We should instead keep them in sight, watch them, and even listen to them for the possibility of redress, a process that involves an eclectic mix of methodological approaches. This would involve descriptive/surface readings as well as deep/close readings. Proponents of surface reading insist that textual surfaces hold gems that we lose when we look too deeply or closely.<sup>53</sup> For Stephen Best and Sharon Marcus, for instance, the “surface is what insists on being looked at rather than what we must train ourselves to see through.”<sup>54</sup> While the surface can yield productive material, insightful reading also entails seeing through the surface to plumb depths. It entails surface inquiry, but it does not invalidate the deployment of deeper exploration in order to generate wisdom about the material.

Insightful reading also employs rich contextualization and enjoys the benefits of theory. While probing both surface and depth, insightful reading also involves looking sideways at the context of production—that is, to the history and politics of the situation offered in the cultural artifact. It is not anti-theory; if it is “a partisan of anything, it is of ‘theoretical cubism’: the deployment of multiple perspectives and grids” to produce a robust interpretation of the object under scrutiny.<sup>55</sup> This form of reading is all-encompassing and eclectic as it searches for the wisdom in a text. It invites us to stay with the disturbing image in order to generate insights not in service of exploiting the Other but in order to understand exploitation in a critical fashion and possibly begin the work of repair. Images of subjection in media culture do not offer a foreclosed meaning. Their surfaces and depths as well as their context and theoretical models can be deployed to generate sympathetic and ameliorative insights about them.

My approach allows the problematic image to serve the ends of a black radical tradition, a tradition that has strategically exposed violent images to problematize antiblack violence. Take for instance the 1955 decision of Emmet Till’s mother to hold an open-casket funeral for her son, lynched in Mississippi for flirting with a white woman. Mamie Till-Bradley had the option of protecting her son’s dignity by refusing to show his swollen and mutilated body. In choosing, instead, for the world to see the disfigured fourteen-year-old body, Till’s mother was not objectifying her son or making a spectacle of black suffering. She wanted Americans and the world to stay

with the image of the dead teenager in order to appreciate the racial ecology of black suffering in the United States. Till-Bradley's decision was an invitation to keep the younger Till's body in sight, to not look away out of discomfort or disgust. The insights on racism decipherable from Till's death motivated the exposure of his body, which catalyzed a wave of civil rights activism in the United States.

The antiblack violence against Till is located on a continuum with the forms of violence against African bodies in this book, culminating in my discussion of the intersectional resonances of the Black Lives Matter movement and the 2015 killing of Cecil the Lion in Zimbabwe (chapter 4). Like Till's image, the images of ecological degradation displayed in these pages are better appreciated as evidence for problematizing and seeking an end to antiblack violence rather than as instruments of perpetuating the status quo. Besides being instantiations of antiblack violence, there is a sense in which Till's image joins the media forms analyzed in this book as exemplars of ecological violence. Till's death and the dumping of his mutilated body in the water continued the desecration of the American ecosystem inaugurated with the displacement of its indigenous population and the transplantation of people, plants, and animals to the New World. The shedding of Till's blood degraded his body and land just as his temporary burial in water tarnished not only his image but the image of water as well. In short, human and nonhuman bodies constitute the site of violence against ecology in Till's tragic death.

Embarking on a critical program of exposure, I refuse to look away from disturbing images because such action would not abolish the objectification of black lives in Africa and beyond. To be sure, the artists producing these media generate revenue from making art about the suffering of black people and some of the representations verge on the erotic and the exotic. But they are also tools for grappling with social exploitation and ecological degradation. Take the example of photographs of Agbogbloshie metal pickers in chapter 2. While they depict the degradation of black bodies, I draw insights from within and beyond the images to understand their disclosures about the exploitation of labor and toxicity in that space. My investment in Ed Kashi's images of the Niger Delta in chapter 3 can be read in a similar light. Some of Kashi's images are erotic but, in my reading, this trope leads to a sophisticated engagement with labor and toxicity that reveals a trajectory of exploitative extraction that dates to slavery. These insights are made possible with the interrogation of these images with theoretical enunciations and deep contextualization. The commonplace temptation to avoid these

images notwithstanding, they contain wisdom regarding the environmental crisis and require that we keep them in sight and make use of our inner sight to decipher their import.

The eclecticism characterizing insightful reading also guides my choice of primary materials. I analyze documentary and fictional films, photographs, sculpture, and video art for their formal and thematic value for ecological politics. Although I am careful to note distinctions among media forms and genres, the binary between popular and artistic media that often favors the latter does not hold here. For instance, I do not consider conventional African cinema to be superior to Nollywood films. Popular forms can be the site of social critique and the articulation of agency, and are avenues “for multiplicitous constructions of citizenship, identity and democratic participation.”<sup>56</sup> The “episteme of the African street,” to use Stephanie Newell and Onookome Okome’s phrasing for the knowledge embedded in popular cultural works, is better seen as “creative . . . documentation of ordinary people’s vitality and responsiveness to political and social transformations.”<sup>57</sup> In place of the high art/popular culture dichotomy, I adopt a “pluralistic eco-aesthetic” that locates eco-value in a variety of media.<sup>58</sup> Artistic photographs such as Fabrice Monteiro’s collection about Dakar find space in this book alongside the safari photograph that circulated in the wake of Cecil the Lion’s death in 2015, just as documentary films, including Idrissou Mora-Kpai’s *Arlit* and Femi Odugbemi’s *Makoko: A City Afloat*, cohabit with Wu Jing’s popular film set in Africa, *Wolf Warrior 2*.<sup>59</sup> I read these texts for their potential for archiving ecological problems, mobilizing ecological affect, and imagining alternative world-making scenarios.

While I discuss a range of media, photography and film occupy the center stage of this project. Photography and film have been at the center of meaning-making in Africa since the colonial era. Photography, for instance, was mobilized in Africa soon after its invention in the nineteenth century. Whereas it served the indigenous elite as a technology for demonstrating their subjectivity, status, and power, it also served the colonial mission’s goal of objectifying Africa and its people.<sup>60</sup> Photographs of Africans were used to justify their inferiority and the colonial mission across Europe.<sup>61</sup> Africa’s environments—its flora and fauna—were also recorded and classified with the aid of the camera. These records formed an integral part of Western epistemology on the continent.

In the twentieth century, however, the democratic potential of photographs was realized at the height of nationalist agitations for independence. Africans in Bamako, Lagos, and Dakar, to cite just a few examples, visited

photography studios to produce portraits of themselves, their friends, and their families.<sup>62</sup> As Kobena Mercer describes these portraits, “what we see on display are some of the most powerful and creative transformations of photography’s role as a mirror to the making of our modern selves.”<sup>63</sup> The self-making character of these images enables Adélékè Adèkò to establish an interesting connection between the adulatory function of praise poetry and of photographs in his study of Yoruba arts: “the progression from praise poetry to the studio portrait is undeniable.”<sup>64</sup> Not all of these pictures were taken in studios, as the archive of the eminent Malian photographer Malick Sidibe demonstrates. Sidibe and other photographers made images of Africans at parties, at clubs, and even outdoors.<sup>65</sup> Although the photographic subjects may not have always intended it, their images provided a counter-narrative to the derogatory, unflattering images of Africans in the colonial photographic imaginary.

Film had a later start date on the continent, where it was mobilized as an example of the “colonial sublime” to mesmerize people and control their subjectivity.<sup>66</sup> The British Colonial Film Unit promoted colonial values such as hygiene and respect for colonial authority with the camera. The inferiority of Africans assumed in colonial photography was also prevalent in the cinema, which elided Africans altogether or portrayed them in negative terms.<sup>67</sup> As Manthia Diawara puts it, European filmmakers “considered the African mind too primitive to follow the sophisticated narrative techniques of mainstream cinema. Thus, they thought it necessary to return to the beginning of film history—to use uncut scenes, slow down the story’s pace, and make the narrative simpler by using fewer actors and adhering to just one dominant theme.”<sup>68</sup> It was not until the mid-twentieth century that Africans made films that put Africans at the center of the conversation. These early films, including the work of Ousmane Sembène and Med Hondo, attempted to “facilitate the freedom of the oppressed with social justice and equality in every area of life.”<sup>69</sup> The project of decolonization at the heart of these visual representational practices involved grappling with the dialectics of modernity and tradition, and of the city and the countryside.

Although critics have hardly paid attention to them, the environment and environmental concerns have always been at the heart of photographs and films in Africa. Photographs and films usually positioned Africans in relation to their environment, which either inhibited their mobility or facilitated their freedom. In Safi Faye’s *Kaddu Beykat*, the first film by an African woman to gain critical acclaim, women are positioned in relation to the large expanse of land that they have to cultivate, and the idyllic, rural space of the

countryside is contrasted with the hostile, exploitative city.<sup>70</sup> As the film depicts the drought that has rendered farming difficult in this area of Senegal, the environment moves beyond mere setting to become an important theme. We see an analogous foregrounding of the environment in the media arts I analyze in this book, most of which were produced in the first two decades of the twenty-first century.

Africa may be struggling in other sectors, but its cultural economy has continued to yield a bountiful harvest, from literature to film to fashion. The growing number of cultural artifacts—textual, pictorial, aural, and others—devoted to African environments is, furthermore, a recognition of the climate crisis and the increasing risks to our “animate planet.”<sup>71</sup> My point is that these texts are of the world and are in the world. However, the worldliness of these texts should not be read as signs of their correspondence to reality. With Pooja Rangan, I ask, “how does documentary [and other media] render suffering . . . immediate” while also being mindful of the constructedness of this immediacy?<sup>72</sup> I am interested in the poetics of mediation and the techniques of revelation and concealment that they allow.<sup>73</sup>

### **Network Forms, Planetary Politics**

A planetary ethos, based on a nonexploitative mode of being-in-the-world, remains a project of futurity, but before its realization we must grapple with the exploitative thrust of current modes of global interconnection. The network society can be traced to developments in information and media technologies in the 1970s.<sup>74</sup> These technological advancements gave rise to accelerated information flows and to what David Harvey terms “space-time compression.”<sup>75</sup> To acknowledge the ascendancy of transnational networks in the 1970s, however, is not to dispute the transnational character of earlier movements and networks. Among these are the institution of slavery from the sixteenth till the nineteenth century, and the colonial encounter that yoked Europe to the rest of the world, albeit unjustly and unequally. As Frederick Cooper does well to remind us in an essay lamenting the capaciousness of the term *globalization*, even before the Atlantic slave era there were movements of people and goods across transnational spaces in, for instance, the Mongol empire.<sup>76</sup> Yet that earlier internationalism was different from the new global form that debuted in the 1970s. One distinction is that the earlier form of international engagements was predestined to secure, rather than erode, national/territorial integrity and power.<sup>77</sup> Further, without the benefit of modern communication technologies and their sophisti-

cated infrastructure, the earlier epochs lacked the speed and efficiency of the later era.

The 1970s gave rise, then, to an accelerated pace of connection. If people, goods, and information had taken some time to arrive at their destinations across the world in the days of yore, the technological revolution of the 1970s dramatically sped up transmission. As Manuel Castells notes, the “information technology revolution was instrumental in allowing the implementation of a fundamental process of restructuring of the capitalist system from the 1980s onwards.”<sup>78</sup> This restructuring meant that goods and services could move across the world at an unprecedented speed. We can say the same for the movement of human beings as well. Globalization’s ease of movement, however, left many out of its success story. While proponents of globalization celebrate its contributions to the advancement of human civilization, others have been quick to highlight the barbaric obverse of the civilizational script. Simon Gikandi refers to this tension when he observes that “the discourse of globalization seems to be perpetually caught between two competing narratives, one of celebration, the other of crisis.”<sup>79</sup>

The socioeconomic fallout of globalization coupled with the nation-state’s coercion in Africa have inspired migration and exile outside the continent. Many of these émigrés are writers, artists, and other media producers who bring their condition of expatriation to bear in their work. The Nigerian writer Tanure Ojaide has written of how migration became a prominent theme for African writers who left the continent in the 1990s and 2000s.<sup>80</sup> This is also true for African filmmakers and other media artists who left for favorable climes in which to practice their craft. Even for those who stayed behind, the declining local support for artistic production meant that many turned to external sources for funding, which often shape the resulting work. Put differently, a subset of African media is shaped by transnational and cross-cultural contacts transcending the nation. Such works belong in the class of network forms because of the imbrications and connections between the global and the local at their core.<sup>81</sup>

Networks are about the multiplicities and complexities that structure life in the contemporary moment. When it works well, a network can serve as an antidote to totalitarianism and ethnocentrism. By embracing interconnection instead of isolation, networks shun parochialism. Considering this positive valuation of networks, it is no wonder that Patrick Jagoda describes them as “an evocative metaphor of relationality or a nonhierarchical model of interconnection.”<sup>82</sup> Networks undergird the cosmopolitan obligation to welcome strangers, but when summoned by ecocritics, they also capture hu-

mans and nonhumans in what Serpil Oppermann and Serenella Iovino term a “disanthropocentric alliance.”<sup>83</sup> The ecocritic at the forefront of this conversation is Ursula Heise, whose notion of eco-cosmopolitanism insists that it is practically impossible to identify any locality without some global embeddedness. Heise expands upon a non-anthropocentric consideration of the network when she places the human and nonhuman in an entangled, interspecies relationship, complicating conceptualizations of an absolutely distinct human.<sup>84</sup> Taken together, liberatory understandings of networks as multiplicitous and as interconnective technologies accord with the ecological vision of this book.

What do these have to do with form? Jagoda leads in the direction of an answer when he writes that the “problem of global connectedness cannot be understood, in our historical present, independently of the formal features of a network imaginary.”<sup>85</sup> As Caroline Levine reminds us, network forms are “defined patterns of interconnection and exchange that organize social and aesthetic experience” and their primary affordance is “connectedness.”<sup>86</sup> In a moment of cross-cultural encounters, transnational affiliations, and dissensus, it makes sense that the ensuing representational media will be marked by the displacement and interconnections characterizing networks. In the current context, the emigration of African artists and the outward turn to the West and elsewhere for funding, circulation, and an audience has meant that a significant corpus of media produced since the 1990s is especially marked by network sensibilities in formal and thematic terms.

The artists studied in this book mix genres and influences to produce works abandoning the idea of a contained Africa for a portrait of the continent in the world. While strategically taking advantage of the affordance of networks, these artists are also mindful of the inequality of network connections when it comes to Africa. From placing a spotlight on the digital divide unduly disadvantaging most people on the continent, to critiquing unequal access to a comfortable life, to foregrounding the extreme exposure of human and nonhuman bodies to toxic matter due to global interconnection, these ecomedia producers avoid romanticizing networks. While adapting networks’ useful characteristics to produce and distribute their works, the media creators in this book recognize that they also carry hierarchical and exploitative impulses.<sup>87</sup>

Networks are responsible for many of the ecological problems represented in African ecomedia as they facilitate the transmission of toxicity across bodies and spaces. But they also constitute the condition of possibility for these works. Yochai Benkler celebrates the affordances of the digital net-

worked economy including both the increased individual autonomy and nonmarket social cooperation they engender.<sup>88</sup> Benkler spotlights achievements in the cultural sphere: the democratization of the means of production, expanded and accelerated means of distribution, and elevated opportunities for cultural critique that the digital age facilitates.<sup>89</sup> Benkler may not have subjected networks to the kind of critique that illuminates their exploitative crevices, but his thesis survives scrutiny in the following pages. Networks—some capitalist, others in the nonmarket mode—allow the training of artists and funding of their work, as well as the circulation of their projects and those of their predecessors that may have influenced them.

### Overview of Chapters

In the works I examine throughout this book, we see not only the interrelationship of times (chapter 1) and spaces (chapters 2 and 3). We are also invited to acknowledge the human-nonhuman ecological network that gets elided when the focus is unduly placed on the human or when we fail to acknowledge that “the very idea of nature” is “a cultural formation” (chapter 4).<sup>90</sup> As chapter 5 shows, urban spaces in Africa intermingle times and spaces, and they serve as sites of interconnection between humans and nonhumans. In other words, the African city is a site of entanglements and is the place where people and things function as network infrastructures. *African Eco-media* is composed of five chapters, which are linked by the dimensions of network forms (time, space, human-nonhuman entanglements), and closes with a concluding epilogue.

Scholars have tempered the celebration of new media’s novelty by pointing to the residue of the old or the past in such projects.<sup>91</sup> I bring the sense of “media as historical subjects” to bear in my first chapter.<sup>92</sup> In a reading of Wanuri Kahiu’s short film *Pumzi* and Fabrice Monteiro’s collection of photographs *The Prophecy* undertaken in this chapter, I pinpoint fragments from Africa’s past and echoes of earlier cultural forms in the imaginative futures that these cultural projects showcase.<sup>93</sup> Also, I bring a critical take to Afro-futuristic projects. While acknowledging their emancipatory possibilities, I draw attention to their pitfalls, including the fact that they often repeat the problems of the past and present. I identify one such pitfall in the disappearance of Asha, Kahiu’s protagonist, in the closing shots of *Pumzi*. The film’s localization of the science-fiction genre and its excellent portrayal of a black female protagonist are laudable, but its envisioning of a transformative future hinges on the disappearance of Asha, which, I argue, echoes the silenc-

ing and obliteration of black women in the present. Asha's disappearance to make way for a tree also recalls the displacement of human communities for wildlife conservation in Africa and other postcolonial locales.

If temporal entanglement frames chapter 1, chapter 2 takes on spatial interconnection in Pieter Hugo's *Permanent Error*, a collection of photographs devoted to the recycling of electronic goods in Agbogbloshie, Ghana, and Frank Bieleu's *The Big Banana*, a film on the workings of a transnational banana plantation in Cameroon.<sup>94</sup> My analysis demonstrates the social and ecological violence associated with Africa's connection to the world. My reading of Hugo's work also reframes the conceptualization of digital labor and free labor. I argue specifically that infrastructural work in Agbogbloshie must be considered an aspect of digital labor, and that the unwaged nature of metal recycling alongside its risks qualify this activity as free labor. My approach expands the consideration of digital labor beyond the work that occurs on the internet and reconfigures the concept of free labor to account for other forms of unwaged labor that produce value, some of which is indirectly coerced.

Chapter 3 takes up the question of ecological trauma, which has already emerged in the first two chapters. I examine here the traumas affiliated with resource extraction in the Niger Delta region of Nigeria (oil) and Arlit, a town in Niger (uranium). As "radiant infrastructures," oil and uranium radiate, producing energy.<sup>95</sup> Each of these resources "connotes the luster of hope," but in reality they also emit "harmful radiations with carcinogenic effects."<sup>96</sup> In reading Michael Watts and Ed Kashi's *Curse of the Black Gold* alongside Idrissou Mora-Kpai's film *Arlit*, I consider how extractive minerals leave African communities contaminated and traumatized.<sup>97</sup> While trauma studies usually foreground the past and the present, I show that the ecology of the Niger Delta demands serious consideration of the trauma of the future, of the yet-to-come, in apprehending the problematic of suffering. Focusing on the trauma of the future enables me here to examine the link among ecological trauma, displacement, and migration.

Human-animal entanglement is the focus of chapter 4, which makes the case for putting African studies and African diaspora studies in closer dialogue. The circulation of a safari image following the killing of Cecil the Lion in 2015, during the Black Lives Matter activism in the United States, provides a jumping off point for this chapter. I argue that the "problematic of race" undergirds Cecil's death and the circulation of the image under investigation, and that race remains the underexplored fundament of wildlife media, including the CNN film, *Trophy*, co-directed by Shaul Schwarz and

Christina Clusiau.<sup>98</sup> I posit in the concluding section of the chapter that Orlando von Einsiedel's film *Virunga* activates a borderland for intertwining human-nonhuman interests and cultivating positive interspecies relationships.<sup>99</sup> This chapter allows for apprehending vulnerabilities across species and opens the space for much-needed dialogue between African studies and African diaspora studies.

The African city provides a space for considering the multiplicities of networks—temporal, spatial, and interspecies—already discussed in this book. I read urban space in Africa as a relational ecology as I turn in the final chapter to media representations of the environments of African cities. Focusing on Guy Tillim's collection of photographs *Jo'burg*, Wu Jing's film *Wolf Warrior 2*, Femi Odugbemi's film *Makoko: Futures Afloat*, and Olalekan Jeyifous's Afro-futurist 3D architectural renderings in *Shanty Megastructures*, I argue that ecomedia focusing on urban space in Africa constitute it as the site of everyday precarity, the space for geopolitical-cum-ideological contestation that endangers the biosphere, and as a site for articulating sustainable futures.<sup>100</sup>

In the concluding epilogue, I bring together the logical implications of the major arguments of the book—namely that Africa is a paradigmatic site for understanding the ecology of media infrastructure and that the continent's media arts contain examples of the infinite resourcefulness crucial for making media in a time of finite resources. Drawing on examples from African cinema and Nollywood, and from the everyday recycling of objects through repair and reuse, I argue that the continent has much to offer in terms of the much-needed low-carbon media that can be marshaled as alternatives to the excessive consumption undergirding mainstream media and our era more broadly. Here, I make a case for a kind of media of the future that I call *imperfect media*. Considering what we know about the value of media for communication, entertainment, and sustenance, we cannot jettison them due to their ecological complicity. Our responsibility as media producers and consumers therefore is to consider how to recalibrate their production, distribution, consumption, and recycling to mitigate those adverse ecological implications already outlined. How can we reorient media approaches toward “low wattage culture,” which attends to the “practicality of ecological awareness”?<sup>101</sup> Imperfect media, undergirded by finitude or the recognition of the dissipation of energy sources, is a major step in the direction of ecologically conscious media practices.

While analyzing a range of media, *African Ecomedia* is not exhaustive. There remains a rich body of work awaiting critical consideration and it is my hope that this book inspires further attention in this area. Such scholar-

ship might examine Nyaba Leon Ouedraogo's photographic project on Agboghloshie, *The Hell of Copper*, as well as George Osodi's *De Money*, an exploration of gold mining in Ghana, and his *Oil Rich Niger Delta*.<sup>102</sup> There are other Niger Delta projects such as Victor Ehikhamenor's oil-drum art installation *Wealth of Nations* and the film *Black Gold* by Jeta Amata.<sup>103</sup> Timaya's "Dem Mama" provides an example of the depiction of the Niger Delta oil crisis in popular music.<sup>104</sup> I briefly discuss Zina Saro-Wiwa's video short *Sarogua Mourning* in chapter 3, but her broader oeuvre is worth considering for its eco-inflections.<sup>105</sup> The Nigerian photographer Andrew Esiebo's projects on urban life in Africa are worth considering, as are films such as Neill Blomkamp's South African science-fiction film, *District 9*, and *Crumbs*, the postapocalyptic science-fiction romance set in Ethiopia by director Miguel Llansó.<sup>106</sup> There is a plethora of wildlife films that would round off this list, including *Blood Lions*, *The Last Animals*, focusing on the killing of elephants for ivory, and *Stroop*, on the intricacies of the rhino horn business.<sup>107</sup>

The burgeoning archive has invited us to look responsibly. Let the work of unpacking African ecomedia begin!