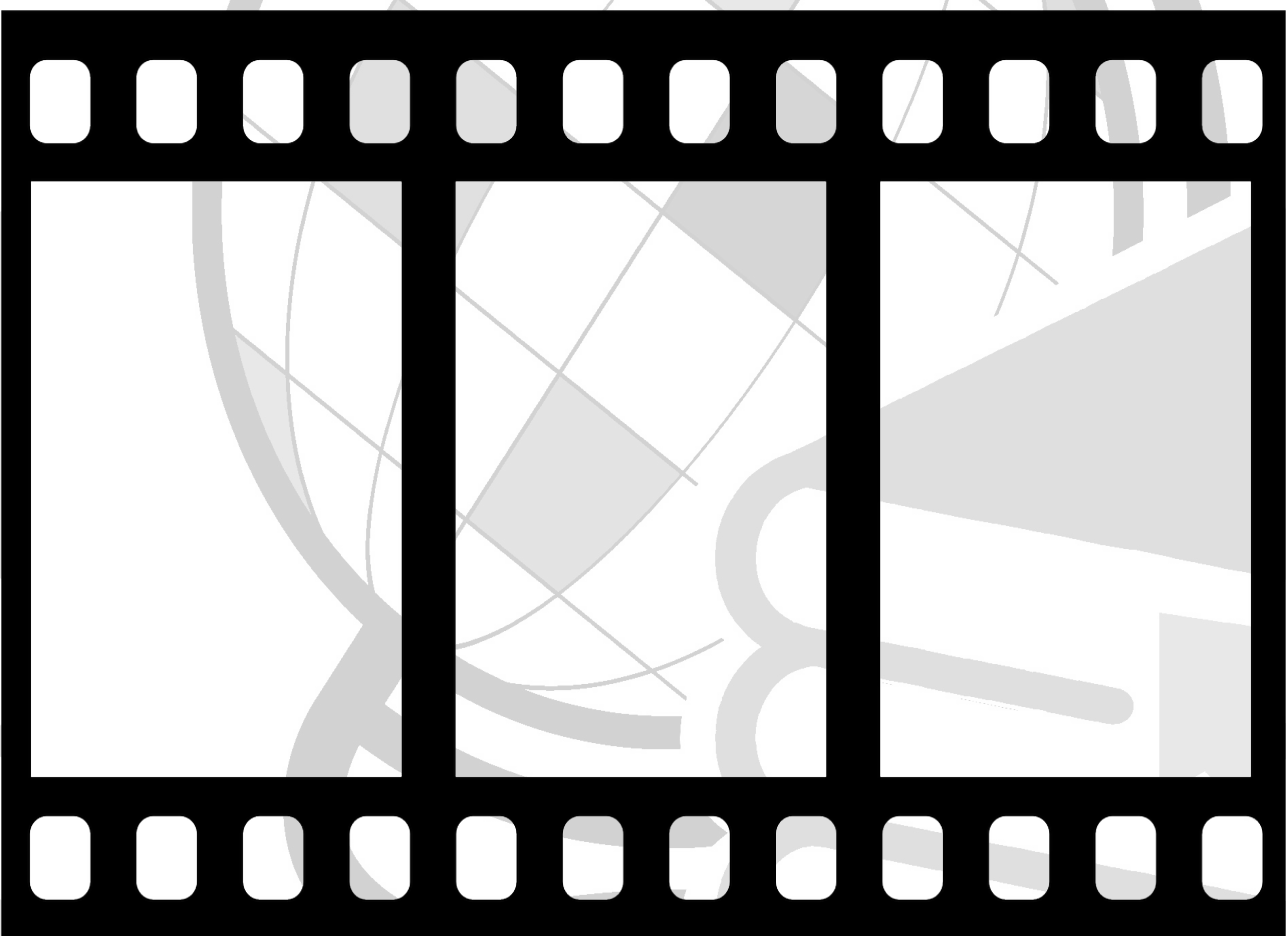


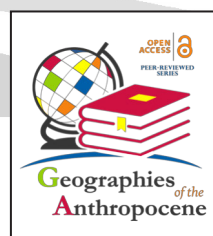
CINEMA, DISASTERS AND THE ANTHROPOCENE

Enrico Nicosia, Lucrezia Lopez (Editors)



Foreword by David McEntire

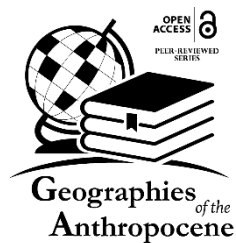
IL Sileno
Edizioni



Cinema, Disasters and the Anthropocene

Enrico Nicosia, Lucrezia Lopez

Editors



IL Sileno
Edizioni

Cinema, Disasters and the Anthropocene
Enrico Nicosia, Lucrezia Lopez (Eds.)

is a collective volume of the Open Access and peer-reviewed series
“Geographies of the Anthropocene”
(Il Sileno Edizioni), ISSN 2611-3171.

www.ilsileno.it/geographiesoftheanthropocene



Cover: The graphic project is by Ambra Benvenuto.

Copyright © 2022 by Il Sileno Edizioni
International Scientific Publisher “Il Sileno”, VAT 03716380781
Via Piave, 3/A, 87035 - Lago (CS), Italy, e-mail: ilsilenoedizioni@gmail.com

This work is licensed under a Creative Commons Attribution-NonCommercial-NoDerivs
3.0 Italy License.



The work, including all its parts, is protected by copyright law. The user at the time of
downloading the work accepts all the conditions of the license to use the work, provided
and communicated on the website
<http://creativecommons.org/licenses/by-nc-nd/3.0/it/legalcode>

ISBN 979-12-80064-39-4

Vol. 5, No. 2 (December 2022)



Geographies *of the* Anthropocene

OPEN
ACCESS



PEER-REVIEWED
SERIES

ISSN 2611-3171

Geographies of the Anthropocene

Open Access and Peer-Reviewed series

Editor-In-Chief: Francesco De Pascale (Department of Culture and Society, University of Palermo, Italy).

Associate Editors: Salvatore Cannizzaro (Department of Humanities, University of Catania, Italy), Sebastiano D'Amico (Department of Geosciences, University of Malta, Malta), Fausto Marincioni (Department of Life and Environmental Sciences, Università Politecnica delle Marche, Italy), Leonardo Mercatanti (Department of Culture and Society, University of Palermo, Italy), Francesco Muto (Department of Biology, Ecology and Earth Sciences, University of Calabria, Italy), Charles Travis (School of Histories and Humanities, Trinity College Dublin; University of Texas, Arlington).

Editorial Board: Mohamed Abioui (Ibn Zohr University, Morocco), Andrea Cerase (Sapienza University of Rome, Italy), Valeria Dattilo (University "G. D'Annunzio" Chieti-Pescara), Dante Di Matteo (Polytechnic University of Milan, Italy); Jonathan Gómez Cantero (Departamento de Meteorología de Castilla-La Mancha Media, Spain), Eleonora Guadagno (University of Naples "L'Orientale", Italy); Peggy Karpouzou (National and Kapodistrian University of Athens, Greece); Davide Mastroianni (University of Siena, Italy), Giovanni Messina (University of Palermo, Italy), Joan Rossello Geli (Universitat Oberta de Catalunya, Spain), Gaetano Sabato (University of Palermo, Italy), Nikoleta Zampaki (National and Kapodistrian University of Athens, Greece).

International Scientific Board: Marie-Theres Albert (UNESCO Chair in Heritage Studies, University of Cottbus-Senftenberg, Germany), David Alexander (University College London, England), Loredana Antronico (CNR

– Research Institute for Geo-Hydrological Protection, Italy), Lina Maria Calandra (University of L'Aquila, Italy); Salvatore Cannizzaro (University of Catania, Italy), Fabio Carnelli (EURAC Research, Bolzano, Italy); Carlo Colloca (University of Catania, Italy), Gian Luigi Corinto (University of Macerata, Italy), Roberto Coscarelli (CNR – Research Institute for Geo-Hydrological Protection, Italy), Girolamo Cusimano (University of Palermo, Italy), Bharat Dahiya (Director, Research Center for Integrated Sustainable Development, College of Interdisciplinary Studies Thammasat University, Bangkok, Thailand); Sebastiano D'Amico (University of Malta, Malta), Armida de La Garza (University College Cork, Ireland), Elena Dell'Agnese (University of Milano-Bicocca, Italy), Piero Farabollini (University of Camerino, Italy), Massimiliano Fazzini (University of Camerino; University of Ferrara, Italy; Chair of the “Climate Risk” Area of the Italian Society of Environmental Geology); Giuseppe Forino (University of East Anglia, England), Virginia García Acosta (Centro de Investigaciones y Estudios Superiores en Antropología Social, CIESAS, México); Cristiano Giorda (University of Turin, Italy), Giovanni Gugg (LESC, Laboratoire d'Ethnologie et de Sociologie Comparative, CNRS – Université Paris-Nanterre, France), Luca Jourdan (University of Bologna, Italy), Francesca Romana Lugerì (ISPRA, University of Camerino, Italy), Cary J. Mock (University of South Carolina, U.S.A.; Member of IGU Commission on Hazard and Risk), Enrico Nicosia (University of Messina, Italy), Gilberto Pambianchi (University of Camerino, Italy; President of the Italian Association of Physical Geography and Geomorphology), Silvia Peppoloni (Istituto Nazionale di Geofisica e Vulcanologia, Italy; Secretary General of IAPG; Councillor of IUGS), Isabel Maria Cogumbreiro Estrela Rego (University of the Azores, Portugal), Andrea Riggio (University of Cassino and Southern Lazio, Italy), Jean-Claude Roger (University of Maryland, College Park, U.S.A.; Terrestrial Information Systems Laboratory, Code 619, NASA Goddard Space Flight Center, Greenbelt, U.S.A.); Vito Teti (University of Calabria, Italy), Bruno Vecchio (University of Florence, Italy), Masumi Zaiki (Seikei University, Japan; Secretary of IGU Commission on Hazard and Risk).

Editorial Assistants, Graphic Project and Layout Design: Ambra Benvenuto, Franco A. Bilotta;

Website: www.ilsileno.it/geographiesoftheanthropocene;

The book series “Geographies of the Anthropocene” edited by the International Scientific Publisher “Il Sileno” (Il Sileno Edizioni) will discuss

the new processes of the Anthropocene epoch through the various worldviews of geoscientists and humanists, intersecting disciplines of Geosciences, Geography, Geoethics, Philosophy, Socio-Anthropology, Sociology of Environment and Territory, Psychology, Economics, Environmental Humanities and cognate disciplines.

Geoethics focuses on how scientists (natural and social), arts and humanities scholars working in tandem can become more aware of their ethical responsibilities to guide society on matters related to public safety in the face of natural hazards, sustainable use of resources, climate change and protection of the environment. Furthermore, the integrated and multiple perspectives of the Environmental Humanities, can help to more fully understand the cultures of, and the cultures which frame the Anthropocene. Indeed, the focus of Geoethics and Environmental Humanities research, that is, the analysis of the way humans think and act for the purpose of advising and suggesting appropriate behaviors where human activities interact with the geosphere, is dialectically linked to the complex concept of Anthropocene.

The book series “Geographies of the Anthropocene” publishes online volumes, both collective volumes and monographs, which are set in the perspective of providing reflections, work materials and experimentation in the fields of research and education about the new geographies of the Anthropocene.

“Geographies of the Anthropocene” encourages proposals that address one or more themes, including case studies, but welcome all volumes related to the interdisciplinary context of the Anthropocene. Published volumes are subject to a review process (**double blind peer review**) to ensure their scientific rigor.

The volume proposals can be presented in English, Italian, French or Spanish.

The choice of digital Open Access format is coherent with the flexible structure of the series, in order to facilitate the direct accessibility and usability by both authors and readers.

CONTENTS

Foreword	
<i>David McEntire</i>	8

Introduction	
<i>Enrico Nicosia, Lucrezia Lopez</i>	10

Section I

Narrating the Anthropocene in Cinema: Its Imagery between Romanticism and Symbolism

1. The Return of the Suburban Fantastic Cinema: Nostalgia and Ecological Dystopia in the Suburbia	
<i>Pedro Artur Baptista Lauria</i>	18

2. Using the Zombie Metaphor and Apocalyptic Imageries to Preach Environmentalism in Nigeria: A Semiotic Reading of C.J. Obasi's <i>Ojuju</i>	
<i>Floribert Patrick C. Endong</i>	33

3. Countering Stereotypes in Jamaican Cinema as Discourse for the Anthropocene	
<i>Joshua Paul, Tomlin Paul</i>	58

4. From Denis Villeneuve's <i>Arrival</i> to Adam McKay's <i>Don't Look Up</i> , cultivating a meeting ground for communicating the Anthropocene: will we speak Eggplant?	
<i>Andrea Nocera</i>	71

5. Towards a Humble Vision in the Anthropocene: Critique of Anthropocentrism in <i>I Am Legend</i>	
<i>Seçil Erkoç Iqbal</i>	90

Section II

Environment and Landscape Disaster during the Anthropocene: a call for Sustainability through Cinema

6. The *Chernobyl* miniseries as a narration case of environmental disasters in the Anthropocene era
Sonia Malvica, Lucrezia Lopez, Enrico Nicosia 112
7. “Il tempo dei giganti”. A mosaic of minute stories for a film-documentary account of the Xylella case in Salento
Fabio Pollice, Patrizia Miggiano 129
8. Cinema and digital technology: new communication formats characterizing the scenarios of modern communication networks
Maria Laura Pappalardo 147

Section III

Water Exploitation and its Consequences in the Anthropocene era: contribution from cinematic productions

9. The conquest of power. A look to hydroelectric landscapes of Alps through the lens of audiovisuals and cinema
Maria Conte 160
10. The China-Tibet relationship in the film story: an announced disaster?
Antonietta Ivona 182
11. Picturing the Anthropocene through flood narratives: The environmental disaster discourse in Indian cinema
Sony Jalarajan Raj, Adith K Suresh 204
- The Authors** 218

2. Using the Zombie Metaphor and Apocalyptic Imageries in Films to Preach Environmentalism in Nigeria: A Semiotic Reading of C.J. Obasi's *Ojuju*

Floribert Patrick C. Endong¹

Abstract

In a bid to sensitize masses about the terrible effects of environmental degradation, many pro-environmentalism activists and storytellers tend to use strong apocalyptic imageries, thought-provoking metaphors and the fear appeal in the construction of their advocacy messages. Using such an approach often entails representing the effects of such phenomena as pollution, deforestation, poor land development and natural catastrophes with pessimistic symbols: the Armageddon, deadly pests/pandemics, abysses, hellish scenarios, chaos, and death among others. Using such strong metaphors often serves as fear appeal aimed to push for nature-friendly ideals. Following this line of thought, the Nigerian cineaste C.J. Obasi leverages the zombification metaphor and apocalyptic imageries in his zombie thriller titled *Ojuju*, to subtly decry environmental degradation in Nigerian slums and advocate environmentalism in Nigeria. Using semiotics and secondary sources, this chapter argues that although exaggerative, the zombie metaphor in *Ojuju* vividly represents the chaotic state of environmental degradation and the resultant precariousness of human life in most Nigerian slums. The chapter examines the state of environmental degradation/protection in Nigerian urban cities and shows how this condition is represented in Obasi's *Ojuju*. The chapter also explores the extent to which the zombie metaphor and the apocalyptic imageries deployed in the film are apt in representing the environmental risks prevailing in Nigerian cities.

Keywords: Zombie Metaphor, Apocalyptic Imageries, Nollywood Movies, Environmentalism, Environmental Degradation.

¹ Department of Performing Arts and Cinematography, [IBAF], University of Dschang, Cameroon, e-mail: floribertendong@yahoo.com.

1. Introduction

On too many occasions, pro-environmental communication has hinged on the fear appeal and apocalyptic imageries. Such appeal and imageries are rooted in persuasive messages that seek to arouse fear in the readers and shape or reform human behaviors in favor of environmental protection, through the instrumentality of threat of impending danger or harm. A fear appeal most often highlights the vulnerability of the risk, and presents actions that must be taken to avoid this risk. It is therefore a strategy aimed at motivating people to adopt or advocate particular ideals, take action in favor of specific causes and policies or buy specific ideas. In pro-environmentalism campaigns, this appeal is often used to present the vulnerability of risks connected to issues such as global warming, poor drainage, desertification, pollution and environmental degradation among others. It also helps to push various concepts related to the protection of the environment. Scores of studies – notably Chen (2016), Chadwick (2015) and Azura (2022) – have indicated that the use of such fear appeal in NGO's pro-environmental communications has, in varying degrees, triggered pro-environmental attitudes or behaviors from audiences. In tandem with this, the leverage of this appeal has remained a popular culture among environmentalism-oriented artists, activists, citizen journalists, NGOs and cineastes.

In effect, in a bid to sensitize masses about the terrible consequences of environmental degradation in the world, many pro-environmentalism artists, NGOs and storytellers have entrenched the culture of using strong apocalyptic imageries, thought-provoking metaphors and fear appeals in the construction of their advocacy messages (Vu et al., 2021). It has actually become common to come across pro-environmentalism visual and theatre artists who, in their messages, represent the effects of such phenomena as pollution, deforestation, poor land development practices and natural catastrophes with symbols such as the Armageddon, deadly pests/pandemics, abysses, hellish scenarios, chaos, and death among others. Using such strong metaphors often serves as fear appeal and a strategy to push for nature-friendly ideals.

One of such fear-provoking metaphors or concepts deployed in this pro-environmentalism context is the zombie or the zombification which, in global imagination, is popularly associated with a plurality of negative phenomena. In effect, the zombie inspires fears by its physical appearance: it is a monstrous shambling being, which has no energy and is depersonalized. It feeds on human flesh/brains and is, in many imaginations, very scaring (Seabrook, 1929; Lauro, 2015). There are many myths on the zombie; however, in most imaginations, zombification is associated with negativisms

ranging from mindless consumerism and dehumanizing capitalism to counter-survivability (Vervaeke, Mastropietro & Miscevic, 2017; Crockett & Zarracina, 2016). In environmental communication likewise, the zombie and zombification are usually associated with both the ugly consequences and the perpetration of anti-environmental attitudes or behaviors (Slovic, Swarnalatha & Sarveswaran, 2019; Cohen, 2012). The two metaphors are used to evoke the ways in which humanity copes with environmental anxieties. Following this understanding, Murphy (2017) observes that the zombie most often represents environmental collapse.

In tandem with this style of representation, the Nigerian cineaste C.J. Obasi leverages the zombification metaphor and apocalyptic imageries in his film titled *Ojuju*. Such use of the zombie metaphor enables the cineaste to indirectly advocate environmental protection. Obasi's film depicts a terrible environmental situation where, the progressive pollution of the sole water source in a Nigerian shanty town, leads to the chemical contamination of town dwellers. This contamination in turn provokes the zombification of the majority of the town's humanity, creating a complex humanitarian and emergency situation in the town. In this paper, the author uses semiotics and secondary sources to argue that although exaggerative at first sight, the zombie metaphor in *Ojuju* vividly represents the chaotic state of environmental degradation and the resultant precariousness of human life in most Nigerian towns. The paper seeks answers to three research questions: What is the state of environmental degradation/protection in Nigerian urban cities? How is this state of things represented in Obasi's *Ojuju*? To what extent are the zombie metaphor and apocalyptic imageries apt in representing the environmental risks in Nigerian cities.

2. The Zombie and Apocalyptic Imageries in Environment-Oriented Communication

The zombie permeates all areas of popular cultures in countries across the world. It has veritably exploded into a zeitgeist. The popularity of the zombie figure/metaphor is seen in the fact that it occupies a prominent spot in all media genres, from music and games, through comics to advertising and cinema. In Western countries such as America, the popularity of the zombie has spilled over into all spheres of life, so much so that all types of socio-political and intellectual discourses have provided a fertile ground for the zombie metaphor. This metaphor is thus used in economics, politics and mathematics as well as in natural sciences. It is therefore not surprising that

the zombie metaphor has also spilled over into pro-environmental communication. Environment-oriented communication has these last decades been replete with the living dead. Fox (2011) remarks that “zombie ideas” have since entered into environment-based scientific and media discourse in the same way they had found a fertile space in other fields such as economics and politics.

As earlier mentioned, the zombie has most often been leveraged in political and economic discourses to represent humanity’s deepest fear. This is not unconnected to the fact that the zombie in itself inspires much fear. As noted by Crockett and Zarracina (2016), the undead creature has, in the popular consciousness as well as in most media discourses represented “an aesthetical horror”. Perron (2009: 128) similarly contends that “be it in a novel, a film or a video game, the figure of the zombie is abject and reminds the still-living of the inescapable decrepitude of their own material parts, to the point of repulsion”. Its extremely ugly nature – which involves soullessness, rot and decay, physical deformity, cannibalism and monstrosity – has been used as a metaphor for humanity’s deepest fears such as racial sublimation, communism, mass contagion, human extinction, globalism and dehumanizing capitalism among others. Corroborating this observation, Vervaeke, Mastropietro and Miscevic (2017) have contended that, although the zombie metaphor tends to be a shifting signifier from one author or one discipline to the other, its association with negativity and horror has remained quasi universal. Thus, wheresoever the zombie is used, it essentially connotes evil and risk. The three scholars write that:

The zombie has become a pervasive cultural symbol that is constantly expanding its reference, not content to relegate itself to its tradition. As Deleuze and Guattari [...] put it “the only modern myth is the myth of zombies”. The zombie seems to be a shifting signifier with an unending hermeneutical compass. And yet its features remain remarkably consistent from one story to the next, and it has represented many varieties of apocalypse without altering its basic nature: consumerism, poverty, hunger, political dystopia and environmental degradation, zombies have assumed a heterogeneity of ugliness. No longer simply a vehicle for entertainment, it has become the basis for critical reflection and cultural self-examination (Vervaeke, Mastropietro & Miscevic, 2017, pp. 3-4).

In line with the above, the use of the zombie apocalypse in the ecology-oriented or pro-environmental communication has mainly been to emphasize the negative consequences of man’s anti-environmental attitudes, his anti-ecological actions on earth or the consequences of such actions. In tandem with this, zombification in pro-environmental communication often signifies

the risks related to environmental degradations, global warming and other ecological problems: dysfunction, social anomies, disequilibrium, chaos, and human extinction (in the long run) among others. Sen (2018) highlights the apocalyptic *signified* of the zombie and goes on to explore how by associating zombification with human extinction (caused by anti-ecological behavior), activists involved in the climate change debate may successfully touch the hearts and minds of audiences. He writes that:

Unlike climate change, a zombie apocalypse isn't real. Nonetheless, the projected fear of the end of humanity that zombies narrate may be worth our attention. If there is one tag line that is universally relevant to all zombie movies it is this: "Save Humanity." To my mind, it should replace the common environmentalist chant, "Save the Planet." All worthwhile geoscientists attest to the fact that what is at stake here is the future of civilization as we know it and not necessarily the longevity of the planet. Our planet should continue spinning around our sun for another five billion years, until the sun consumes itself. Extinction, however, is a serious matter often underplayed in so-called pragmatist climate change discourse; that is, the discourse that speaks to a so-called "green" economy, which in truth, maintains the status quo. Addressing climate change fully should in fact appear terribly impractical and as difficult as facing off a zombie incursion (Sen, 2018, p. 16).

In cinema and TV productions more specifically, the zombie metaphor has also driven environmental activism or discourse, mostly in a subtle way. Many Hollywood movies – particularly those released after the Second World War – have been sites of the crystallization of the zombie, used as specific environmental anxieties. According to a study conducted by Watson (2013) Hollywood zombies are "historically contingent". Also, they represent specific categories of environment anxieties that have prevailed and evolved in the western world at various times. Watson's (2013) study thus reveals that while zombies represented over-consumption, consumerism and the fear of incurable diseases in George Romero's *Dawn of the Dead* (1978) and *Day of the Dead* (1985), their signified shifted to various types of environmental anxieties in subsequent films. In Dany Boyle's *28 Days Later* and in Zach Snyder's *Dawn of the Dead* (2004) the zombies stand-in for growing anxiety over urban environment including over-crowding, collapse of the inner core and disillusionment with the suburban dream. Likewise, the zombie contains an under-current of anxieties in some video/digital games. In the *Plants vs Zombie* game for instance, zombies are made to represent anti-environmental and anti-conservation policies and movements in world politics. In the game,

the zombie is a metaphor for any action that could be a threat to nature, more especially the preservation of species (Backe & Aarseth, 2013).

It is also observable that, like in other disciplines – notably politics, economics and mathematics, - the zombie has fuelled or inspired various theorizations in environmental science. Bill Adams (2020) has deployed the concept of “zombie ecology”, in his examination of garden centers in the UK. He described these centers as “portals to the world of the undead” for two principal reasons. First they encourage a new and mindless form of mass consumption of “unessential commodities” thereby providing a natural habitat for zombie consumers. Secondly, they favor the creation of hybrid kinds of ecosystems which integrate both natural and synthetic features as well as local and indigenized species. This hybridization subtly adds to the artificial definition of the gardens. The design of such quasi-artificial gardens favors a regrettable situation where the environment is depleted by man’s action in faraway places, to construct garden centers at home; all this is done in view of satisfying the desire of a local market. Adams amply explained the two above mentioned reasons thus “it is common place of environmentalism that consumption threatens the biosphere. A garden centre is probably no worse than any other emporium in this respect. But it does show our impacts more clearly: for here we are consuming to make a garden, and yet our very consumption degrades nature somewhere else. Like zombies, we ultimately consume ourselves”.

In the same vein, Cohen (2012) uses the concept of zombie ecology to develop a reflection on grey ecology. In this reflection, the author associates grey ecology with various forms of nature-unfriendly cultures, contrasting such a scenario with green ecology. In the process, he leverages the metaphor of the undead or the living dead and suggests that zombie ecology is just a manifestation of the grey ecology. In his language, world nations favor the grey or zombie ecology when they refrain from adopting ambitious and relevant nature-friendly policy under the guise that such policies are either a threat to industrial progress or a useless effort given the imminent extinction of mankind on earth. Cohen (2012) actually argues that “a green ecology judges a culture by its regard for nature, where ‘nature’ is typically regarded as an external entity, culture’s other. A grey ecology refuses such separations, and believes that the haunting of monsters reveal communal values, shared aspirations and lived ethics (the anthropomorphic) as well as the coinhabitation and alien thriving of the nonhuman (the disanthropocentric)”. Cohen associates “the hunting of monsters” with a grey ecology’s belief in spurious, frightening, apocalyptic and defeatist environmental myths that end up inculcating passivity and nature-unfriendly values in members of the

society. This ultimately contributes in making people in the grey ecology to be zombie like and undead. The zombie or grey ecology is to Cohen, driven by the apocalypse which ultimately represents “a failure of the imagination, a giving up on the future instead of [being] a commitment to the difficult work of composing a better present”.

Another author who leverages the zombie concept in his theoretical constructions is Fox (2011). In a paper titled “Zombie ideas in ecology”, the author draws on such neologisms as economist John Quiggin’s coined phrase “zombie ideas” to review a number of widely held but unproven myths in ecology. According to his conceptualization, zombie ideas are beliefs that have “survived decades of attacks from the theoretical and experimental equivalents of chainsaws and shotguns, only to feed on the brains of new generations of students”. These are ideas which are especially popularly held in spite of the fact that they are not backed by facts or credible theories. They are also intuitively appealing and have persisted over decades. They are not truly alive –because they are not true – and paradoxically they are neither dead. Thus, they are undead or zombie ideas in the domain of ecology. One of the zombie ideas reviewed by Fox is the belief that disturbance reduces species’ diversities thereby weakening or eliminating competition and preventing the competitive exclusion that occurs in undisturbed environments. Thus, the zombie metaphor has been used to drive pro-environmental arguments in the NGO, media and scientific communications.

3. Environmentalism and the Zombie in Nigeria: The Nigeria’s Socio-Political and Filmic Discourse

In this section, attention is given to the state of environmental protection in Nigeria and an examination of the zombie metaphor as discursive tool not only for the environmental discourse but also for the socio-political discourse in the country.

3.1. State of Environmental Protection in Nigeria

The movement for the protection of the environment has these last decades been a global concept. The globalization of this movement naturally stems from the fact that most, nay all nations on earth are affected by the effects of environmental degradation. These effects include phenomena such as global change, the ozone layer depletion, pollution and the destruction of the

biodiversity among others. Like other countries of the world, Nigeria has been touched by both the effects of environmental degradation and the environmentalism movement. The various social institutions in the country have recognized the need to leverage environmental activism and adopt pro-environmental policies in the country. In tandem with this, the Marketing Officer of Nigeria's Sterling Bank, Bassey Henry observes that environmental problems such as pollution, desertification and the destruction of the biodiversity that used to sound very distant, some decades ago, are now a reality in Nigeria. As he puts it "They are happening to us [Nigerians] ... We now are beginning to experience them in our localities and should take them as seriously as possible. We cannot afford to be reactive to these issues and must adopt a strategic proactive approach to a cleaner and more sustainable environment" (cited in Sterling Bank 2017).

In effect, Nigeria has since the years 1980s witnessed serious environmental crises or issues which have fuelled the socio-political debate or motivated the adoption of a number of pro-environmental policies in its territories. One of such crises is the Koko waste incident of June 1988 in which tones of toxic industrial wastes were illegally dumped by an Italian vessel in the South Western locality of Koko. The media and public outcry that followed this incident prompted the Nigerian government to adopt a number of *ad hoc* measures and environmental regulations. Concretely, the Federal Government of Nigeria created the Federal Environmental Protection Agency (FEPA) in 1988. This government later encouraged each of Nigeria's 36 States to establish their own environmental protection agencies christened State Environment Protection Agency (SEPA). In addition to this, each of the above States agencies enacted their own laws and regulations. The Koko waste incident thus motivated the Nigerian government to reform its approach to dealing with environmental problems from an *ad hoc* (direct response) model to the adoption of environmental legislations. This paradigm change led to the enactment of other regulations such as the *Forestry Act* (1958), *Antiquities Act* (1958), *Territorial Waters Decree* (1967), *Oil in Navigable Waters Decree* (1968), *Petroleum Decree* (1969), *Quarries Decree* (1969); *Sea Fisheries Decree* (1971), *Land Use Decree* (1978), *National Environmental Protection (Management of Solid and Hazardous Waste) Regulations* (1991), *Guidelines and Standards for Environmental Pollution Control in Nigeria* (1991), *Environmental Impact Assessment Decree* (1992), *Water Resources Act 101* (1993), and the *Minerals and Mining Act* (1999). In addition to all the above laws, Nigeria became a signatory to a number of international multilateral conventions, which are related to the environment.

All these efforts reveal, to an extent, the Nigerian government's efforts towards mitigating the effects of environmental problem in the country.

In the same line of thought, a considerable number of Nigeria-based NGOs, environmental activists and business enterprises such as telecom operators and banks among others, have set up initiatives that supplement the environment-oriented efforts of the government. A Good example of such initiatives is Guinness Nigeria's partnership with Wecyclers (a non-profit social enterprise involved in the promotion of environmental sustainability and community health among others), aimed at enabling a successful implementation of the "Guinness 4R Waste Management Model which integrates Re-use, Re-reduction, Recovery and Recycling in the waste Management" in Nigeria and in the world. Another example of such environmental initiatives is Sterling Bank's 2009 Sterling Environment Makeover (SME). This initiative was conceived as a social responsibility scheme to promote environmental sustainability, sanitation and hygiene in the 36 Nigerian States. Through the instrumentality of the SEM project, Nigeria's Sterling Bank has supported the cleaning of markets, highways, motor parks and streets in all the Nigerian States. Main beneficiary States include Enugu, Lagos and Ogun.

In spite of all the governmental and non-governmental efforts mentioned above, anti-ecological attitudes and environmental degradation have remained very serious issues in Nigeria. Land, air and water pollution, deforestation and desertification among others, have become serious equations to be solved by the country. Most oil producing regions in Nigeria experience a wide range of environmental pollution and degradation, as well as health risks and socio-economic problems linked to ineffective government's petroleum development policies (Yakubu, 2017, Nabegu, Mustapha & Naibi, 2016). In effect, petroleum exploitation, development and production in such Nigerian oil-producing regions as Niger Delta and Rivers, have resulted in serious environmental degradation, pollution-related diseases and even economic issues. For instance, oil leaks from Shell pipelines in the Niger Delta in 2008 and 2009 seriously affected the viability of fishing in some local communities. In the Nigerian village of Bodo more especially, this water pollution forced most fishermen to go out on the open sea to throw their nets. The polluted coastal waters were becoming less propitious for fishing (Aniefiok *et al.*, 2016; Nabegu, Mustapha & Naibi, 2016).

In 2016, residents of Port Harcourt (in Rivers State, Nigeria) witnessed the environmental impact of soot pollution which created a situation of double air pollution in their city: the unresolved prevailing pollution and the added emergence of particle pollution. This incident fuelled media reportage,

environmental activism and protests in Port Harcourt city and beyond. It also raised the question of the (in)effectiveness of government environmental policies in River State and in Nigeria as a whole.

A 2010 BBC documentary series christened “Welcome to Lagos 1, 2&3” came to expose the phenomena of poor garbage disposal, slum and environmental pollution in big Nigerian cities (see Figures 1 and 2). Aired on BBC2 at 9 p.m on Thursday April 22, 2010 and on BBC4 the following Friday, the documentary portrayed Lagos as a slum and a universe plagued by multiple sources of environmental pollution and related problems. The documentary focuses on wastes dumps situated in various parts of Lagos where extremely poor people called “scavengers” comb heaps of refuse in search for wealth or food, under very dehumanizing conditions. Critics censored the documentary for presenting Lagos as a jungle, a place of abject poverty and filth. Although many critics described “Welcome to Lagos” as a myopic and colonial representation of Nigeria, the documentary reviews a number of urban and environmental problems in some of Nigeria’s metropolises (BBC News, 2020; The Guardian, 2010; Donwell, 2010). Some of these problems include poor drainage, poor solid waste disposal, air and land pollution, pollution of water sources, poor housing and negative environmental attitudes among others (Nwachukwu, 2010; Ogbodo, 2009). All these factors contribute in no small measures to rendering social life difficult in Nigerian urban cities.



Figure 1 - Images of a Lagos Slum drawn from BBC’s “Welcome to Lagos 1, 2, & 3”

3.2. *The Zombie in the Environment-Oriented Cinema in Nigeria*

Most environmental crises happening in Nigeria has attracted or fuelled media reportage and heated socio-political debates in the country. In line with this development, the Nigerian cinema has been a fertile platform for environmental discourse or activism. A considerable number of Nigerian documentary and fiction films have sought to explore the dangers of environmental depletion in Nigeria. Amara Nwankpa's *Nowhere to Run* for instance, raises awareness of the negative impacts of climate change on the security question and livelihood in Nigeria. It particularly shows how climate change in Nigeria could make the security question more complex in the country. Talking about his film, Nwankpa explains that although climate change is seriously affecting human life in Nigeria, most Nigerian tend to believe that the phenomenon is a mere foreign or distant environmental problem. There is actually very little awareness and definitely no policy making or any response to address what most Nigerians see as a global threat. "We felt that if we had a documentary and it was in people's faces and told the story of climate change from a Nigerian perspective, it would raise awareness" (cited in Made for Mind 2016).



Figure 2 - *Slum Dwellers Excavating Refuse in BBC's "Welcome to Lagos" Documentary*

Another Nigerian cineaste Tunde Kelani shot *Pyrolysis or Paralysis* (2015), a documentary focusing on the dangers of environmental degradation in Nigeria. The film actually talks about the deleterious environmental effects of charcoal production on the Nigerian forest cover. It suggests that this economic activity engenders deforestation and desertification which in turn generate a range of social problems. The same cineaste partially addresses environmental issues in many of his fiction films. Two of such films are *Arugba* (2008) and *Ti Oluwa Ni Ile* (1, 2 & 3). In these movies, the film director tends to suggest the centrality of nature in man's success or survival on earth. In *Arugba* for instance, he makes the source of the protagonist's power to lie in the water, and in *Ti Oluwa Ni Ile*, the crimes surrounding the sales and purchases of land, causes the death of some dubious men. In this movie, Kelani presents land as a phenomenon which can make or mar the life of the human on earth.

Nollywood movies generally use metaphors other than the zombie to construct their environment-oriented messages. It is hard to come across a film that hinges on the zombie or any other type of undead (vampire, revenant or demon) to critique environmental attitudes or policies in the country. C.J. Obasi's *Ojuju* is therefore one of the very rare – if not the only – environmental film rooted in the zombie apocalypse and the fear appeal. Meanwhile, the other recent zombie films such as Sam Pery's *Outbreak 2020* and Charles Enonchong's *Witchdoctor of the Living Dead* are not concerned with environmental issues. This notwithstanding, the zombie has always inspired some social critics in the country. Afrobeat apostle Fela Ransome Kuti for instance conceived the term zombie politics in his Album *Zombie*. This coinage was aimed to criticize bad governance in Nigeria, particularly the military dictatorship of the 70s in Nigeria. In his understanding, zombie politics is all about mindless authoritarianisms where the leaders were just the shadows of what they should be in the strict sense of the word. In Fela's imagination, zombie politicians are mindless automatons whose eyes and ears are closed to the young, the needy and the radical. They are an incarnation of Fanon's (1963) zombies, as described in *The Wretched of the Earth*. Stricto sensu, Fanon's zombies are kinds of victims of mental slavery. As he puts it: "Zombies, believe me, are more terrifying than colonists. And the problem now is not whether to fall in line with the armor-plated world of colonialism, but to think twice before urinating, spitting, or going out in the dark" (Fanon 1963: 209).

4. C.J. Obasi's *Ojuju* and Environmentalism

4.1. Brief Presentation of the Film

Ojuju is a 2014 zombie thriller written and directed by C.J. Obasi (see Figure 3). The film is a minuscule budget production, starring Gabriel Afolayan (as Romero), Omowunmi Dada (as Peju) and Kelechi Udegbe (as Emmy) – its main characters. It tells the tale of Romero and his two friends Emmy and Peju who, overnight, are compelled to survive a mysterious epidemic that has transformed their neighborhood of residence (an isolated Nigerian slum), into a minefield of flesh-eating creatures. The monstrous transformation begins after the main source of water in the slum where they dwell is infected. Most slum dwellers (including Romero's girlfriend) are contaminated. They develop strange symptoms close to those of rabid river blindness. Romero and his two friends track the disease to the slum's sole source of water supply and try to understand its genesis in a bid to find a solution to the situation.

Obasi's film premiered at the Eko International Film Festival, and the African International Film Festival (Calabar) where it won Best Nigerian Film. The movie also attracted a moderately positive review from both Nigerian and foreign commentators. *The Hollywood Reporter* commented that although made on a minute budget, *Ojuju* is an enterprising and well crafted movie, which among other things, is infused with both sly humor and genuine thrills. Julianna Snow on her part described the film as a didactic social allegory that vividly portrays the predicament of millions of Nigerian living in the highly infested environment of slums in such towns as Lagos. Avocado (2018) similarly observes that *Ojuju* has many technical flaws which stem much from the fact that it is a zero-budget film. However its director's interesting mixture of sly humor and avant-gardism enables the movie to stand out. The commentator adds that "I can't say [*Ojuju*] is suspenseful or too effective as a horror film, but it shows quite a bit of promise for the filmmaker" (Avocado, 2018, p. 6).



Figure 3 - Poster for C.J. Obasi's *Ojuju*.

4.2. *Ojuju* as a Critique of Poor Environmental Policies in Nigeria

At first sight, one may think *Ojuju* is just a zombie film which, like any other one, is set to merely entertain and pass a usual didactic message. The truth however remains that, the film is a social allegory on deplorable human conditions in Nigerian slums in particular, and in many other semi-urban environments in Nigeria in general. The film is profoundly feeding on the outcome of an ethnographic research and a wealth of environment related

facts collected by the film director. Actually, C.J. Obasi undertook to shoot on the chosen location (a teeming slum located in Ikeja, Nigeria [see Figure 4]) after a series of visits he paid to a friend living in the locality – the slum in which the film was shot. In an interview granted Julianne Snow (2020), Obasi confided that he develops the story of the film based on the unique features of the area such as its one-exit in, one exit out feature, as well as the fact that the area had a single water source where all members of the community fetched from. The locality actually exemplified typical Lagos slums which in addition to poor housing and poor garbage disposal, generally experience water vulnerability. This water vulnerability most often stems from a variety of factors one of which is environmental pollution. In an attempt to construct his filmic message along the social and environmental reality, Obasi conceived a story that is rooted in the theme of water pollution. His film is about an infested slum where a contaminated source of water becomes a vector of chemical contamination for a wide mass of vulnerable humans. The film is a window into the environmental conditions in which Nigerians live in Lagos slums.



Figure 4 - Aerial View of the Ikeja Slum where *Ojuju* was Shot.

In addition to the above mentioned preliminary observation, C.J. Obasi hinged on the contents of a report published in 2014 by UNICEF and WHO.

This report presents water vulnerability as a serious problem in Nigeria. It states that over half of the Nigerian population has no access to clean drinking water due partly to toxic contamination of water sources. The report thus mentions water pollution as a serious environmental and health problem in Nigeria (World Health Organization & UNICEF, 2014). By drawing on the contents of this report, Obasi contributes to the ongoing discourse on water pollution/vulnerability and water supply in Nigerian metropolises. The phenomenon of water contamination – which his film raises – is endemic not only to Nigeria but the whole of Africa. A 2021 UNICEF report titled “*Water Security for All*” identifies localities in Nigeria where physical water scarcity risks overlap with poor water service levels. People living in these localities depend on surface water or unimproved/polluted sources of water (UNICEF 2021). In tandem with this, the 2021 WASH NORM study conducted by Nigeria’s National Bureau of Statistics and the UNICEF reveals that governmental efforts towards providing access to water, water vulnerability persists in Nigeria as majority of Nigerians do not still have access to adequate and quality water and hygiene services. According to the study up to 86 per cent of the Nigerian population lack such access safely managed drinking water sources. The study also reveals that although 70 per cent of Nigerians reportedly have access to a basic water services, more than half of these water sources are contaminated (National Bureau of Statistics & UNICEF 2021). Thus, water pollution remains a serious issue in Nigeria.

The use of the two tropes of water pollution and contaminated water sources also helps Obasi bring to the fore two serious environmental issues plaguing slums and shanty towns in Nigeria. The first is the anti-environmental attitudes of the slum dwellers in the film. These attitudes contribute in no small measures to contaminate water sources in their habitat. Their attitude is reminiscent of popular cultures in Nigerian slums where water sources such as streams and rivers usually represent preferred dumping grounds where piles of air-polluting or chemically poisoning refuse are disposed. The water sources are also often subject to fecal contamination. This chemical and fecal contamination of water sources is at the root of outbreak of water-borne diseases in Nigerian urban slums (Okafor *et al*, 2021). Ugwu Jennifer (2021) explores this phenomenon with close reference to the Makoko neighborhood, Nigeria’s biggest floating slum. In the same line of thought, Avocado (2018: 6) argues that the environment depicted in *Ojuju* is reminiscent of the many Nigerian slums which are without access to safe drinking water. By safe water he means, “water that isn’t polluted by sewage, pesticides, chemicals and more”.

The second issue subtly brought to the fore through the water pollution trope is the ineffectiveness of government environmental policies and the limitations of government's efforts towards ensuring access to unpolluted water. Obasi's story is therefore well anchored in the environmental and social reality in Nigeria. The film is a well crafted conversation on the risks of anti-environmental attitude of Nigerians and poor government environmental policies, which are responsible for degrading or dehumanizing human conditions. Snow (2020) is therefore right to describe *Ojuju* as a "social allegory".

5. Zombification as a Metaphor/Symbol of the Consequences of Environmental Degradation

The use of the zombie metaphor in Obasi's film could variously be interpreted. However, a number of features in *Ojuju* could help show that Obasi's zombies serve as strong imageries that are part of an environmentalist discourse. From the outset, it will be important to highlight the fact that, Obasi sought to simultaneously reproduce and localize the modern/Hollywoodian zombie. His engrossment with George Romero's rhetoric and cinematic styles in *Dawn of the Living Dead* has inspired him to design his zombies very much like Romero's undead creatures. These creatures (Romero's zombies) differ from the "living zombies" and the Afro-Caribbean zombies. Eschner (2017, p. 17) explains the difference between the modern zombies (often called Romero's zombies) and the living zombies thus:

Romero's zombies are without a doubt, the quintessential archetype for the modern zombie; however, to not look past this type of zombie would be to miss an entire subset of the current zombie population. This subset is known as living zombies. [...] Living zombies differ from modern (Romero) zombies, first and foremost in that they are alive, they are not reanimated corpses. Another difference between living and modern zombies is that living zombies tend to be fast, where modern zombies tend to be slow. [...] Like modern zombies, living zombies tend to be singly focused on the destruction of the non-infected. Matt Mogk, author of "Everything You Ever Wanted to Know About Zombies" succinctly defines both modern and living zombies. Modern zombies are relentlessly aggressive, reanimated corpses, driven by biological infection. Living zombies are relentlessly aggressive humans, driven by biological infection.



Figure 5 - A Zombie in Obasi's *Ojuju*.

Obasi's undead creatures are the products of chemical/biological contamination (see Figure 5). They are biologically deformed and are shambling depersonalized beings. In addition, they are flesh eaters, just like most Hollywoodian zombies. However, although they have much in common with modern/western zombies, Obasi's undead are not entirely non-African/Nigerian. They are hybrid as they combine characteristics of both modern and African zombies. Marks of their Africaness include the color of their skin and the setting in which they operate. Another strong mark of their Africaness is the name used by the film director to refer to them: "*ojuju*". This term means zombie in local languages. Snow (2018, p. 63) explains Obasi's localization of the Western zombie metaphor thus:

In an interview, Obasi said he chose the name "Ojuju" because he didn't want to use the word "zombies" in any manner or form as regards the project (He felt that if such an outbreak were to occur in the slums of Lagos, they would hardly use the word "Zombies" to describe it. Obasi felt it would be more realistic to eliminate any and all supernatural elements to the plot, and localize a well-known and celebrated pop-culture (zombie) for the Nigerian environment, rather than trying to do a Hollywood-version of what a zombie film ought to be.

One clear difference between Obasi's zombies and the modern ones lies in their signified; while the latter are most often used as a symbol of modern anxieties such as mindless consumerism, racism and capitalism, Obasi's living dead could symbolize grievous and deadly sickness and other very ugly consequences of environmental degradation and poor government environmental policies. This symbolism can be developed using at least three elements observable in the movie namely: the repugnant symptoms/manifestations of zombification, the zombie apocalypse (fear appeal) and the "otherisation" of slum dwellers. The various signified of the zombie in *Ojuju* will be discussed in details in the subsequent subheadings.

5.1. Symptoms/manifestation of Zombification as a symbol of Health Issues

By associating the consumption of polluted water with potential causes/vectors of zombification, Obasi clearly deploys a gross exaggeration. This is so as such causality of zombification is inconsistent with science and can only be regarded as science fiction. Additionally, no case of zombification originating from the pollution of water or the consumption of contaminated water has ever existed in real life. However, Obasi's exaggerative rhetoric enables any keen film viewer explores the negative health-related consequences of water pollution. In other word, the zombie enables the film director to contribute to the social discourse on environmental pollution in Nigerian slums. The repugnant physical appearance of Obasi's zombies – that is their rotten, damaged and deformed bodies, their shambling move and their depersonalization – also vividly calls to mind the different epidemic sicknesses Nigeria slum dwellers contract as a results of water pollution and other environmental pollution. Some of these sicknesses include cholera, typhoid and diarrhea among others.

5.2. The Zombie Apocalypse and Fear Appeal

In his paper titled "grey zombie ecology", Cohen (2012) defines the apocalypse in line with defeatism vis-à-vis the imperative of adopting ambitious environmental policies. He contends that the apocalypse is "ultimately a failure of the imagination, a giving up on the future instead of a commitment to the difficult work of composing a better present. Those who dream of the purgation of our problems rather than deliver themselves to the

labor of repair”. Thus the apocalypse has to do with exhibiting or engendering a sense of panic and giving the impression that the situation is desperate and out of control. In most environmental communication/films, the apocalypse is seen when the negative consequences of environmental degradation are presented as a “zombieism” that “can’t be put back into a bottle” (Eschner, 2017). Taking zombie movies on climate change as a case study, Shaw (2013, p. 25) illustrates this apocalypse. He contends that most zombie movies on climate change are anchored in a fear appeal where the story is always made to have a pessimistic end. As he explains:

Stories generally have three elements; a thesis (the existing order), the anti-thesis (the thing that threatens to disturb that order) and the synthesis (the new order that emerges after the threat has been dealt with). That is what gives a story its narrative arc and tension. The great thing about proper zombie films is that they play havoc with this structure. There is a thesis and an anti-thesis but no synthesis. The zombies are never destroyed and no new stable order emerges. And that, I fear, may be the truth of the climate change story.

In *Ojuju*, the apocalypse is seen in the fact that although Romero the protagonist is not infected, most of his close relatives are victims of the strange epidemic and ultimately zombified. This tends to suggest that zombification is a kind of fatalism. Whatsoever the pro-environmental efforts and emergency policies the society adopts, there are going to be some victims. The trope of the zombie apocalypse is thus deployed in *Ojuju* to bring to the fore the fear appeal that characterizes most pro-environmental communication. As noted by many commentators, pro-environmentalism is now all about using the apocalypse to desperately convince an incredulous audience about the desperateness of the situation.

5.3. *The Otherization of Slum Dwellers*

The zombie metaphor subtly serves the otherization of slum dwellers in *Ojuju*. This tendency of otherizing the people living in slum is common not only among exogenous but also indigenous media (Mhabir, *et al.*, 2016). To otherize means to make a person or a group of persons seem different. It also consists in considering such persons or group of persons as being different. Kathleen Taylor (2009) explains that in a situation of otherization, a group of people is either not included in their tribes or treated/classed as beasts or sub-humans. Otherizing slum dwellers often consists in representing them as sub-humans who live in very abject, sub-human or dehumanizing conditions (Odunjo & Okanlawon, 2014; Duke, 2021). It also consists in abjectifying

them and subtly distinguishing them from real urban dwellers. In relation to the above, the CEO of Abuja based Fesadeb Communications, notes that people in Nigeria slums are “homeless; many sleep under the bridges; many in shanties under sub-human conditions” (cited in Uroko, 2020, p. 32).

A number of media reportage on environmental degradation in Nigerian slums have tended to otherize, slum dwellers. Such (apparent) otherization has often consisted in representing the slum dwellers as sub-humans or resilient beasts. A case in point is BBC’s documentary series christened “Welcome to Nigeria 1, 2 & 3) which subtly portrays slum dwellers in Nigeria as people who live in very dehumanizing conditions, and as depersonalized beings or sub-humans. The documentary follows groups of people living in rubbish dumps, the Lagos lagoon (the world’s biggest floating slum) and the city beach side. It mainly represents the slum dwellers as people who make a living from the pit of degradation. In an assessment of the documentary, popular political critic and literary icon Wole Soyinka, described the documentary in a derogatory tone as follows: “There was this colonialist idea of the noble savage which motivated the program. It was patronizing and condescending. It surprised me because it came from the BBC which is supposed to have some sort of reputation. It was not worthy of the BBC” (cited in Donwell, 2010, p. 18).

In *Ojuju*, zombification could also be said to serve as a tool to naturalize this otherization of slum dwellers. Zombification in the movie tends to suggest that in Nigerian slums, environmental degradation enables a situation in which humanity is turned into inhumanity. It also suggests that such shanty neighborhoods are so degraded, polluted and non-conducive to human life that, only depersonalized or sub-human (zombies) will survive in the areas. Thus, the zombie becomes the social “Other”, that is a sub-class of humans.

6. Conclusion

In a bid to sensitize masses about the terrible consequences of environmental degradation, many pro-environmentalism artists, activists and storytellers tend to use strong apocalyptic imageries, thought-provoking metaphors and fear appeals in the construction of their advocacy messages. Using such an approach often entails representing phenomena such as pollution, deforestation, poor land development practices and natural catastrophes with symbols such as the Armageddon, deadly pests/pandemics, abysses, hellish scenarios, chaos, and death among others. Using such strong metaphors often serves as fear appeal and a strategy to push for nature-

friendly ideals. Following this line of thought, the Nigerian cineaste C.J. Obasi leverages the zombification metaphor and apocalyptic imageries in his *Ojuju* to indirectly advocate environmental protection. Obasi's film depicts a terrible environmental situation where, the progressive pollution of the sole water source in a Nigerian shanty town, leads to the chemical contamination of town dwellers. This contamination in turn provokes the zombification of the majority of the town's humanity, creating a complex humanitarian and emergency situation in the town.

In this paper, the author used semiotics and secondary sources to argue that although exaggerative at first sight, the zombie metaphor in *Ojuju* vividly represents the chaotic state of environmental degradation and the resultant precariousness of human life in most Nigerian towns. The paper examined the state of environmental degradation/protection in Nigerian urban cities and showed how this state of things is represented in Obasi's *Ojuju*. The chapter also argued that the zombie metaphor and the apocalyptic imageries are apt in representing the environmental risks in Nigerian cities.

References

Adams, B., 2018, *Zombie ecology. Thinking like a human, conversation or the 21st century*, Thinking like Human, London.

Aniefiok et al., 2016, "Petroleum industry in Nigeria: Environmental issues, national environmental legislation and implementation of international environmental law", *American Journal of Environmental Protection* 4, 1, 21-37.

Axelrod, E., 2014, The psychology of zombies: Why are zombies so infectious. In: Axelrod E.M. (ed), *Zombies, divorce and the internet: A collection of psychological disquisitions*, APSG, Inc, Dencer CO, 1-19.

Azura P., 2022, "Climate catastrophe". The role of fear appeals in climate change communication. An MA thesis submitted to the School of Geography, Environment and Earth Science, University of Wellington, Wellington.

Backe, H. J. & Aarseth, E., 2013, Ludic zombies: An examination of zombieism in games. *Proceedings of DiGRA 2013: De-Fragging game studies*, Digital Games Research Association (DiGRA), London, 1-16.

BBC News, 2020, "Nigeria housing: 'I live in a floating slum in Lagos'". *BBC News*, Retrieved April 29, 2022 from <https://www.bbc.com/news/world-africa-51677371>

Chadwick, A. E., 2015, Bridging the divide between positive and negative: The effectiveness of hope and fear appeals in climate change communication.

A paper presented at Bridging Divides: Spaces of Scholarship and Practices in Environmental Communication: The Conference on Communication and Environment, Boulder, Colorado, June 11, 2015.

Cheng, M.F., 2016, "Impact of fear appeals on pro-environmental behaviour and critical determinants", *International Journal of Advertising*, 35, 74-92

Cohen, J.J., 2012, "Grey (a zombie) ecology", *In the Middle*. Retrieved April 24, 2020 from <https://www.inthemedievalmiddle.com/2012/06/grey-zombie-ecology.html>

Crockett, Z. & Zarracina, J., 2016, "How the zombie represents America's deepest fear", *Vox*, Retrieved April 24, 2022 from <https://www.vox.com/policy-and-politics/2016/10/31/13440402/zombie-political-history>

Donwell, B., 2010, "Wole Soyinka attacks BBC portrayal of Lagos 'pit of degradation'", *The Guardian*, Retrieved April 29, 2022 from <https://www.theguardian.com/media/2010/apr/28/soyinka-bbc-lagos-documentaries-criticism>

Duke, S., 2021, Float city. Makoko: (Re)development of an aquatic home. An MA Thesis submitted to the Carleton University, Canada.

Eschner, K., 2017, "Zombie movies are never really about zombies", *Smart News*, October, 30, p. 17. Retrieved May 1, 2020 from <https://www.smithsonianmag.com/smart-news/zombie-movies-are-never-really-about-zombies-180965321/>

Fanon, F., 1963, *The Wretched of the earth*. (Trans. Constance Farrington). Grove Press, New York.

Fox, J. 2011, "Zombie ideas in ecology. Dynamic ecology", *OKIOS: Journal of Advanced Ecology* June 17 edition, 16-21.

Lauro, S.J., 2015, *The transatlantic zombie: Slavery, rebellion and living dead*, Rutgers University Press, London.

Made for Minds, 2016, "Nigeria's own inconvenient truth", *Made for Minds*, Retrieved April 29, 2022, from <https://www.dw.com/en/nigerias-own-inconvenient-truth/a-36468974>

Mahabir, R. et al., 2016, "The study of slums as social and physical constructs: Challenges and emerging research opportunities", *Regional Studies, Regional Science*, 3, 1, 399-19.

Murphy, P. D., 2017, "Lessons from the zombie apocalypse in global popular culture: An environmental discourse approach on the walking dead", *Environmental Communication*, 12, 44-57.

Nabegu, A.B.M. & Naibbi, A.I., 2017, "Environmental regulation in Nigeria: A mini review", *International Journal of Environment Science and Natural Research*, 1, 5, 1-4.

National Bureau of Statistics & UNICEF, 2021, *Water, sanitation, hygiene: National outcome routine mapping*, Federal Republic of Nigeria & UNICEF, New York.

Nwachukwu U.M., 2010, "Solid waste generation and disposal in Nigerian cities: An empirical analysis of Onitsha metropolis", *Journal of Environmental Management and Safety* 1(1), 180-191.

Odunjo, O.O. & Okanlawon, S.A., 2014, "Urban poverty and housing inadequacies in Nigeria: Need for intervention in the core areas of cities". In: Santosa H. & Osman A. (Eds.), *W110. Informal settlements and affordable housing*, International Council for Research and Innovation in Building and Construction, London, 1173-1196.

Ogbodo, G.S., 2009, "Environmental protection in Nigeria: two decades after the Koko incident", *Annual Survey of International and Comparative Law*, 15, 1, 1-18.

Okafor, U.P. et al., 2021, "Health implications of streams water contamination by industrial eluents in the Onitsha urban area of southeastern Nigeria", *Journal of Water and Land Development*, 8, I-III, 105-114.

Ovacado, 2018, Month of horror 2018: A/S/L Nigeria: *Ojuju. Avocado*, October 15, p.6.

Perron, B., 2009, The survival horror: The extended body genre. In: Perron, B. (ed.), *Horror video games: Essays on the fusion of fear and play*, McFarland, Jefferson, N.C, 121-43.

Sen, M., 2018, "What zombies can teach us about fighting climate change", *Chicago Review Books*, Retrieved April 24, 2020 from <https://chireviewofbooks.com/2018/02/15/what-zombie-literature-can-teach-us-about-fighting-climate-change/>

Shaw, C., 2013, "What zombie films tell us about climate change: There's no one happy ending", *The Guardian*, March 22, pp. 25-26.

Slovic, S, Swarnalatha, R. & Sarveswaran, V., 2019, *Routledge handbook of ecocriticism and environmental communication*, Routledge, London.

Snow J., 2020, "Zombie film Friday: *Ojuju*", *days with the undead*, Retrieved April 30, 2022 from <https://dayswiththeundead.com/2020/03/13/zombiefilmfriday-ojuju/>

Taylor, K., 2009, *Cruelty: Human evil and the human brain*, Oxford University Press, Oxford.

The Guardian, 2010, "Editorial: The BBC documentary on Lagos", *The Guardian*, May 5, p. 3.

Ugwa, J., 2021, *Thirst in the midst of the lagoon*, International Centre for Innovation and Research (ICIR), Lagos

UNICEF, 2021, *Water security for all*, UNICEF, New York.

Uroko, C., 2020, "Slum dwellers worst hit as COVID-19 exposes 'homelessness' in Nigeria", *Business Day*, May 5, p.32.

Vervaeke, J., Mastropietro, C. & Miscervic, F., 2017, *Zombies in western culture. A twenty-first century crisis*, Open Book Publishers, London.

Vu, H. T., et al., 2021, "Social media and environmental activism : Framing the climate change on Facebook by global NGOs", *Science Communication*, 43, 1, 91-115.

Watson, A., 2013, "Zombie, environmental declensionism and the fate of humanity: Symbolism in the zombie metaphor 1963-2013", A presentation delivered at the American Society for Environment History Annual Conference.

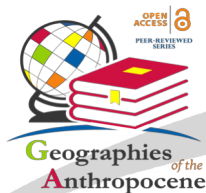
World Health Organisation & UNICEF, 2014, *Progress on drinking water and sanitation. 2014 update*, WHO & UNICEF, New York.

Yakubu, H.O., 2018, "Particles (soot) pollution in Port Harcourt, Rivers State, Nigeria – double air pollution problem ? Understanding and tackling potential environmental public health hazard", *Environments*, 5, 2, 1-22.

The Anthropocene concept identifies a geological era in which human action leads to changes on a planetary scale with long-term irreversible effects. This volume collects insights into geographical research, with a specific look at the challenges of the future, and the potential of visual communication offered by cinema, documentaries and television series. In fact, fiction could represent the appropriate medium to examine the notions of the Anthropocene, being a language of global diffusion and highly evocative since it uses the engagement of narration and entertainment to convey messages of vital importance, arousing emotions in the viewer, shared awareness and, finally, responsibility. In the Anthropocene era, the challenge of climate change is not a problem of science but a failure of politics. And politics fails because the Great Acceleration has led to the good life and certainly a better life for people everywhere. Who is willing to give up the great stuff of the Great Acceleration? What would that new life look like? What kind of challenges does the future propose? Some of these questions, among others, are raised in the chapters of the present volume. The different geographical contexts and approaches, here collected, can play an important clarifying function, to reduce the complexity of (today's) social, economic, political, and technological reality, presenting a much deeper vision of reality than it appears to us, and at the same time offering us the means to navigate it. Thus, the volume deals with these issues in three sections, moving from narrative methods to the representation of ecological disasters and finally analysing a more specific topic.

***Enrico Nicosia** is a Full Professor in Geography at the Department of Cognitive Science, Psychology, Education and Cultural Studies at University of Messina (southern Italy). The scientific activity is documented by numerous publications in various fields of geography. The main research topics focus on sustainable land development policies and the role of the social-economic components on urban regeneration strategies, related to the organization of large events. His recent studies are directed at: the urban redevelopment, the transformation of the spaces of consumption, and Film induced tourism.*

***Lucrezia Lopez** Lucrezia Lopez is Lecturer of Geography at the Department of Geography of the University of Santiago de Compostela (USC) and secretary of the CETUR (Centro de Estudios Turísticos). She is academic coordinator in the USC of the International Master's Degree in City Challenges, and secretary of its international academic commission. Her research lines concern the Camino de Santiago, studied by a plurality of geographic, cultural and touristic approaches. She also deals with cultural and Mediterranean studies, tourism geography, heritage and heritage management, and geohumanities.*



ISBN 979-12-80064-39-4

IL **Sileno**
Edizioni