

## ENERGY ENVIRONMENTAL CRISES IN NIGERIAN NOVELS AND THE RENEWABLE ALTERNATIVES

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### **Abstract**

Energy environmental crises, vis-à-vis renewable alternatives to petroleum, have recorded an abysmally low representation in Nigerian novels. This is despite the global outcry concerning fossil energy exploitation and the state of the environment. For more than a decade now, issues of petroleum exploitation have sustained a number of Nigerian novels. But the absence of literary representations of sustainable alternatives to petroleum creates a serious gap in Nigerian literature that needs to be urgently filled. Adopting the methods of ecocriticism and energy humanism, this paper argues that renewable energy alternatives, yet to be explored in Nigerian novels, may be represented as subject, theme, and even character, to counter the degrading, violent and crisis-ridden cultures associated with fossil energy imaginative literatures.

**Key ideas:** Renewable Energy Environment Nigerian Novels

### **Introduction**

Energy demands for the sustenance of science and technology, locally and internationally, continue to increase as the demands for science and technological goods increase. And everywhere, there is concern over sustainability in energy production, distribution and consumption. To counter the global ecological impacts of exploitation and consumption of fossil energy sources, available science and energy literatures reveal discoveries of alternative and renewable energy sources. Yet in spite of abundant fictional and non-fictional representations of the harmful ecological consequences of crude oil exploitation, petroleum and other remains the major theme of literatures from the Niger Delta setting. There is apparently no significant literary artistic representation of alternative energy sources.

An eco-critical study of a number of novels and other literary modes set in Nigeria's Niger Delta area reveal realities of despoliation of the physical environment, occasioned by the activities of petroleum energy exploiters. Prof. Dara G.G. opens his 2008 keynote address titled "Revolutionary Pressures in Niger Delta Literature, with the assertion that: "the radicalisation of the Niger Delta political space has had its effect on the themes and rhetorics of works by the region's writers [and] activist thinkers". The outcry against degradation of the place, notwithstanding, there remains a significant gap that needs to be filled, if the novels would transcend propaganda. This gap is the lack of intentional

representation of renewable energy alternatives as subjects or themes in literature, the novel in particular; and this is the major problem this current research addresses.

This paper is essentially a re-examination of the issue of petroleum exploitation in the Nigerian energy environmental literary culture. It seeks, furthermore, to discover possibilities of representation of renewable energy alternatives, as theme or subject, in prose narratives, and findings used as generalisation for all Nigerian literary modes. It seeks, moreover, to contribute to the growing ecocritical and energy humanities' discourses on global energy and environmental sustainability. The interdisciplinary methods of ecocriticism and energy humanities are employed in the analysis of the textual and contextual issues of energy and environmental sustainability in Nigerian prose narratives.

### **Theoretical Framework**

Ecocriticism's primary concern, according to Cheryll Glotfelty, is with "the relationship between literature and the environment" (xix); and energy humanists, Boyer and Szeman assert that energy humanities is a method which "highlights the essential contribution that the insights and methods of the human sciences can make to areas of study and analysis that were once thought best left to the natural sciences". In its ecological centeredness, ecocriticism's consideration of the environment as home for all, makes it all-embracing; bringing together, according to William Rueckert, the "old pair of antagonists, science and [Arts] ... to lie down together and be generative after all" (107) in the current global quest for answers to energy environmental issues. Hence, ecocriticism differs significantly from energy humanities' anthropocentric stance, a concern for what becomes of humanity. However, both theories are significant to this paper for their appeal to a peaceful, ecological balance where all – humans and the flora and fauna coexist in one global *oikos*.

### **Energy Environmental Crisis in Nigerian Novels**

In Isidore Okpewho's novel *Tides*, and a host of others – Helon Habila's *Oil on Water*, Kaine Agary's *Yellow-Yellow*, and Bina Nengi-Ilagha's *Condolence* – to mention but a few, crisis, insurrections and counter-insurrections are the products of thoughtless exploitation and degradation of the natural Niger Delta ecosystem (Ugwu, 4). Yet, there is no end in sight to the crisis, as the minister of petroleum in Okpewho's *Tides* clearly warns everyone that "the Federal Government was committed to petroleum as the mainstay of the nation's economy, its chief source of wealth (126).

Zeki, one of Ilagha's characters lamentation: "with the rivers polluted and the delicate ecosystem damaged, fishing had become unattractive. What could be happening?" (153) is yet an indication of crisis in the environment. Bickerbug, Okpewho's chief mouthpiece further exposes the origin of the energy environmental crisis thus:

Then comes the drilling itself ... and the resultant pollution which has made life virtually unlivable for our people down in the Delta ... Now let's look at the

various sources of pollution. First, the wellhead is fitted with what's known as blowout preventer ... But the preventer is never able to stop a blowout ... The only effort made so far is to reduce the volume of oil blown out, from some one or two thousand tonnes to about six hundred tonnes per rig.'

'So there is always an overspill'

'There's always an overspill ... And when I talk about a blowout, its' really a *blowout*, an explosion. The rig can take it, because it's got the weight to absorb the shock. But what about the villages in the environs? For them it's another tremor, and this goes on constantly even before the oil drifts to their fishing enclaves and their farms.'

'... Overspills occur from various other sources. The pipes ... may spring a leak or get fractured ... and of course the oil escapes into the water. Or the barges and bunkers carrying the oil may lose some of it for various reasons – leakages, overloading, blown gaskets, even corrosion from prolonged chemical action of brine and other things – and again all that oil is emptied into the water ...

'Every once in a while the oil tankers are washed – and that's another source of pollution ... the ballast and oil are thrown out into the surrounding water ... and as the volume of exploration from the various oil companies increases the volume of oil pollution increases also'

'... the fishes die because the floating oil blocks the oxygen from the water or because their respiratory membranes are clogged by the oil. Even the birds that dip in the water to catch fish and other foods suffer – their wings are matted by the oil and they cannot fly so they sink and drown or die on dry land by asphyxiation, having taken in so much grease. The farms, too, are ruined – the crops won't grow because the oil floating on the irrigation chokes the soil. Even the drinking water is affected ... (144 – 146).

Every other issue: despoliation of the environment, poverty, disease, illiteracy, corruption, militancy or violence, is attributable to the one problem – fossil energy exploitation. This issue is rendered a global one with the involvement of the oil companies, all foreign, with their engineers and their host country's government and allies. This representation of an assemblage of stakeholders in the impasse is a testimony of the global nature of the crisis. In Habila's *Oil on Water*, crisis also arise from exploitation of oil

One day the patrol [local militants] came upon two oil workers piling soil samples into a speedboat. There was a brief skirmish ... one of the oil workers escaped with a swollen jaw, the other with a broken arm ... the next day the soldiers came. Chief Malabo was arrested, his hands tied behind his back as if he were a petty criminal, on charges of supporting the militants and plotting against the federal government and threatening to kidnap foreign oil workers (40)

Thus, in *Oil on Water*, centred on the kidnapped British woman, wife of a British petroleum engineer and the two journalists, who are paid to find her and negotiate her release, the themes of petroleum oil exploration and the attendant evil consequences of its exploitation sustain the tale as the above excerpt reveal. Yet, there is no suggested alternative energy source.

Beyond fiction, Emily Buckley asserts: “There is no longer any denying that we need to reassess how we generate our energy ... the diminishing levels of fossil fuels will eventually cause an energy crisis ... Added to that [is] the enormous damage the burning of those fossil fuels is doing to our planet and it is clear that we need to find alternative means of producing enough energy to power the globe”. Yet, the nearest hint to the presence of the sun, a natural element and an alternative source of energy in *Oil on Water* is this clipped reportage: “the sun is bright. I am talking to Zaq in the hut. It is one of those days when he looks spry and full of energy” (176).

Thu from this excerpt, we learn that sun possesses healing and energizing powers. But there is no further reference or insight to its benefits to the environment and to the overall energy needs of the global community. This reference to the brightness of the sun could have been more advantageously employed, if emphasized as a means of harnessing energy, for sustainability and for ecological benefits, rather than decrying or bemoaning the crisis.

The narrator, assumes an omniscient status, enters the mind of the British woman, the object of the search and instrument for exposing the oil evils in the area:

I looked outside at the forest and the abandoned boats on the water, the few thatched huts and I thought, what could fate possibly want with her [the British woman] on these oil-polluted waters? The forsaken villages, the gas flares, the stumps of pipes from exhausted wells with their heads capped and left jutting out of the oil-scorched earth, and the ever-present pipelines crisscrossing the landscape, sometimes like tree roots surfacing far away from the parent tree, sometimes like diseased veins on the back of an old shriveled hand, and sometimes in squiggles like ominous writing on the wall. Maybe fate wanted to show her firsthand the carcasses of the fish and crabs and waterbirds that floated on the deserted beaches of these tiny towns and villages and islands every morning, killed by the oil her husband was helping to produce.

Oil, from the narrator’s perspective above, is obviously of no benefit; it portends only evil. But it is not so from the perspective of the oil exploiters and its intermediate beneficiaries represented by Okpewho’s “Minister for Petroleum and Power” (125).

The novels are indeed replete with graphic pictures of the evils association with generation of crude oil, making imperative counter literary artistic representations of alternative, renewable energy sources, with their prospects of sustainability. There is

thus need for as much knowledge about these other energy sources just as have been revealed, in the novels, of petroleum, its exploitation process and negative impacts on the ecosystem. This is the gap in the story that needs to be filled.

“Quite unintentionally”, says Lynn White Jr., “changes in human ways often affect nonhuman nature” (4). As such, even as scientists, technologists, energy experts and environmentalists become committed to finding solutions to the problems of oil and other nonrenewable energy sources, literary artists: poets, prose writers and dramatists, must play their parts, employ their methods to sensitize their audience towards better ethical technological cultures. Is it possible to represent renewable energy sources and sustainability in the same, or even better, manner than petroleum, a non-renewable energy source and its degrading consequences are represented in these and other Nigerian novels? Only intentional efforts would provide the answer. The onus is on upcoming artists to take advantage of what new technologies have to offer in this interdisciplinary age.

### **Reinventing Energy Sources in Literature**

Recognising that over time, nature has variously been annihilated and then redeemed, Lawrence Buell’s “Nature’s Personhood” is a critical examination of the place of natural elements (including the Sun, Wind and all organism in an anthropocentric social milieu, and even in modern ecocentricism. Referring to nature, he says: “high modernism announced its death; modern ecogism has brought it back” providing all the “motive for personifying nature” (180 – 181). Beyond nature’s personification in works of literature is the necessity also for a reinvention of an environment in which nature, with its goodness, is promoted over and above the devastation that science and technological cultures have imposed. Citing sources, secular and sacred, Buell exposes proposes an “ethics of care”, which he says: “promises to quicken the sense of caring for nature and to help humans compensate for the legacy of mind-nature dualism while at the same time respecting nature’s otherness” (218). Respect and personhood accorded nature should also translate into recognition of the positive contribution of the natural elements to the overall well being of the global ecological milieu. The benefit of alternative renewable energy sources, in this regard could be artistically projected:

An assertion by a character: “I have just prepaid for the supply of solar electricity from the distribution company. It is safer, more affordable and durable” becomes an artistic, yet subconscious promotion of a better energy environmental culture in the consciousness of the reader.

“We need to refocus a lot more effectively on alternative energy resources, particularly solar energy. There is really no reason why a country like Nigeria should not have more of its power supply from solar” (Kachukwu). This is a non-literary representation of the country’s energy environmental reality. But literary artists would not be true to their calling if they fail to mirror this reality.

An exclamation by an agrarian character in a novel: “Thank God for the sun and wind; that we can dry our clothes and blow chaff from beans” becomes the artist’s contribution

to creation of awareness of these alternatives. In a more sustained narrative, like the novel, a plot scheme involving the life of a protagonist or major character may be mirrored thus:

Ndukwe grows in rural farming community. He is inspired, while in the primary school, by a practical demonstration of the power of a wind turbine. He wins a scholarship and on graduating from an engineering faculty, but finding no job in the industries makes himself useful as a basic science instructor. Portrayed in a classroom setting Ndukwe educates scholars on the latest invention of solar or wind energy and actually helps the villagers, with help of a government agency, to install a solar energy base for electrification of the village.

Propagating the values of renewable energy sources through non-crisis-ridden means engenders ecological harmony and promotes balance in the ecosystem. Compare such with the effect on readers of this technical narrative from Bickerbug, one of the major characters in Okpewho's *Tides*:

There are many kinds of oil rigs, but every one of them is fabricated on-shore, or assembled from component parts, and transported to the offshore drilling site on a barge. There are two main parts to the rig. First, there's the substructure which provides the stable base for the drilling operation, and then there's the deck on which the entire exploration tackle is mounted. The substructure itself is of two kinds – the steel template kind and the gravity kind. The steel template structure rests on some four or eight legs lowered to the sea-floor and secured to the seabed by pipe piles driven some two to three hundred feet below the sea-floor. The gravity structure is used in places where the sea-floor is too hard to be bored by pipe piles, as in icy Alaska, or where there is some rock in the area that may prove to be an obstacle. So the gravity structure consists of heavy concrete cylinders – metal cylinders have also been used, even here in Nigerian off-shore rigs. These are lowered to the sea-floor, sixteen of them or so, holding in place the three or four other cylinders on which the operations deck is going to rest. It just sits on the sea-floor. The deck itself must be sufficiently high above the water not to be buffeted by waves. Then the well-head, from which the borehole is going to be sunk, is fitted on a cellar-deck about fifteen feet below the main or operations deck. You must understand that all this rigging is a massive structure – what you see rising from the waters like one huge Christmas tree or mast is a mighty bulk ... A standard operations deck is some two million pounds in weight, while the substructure – because it has to withstand the various environmental forces or loadings like wind, current, waves, even seismic action – is usually twice that weight. In fact, the gravity structure may be as much as ten or twenty times the weight of the steel template, and can therefore carry a correspondingly heavier operations deck (143 – 144).

This is a motivational script for intending oil engineering major. The exploitation efforts made here underscores oil as essential to sustainability in energy production, besides the economic gains. No doubt, this descriptive passage is a product of research and creativity, which creates awareness of the interdisciplinary nature of the twenty-first century enquiry. The artist is also, to a certain extent, a techno-scientist. And we argue that this same techno-scientific approach to literature could well be employed in the treatment of possibilities of exploitation of renewable energy – solar, wind, hydro – alternatives, borrowing of course from available non-fictional or even fictional science and technology literature. This way, attention would gradually shift from petroleum, already proven to be non-renewable and fraught with harmful ecological impacts.

From the non-fictional perspective, no doubt, wind and solar energy sources clearly feature as subject or theme. Buckley's further assertion that: "The methods by which we harness solar power are constantly being improved ... the future looks like it might be bright, sunny and solar powered"; though a non-artistic projection, captures a reality that the literary artist could emulate.

Most recent findings by Oyedepo and others reveal more rapid improvement. The question, from the humanist artistic point of view, is: what contributions have the Nigerian literary art and criticism made towards our local and global energy and environmental needs?

Renewable energy sources have equally become major themes in energy ecological discourses that aim at repositioning them as sources for sustainability in energy generation, ecological balance and purity. This passage from "An Analysis of the Potential Impact of Wind Turbine" is an additional instance of the commitment of science and energy experts to a more viable energy ecological future:

In addressing wind power as a source of renewable energy a great many questions have been raised and concerns have surfaced ... addressing wind turbines, the sound produced and health effects associated with them. Publications, journal articles, books and various studies have been reviewed and summarized to give an impression of wind as a part of the renewable energy sector in comparison with traditional electricity production (Sierra Club Canada).

Reading the well over twenty-page article, it is all about the Wind; what it can do; how it can help; its place or acceptability in the modern world, etc. etc. The possibilities, benefits and methods of generation, distribution and consumption of energy, from the renewable sources become the hub of every segment of the discourse. But such representations are very much lacking as the subject or theme of our popular folk literature, the novel particularly.

## Conclusion

Literature, from its earliest beginnings, has remained a reinvention of reality, accurately or otherwise, depending on the perspective of the inventor. Arguments abound for the representation of nature in literature; in fact, it is the canon upon which ecological or green literature is founded. Buell contending that personification of the natural elements, has been endorsed as a way of recognizing their importance, appeals to the bible: “Psalm 148 calls on the sun, moon, stars, waters, fire and hail, mountains ... to praise the name of the Lord” (183). But these are not represented as the subject or theme in the way that petroleum or crude oil is represented in literary ecological novel, *Tides*, for example.

Christopher Mane’s recommendation of “a viable environmental ethics [to] confront “the silence of nature” – the fact that ... only humans have status as speaking subjects” (26), might be construed as an admonition on the anthropocentric West; and as an approbation of the animist cultures for whom the natural world is inspirited (15). However, it has clearly been proven that nature speaks, has always spoken and has, in recent times, spoken very loudly, through natural or ecological disasters. There is thus no better time to take practical steps to represent in folk and popular literature, the more subtle language of hope encapsulated in the renewable energy alternatives proposed and propagated in energy ecological discourses. Such representations would help to raise an ecologically and culturally literate generation, to sustain modern global science and technological gains, in energy and other productions, as well as combat global ecological degradation and imbalance.

There is no better way of repositioning researches in Arts and the Social Sciences than to turn our searchlights on the twin issues of energy generation and the environment in this age, when the world yearns for greater energy supplies to sustain the ever-changing faces of her science and technological cultures. It is ironical that as the demand for energy increases, so does global outcry against methods and sources of energy generation and consumption, as the causes of present global ecological woes. In the words of Jonathan Bate, “as political and moral visions change, so literary criticism will change too” (168). To this end, the twin concepts of ecocriticism and energy humanities become imperative approaches to the study of sustainability and renewable energy sources as concepts in ecological novels; and for advancing the possibility of the novel and popular literature as tool for mitigating human and environmental degradation. These methods would entail, in creativity, representations of renewable energy sources and analyzing same within the context of their impacts on humanity and the flora and fauna in any setting.

In both *Tides* and *Oil on Water*, there is an inconclusive end to the tales. In *Tides*, for instance, following the final outbreak of violence, and the consequent chaos, these broken and unfinished words of one of the characters ends the tale: “Please take my advice. Find somewhere [to] hide. Until this thing settles. Must stop at once. I can hear sombo[dy]” (200).

This simply is an indication that there is no solution yet to the problem of the place and of fossil fuel exploitation. It is also an indication of the need for imaginative representations of sustainable alternative to petroleum. Employing the various literary elements, renewable energy sources may be projected in works of literature.

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