Ethnic science fiction depicts political science fiction stories with an ethnocentric bent. This paper shall explore the possibility of driving Technoscience in Africa through political engineering, with ethnic science fiction in all its media (novels and short stories, movies and animated movies) as the prime mover instrument. The paper does not focus on science fiction as a source of, or stimulant for, technoscientific innovation (for this is true but is the subject of another discourse) but rather focuses on ethnic science fiction as a peculiar kind of science fiction that has the power to spark off ethnic competition for technoscientific identity manifestation in real life. The paper puts ethnicity at the centre of technology politics in multi-ethnic African states and recommends the construction of ethnic innovation policies in these states.

In the 21st Century, ethnic solidarity and ethnic sentiments have remained undiminished in Africa as a result of the superabundance of ethnic diversity. Lingering ethnic homelands and the attendant ‘indigeneship’ confer “legitimacy” to members. One ‘comes from’ a certain village; that is his family for several generations past has been members of that community or village. It is not easy – in fact, not possible – for non-members to acquire...
leadership or political positions in that community. Each community usually traces its origin to one man, and so belonging to the group involves kinship and bloodlines. This is the micro level of ethnicity.

Ethnicity on the macro level involves the entire tribe (composed of many communities) united by a common language and culture (and at times a common religion) identifying themselves as distinct from (and in most cases superior to) other groups. Ethnic politics is the manifestation of ethnic cleavages in the political sphere. Ethnic politics is at the root of Africa’s inability to evolve technoscientific economies even after several decades of the post-colonial era – the phenomenon better known as Africa’s technology gap. In African countries, tribalism has so shaped and redefined politics that national technology targets are simply inconceivable.

An Overview of Science Fiction

Gunn Center for the Study of Science Fiction at the University of Kansas\(^1\) defines science fiction as

…the literature of the human species encountering change, and the literature of ideas and philosophy; it is multi- and interdisciplinary; and at its heart is a community of thinkers and creatives.

The African Science Fiction Project (TASFP) views science fictions as

a short story or novel which deals with imaginary future developments in science and their effects on human life. In science fiction, the plot creates scenarios different from those of the present day and the known past.

Science fiction stories are visualizations of the future on the grounds of science. It has the ability to arouse our creative imagination and leads us to visualize the future to help us understand the present. Therefore, “Science fiction allows us a much more detailed view of life in alternative futures.” (Bowers, 2014)

The African Science Fiction Project (TASFP, 2014) agrees with this viewpoint:

Science fiction is produced when our imaginative faculties attempt to construct a bridge between fact and fiction on the grounds of science… So a science fiction must necessarily entertain as well as arouse our creative imagination, much as it simultaneously saturates us with expanded foresight aptitude. Science fiction is a genre that is future-oriented wherein the impact of the continuous production of science on society features as a recurring characteristic.

For the Gunn Center\(^2\),

…science fiction provides an approach to understand the universe we live in. It provides tools, tropes, and cognitive framework within which we can explore ideas and safely run thought-experiments where we cannot or ought not in real-world experiments. By dramatizing such scenarios, populating them with believable characters, and providing the background necessary for the audience to willingly suspend disbelief, science fiction brings ideas to life.

For Ursula\(^3\), the visionary value of science fiction is more salient than anything else:

Hard times are coming when we will be wanting the voices of writers who can see alternatives to how we live now and can see through our fear-stricken society and its obsessive technologies to other ways of being, and even imagine some real grounds for hope. We will need writers who can remember freedom. Poets, visionaries, the realists of a larger reality.

Therefore, as a product science fiction develops future-mindedness in its consumers. It is “an exercise in synthetic and analytic future-oriented political, social, and economic thinking…” (Bowers).

Similarly, “Science fiction literature extends our foresight capabilities through its expansion of our time horizon…” (TASFP, 2014). Science fiction sharpens man’s envisioning abilities and enables him to conceive novel political systems and structures and alternative ways of governing.

Science fiction is a formidable channel for communicating Futures Studies to the public (Ibid.) and at the same time it is part of Futures Studies. This field of study, also called Foresight or Futurology

is the science, art, and practice of postulating possible, probable, and preferable futures and the worldviews and myths that underlie them. Future Studies… seeks to understand what is likely to continue, what is likely to change, and what is novel…(Wikipedia)

Science fiction discusses the economics of science, the politics of science, the sociology of science, and the psy

\(^1\) Gunn Center for the Study of Science Fiction  http://www.sfcenter.ku.edu/

\(^2\) Ibid.

\(^3\) Ibid.
chological foundations of science in a future context deploying the narrative technique.

Theoretical Assumptions

This paper hinges on instrumentalist theories of ethnicity. Instrumentalism as a method of conceptualizing ethnicity argues that individuals can easily change their identities even after identity crystallization has been achieved. The symbolic content in ethnic identities can change to some degree over time. This is opposed to primordialist conceptions of ethnicity. Instrumentalists include Banton (1983), Barth (1969), Brass (1991), Gorenburg (1999), Laitin (1998), Nagel (1994), Okamura (1981), Royce (1982), and Synder (2000).

Similarly, instrumentalism defines ethnic competition theory, which itself is a theoretical perspective on ethnic mobilization. Ethnic competition theory “focuses on ethnic leaders making rational calculations about their identity and invoking ethnicity in their struggle for resources and power.” (Vermeersch, 2011).

Ethnic science fiction is a model in identity politics, since it is a method to achieve ethnic coherence and group solidarity for ethnic technoscientific agendas.

Ethnic stereotypes can be perceived as “simplifications for the ego-image” (Hale, 2002). Similarly, ethnic science fiction is conceptualized both as ethnic mobilization paradigm and “identity thickening” paradigm (Hale).

Ethnic stereotypes and group conspiracy theories (Hale) support the ethnic science fiction model. In considering two perceptions of ethnicity, viz. ethnicity as conflict-producing and ethnicity as competition-producing (Hale), the ethnic science fiction model supports the latter view. Ethnic competition is a fertile ground for technoscientific innovation. Image-identity conflict fertilizes the social environment to produce image-identity competition.

Ethnic identities are “inherently dynamic, constantly changing” and can acquire new ‘identities’ through identity construction or identity creation and identity thickening (Hale). In the same vein, ethnic consciousness is a function of identity thickening. Identity change or shifts result from changes in the social environment. Image-identity conflict produced by ethnic science fiction is an example of such changes in the social environment of ethnic identities.

Identity-fixing concerns the branding, the labels of an ethnic identity; the things for which an ethnic group is known, especially in relation to other ethnic groups in a multi-ethnic society. Ethnic science fiction becomes a paradigm in identity-fixing or identity construction. Identity-fixing in identity politics concerns the image of the ethnic group in the eyes of that group that is transmitted to other groups. An ethnic group can begin to propel itself toward the fixed technoscientific image-identity prototyped in its own ethnic science fiction because of the basic human need for competence manifestation. If the identity-image is technological or generally technoscientific, the ethnic group gradually begins to absorb that identity-image into its subconscious manifestation, with the internal need for higher and higher competence manifestation acting as a high-voltage electromagnetic attraction. Here, the higher-intellect and the lower-intellect members of the ethnic group easily agree to accept this technoscientific image-identity and to manifest it. This intrinsic psychological need-drive is embodied in self-determination theory (Deci and Ryan, 2008). This human need for competence mixes with ethnicity to produce competence competition among contending ethnic groups.

Ethnic Stereotypes in Ethnic Science Fiction

Political science fiction “…examines the close relationship between politics and science fiction and shows how much of the former is grounded in the latter” (Hassler and Wilcox, 2009). Political science fiction conceptualizes science fiction texts and movies “as models of political science theory and practice” in view of “the propensity of [science] fiction writers to centre their works on particular governmental structures” (ibid). Generally, political science fiction involves “how current cutting-edge technology might have social and political consequences” (Bowers, 2014). Some questions raised by political science fiction include: “How can imagining the future help us understand the present? How does considering the future help us think critically about politics today?” (ibid).

By observation, ethnic science fiction is but a subset of political science fiction. While political science fiction is simply science fiction with socio-political content, ethnic science fiction specifically entails the creation of stereotypes in glorification of one ethnic group or tribe over another in terms of scientific teachability, technological prowess and temper, science business acumen, etc.

When we take science to the realm of the imagination, we create science fiction. If the socio-political content of the imaginative rendering is unclear and hazy or completely absent, we can best describe our output as science fantasy. Therefore, science fiction is human imagination involving the creative imagination, the reflective, imaginative and critical capability and the capacity to act upon (interact with) this ability to imagine. Of course, a form of science fiction that takes the imaginative process to a point where there is a need to consider the extrapolation of the science fiction setting into a reality that is indistinguishable from a scientific reality and a non-fictional reality (such as the setting of a science fiction book becoming more like the setting of a science fiction story).

4Murray (1938) defines need as “a construct (a convenient fiction or hypothetical concept) that stands for a force (the physico-chemical nature of which is unknown) in the brain region, a force that organizes perception, apperception, intellection, conation and action in such a way as to transform in a certain direction an existing, unsatisfying situation.”

5Here is a simplified analysis of this model: “Self-determination theory (SDT) is a macro theory of human motivation and personality, concerning people’s inherent growth tendencies and their innate psychological needs. It is concerned with the motivation behind the choices that people make without any external influence and interference. SDT focuses on the degree to which an individual’s behavior is self-motivated and self-determined…” Read more at source: Wikipedia https://en.wikipedia.org/wiki/Self-determination_theory#Competence
nation on science that includes an understanding of the corresponding socio-political environment. Some academic circles have begun to conceptualize science fiction simply as future politics. This is due to the incalculable role of the human imagination in driving science and the ever-expanding centrality of science in politics.

Granted that tribalism is the prime motive force that drives African politics even after the first decade of the 21st Century, are there ways to tinker with this force to drive science consciousness and ultimately the production of science and its consumption in Africa’s ethnic nationalities?

Ethno-religious identities are extremely significant in African societies. Ethno-religious sentiments define African politics, whether in elections or rule-making or the allocation of resources. Ethnic democracy therefore has become Africa’s contraption of liberal democracy. This peculiar brand of democracy cannot be wished away by pacifiers such as national or patriotic sentiments. Ethno-religious sentiments are the motive driving force and consciousness drivers that connect the spirit of the people with their goals. Attempts to downplay on these sentiments are tantamount to attempts to disconnect the people from their energy source. National agendas are extremely difficult to achieve because the people do not feel them strongly as opposed to ethnic agendas for which the beneficiary collective has the greatest passion and feeling of responsibility.

There is ample evidence from political psychology on the psychological foundations of ethnocentrism and why it is a motive force that drives politics in ethnically heterogeneous societies. Ethnic science fiction stereotypes share in this psychological heritage. Ethnic science fiction stereotypes are fixed mental images – positive or negative – produced in the fictional world concerning particular ethnic collectives. Usually, the mental projections regarding the said collectives are drawn from actual stereotypes in the real world, and through extrapolation woven into science fiction stories. For example, the Igbo ethnic group of Southeast Nigeria as the lost Japan of Africa is a real-life stereotype identified by scholars judging from the area’s technological exploits during the Nigerian Civil War (1967-1970) during which this area sought to establish the nation of Biafra in that campaign. Using this as an illustration, a thousand versions and mixes of this stereotype can be infused into ethnic science fiction concerning the Igbos. Amplification in science fiction of the psychological foundations of ethnocentrism – which is the mother of invention. At this stage, innovative behaviour is born in the two ethnic groups. This is a hypothetical two-way conflict scenario involving only two ethnic identities. More complex scenarios would involve several ethnic groups in this conflict situation in a multi-ethnic polity.

In reaction, corrupt leaders past and present may find themselves taking a leap into technological investment and science business with billions of public funds stolen while in office. Billionaire businessmen who have never been politicians will consciously begin to add high tech manufacturing investments in their ethnic strongholds instead of doing only importation. A thousand things will happen. Someone from the ‘warring’ ethnic groups will start the technological arms race, that is an ethnic technological competition and everyone else will be caught up in it, either as proud players or enthusiastic spectators and fans.

**Positive Ethnicity**

I deploy the term positive ethnicity to describe a politically-engineered ethnocentrism for the attainment of specific developmental objectives of the state. Positive ethnicity does not initiate ethnocentrism per se but adapts it for socio-political developmental paradigms.

African governments must stop wasting billions of public funds on national integration efforts and rather build technoscientific transformations around existing ethnicities. Ethnicity has, rather than diminish since decolonization, grown to the level and force of ethnic fundamentalism which itself is the level that yields the greatest exploitable energy in ethnocentrism. At this level, nuclear and solar power plants can be built by the people without the support of expatriates; rockets can be built and taken to space; ten indigenous automobile brands can be built and mass-produced by one country in ten years.

In Nigeria the Boko Haram sect has arisen in the northeast and terrorized the country for close to a decade, and a similar Islamic fundamentalist group has arisen in Kenya terrorizing residents of that state with untold mayhem. Some of these ethno-religious fundamentalist groups have scientists among them and do make their
own bombs and other armaments of destruction. One wonders if bombs and ammunition are the only things these scientists can make. Definitely the scientists can make other things than weapons when challenged to do so in defence of their ethno-religious identities. That is, when challenged to do so, the scientists currently making bombs for their ethnic fundamentalist movements can certainly produce technoscientific artifacts that are not deployable in war in defence of the technoscientific image-identity of their ethnic strongholds wherein they believe so much and are ready to sacrifice their lives.

**Political Propaganda versus Ethnic Science Fiction**

Ethnic science fiction can be viewed as a form of political propaganda, yet the two concepts are fundamentally quite distinct. This distinction lies in their respective goals – while political propaganda is a control mechanism deployed on the masses to mop up their support by those in power or those seeking power, ethnic science fiction itself is a propaganda mechanism originating from the bottom and proceeding upwards, in response to certain ethnic yearnings, and its targets include both the masses and the political or the upper class. While political propaganda necessarily seeks to retain or capture political power, ethnic science fiction seeks to create an ethnic tension through image and stereotype building and enrichment, the resolution and denouement of which can only be an ethnic competition for technoscientific manifestations in the real world.

Their similarity is that they both deploy psychological techniques of influencing and controlling political behaviour. But the political behaviour produced by political propaganda can assume any form, including ethno-religious conflicts such as riots, while ethnic science fiction produces political behaviours that metamorphose into contagious innovative behaviour.

**Conclusion: Fanning Ethnic Pride for Technoscientific Competition in Africa**

While African governments have invested hundreds of millions of dollars in ethnic unification efforts, national pride has remained elusive for instance in Nigeria where the government has embarked on ethnic unification projects since 19736. Granted that ethnocentrism is lower in countries where corruption has been tightly checked than in those countries where it has gone out of control with the attendant widespread poverty, one wonders whether corruption and general governmental ineptitude alone are the determinants of ethnicity and ethnocentrism. The problem is obviously more than meets the eye. The pluralistic origins of ethnocentrism is therefore obvious. But can African political systems outgrow ethnocentrism? Can a hundred years of more urbanization eliminate Africa’s ethnic homelands, the strongholds of ethnocentrism? When will liberal democracy replace ethnic democracy currently found in African states? When will African states become African nations so to speak?

Ethnicity without direction has been the bane of Africa’s technoscientific backwardness that has dragged well into the 21st Century. Ethnicity in Africa must be re-conceptualized as a positive energy source. Ethnicity’s intractability in Africa derives from the misconception of the phenomenon as evil and anti-developmental, especially where it manifests in the political sphere as ethnic politics. There are no specific directions provided for this energy to do useful work and so it finds its expression in and manifests as ethnic politics.

In multi-ethnic African states, ethnocentrism is truly a force, an energy source for development if accurately harnessed. This energy is not to be found in rhetorics like “unity in diversity” for which African governments and regimes have spent billions promoting without any tangible results; or at most the diversity in cultures of the ethnic collectives of a state are marketed for tourism. But the truth is that even tourism flies out of the window the moment the ethnic groups begin to disagree and some bullets begin to fly about. A horrific example is the case of Rwanda in 1994 during the ethnic campaign between the Hutus and the Tutsis in which over 500,000 people were slaughtered with machetes and locally-made guns in a space of three months.7 The socio-political and economic value of marketing ethnic diversity for tourism is infinitesimal as compared to the value of igniting their real strength. This energy lies in their mutual and natural an

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6 The National Youth Service Corps (NYSC) is a Nigerian example of such ill-conceived ethnic unification projects. The NYSC scheme was created in a bid to reconstruct, reconcile and rebuild the country after the Nigerian Civil war. The unfortunate antecedents in our national history gave impetus to the establishment of the National Youth Service Corps by decree No.24 of 22nd May 1973 which stated that the NYSC is being established "with a view to the proper encouragement and development of common ties among the youths of Nigeria and the promotion of national unity." (Source: http://www.nysc.gov.ng/about/about.php) The program has been met with serious criticism by a large portion of the country. The NYSC members have complained of being underpaid, paid late or not paid at all. Several youths carrying out the NYSC program have been killed in the regions they were sent to due to religious violence, ethnic violence or political violence. (Source: https://en.wikipedia.org/wiki/National_Youth_Service_Corps). The slaughter of the participating youth reflects the truth that they are not perceived as a symbol of Nigeria’s unity, but are immediately identified as the outer group in the regions where they are posted during periods of ethnic tension. Therefore the billions of naira spent on the project is a national waste.

7 The Rwandan Genocide was a genocidal mass slaughter of Tutsi and moderate Hutu in Rwanda by members of the Hutu majority. During the approximately 100-day period from April 7 to mid-July 1994, an estimated 500,000–1,000,000 Rwandans were killed, constituting as much as 70% of the Tutsi and 20% of Rwanda’s total population. The genocide was planned by members of the core political elite known as the akazu, many of whom occupied positions at top levels of the national government. Perpetrators came from the ranks of the Rwandan army, the National Police (gendarmerie), government-backed militias including the Interahamwe and Impuzamugambi, and the Hutu civilian population. Read more at Wikipedia. https://en.wikipedia.org/wiki/Rwandan_Genocide.
imosity which triggers mutual competition in the set direction. Ideals such as “unity in diversity” and the promotion of the economic value of ethnic diversity in tourism are not trigger points: that is, they do not represent the ignition in the ethnic engine. Rather, these pacification approaches to ethnic diversity management can only ‘soften’ the people and disconnect them from their internal gunpowder.

Ethnic science fiction meets this internal gunpowder and fertilizes the imaginations of the ethnicities involved. This combination initiates an ethnic technoscientific competition in the real world, but first as a stiff competition in the fictional world on the parameters of ethnic technoscientific inventiveness. By putting Africa’s technoscientific takeoff on the wheels of her century-old ethnocentrism to draw on this energy source to power and sustain this takeoff, an *ethnic innovation policy* can be politically and socially constructed.

Ethnic leaders carry the burden of the image of the social community as their self-image. Ethnic leaders therefore emerge to work to maintain certain acceptable image-identities of the group. Ethnic science fiction influences and directs ethnic leaders to construct the technoscientific image-identity of their ethnic groups vis-à-vis the image-identities of the outer groups, resulting in a unique model of ethnic competition wherein the paradigm for elite competition tilts more towards the psycho-social than the economic. Essentially therefore, where ethnic science fiction is produced, the ethnic leaders would be the initiators or the backers and sponsors. Ethnic science fiction then is an instrument in the hands of ethnic leaders in the attainment of certain image-identity and subsequent mobilization of the ethnic group for technoscientific developmental objectives. Additionally, it is a psychological instrument in inter-ethnic competition which yields productive conflict – a necessity situation that produces technological innovation.

As science fiction makes its in-road into Africa’s socio-political environment through a domestication process which represents the emergence of African Science Fiction, care must be taken to ensure that these invaluable visions of the future carry within them the latent fuel of Africa’s ethnicity and ethnocentrism to emotionally connect the diverse peoples to these visions to ensure their ownership and survival, thus setting off a technoscientific identity-competition among the relevant ethnic identities.

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