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# Reclaiming African perspectives in knowledge production: a look at ethnographic perspective to research

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**Abstract.** This paper looks at the concept of Africanization of research processes to provide a renewed way of looking at Africa and African as producers of knowledge. The paper contends that colonialism has caused immense epistemological violence among Africa communities both in the continent and in diaspora. To help reimagine research methodology under the current neoliberal registration system of knowledge, this paper calls for reimagination of how we think and act research. This means calling out the current numerical simplification of how we look at Africa and African and start employing storytelling as a form deconstructing the gendered numerical essence of knowledge making. The paper sits within a decolonial perspective to start looking at the ways in which numbers can start mourning the loss of African knowledge making process under the current neoliberal supervision of what gets to be called truth.

**Keywords:** Colonialism, Numerical, Africa, Africans, Stories, Gendered Numbers.

## Introduction

*The term “participant observation “and “ethnography “ are essentially synonymous. (Bell, Bryman and Kleinknecht ((2023)), p.226))*

This paper attempts to engage with African ways of being and knowing and the ways in which that can help revitalize the ‘how’ of producing knowledge (Ngara, 2008). This paper comes from my personal experience with students who keep asking questions on the connection between numbers mostly found in dominant quantitative research and the everyday stories we tell. I add this perspective to help mold and shape new ways in which a gendered and colonial process meant to produce truth in the name of numbers and truth making can equally be a process of committing genocide among marginalized communities and for this instance the lives of African communities (Nyaga and Nyaga, 2023). To do this I argue that when numbers are storied and tuned into African ways of knowing and living, then we can have a just society. I am also conscious that African experiences are not singular, neat and lean. That being the case, it is imperative for any social justice researcher to work with African stories in their compounded and various ways. It means being close to the realities and values of African people without necessarily mapping them as singular and understandable. It is the art of imagining African people beyond numerical metrics that this paper wants to situate itself.

The paper argues that the pedagogy of storied numbers in research must look at how knowledge is gendered, and that numerical truth is equally colonial, masculine and toxic. What that means is that numerical truth is genocidal and is the reason why many African people continue to face everyday colonial oppression. In an African context, it is the role of the researchers and participants to make numbers cry, agonize and grief for any social justice work to be achieved. To grief is seen in some contexts as production of tears and in others as an activity of giving accounts for loss of peoples who continue to be disappeared by a society that is more focused on numbers on the backs of African people. In this instance, researchers within and without Africa should not focus on numbers of tears participants ‘produce’ but rather remember grief as a form of epistemological process that is inconsolable and fixed. What that means is that we cannot resolve African grief or reconcile it numerically. Our ethical role as researchers within African contexts is to remember the histories of atrocities African peoples have faced under colonial violence and the ways in which their stories continue to be redacted and simplified in ways that are meant to reproduce violence on African bodies. This paper therefore will look at African knowledge and perspectives as an antidote to the colonial epistemologies that continue to shape everyday knowledge production in the academy. First, the paper looks at the gendered life of numbers. I will look at the components and values of African knowledge. After that I will look at how African epistemologies can inform knowledge production in ways that are decolonial, ethical and political. I will then add the advantages

and challenges we may face when employing other forms of epistemologies into a colonial perspective in knowledge production. I will then conclude the paper with a call for an intersectional perspective to production of knowledge.

### **The Gendered Truth**

This paper puts a wager that contemporary western and colonial research is violently masculine and toxic in terms of its epistemological processes. Such a wager is not new and has been discussed previously in multiple works that calls for the decolonization of research as an objective process of knowing (Smith, 2022). I argue research processes are grounded on a colonial and imperial competitive, objective and reductionist approach (Nyaga, 2023) meant to espouse the white man as the knower and the rest of the living as those to be known (Said, 1978). Those to be known have to be broken into simplicities that can then be reflected into the light of the knower. This assumption marks the unknown as dark and bleak and that the knower who is the light must lighten them for them to be seen as living. Light becomes symbolic to living. Any space that is dark such as Africa comes to be marked as needing light for it to live (Mbembe, 2016; 2001; Mbembe and Dubois, 2017). The assumption is that dark is dead and lacking any ontological ground. This marks such grounds as demonic (McKittrick, 2006) and lacking any reality of themselves. To bring light to such spaces marked as *tabula rasa* is to give some reality that would eventually give life to the dead matter. White men escapades into the land of the unknown have been known as a process of rites and rituals meant to make them men (Wamley, 1999). They get lost into the unknown and when they come out from the unknown unscathed then they can claim their masculinity. It is a process of conjuring the dark that white men become men. Such a form of colonial conquest is at the center of research. Many researchers enter communities with the aim of exercising their gendered self to claim a space in the community of men (Kimmel, 1992; 1994; 2010). They encroach into the land of the living to objectify and simplify them into a singularity that they can now claim their expertise. Expertise is therefore a gendered term that allows those others who are now white heterosexual able-bodied men to claim their place in the arena of men. The researcher becomes the redeemer of the dark and broken making.

The question of a toxic and masculine epistemological process that employs standardization of all that it comes across is in and of itself a colonial masculine violent process meant to reduce and simplify anything that comes across as emotional or instinctual (Nyaga, 2023). White heterosexual able-bodied men are the precursor of this colonial and gendered forms of violence against anything that is living, all because they want to affirm their masculine self and claim an eureka celebratory moment. Many works have been written on the survey and mapping and the ways in which land is turned into property that can be owned (Blomley, 2003). Such forms of conversion of land to property comes with a unique form of

violence that divest Indigenous peoples, Black peoples, women, and other communities of their values, cultures, realities and histories all because men must own them. Such forms of ownership are geared towards confirming men as men. To be men, one takes control of anything and everything that is living and reduces it into something that can be objectively tangible. This means removal of all incomputable elements of the living by taking away its spirit. In a way, spirit is the ultimate challenge to the white man's proclamation of eureka moment. Since the spirit fails computational metric meant to simplify life into an object, it has to be marked as a compounding factor that must be discarded and forgotten. I am reminded that the spirit is the everyday breath that the living must perform for them to live. To take away that is to destroy life. I am also reminded that the spirit is the breath that helps the living to vocalize. To deny the spirit existence is to equally take away their vocalizational power to produce speech. The spirit produces echoes and the very process of taking the spirit out of the equation of life is equally a way of denying the living the power to challenge everyday life through a process of downloading the echo into a system that decants it into a voice. This argument means that voice denies the existence of spirit in what we say and do with our speech. In that regard, I argue for the return of the spirit into the voice to bring back life that can challenge the existence of free living with free speech in terms of how we get to know what we know as life. To take away the spirit is to make the living objects that are immovable and cannot challenge taken for granted ways of thinking. These are colonial and imperial mechanisms meant to exult a white subject as the standard that must be embodied by the rest for them to be marked as knowing subjects. As a knowing subject, one must lose their life for the white man to claim their manliness.

To claim that research is gendered is to assume that the truth we mostly look for in research is all about imagining ourselves as experts who are knowledgeable and who can solve people's lives. This savior syndrome found in research has helped maintain a particular heteronormative belief that men, who are mostly seen as creators of knowledge, have a divine responsibility of saving others who are seen as broken and waiting to be solved. Most research focuses on the researcher as an objective being who can distance themselves from emotions and as such a public man. On the other hand, they who are researched are assumed as irrational and private and as such need the rational man to resolve their brokenness. This is even more precarious when it comes expanding our understanding of a heteronormative society where there are two spheres of life which are private and public; and subsequently the failure to name that which lies in the gap of the two spheres. The fact that there is no name to express the gaping space helps us start to think whether such left out spaces have something that can help inform research in ways that are ethical and political. I look at this gaping hole as a space that has been considered as silent and having not voice. In fact, the gaping hole is avoided since it is connected to the death of knowledge and the only thing that comes from it

is an echo. The gaping space is considered as without a voice and the role of the social worker is to give it voice to know itself. The issue I bring forward to this discussion is that such a space that is devoid of voice and reason must be assumed as non-existent and as such forgotten. I speak of this issue as a fundamental element in knowledge production because of the ways in which people of African descent who are considered as belonging to the gaping hole continue to be left out of policy and practice more so in the west. The assumption is that African bodies are unintelligible and have no emotions and voice and therefore the role of the researcher is to save them from the gaping hole by giving them voice and emotion. I say giving them emotions because the African body is assumed to be instinctual and cannot speak.

As such, the researcher's role is to train this instinctual being to speak and express itself in ways that can help tell the truth about it. While such a perspective looks charitable and ethical, we need to look at how such benevolence of giving voice to the instinctual being simultaneously silences in ways that allow the researcher to speak through them. This form of saviorship, it should be noted, destroys the realities, values and histories of a people assumed to be buried in their instinct and for them to come out of the gaping hole into the surface of civilization, they will need to speak like their savior. To speak like your savior means the loss of once balance. This kind of sympathetic form of saving those who are instinctual has helped conceal forms of anti-African racism we continue to witness in knowledge production. It is becoming clear that research is part of colonization and imperialization of the African soul and as such it is important to think of the ways in which we need to resolve through decolonization, the everyday violence, marginalization, imperialism and exploitation of African people both in the continent and in diaspora. Research is connected to the ways in which peoples' stories are simplified into a commodity that is sold in the marketplace at a profit. Many African Indigenous people have been reduction through objectification. What that means is that researchers who visit African spaces imagine them as instinctual beings who have echoes rather than voice. In most instances, when researchers find themselves in such a social setting, they employ an objective method of data collection mostly called observation to watch them from a vertical view. This form of observation assumes that we can be objective in our research by creating a distance between us and the object of introspection. The assumption is that since they cannot voice themselves, we can as well work with their everyday habits and behavior to get an adjective truth about them. What that does is deny them the space to speak about their reality and values.

Of course, the assumption is that we cannot understand them since knowledge production is based on understanding this other that is not us or of us. Understanding as an epistemological perspective believes that this other who is before us can be reduced or simplified into an object that can be introspected and understood. It is in the process of reducing and simplifying them that we witness the loss of life of participants in the name

of knowledge and truth making. Such a loss is never understood as a loss since in the first place there was no life (Butler, 2020). It is in this process of knowledge production that African communities are forgotten through the process of understanding. According to Levinas, we cannot understand the other without a loss. He says that we always arrive late whenever we want to understand this other person that is not us. In his discussion, Levinas reminded us that we need to instead imagine this other in ways that Silvia Winter calls to be human as a praxis. What that means is that we need to look each other in the eye in ways that help us see ourselves in the eye of the other in ways that are reciprocal. In the hermeneutics of self, Foucault calls us to look at the other as a necessary ethical requirement to get to know ourselves through them.

In this instance, research becomes a way through which we form ethical relationships with each other in ways that are not heteronormative and dualistic but rather intersectional. What that means is that the research and researched dualism has disappeared in ways that are ethical so that we start imagining what lies in the gaping hole that is left to swallow those who do not look like us. The fundamental element of intersectionality in research is to acknowledge the gaping hole in knowledge production as a necessary area of informing our research so that we can broaden our complex ways of imagining how we know what we know, our realities and values. Such a focus to the gap that I call the African space is to not only engage with the hole but also acknowledge it as a requisite space that can help us imagine what we come to know as knowledge. What this means is being vulnerable to the loss of what you know as knowledge. We equally need to understand that instincts are an important element of social life and that the echo which causes noise in what we want to know may actually help us hesitate when we want to know. Such a hesitation is an ethical requirement that can help define and intersect a host of other ways of knowing that can bring an interlocking perspective.

## **African knowledges Values**

### ***1. Indigenous perspectives***

Indigenous perspective to knowledge production is based on relationships, respect, radical love, environment and spirituality (Dei, 2000; 2002; 2008; Gegeo and Gegeo, 2001 Nyaga, 2017). Each of these components works in intersectional and complex ways such that they fuse together in ways that cannot be singularized (Nyaga, 2017). That way, knowledge production becomes more of a multicentric process of acknowledging each other as capable and knowledgeable based on their own context and realities (Dei, 2008; Nyaga, 2017). Relationships in indigenous knowledge making involve having to build long lasting friendships and connections such that even after the end of the research project, both knowledge makers remain connected and committed to each other's welfare (Nyaga, 2017). In this instance, knowledge takes a secondary role while relationships become the primary reason for

knowledge making (Nyaga, 2023). In a market-based economy, knowledge is made the fundamental element in getting to know our social world while ethics takes a back seat (2023).

The dangers with this kind of epistemological orientation are the fact that it individualizes and creates an environment of competition that does not recognize relationships in knowledge production as fundamental ethical requirements. Many indigenous communities in the world believe that respect is essential in knowledge production (Chilisa, 2012; Dei, 2008; Nyaga, 2017). What that means is that people who engage in knowledge production are engaging at a level of recognizing each other's intellectual capacity based on their histories, values and realities (Chilisa, 2012; Dei, 2008; Nyaga, 2017). In this respect, there is no space for epistemological hierarchy where the researcher is the knower, and the researched/participants are the unknowing other (Reyes-Cruz, 2008). This kind of colonial hierarchy within the current knowledge production processes is seen as disrespectful to participants since it undermines their role as knowledge makers within a ground that is ethical and contextual. In retrospect, knowledge production within the Indigenous communities believes in contextual experiences and realities as a fundamental ethical element in knowledge production (Dei, 2008). The participant who has experienced issues under research focus is imagined as knowledgeable and capable of expressing their lived realities in ways that are unique and meaningful (Reyes-Cruz; 2008). This Indigenous perspective to knowledge making, believes that knowledge production processes and practices should not be grounded on dualistic assumptions that leaves gaps between those who know and those who are to be known (Reyes Cruz, 2008). This kind of knowing the other and representing them; which is fundamentally grounded in western epistemologies, is imagined as disrespectful and disregards people's ways of life as fundamental ethical requirements in knowledge making (Chilisa, 2012; Dei, 2008; Nyaga, 2023).

Radical love as an essential ethical element in Indigenous epistemologies is evident among many Indigenous communities of the world (Chilisa, 2008). What this means is that for knowledge to become ethically valuable, radical love must redefine its methodological compass. To claim that we need to be radical in loving the other; more so in knowledge production is to remain true to self and the other who must be seen within the spectrum of knower. It means being vulnerable to discomfort of questioning from the participant and yet maintaining our relationship to them. It is a question of the researcher acknowledging their colonial place in knowledge production and being open to exercise their position as researcher in the betterment of society. It is a form of lost colonizing grounds that mark researchers as experts and participants as these others that must be known and represented. It is the loss of comfortable grounds that researchers rely on for them to produce knowledge. That loss helps transform the self into these others that are mashed up with the other in ways that break the dual relationship between

the knower and the known. To speak of radical love is to be lost into the other in ways that help form coalitions of purpose for social justice sake (Nyaga, 2023).

Love must be radical in that those who are in the process of producing knowledge must be ready to be lost in each other. According to Foucault on hermeneutics of self, we must be prepared to lose ourselves into the eyes of the other. The other becomes an ethical requirement for us to get to know who we are through disappearing through their eye pupil and being overturned in their retina. That means that each one within the knowledge making process must be prepared to be disoriented by having their world turned upside down. That disorientation is required for us to start losing the comfort brought about by the balanced nature of knowledge production espoused through normative research. To lose the grip on the world that we have known can be disorienting and yet such a loss is required to disturb our expert ground that renders others as nonbeing. That looseness is a place where research becomes more of an ethical exercise rather than knowledge production. The issue with such a loss is that we can be assured of our humanity through the eyes of the other. That assurance helps us to reach our psychic abilities and spaces since we know we have someone with us which can help us conquer and trouble that which lies in our unconscious mind.

This psychic conception to knowledge production believes and looks at knowledge as a violent process of understanding this other that is not us (Nyaga, 2023). To move that epistemological violence as expressed in colonial knowledge production to a level of awareness, we need to radically and reflexively transform it into ways that forces it to reimagine itself. That would mean using the researchers and researched (now co-producers of knowledge) as the reflective mirror effect that helps colonizing knowledge see itself in the eyes of the other that has suffered the violence. This would mean recognizing the researcher as the quintessential representation of the colonizing knowledge. The researcher has to acknowledge their implication to the colonizing knowledge and be open to vulnerability. This would then mean that the encounter between the researcher and researched is not a comfortable one but rather informed by colonial violence that continues to violate and marginalize the researcher. I would call such a development between the researcher and the researched as a violent encounter that never forgets but remembers the colonial epistemological atrocities caused among Indigenous communities of the world. To remember is a cognitive process but it is equally represented as bringing people together in their variousness. Key to this process of Indigenizing knowledge production is a coming together between the different standpoints to produce knowledge in ways that are not ending but rather continuous. It means that knowledge must be a process of relationship making to help transform the way we live and exist.

Accordingly, those who are in the process of knowledge making must be prepared to express themselves in ways that recognize their humanity (Reyes Cruz, 2008). Research therefore becomes a form of

psychic self expression coupled with acknowledging each other as capable of producing knowledge. To that end, indigenous perspective to research believes in the role of spirituality/psyche as a fundamental component in knowledge production. In fact, spirituality is a central element that threads other epistemological components together to birth new orientations to knowledge making (Wright, 2016) . What that means is that our unconscious mind has over time been captured by the colonizing western epistemologies that promise comfort and yet that comfort helps violate those others that are marked as broken, compounding and disposable. It is this other who is marked as unknowing that the researcher ethically requires to start breathing again. To make that claim that researchers are not breathing is to affirm that they have lost the capacity to exist in a world that is relational. Such a claim seeks to employ psychic methodologies that start to save the researcher from their epistemological whiteness that has consistently denied them their right to exist in ways that are human. This claim therefore asserts that contemporary colonial research processes have reduced and simplified the researcher into a property that can be owned. To be quantified into property is to be simplified and reduced in ways that help squeeze life out the self. I have argued consistently that this form of squeezing out of the human must equally be seen to cause trauma which is then transferred to participants. To counter this kind of traumatic experiences, the researcher must be ready to heal and remember their place in the universe. They can only remember that place if they form respectful relationships with the participant, who must then save the researcher from himself. This means that the art of research becomes one that the hurting is remembered into the community.

This art of commodification of the self is made even more difficult by the current neoliberal paradigm which emphasizes on normalized society that must expunge any notion that is outside of heteronormative knowledge making (Nyaga, 2023). In that respect, we are born and socialized to fear and hate our psychic self; yet that self is what constitutes your existence. Instead, we are trained to psychically lock ourselves out into the unconscious and wear a mask that is not us (Fanon, 2008). Researchers are therefore more focused on the mask for their research since it has familiar epistemological grammar that they understand; and yet such an understanding renders them dependent and non-imaginative. Such a focus is surface oriented and unprepared to open the instinctive language that defines people's realities and their value. This space that is psychic has been pathologized and in most cases medicalized to keep it from appearing in public research spaces. As a researcher who is ethical and political, the work is more on venturing into those uncharted psychic territories and start asking various and compounding questions that have never been asked and for which there is no normative language to ask them. This space of knowledge making helps to break and open ethical boundaries of meaning making by allowing a form of transformative solidarity between knowledge makers

such that we can be ready to question and queer what we have been told as rational and true knowledge.

## ***2. Decolonizing***

According to Smith (2004), research has received a negative connotation among Indigenous peoples of the world due to its connection to colonial violence. Research has participated in the colonization of Indigenous communities of the world through mapping, surveying and reducing their land into property that can be owned and subsequently authorizing colonial spatial elimination of cultural values and ways of living of Indigenous peoples of the world. It is through research that many Indigenous peoples were expunged violently from their land. Survey as a research method was employed to subdivide the land and turn it into property that could be owned and sold in the market. The assumption was that land was vacant and had to be occupied in ways that were Eurocentric. Such an occupation meant deleting any previous form of life that was predetermined as valueless. It meant clearing the land and anything that was nature to bring forth a form of life that was proper. In that regard, Indigenous lives were cleared out of the way to start initiating proper life. This consideration argued that the land was improper and had to be rationalized in ways that allow property to exist on the backs of Indigenous peoples.

It is through research that many Indigenous communities were marked as unintelligible and objects of study (Smith, 2004). Many anthropologists are not immune to the ways in which they continue to encroach Indigenous land while simultaneously committing violent social atrocities while representing themselves as saviors of Indigenous peoples. As a consequence, many Indigenous peoples are now aware of the ways in which they have been over researched (Smith, 2004). What that means is that they have been objectified and simplified and the only thing researchers seem to see in them is templates of data that have and must be scrapped to access knowledge. Such scrapping has left behind generational and cumulative trauma that continues to affect Indigenous lives in various ways. When data is accessed, it is then processed and branded in a manner that is replete with colonial violence and destruction to allow a singular truth about Indigenous peoples. Such a system of producing knowledge eradicates every relationship and kinship that is the building block of Indigenous epistemologies and takes the holistic backbone of Indigenous values and ways of life. In retrospect, Indigenous knowledge making processes and methodologies believe in the decolonization of knowledge making processes (Dei, 2008; Nyaga, 2017; Smith, 2004). In the current regime of knowledge making, it is becoming clear and explicit that decolonization has been co-opted within the market forces. It is important to note that the model of decolonization presented in this paper is that which is unmapped by Indigenousization. Market rationality has encroached into the decolonization

process in ways that provide manufactured justice meant to sustain the status quo.

Reconciliation within research must be critiqued while at the same time indigenizing its processes. Reconciliation is one among the many decolonizing practices that have become common terms meant to bring forth new ways of living in peace; and yet it has become clear that they simultaneously reproduce colonial violence among the people supposed to benefit from it. This term has a business origin and looks at balancing the asset and liabilities in a balance sheet. What this does is that any Indigenous issue is counted as liability that must be turned into an asset in order to sustain profit. Indigenous collective trauma is labeled as a problem that must be processed in order to turn into profit while depicting the neoliberal market as savior and redeemer of Indigenous peoples. What that does is a form of forgetting of Indigenous histories, values and realities and there reproducing colonial violence in new ways. Trauma becomes a commodity that must be rationalized and sold for profit.

What that means is that the principles of indigenous knowledge that are grounded on the land must as well inform the decolonization process in knowledge production. Those principles that employ respect, radical love, reciprocity, bravery and irreducibility of the human must be seen to inform the ways in which we produce knowledge. Decolonization in knowledge production means that those engaged in production of knowledge must acknowledge the role of colonization and the loss of life. Such losses must be given an account to allow new forms of grieving them. Research therefore must be imagined within the context of inconsolable mourning. What that means is that we cannot give a numerical count of grief. The form of decolonial accountability must be imagined as unfixable, compounded, and various. Research must be aware of the terms and conditions that enhance and reinforce violent colonization of Indigenous spaces. What that means is to recognize the role of colonization reproducing trauma and pain that indigenous peoples face and continue to experience in their everyday life. Research must grapple with the role of markets in the determination of what is true, proper and what is false and unintelligible.

### ***3. Intersectionality***

Within the African Indigenous context, all things are considered as complex and unique (Dei, 2008; Nyaga, 2017; Wane et al; 2019). What that means is that we cannot be singular in understanding African Indigenous life processes; since they employ a holistic methodology that imagines beyond understanding (Wane et al, 2019). In fact, the question of spirituality and healing is a fundamental element of knowing and yet within western epistemologies spirituality is marked as a compound that must be atomized and rationalized in ways that are numerical and accountable. Such forms of numerification are in and of itself a means of social genocide in the name of knowledge production. To remain linear and neat within the African Indigenous context reflects social elimination and militarization of other

ways of knowing. Such forms of redlining of Indigenous values and realities for the purpose of truth making has been a major element of colonial and imperial violence among Indigenous peoples of the world; all purposed and rationalized as the only means of knowledge of Indigenous peoples.

In the context of North America where there are multiple and various forms of knowledge, it is important to recognize and acknowledge the role that is played by each facet of knowledge making in the overall elaboration and demonstration of social life. It is equally important for any research working within and without Africa to recognize who intersectional those facets of knowledge making work to bring a compounding effect of reason and unreason such that each feed into the live stream of the other in ways that are inseparable. We cannot know the reason if not without unreason. The birth of reason is tied to the existence of unreason. Such a form of complexity should inform how we come to know what we know; and help open new avenues of knowledge making that is beyond understanding. What that means is that in an African context to understand is limiting and as such we should be open to imagination which helps sustain our human power to transcend the now of understanding that continues to lock us in social epistemological prisons.

In retrospect, knowledge directed by colonial and neoliberal market rationalities believes in the singularity of knowledge and that any emotional or instinctual relationship between knowledge should be discouraged (Dei; 2010; Nyaga, 2023; Reye Cruz, 2008). This Eurocentric model of knowledge making believes in the power of disciplinary boundaries. A case in point is the present-day research approaches such as case, study, ethnography, phenomenological approach, narratives and grounded theory (Creswell, 2013), which borrows from different qualitative schools of thought. Each of these approaches are expected to stay in the safety of their disciplines and must never intrude on each other. The argument is that once one disciplinary approach has an issue, they must not infect the other. The onus is to help keep and sustain knowledge production as neat and linear as possible in ways that keep corridors of knowledge manageable and governable. This form of epistemological governmentality helps in organizing who gets to be scientific versus the unreasonable.

This management of approaches renders each of these approaches to look at social issues in ways that are singular, fixed, rational and competitive; and in the process disassociating with emotions and spirit (Foucault et al; 2005). These disciplinary corridors or what must be seen as epistemological redlining drawn between the approaches enable and authorize violence brought about by each of these qualitative approaches on each other; all because of the urge to be sciences. This Eurocentric and colonial disciplinary violence is made possible by the quantification of the boundaries; whereby all compounding knowledges are earmarked as valueless and uncountable. Those boundaries are supervised by quantitative positivist approaches that must decide and rule which discipline enters epistemological citizenship. Such a process makes sure that each discipline

is locked up in its approach; making it possible for these disciplinary approaches to be ruled, managed, surveilled and governed in ways that are continuous, consistent and unverifiable. Even though qualitative approach to knowledge making has been conceptualized as open to difference, it has overtime been controlled and governed by science in ways that its openness is rationalized by science therefore opening new colonial redlining in terms of determining what is science and what is pseudoscience. The question we need to ask is how we can engage with what gets to be forgotten between the markers of what authentic science is and what is pseudoscience. That line of difference is undeterminable and has no grammar to determine the violence that goes unnamed.

An African Indigenous approach to knowledge must acknowledge this form of disciplinary colonial violence and decide to break the boundaries that encourage such form of epistemological lateral violence between disciplines. This will mean that all boundaries are broken down through employing an indigenous perspective or element discussed earlier to open space for new epistemological grammar that can start to name this colonial violence that has no name and that help sustain unverifiable and unaccountable violence. Key to this breakdown is infusion of intersectionality as a psychic process of imagining these boundaries as complex based on social markers such as race, gender, sexual orientation, disabilities/abilities among others. What that means is blurring the boundaries in ways that make it unclear, cloudy and teary to come to an end of knowing . This form of clouding is meant to take space in the moment of epistemological disciplinary divisions and flood the border with instinctual feeling in what Mbembe calls animalism. In his work, Mbembe says:

*“As a result, the new animism merges with electronic and algorithmic reason, which is its medium and its envelope, and even its motor. On the political level, this new animism is a knot of paradoxes. Virtualities of emancipation are to be found in its deepest core. It announces—perhaps—the end of dichotomies. But it is also able to serve as a privileged vector of the neovitalism that feeds neoliberalism. The new animist spirit must therefore be critiqued. The aim of this critique would then be to contribute to protecting the living against the forces of desiccation. Therein lies the signifying force of the African object in the contemporary world.” P.7*

Within the African indigenous perspective in knowledge making, researchers must imagine themselves otherwise. Researchers must be open to getting lost in the state of imagination rather than trying to reduce and simplify their human capacity to create. Understanding is one part of being human; and yet it lays prison cells on us when we give it authority to define our end. Understanding stands on our way to be holistic human. While we

may as well overstand, I want to argue that we need to open other spaces to human transposition that can allow ethical creativity.

What that means is to see ourselves in the eye of the other as espoused in my previous item on intersectionality. This means that the other is an ethical requirement to our very existence. The other helps us to introspect ourselves in ways that can open our other suppressed self in ways that can help imagine the other as an extension of me. What that means is that we have an ethical responsibility to reflect others through our eyes in ways that create an environment of getting to know each other and the self. This process of knowing the self through others opens a space of vulnerability and loss which is a necessary ethical obligation to the existence as social beings. To be critically reflexive within the African context therefore means working with our vulnerable selves and being open to losing the self for the sake of imagining this other that is not me. The other becomes our graveyard where we lose the world we know and instead imagine ourselves on this other that we have been told is different from us. This kind of loss or death is one that is not between the master and the slave where the master loses themselves in the slave only to appear through them. This new form of loss is based on mutual respect and growth.

#### ***4. Critical reflexivity-numbers do not cry***

Numerical elementation of knowledge production must be understood as constituted within the neoliberal framework where everything is commodified and branded for sale in the marketplace (Nyaga, 2023). Within the numerical worldview, the 'self' becomes self once it is produced and made readable and representable. This self must be simplified into numerical representation for it to be known as a readable body. The self so represented must then be imagined as having a voice to act speech and be acted by the speech. The self enters a world of speech and is separated from wild echo. But this self must remain separated from the wild for it to be worldly. The wild becomes a compound that must be kept off the self that has entered a world of atomization. That is what the world calls giving life.

The self may mean so many things from an individual to those who are close and known to us. If this is the worldly direction, we take in getting to know ourselves, then what happens to those others who do not add up to the metrics of the world that define us? What happens to the wild when the world is selfing us? Critical reflexivity compels the self to start remembering those others who fail to be accounted for just because they do not add up or look and speak like us. To understand this perspective which I refer to as the African Indigenous perspective, we need to look at how we work with our environment or the wild. We need to look at other expressions that are more than the speech that constructs the world that we live in. We need to look at the role of echo in speech making. In most cases, we are told to dig deep into our self. Questions are raised as to who is this self that we must know. How do we get to know this self that is in us and

that will help us stay in touch with ourselves. How do we come to own this self that is us? To dig deep is to break the ground or the land we stand on with a purpose of knowing what lies below and beyond it. What goes beyond us is marked as a lie that must be made true. This conversion must be science based and undertaken to turn the lie into a version of self that is understandable and readable. That self must be able to converse if it is to be accepted into the world of verses and voices. It is creating a gap to know and imagine what is left of us. In most cases, we consider this a form of mining and conversing to our hidden self as necessary in taking care of ourselves.

The question that lingers is why 'mine' your self? Of course, under the current neoliberal register, we mine because we aspire to accumulate ourselves on others for a profit. We mine because we want to own ourselves. We mine because we want to be proper. We mine because we intend to singularize and individualize the self that is us? We mine because we want to finally proclaim 'this is mine'. We find ourselves mining others not for the purpose of mutual benefit but for the purpose of self exultation and owning the others that we turn or convert/converse to our self. What we mine others we recreate or reprint ourselves on others such that even in our death brought about duplication of the self on others, we continue existing through others. Death becomes a renewal of life for us who mining others. In retrospect, our mining others bring death on this other that is not us. It is to inject ourselves in others that they continue dying and disappearing through existing us. This kind of self knowledge must be on the back of others for it to be scientific. This kind of social process of knowing is built on the disappearance of this other that is not us so that we can remain alive in our death. This master and slave kind of knowledge leaves the slave as a graveyard where the master engraves or buries themselves on the body of the slave in ways that objectifies the slave into a non-living and unintelligible being. Such a definition of the slave as unintelligible and nonexistent helps rests the master while also providing a conducive space for the existence of the master.

Within the African context, we are called upon to be prepared to provide the self as graveyard for the existence of those others we do not know and yet we expect their existence can be mutually beneficial. Many corporations have employed this concept with the intention to produce more profit while disregarding others. Those others are understood as compounded variables that prevent producing a singular truth about the social world that can translate to profit. These others that have no voice are understood as compounded since there is no metric within the current knowledge metric to measure their veracity and capacity to act speech. The best possible way to remain rational as a world of speech is to forget and expel the speech less from the world of speaking and knowing. Within the context of African indigenous ways of knowing, we are called upon to be vulnerable to imagining the loss of this other that fails to enter the world of versing.

The problem we have in the current neoliberal context of knowledge making is that knowledge is produced not for anything other than surplus value (Nyaga, 2024). If numbers are the only impetus to knowing ourselves, we lose the chance to imagine how numbers have emotions that when utilized in ethical ways may help transform how we perceive ourselves through others. An African Indigenous perspective to knowledge making helps us imagine that our ethical role is to make numbers cry. Numbers have to be reminded that they too have emotions and that their tears are part of being alive. I employ pedagogy of giving life to numbers since as currently constituted, numbers are and have been understood as existing outside the objective truth. For numbers to exist, they must express their vulnerability through everyday actions meant to reach out to their psychic self. They must transform themselves into vulnerable spaces of knowing themselves as beings with emotion. Numbers must be beinged. Until such a point when numbers exist through others, society will continue to lie to itself that it is secure in numbers.

I had a conversation with a colleague one time that if numbers were storied then we would have so many students passing their mathematical tests. What that means is that numbers are so self conscious to remember their emotional state and intelligence. Within the context of African indigenous cultures, numbers have always been expressed as stories. Numbers must be written and spoken in ways that help them to exist with others that are otherwise. Numbers must be compounded.

Therefore, to think in critical and reflexive ways means being vulnerable to engage with the discomfort of getting to know the other. It is being ready to lose one's self in order to resist individualization that preset our current knowledge system. It is an invitation of the unknown to collaborate in ways that are mutually beneficial. To be critically reflexive is to dig deep and engage with historical ruins brought about by colonial violence and exploration of our African peoples who were taken ways during the slave trade and sent to other lands. It is engaging in that journey of the unknown to look for those others who lost all because of a society that is deeply rooted in capital accumulation and disappearance of African people. To be critically reflexive within the African Indigenous epistemic approach is to remember and re-member ourselves in ways that help us make connections to others that we have lost through time and space. It is joining hand with those who are willing to sacrifice for the sake of others.

### ***5. Remembering***

In a world meant to resist community forum as the fulcrum of African epistemologies, we stand to forget and lose our ethical place in knowledge making. Such an ignorant society is bent on self destruction due to its social disconnection and individualism. Atomization is an important principle of any colonial settler society because it helps in profit maximization and recreation of property. A society of property is one that is oriented towards linear regression and simplification. Property is built on

the concept of forgetting other social life to properly organize life in calculable terms and conditions. Propertied life is conditioned by law and order. In such a life, land is surveyed in ways that help to discount any history or value that may have existed prior to or before the invention of property. Property creates lines of difference such that your existence is differentiated and removed from others. It is a system of rules that allows people to remain disconnected from emotions. The line is expected to mark my end and the start of this other I am told is my neighbor.

That line marks the start of a legal society that is bent on causing legal violence to anyone and anything that encroaches on my property (Agamben, 2005). I am made the property secluded from others in ways that imprison me into the 'I'. In that respect, we come to learn the importance of the dictum "my liberty stops where yours start". The current situation is built to mark property as the beginning of freedom and yet that freedom is an illusion of liberty that is not of us by us. They who have no property have no freedom to exist. They have no right to be human but rather are understood as human wrongs that must be punished through exceptional ways. Such exceptionalism is grounded in the rule of property, where they are ordered to be proper.

Property is tied to being human and the rights thereof. Those who have no rights to be human and therefore lacking the freedom must be turned into property to be owned. They must be surveyed and deducted into objects of ownership. This has a fundamental implication to understanding how African people were marked as subhuman who have no freedom and rights and therefore predetermined as social errors who must be owned like a piece of property. This is the element that paves the way to the enslavement of African peoples who were exploited in ways that were violent and dehumanizing. To speak of knowledge production therefore cannot be without remembering those colonial atrocities caused on African peoples both in the continent and in diaspora who lost their life because the world was hell bent to forget them for the sake of knowledge. As a social researcher, it is ethical to remember those histories of epistemic events of colonial violence. I am hesitant to make the unity of African people part of remembering since we recognize the diversity of what is Africa and Africans. African peoples have unique ways of engaging with their social world. They are unique to the extent where they compound what we know as the truth about them. They have the spirit that troubles who we claim to be as researchers. They unsettle the unity of purpose meant to collapse their reality. They are known and yet slip from our grip once we plan to grip them. They remain defiant against any singularity of their existence. That is the strength of the African Indigenous epistemic system of knowledge.

## **6. Context**

Prevailing methods and methodologies employed in research have focused upon creating knowledge outside people's lived experience and realities (Gegeo and Watson, 2001; Nyaga, 2021; 2023; Smith, 2012). In

fact, qualitative research employs a method meant to free data from its context, reality and values. Context is understood as a hindrance and a compounding factor to truth making and as such must be expunged for the sake of generalization of result to another context (Faulkner and Faulkner,2014; Fraser, 2004; Harrington, 2005; Madison,2005). To decontextualize data means a particular form of loss that must be considered for research to be scientifically accurate and reliable. In western epistemology, discounting other accounts is a form of erasure to affirm white narrative as the only form of knowledge that is true and therefore justify cultural and epistemological imperialism. Key here is to destroy existing realities, values and histories of a Indigenous people by marking them as tabula rasa and therefore portray science as the start of history or knowledge. Western science becomes more valued than emotions and emotions that define Indigenous context. Context is assumed to be more complex and compounding and therefore fails the process of commodification of knowledge which is pertinent within Eurocentric epistemologies. Anything that is not commodifiable or cannot be simplified into a truth then must be expunged from the process of knowledge making. This clearly makes connection between science and markets as the fundamental definition and framework of producing knowledge in western research.

Within the African Indigenous knowledge systems knowledge is context oriented (Asante, 2006; 2007; Chilisa, 2012; Dei, 2008; Mazama). Context helps knowledge makers to ground or connect what is known within a space of unknown and reproduce truth in ways that are intersected, compounding and complex (Dei, 2011; Elliot, 2005; Gegeo and Watson.2001). Knowledge making in the African Indigenous context must be connected to African Indigenous people's realities of life and their values (Dei, 2011). African knowledge systems are not focused on producing singular knowledge devoid of people's lived realities and values, but rather sees truth as just one among the many other ways of knowing (Dei, 2011). This means that what we know as truth must be put into practice (consider this as an encounter between the truth and realities of peoples) within the context that is African to imagine it otherwise. This allows new forms of questioning of the truth in ways that allow other ways of knowing to speak within a context that is African. African speech is an important aspect of knowledge making and must be seen to express its multiple truths that counter in respectful ways fundamental singular truth. This makes it impossible for one truth to take precedence over and above other ways of knowing. The issue of scientific and neoliberal knowledge making is the commodification (consider this as a form of imprisoning truth so that it cannot be in concert with other truths) of truth for sale for profit which denies it the opportunity to be questioned and twisted from without.

I also argue that African Indigenous knowledge systems have existed through oral tradition (Furniss, 1992). Orality has allowed knowledge to pass through time and space without necessarily being locked

up in western books. People become holders and vehicles of knowledge such that what is truth is made pedestrian and available to all. That availability of truth has provided space to challenge the known and birth new ways of knowing hence allowing creative knowledge making processes. A story told yesterday is contextualized today in multiple ways to fit people's everyday realities and context. This African Indigenous system methodologies have allowed for greater imagination of what is knowledge to create spaces for people to reimagine themselves and their environments in ways that are community based. This means knowledge produced remains within the community. That does not mean that it cannot be taken up by other communities to improve their own lives.

Key to African Indigenous knowledge systems is that once such knowledge is from one context to another, it is allowed to morph in ways that fit another context. This form of knowledge transfer allows the test of prior knowledge into a new context therefore maximizing its utility and efficacy. Research ceases to be a process of truth making but rather put truth into work or practice. Research becomes more of community development and capacity building rather than storing it in western libraries where they continue to accumulate dust. Western libraries are repositories of knowledge that have over time become graveyards of knowledge that is not meant to change societies and communities. Libraries have become neoliberal granaries where they are kept not to transform societies but to produce surplus value. The argument made here is that western science has accumulated knowledge that is fundamentally meant to produce profit on the backs of African Indigenous people's lives. Such an epistemological loss of context helps forget people's lives in ways that must be thought of as a form of social death of communities. Consequently, knowledge production within the western scientific community is made possible through the death and destruction of other ways of knowing.

### **Concluding Remarks**

Throughout this paper, I have argued that western knowledge systems are gendered and rationalized to fit within the scientific positivist paradigm. Such a research process allows knowledge making to be understood as a process producing a single truth meant for the market. That system employs colonial violence as a quintessential element of knowledge making. That violence is made possible through the everyday architecture of how knowledge is produced; such that other forms of knowledges; among them African Indigenous knowledges are violated and dismissed as compounds that cannot be simplified or atomized. Such a Eurocentric architecture allows for spatial vertical differences within the rubric of knowledge making. Such verticalization of knowledge creates a computational difference between what gets to be known as truth and the rest. Such computational difference has an effect in terms of who we conceptualize the world we live in. That difference allows for an epistemological independence of what is known and the dependence of

what is not known. The known and the unknown have remained separate from each other to allow for differentiation of who gets to be marked as consumer of knowledge and who produces what is consumed. Those who produce get to be citizens and they who consume are marked as deplorables. This narrative of consumption earmarks Africa as an everlasting consumer of western alms and therefore Africa becomes a continent of dependent savages who cannot rise to humanity. This colonial narrative of marking African as an everlasting dependant identifies Africa as a child that must be cared for and help to develop into a legal person. This paper therefore must be seen within the context of African indigenous decolonization of western science to start to reimagine knowledge in ways that are grounded on people's ontologies. Failure to remember African people's realities of life must be seen within the context of Anti-African racism.

On the other hand, the African indigenous knowledge system employs a nonlinear and nonviolent approach. The African knowledge system believes that truth and its veracity is made possible by the error. Error or a wrong makes the right and truth to be and as such we cannot forget the error as the fundamental ethical demand for truth to be accepted. This means that African knowledge systems are grounded on the context and emotions of people and that any forms of violent separation is ill informed and its colonial and colonizing. Knowledge within African society is supposed to be for community capacity building and should be based on the context.

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### References

- Agamben, G. (2005). *State of exception*. University of Chicago Press.
- Asante, M. K. (2006). A discourse on Black studies: Liberating the study of African people in the Western academy. *Journal of Black Studies*, 36(5), 646-662.
- Asante, M. K. (2007). *An Afrocentric manifesto*. Cambridge, UK: Polity Press.
- Blomley, B. (2003). Law, property and the geography of violence: The frontier, the surveyor and the grid. *Annals of the Association of American Geographers*, 93(1), 121-141.
- Chilisa, B. (2012). *Indigenous research methodologies*. Thousand Oaks, CA: Sage.
- Creswell, J. (2013). Five qualitative approaches to inquiry. In J. Creswell, *Qualitative inquiry and research design* (3rd ed., pp. 69-110). Thousand Oaks, CA: Sage Publications.
- Dei, G. J. S. (2000). Rethinking the role of Indigenous knowledges in the academy. *International Journal of Inclusive Education*, 4(2), 111-132. <https://doi.org/10.1080/136031100284849>
- Dei, G. J. S. (2008). Indigenous Knowledge Studies and the Next Generation: Pedagogical Possibilities for Anti-Colonial Education. *The Australian Journal of Indigenous Education*, 37(Supplementary), 5-13. <https://doi.org/10.1375/S1326011100000326>
- Dei, G. J. S. (2002). Learning culture, spirituality and local knowledge: Implications for African schooling. *International Review of Education*, 48(5), 335-360.
- Dei, G. J. S. (2010). *Fanon and the counterinsurgency of education*. Rotterdam, Netherlands: Sense.
- Dei, G. J. S. (2011). *Studying, researching and teaching African Indigenous knowledge: Challenges, possibilities and methodological cautions*. Pretoria, South Africa: University of South Africa.
- Elliott, J. (2005). *Using narrative in social research: Qualitative and quantitative approaches*. London, UK: Sage.
- Fanon, F. (2008). *Black skin, white masks* (New ed.). Pluto.
- Faulkner, S., and Faulkner, C. (2014). *Research methods for social workers: A practice-based approach* (2nd ed.). Chicago, IL: Lyceum Books.
- Fraser, H. (2004). Doing narrative research: Analysing personal stories line by line. *Qualitative Social Work*, 3(2), 179-201.
- Foucault, M., Gros, F., Ewald, F., and Fontana, A. (2005). *The hermeneutics of the subject: Lectures at the Collège de France, 1981-82*. Palgrave-Macmillan.
- Furniss, G. (1992). Oral culture and the making of meaning. *African Affairs*, 91(363), 271-276.
- Gegeo, D., and Watson-Gegeo, K. (2001). "How we know": Kwara'ae rural villagers doing Indigenous epistemology. *The Contemporary Pacific*, 13(1), 55-88.
- Harrington, C. (2005). 'Liberating' critical ethnography: Reflections from Fiji garment industry research. *Anthropology Forum*, 15(3), 287-296.
- Kimmel, K. (1994). Weekend warriors: The new men's movement. In H. Brod and M. Kaufman (Eds.), *Theorising masculinities* (pp. 259-287). Thousand Oaks, CA: Sage.
- Kimmel, M. S. (2010). *Misframing men: The politics of contemporary masculinities*. New Brunswick, NJ: Rutgers University Press.
- Kimmel, M. S., and Messner, M. A. (1998). *Men's lives* (4th ed.). Boston, MA: Allyn and Bacon.
- Kimmel, M. S., and Mosmiller, T. E. (Eds.). (1992). *Against the tide: Pro-feminist men in the United States, 1776-1990—A documentary history*. Boston, MA: Beacon Press.
- Madison, D. S. (2005). *Critical ethnography: Method, ethics and performance*. Thousand Oaks, CA: Sage.
- Mazama, A. (2003). *The Afrocentric paradigm*. Trenton, NJ: Africa World Press.

- Mbembe, A. (2016). Africa in the new century. *The Massachusetts Review*, 57(1), 91-104.
- Mbembe, J.-A. (2001). *On the postcolony*. Berkeley, CA: University of California Press.
- Mbembe, J.-A., and Dubois, L. (2017). *Critique of Black reason*. Durham, NC: Duke University Press.
- Mbembe, A. (2024). *Brutalism*. Duke University Press.
- McKittrick, K. (2006). *Demonic grounds*. Minneapolis, MN: University of Minnesota Press.
- Ngara, C. (2008). African Ways of Knowing and Pedagogy Revisited. *Journal of Contemporary Issues in Education*, 2(2). <https://doi.org/10.20355/C5301M>
- Nyaga, D. (2017). New possibilities for school curriculum: Praxis of Indigenous Peoples in Kenya. In N. Phasha, D. Mahlo, and G. J. S. Dei (Eds.), *Inclusive education in African contexts: A critical reader*. Springer, pp. 139-149.
- Nyaga, W., and Nyaga, D. (2023). Chapter 6 Africa beyond Africa: Afro-pessimism as an Ethical Demand. In *Critical Reflexive Research Methodologies*. Leiden, The Netherlands: Brill. [https://doi.org/10.1163/9789004681644\\_008](https://doi.org/10.1163/9789004681644_008)
- Nyaga, D. (2023). Chapter 7 Markets Logics in Research Process and the Denigration of Black Bodies. In *Critical Reflexive Research Methodologies*. Leiden, The Netherlands: Brill.
- Nyaga, D. (2023). Chapter 5 Beyond Codified Logics of Ethics: Jungle and the Ethics of Non-violence. In *Critical Reflexive Research Methodologies*. Leiden, The Netherlands: Brill. [https://doi.org/10.1163/9789004681644\\_007](https://doi.org/10.1163/9789004681644_007)
- Reyes Cruz, M. (2008). What if I just cite Grasiela: Working toward decolonizing knowledge through a critical ethnography. *Qualitative Inquiry*, 14(4), 651-658.
- Said, E. (1978). *Orientalism*. New York, NY: Vintage Books.
- Smith, L. T. (2022). *Decolonizing methodologies: Research and indigenous peoples* (Third edition). Bloomsbury Academic.
- Wamley, B. H. (1999). The public importance of men and the importance of public men: Sports and masculinities in nineteenth-century Canada. In P. White and K. Young (Eds.), *Sports and gender in Canada* (pp. 24-39). Toronto, ON: Oxford University Press.
- Wane, N., Torres, R. A., and Nyaga, D. (2019). African Indigenous Governance from a Spiritual Lens. In E. McKinley and L. Smith (Eds.), *Handbook of Indigenous Education*. Springer, Singapore. [https://doi.org/10.1007/978-981-10-3899-0\\_45](https://doi.org/10.1007/978-981-10-3899-0_45)
- Wright, R. M. (2016). Indigenous Knowledge, Spiritualities, and Science: An Ongoing Discussion. *Journal for the Study of Religion, Nature and Culture*, 10(2), 133-136. <https://doi.org/10.1558/jsrnc.v10i2.29488>