No More 'Solutionism' or 'Saviourism' in Futuring African HCI: A Manyfesto

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Research in HCI4D has continuously advanced a narrative of 'lacks' and 'gaps' of the African perspective in technoscience. In response to such misguided assumptions, this paper attempts to reformulate the common and perhaps unfortunate thinking about African practices of design in HCI4D – i.e., largely as a function of African societal predicaments and Western technocratic resolutions. Through critical reflection on a range of issues associated with post-colonialism and post-development, I examine the possibilities that various historical tropes might offer to the reinvention of the African perspective on innovation. This leads to the consideration of how engaging in critical discussions about the future dimensions of African HCI can allow for grappling with the effect of the coloniality of being, power and knowledge. Developing on the ideas of futuring as a way of dealing with the complexities of the present – in this case the coloniality of the imagination - the paper ends by discussing three tactical propositions for 'remembering' future identities of African innovation where the values of autonomy are known and acted upon.

CSS CONCEPTS • Human-centered computing~Human computer interaction (HCI) ~HCI theory, concepts, and models

ADDITIONAL KEYWORDS AND PHRASES: African HCI, HCI4D, Design Innovation, Manyfesto, Futuring, Postcoloniality, Decoloniality.

1 INTRODUCTION: A REFLECTION AND A PROPOSITION FOR FUTURING AFRICAN HCI

During the closing keynote of the 3rd African Human-Computer Interaction conference (AfriCHI), Anicia Peters, one of the founders of the AfriCHI community reflected on the ideas, or rather the challenges and opportunities, that brought about identifying discursive spaces whereby taken for granted perspectives on technology innovation can be examined and discussed. Questions posed ranged from 'what would work' in rectifying the unfortunate stories of the past to 'what could allow' for reinventing African identities of innovation in HCI? Would it be recognising the 'alternative' development discourse in HCI4D [56,185,186] or embracing 'alternatives to' the postcolonial narratives of the global south [5, 20, 29, 104, 195] or rather adopting community-led initiatives that champion for and extend situated ways of doing in HCI? [99,145, 179]. This paper responds to these, and more pressing questions by posing, what future dimensions of African HCI could be imagined and performed to allow for subjective things *to know* and *think of* the pluriverse [70]?

Although the intention of this paper is not to provide simple answers to such questions, the emphasis is on reflecting upon a range of ideas that recognize taken-for-granted narratives of African innovation. Such issues have manifested in the subfield of ICTD, specifically those that point to how pre-packaged technological solutions cannot deliver social changes in Africa in the sense perpetuated by the global development community [178]. It also recognizes how the mismatch between the objective of development (which is about building human capacities to address social conditions) and the essence of technology (which is about the amplification of human intent towards intrinsic growth) might not ensure material and political prosperity [179]. This paper responds to such discourses by offering a different formulation of the common and perhaps

1073-0516/2022/1-ART1 $15.00
http://dx.doi.org/10.1145/3571811

unfortunate thinking about African practices of innovation in HCI – i.e., as a function of African politico-economic predicaments and Western ecomodernist resolutions[1].

The attempt towards uncovering 'what would work' in rectifying or 'what could allow' for reinventing future dimensions of African HCI identities is not an isolated issue as it develops on earlier accounts that have shown the complexities of asserting locality in the language of innovations [16, 34, 35, 193]. The emphasis here is not on contextualizing the often-fluid identities of African HCI researchers and practitioners [8, 29, 193], but more concerned with how unsettling the universalized language of techno-science can open possibilities for developing the capabilities of African communities to grapple with modern conditions of globalisation [18, 52]. This is developed on the backdrop that the models informing design innovation perform within a specific mode of identification, albeit in ways that denote how existing structures of modernity create dependencies while polarizing differences [89, 91]. With the awareness of the dependencies of HCI on the Western construct of diversification, there is the possibility that the emerging dimensions of African HCI would be associated with/or in comparison to the epistemologies and methodologies that underpin HCI's interdisciplinarity. And it is the consideration of how differences can be celebrated to give rise to the performance of alternative reading of the identities of innovation in HCI that this paper seeks to explore[2].

Adding onto such efforts, this paper attempts to shed light on the 'abundance' of local practices of innovating Africa while also pointing to the 'ruination' of some Western and pan-Africanist ideals of progression in Africa. Reflection on a range of historical tropes, the paper argues that expanding the futuring practice of HCI in Africa ought not to be premised on the development of alternative approaches to design thinking and making, but instead focus on how situated alternatives might direct other dimensions of subjectivities, as in identities, in Africa. This has significant implications, in creating a reflexive narrative about the place of technology in restructuring social life in Africa; in understanding how to design, evaluate, and deploy interventions that are diagnostic, participatory, and emancipatory.

This paper is structured as follows: Section two discusses related literature that examines different dimensions of identity politics, interdisciplinary in HCI, and the cultural practices informing the design and adoption of digital innovation in Africa. Section three provides some justification for the intellectual exercise, discloses the positionality directing the analysis, and outlines the approach adopted for the reflection. The section also accounted for the implications of adopting the politics of a manifesto in futuring African HCI identities and considers how conflicting cultures of innovation might have de(futured) the social imaginaries informing social relations in Africa. Section four examines the conceptual assumptions underpinning various dimensions of post-development and post-colonial approaches to computing in an African context and attempts to illustrate how their epistemes might have camouflaged the values of solutionism and saviourism that needed to be decolonised. Adopting the concept of 'remembering' as an option for decolonising the

[1] Ecomodernism as a techno-centric alternative to sustainable development advocated for the proportionate use of material resources to improve the human condition of living in a liveable society. Its manifesto suggests that "a good Anthropocene demands that humans use their growing social, economic, and technological powers to make life better for people, stabilize the climate, and protect the natural world" [24 p.7]. Critics have pointed to how the Ecomodernist organising principle is underpinned by the concept of 'techno-determinism', whereas its modus operandi is 'techno-solutionism' [161]. Although the ecomodernist have promised scientific approaches that can lead to the decoupling of production and consumption, researchers have pointed to how its sensibilities for collective prosperity open and encloses certain futures [161]. Such issues have resurfaced in ICTD narratives that point to how technocratic packages and interventions are not enough to command impactful social changes in a market-driven global economy [179]. The use of the term predicaments and resolutions against problem-solution is that the latter denote the continuity of an activity.

[2] This is a decolonisation exercise in the sense that it first seeks to 'dismember' the framing of the African perspective of innovation as an 'Other' narrative in techno-science and then move toward 'remembering' how Africans reform nature/ or react to nature through design thinking and making [192].

composite of the African personalities towards the future [192][3], the paper concludes by discussing theological, cultural, and political pathways in African tradition that can amplify the foresight and actioning of actors towards emerging challenges and opportunities for innovation.

By drawing upon a collection of conceptual ideas to make a case for investigating African communities in their particularities, the structuring of the paper might be considered as depicting the metaphor of the fruit mixer [197] in the attempt to illustrate how different rules of engagement direct the shift from a post-development to a decolonial framing of computing research in Africa. It is also important to highlight that the adoption of the politics of a 'manyfesto' (as in a worldview where many worldviews fit) against that of a manifesto (as in a dominant political principle) is developed on the requirement for continual engagement with the plurality of the social world in ways that does not require a linear program of critique and reflection[4]. This led to the conclusion that the primary contribution of this paper is in the questions posed and the discursive pointers provided to better understand how relations of power direct the imagination and performance of future identities of innovation from Africa.

2 BACKGROUND

As preparatory work for futuring African HCI identities, the conceptual provocation of this paper develops on the aspiration to make the African perspective of innovation more visible in contemporary discourses. The reflection identifies with the critical perspective of computing in and beyond developmental frames [49, 56, 75, 83, 92, 120, 177, 184] through to decolonial [15, 35, 36, 104, 157, 175, 182], and pluriversal perspectives of design [70,163]. This paper identifies with recent discourses in Africa HCI that engaged different dimensions of indigenization and decolonisation as tactics for discontinuing the simplistic categorization of specific perspectives to themes of appropriation, leapfrogging, and adaptation [6, 29, 97, 145, 159]. Consequently, such efforts have led to a range of discussions on how reframing HCI's practices of innovation through indigenous and situated perspectives can accommodate non-Western modes of knowing in technoscience [35,37,38, 39].

Regardless of such efforts, research has also shown how the paradigms informing design and development projects in the global south are rooted in Western epistemologies that are at best biased and at worst racist [7,14,61]. This is demonstrated by the way in which institutional biases are systematically embedded in designs, algorithms, and products that by function could discriminate towards certain grouping of people (see. [79] for example of technologies with racial biases). In design spaces, such informality biases can be identified in the way specific design projects perpetuate a particular view of prosperity and progression – albeit on neoliberal political appeals that view Africa (and African's) as social predicaments to be judged, decided, and confronted [135]. This led to the assertion that problem-solution as pairs represent a political position that

[3] In identity politics, the shift in subjectivities from character to personality has shown how the invention of the African subject matters as an established trope changes in pre-colonial and post-colonial times [126] – particularly from a largely Utilitarian (concern with desire) and Kantian (concern with autonomy) identities to combative tropes of self-imagined identities (concern with the care of the self). Some have argued that the earlier constitution of the African proper was concerned with building character by confirming to customary values as a way of belonging to/or becoming a member of an ethnic grouping. The shift to personality is primarily concerned with the person's will to know the unique traits of the self as a way of self-reflecting on the communal self [203]. This shift depicts how combative African identities are imagined and performed through the manifestation of a style of thinking about the self and others. As such, African personalities can be considered as a trilateral view of recognition that builds upon the hybridization of subjectivities across themes of ecology, ethnicity, religion, language, and culture. The framing of African personality, just as the racialised constitution of Negritude, thus attempts to capture the complexes of the African person through the analysis of the humanist ethos of African traditions, the spiritual perception of Islam, and the redemptive values of Western Christianity – what is often referred to as the triple heritage of Africa [116]. The issue I want to emphasise here is that the social imaginaries directing the reconstitution of African identities are not conceived on the individualism of the self nor the conformism to the communal self, but rather on how the interconnection between the person (not the individual) and the community can satisfy the quest for responsive personhood.

[4] For example, see. *Decolonial AI Manyfesto*. [online] Available at: <https://manyfesto.ai/index.html> [Accessed 3 March 2022].

can re-create the structural inequalities embedded in modern society (see. [52] or a critical view on such pairing as applied to the binaries of the colonized as living laboratory and the colonizer as the scientist).

In developmental discourse, the prevailing narratives has been about quantifying basic needs, proliferating sufficiency's, obscuring limits, creating scarcity, and normalizing dependencies [71]. Even in post-development discourses that have championed for self-reliance of communities, critiques have pointed to how its common approaches – from the economic and infrastructural projections of Goldman Sachs to the progressive and philanthropist approaches of Jeffery Sach, and the activist/intellectual position of Wolfgang Sach – oversimplifies the possibilities for addressing societal challenges brought about by the appeal for directed forms of globalisation [71,72]. Such misguided narratives have also led to paradigm shifts in international development and science and technology research, from a largely economic perspective of innovation in Africa to a collection of emerging discourses that were driven by situated epistemologies, evolving methodologies, and everyday lived experiences (e.g., [114, 195]). For example, Mavhunga's collection of essays shows how African artists and scientists produce knowledge outside formal institutional settings [114], thus offering a different reading of creativity, expertise, and innovation in ways that emphasize "knowledge that will subject economic growth to human needs rather than subject human needs to economic growth and development" [123 p.118].

In ICTD, the emphasis has been on how the need-based, market-drive, and problem-solving paradigm pushed by the 'Washington consensuses and their globalisation appeals might not bring about social changes to existing structural disparities in the global south [180]. An alternative, as suggested by Kentaro Toyama, is that aspiration-based approaches to social development are long-termed, can nurture human abilities, and acts as motivational forces to inspire changes in both personal behaviours and the structures of society [179]. Taking such a narrative into focus in HCI4D might point to how the colonial matrix of power has constructed the political and material state of the computing system in ways that depict the future formation of 'citizens-subjects' into 'entrepreneurs-consumers' as celebrating differences while suppressing diversities [61, 91, p.7]. The fundamental issue that remains is that of the material consequences of continuously experiencing modernity in its fullest forms without deconstructing its vocabularies, its templates, and its models. Arguably, the failure to interrogate the particularities of Western modernity in the postcolony (as in the here and the now) might signal the performance of a colonizing reality that promises growth and progress but instead threatens the prospects of being and living in a satisfactory society.

Adding onto how the colonial matrix of power might direct the relations of technological creativity, political economy, and geopolitics of knowledge, the remainder of this section situates the issue of futuring African HCI in different accounts of identity formation and cultures of innovation. The emphasise is not to map out discourses that situate the trajectory of African HCI and certainly doesn't suggest how the politics of innovation make clear ways in which design futures and defutures [73]. It is instead presenting a particular reading of how the politics of design - here design as a system of pre-configuration or correspondence that emerges from the interactivity between things that populate the social world - could inform African identities of innovation in HCI.

Such framing presents design's main project as reimagining the world in ways that make it possible for the social world to act back on its objects and redesign them. This is ontological in the sense that in remaking the things that populate the social world, the politics of design provide the basis for approaching the future of African HCI as a historically dependent *wicked predicaments* that demands context-specific *wicked re-solutions* that are both generative and contestable [131] [5]. Although conceiving the future dimension of African HCI

[5] Here, ontological design is considered a way of knowing, forming, and practising the world in its particularities. To Arturo Escobar, design is underpinned by different ways of thinking about the world and how to practice in it; be it the rationalist tradition of the sciences, the ontological dualism of Eurocentric modernity, or the relational ontologies of indigenous communities [70]. In forming emerging features of

identities as an ontological design problem of the coloniality of spaces and time might be new [58], the major issues identified concerning wicked predicaments in the literature related to its conceptual ambiguity and abstraction, its normative approach to solution findings and its lack of analytical utility in providing practical re-solutions [131].

Regardless of the effect of framing specific structural predicaments within Western epistemes as wicked, recent efforts have begun to examine how such social issues are framed and applied to the African context. For example, Niskanen and colleagues conducted a systematic literature review of how wicked problems have been adopted as a descriptive and theoretical frame for diagnosing everyday challenges and opportunities in Africa. This led to the suggestion that such residual concepts become manifested in contemporary discourse because of historical dependencies and contextual inter-relations that are both problematic and productive [131]. On the one hand, such relations are problematic as Western discourses have continuously portrayed inventions related to the descriptors of Africa as pseudo-problems that needed modernistic approaches to staging and analysis. On the other hand, the dependencies can be considered as productive as could provide avenues for tracing the epistemological orders that have constructed the imagination and subsequent expression of Africa as an ahistorical entity to be named, studied, and explained. And it is through the practices of approaching specific epistemic inventions as units of historical analysis that unpacking the coloniality of the social imaginaries that African matters of design *know of* and *think for* can be entertained. Therefore, the discussions in different parts of this section will attempt to show how approaching the African social imaginaries as an ontological design problem with multiple re-solutions draws into focus the complexities of futuring inventions imagined and practised within the Western canon of expression.

2.1 Complexities of Identity Politics – The Imagined, The Invented, and The Performed.

2.1.1 Of Africa and being African.

In this section, the emphasis is on identifying specific implications for approaching Africa and being African as a collection of Western inventions in contemporary discourses. First, there is the need to recognise how the process of invention emerges from a particular way of thinking about reality – and in particular an abyssal style of thinking about other cultures and values. One might argue that the invention of Africa as an established trope was developed on an imperial imaginary that sought to dissolve empires and territories with the purpose of economic exploitation and political domination [126] Therefore, inventions that were *imagined* on coloured (black and white) and epistemic lines (traditional vs scientific) would ultimately define and discipline. Even the pan-Africanist and nationalist construction of a wholesome Africa that consisted of independent republics was engineered on a grand design style that seeks to unite fragmented entities but instead goes further in staging local groups or communities into nation-states that triumph in 'cultural synthesis and dismemberment' [116]. The emphasis, however, is on how colonial legacies direct the interaction between people, places, and practices in the cartographic performance of Africa as a unified geographical entity.

Second, there is the need to recognize the complexities of biophysical identity formation, particularly those that were *invented* through a hegemonic mode of construction. This is developed on the premise that identity formation is a historical process (and not a stationary event) that emanates from a geopolitical orientation,

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African HCI identities as a site of ontological design, wicked problems are considered residual concepts that are difficult to formulate and adequately frame [107,148]. With no specific formulation and endpoint, such issues demand diverse interpretations of the functions of problem-making as what might appear to be a plausible re-solution might not be an option after all but a glimpse of a high-level problem-finding activity with a contentious subject matter of its own [59]. Or as critical HCI scholars have begun to emphasize, the sustained nature of the re-solutions of untamed issues themselves (such as poverty, inequality, and exploitation) and "the infrastructures on which solutions might depend" are "the very mechanism by which the problem can be reproduced" [52 p.2-3]. This thereby present the subsequent re-solutions of wicked predicaments as a technocratic process that might de-politicises the status quo upon which they emanate.

and as such, the utilities of such a positionality give value to the meaning attached to its product. The most common argument is that being African as a representation/expression of subjective things came about through the unequal relations of spaces and times; relations that point to how:

> "the idea of 'Africa' is a complex one with multiple genealogies and meanings, so that extrapolations of 'African' culture, identity or nationality, in the singular or plural, any explorations of what makes 'Africa' 'African,'are often quite slippery as the notions tend to swing unsteadily between the poles of essentialism and contingency. Describing and defining 'Africa' and all tropes prefixed by its problematic commandments entails engaging discourses about 'Africa', the paradigms and politics through which the idea of 'Africa' has been constructed and consumed, and sometimes celebrated and condemned.....Africa is always imagined, represented and performed as a reality or a fiction in relation to master references—Europe, Whiteness, Christianity, Literacy, Development, Technology (the comparative and colonizing tropes mutate continuously)—mirrors that reflect, indeed refract Africa in peculiar ways, reducing the continent to particular images, to a state of lack" [203, p.14-16].

Equally relevant to understanding the effect of an invention is how it's being *performed* within differentiated identity frames. Some have argued that the taxonomies of confiding anti-colonial African identities to the arbitrary construct of African proper, Africaness, and Blackness dismiss its combative dimensions in relation to themes such as ecology, geography, ethnicity, religion, culture, and language [128,203]. This raises the fundamental question of whether African HCI, either a sub-theme of HCI or a discursive invention of Eurocentric classification in computing, does exist. The simple answer would be that such an invention does exist, as much as such questions have been raised concerning ICT4D [75] and HCI4D [56, 186]. However, the issue that arises would be about how dominant HCI represents African narratives of innovation, and how in turn, African HCI researchers and practitioners domesticate and reproduce the connotation attached to its practice in HCI's discourses.

Such a question demands a critical analysis of how narratives of biophysical differences that have negated being African of the status of humanness could shape current and future identities of the 'Human' in HCI. As indicated earlier, the complexities of articulating what it means to be Human, African or of African descent miss the point that arbitrary construct and descriptive categories do not accurately represent subjective things in the social world. This led to the consideration of how concepts such as 'Man' and 'Human' are underpinned by an episteme that produces genre-specific dimensions of the figures of world history [123]. Although the status of the 'Human' in HCI has started to change with the framing of matters of design as more-than-human/other-than-human, this shift can be considered as a recognition of the genre-specific dimensions of being human. Such issues reiterate the question of who/what 'gets to be human in HCI' largely because the dualism of subject and object in design spaces often misses the point that human-as-subject are objects within a socially engineered category that classifies things that populate the world.

Adding onto the complexities of identity formation is the neglected question of whether being African, be it the Occident, the Aboriginal, the Native, or the Subaltern Other form part of the Hegelian framing of man-as-human or the other-than-human and more-than-human dimensions of Euro-centric HCI? Although the framing of more-than-human/other-than-human in design spaces has been largely in relation to non-human beings like insects, plants, rocks, and lakes, in ontological design, the emphasis has been on challenging the centrality of design agency as design matters are bounded by different forms of being [73]. Furthermore, a closer examination of the principles governing the categories of the figures of man-as-human might show the blurred relations between the vitalities of being referred to as an Other (i.e., the denial of existence as Human or the allocation of the status of non-being Human) and the patriarchal framing of the Human(s) in contemporary discourses. As noted by Mbembe, "in African tradition, human beings were never satisfied simply being human beings, they are constantly in search of a supplement to other human hoods. Often, they added to the human hood various attributes of the properties taken from the world of animals, plants, and various objects" [119, p.218] (Mbembe, 2021 p. 218). Therefore, the negation of the status of being-Human towards Africans might denote the possession of a specific genre of properties that signal a fact of a prior and conscious existence [123].

To further complicate the question of who/what gets to be human in HCI, one can argue that the entire episteme that underpins the disciple of modern design was developed on the historical circumstance that privileged certain experiences over others. When the assumptions directing the practices of modern design are considered colonial, one can identify how their colonising patterns of application would continuously influence the politics of designing our being: with being referring to both human and non-human things. And it is through the critical analysis of the episteme that determines the being of things that one can articulate the political implication of design in making the world. Drawing upon such a mode of recognition, the point here is that partly due to the colonisation of spaces and times in the postcolony, unpacking being African-as-human would first demand unsettling the negative connotation attached to Other beings as a verb and as a reality, and then begin to show how the framing of the African-as-Other denote a prior knowledge of the instrumentalities of the African person as a mystery that cannot be reduced to mere descriptors and identifiers.

A closer analysis of such a proposition might lead to the uncomfortable truth that the idea of 'man-as-human' is a recent Hegelian invention – with all its contradictions and lack of mutual recognition - that emerges through the distortion of other regimes of knowledge. This might also lead to questions of whether there are, or there is the need for, discursive differences in the framing of the biophysical aspect of the Human in HCI, and certainly how that might shape the materiality's attached to the interaction between the 'more-than-human' users and the 'other-than-human' interfaces [76]. Such an account would ultimately lead to the assertion that futuring African HCI identities are a continual process of decomposing the organising principles of HCI as an interdisciplinary and not an end project of its diversification.

*2.1.2 Human-Computer Interaction as ********* (the list gets long).*

There has been considerable debate among researchers and practitioners about what sort of research enterprise HCI is or could be, its formation and its status as a meta-discipline that examine issues of technology and society within different knowledge systems. As far back as the 1980s, the prevailing argument concerning the conception of HCI's general problem, practice and knowledge is that it is either a craft, a nascent applied science, or an engineering discipline [110][6]. More recently, the general assertion is that HCI as a meta-discipline ought not to have a specified general problem [41]; however, there is still the question of what set of practices are called upon to lead to re-solution to specific designs, and what sort of knowledge enable those practices to be recruited in design spaces [150]. There is also the consideration of how the general problem of HCI (domain of work, human, and computer) intersects with the practices of human factor and ergonomics, software engineering, and cognitive science – thus leading to complexities in articulating an alternative conception of the application of its knowledge practices as a catalyst to support the "the design of humans and computers interacting to perform work effectively" [110, p.9].

Although there is an acknowledgement of the lack of a solid philosophical, epistemological, and methodological core in HCI [78], some have argued that HCI ought to be considered as an eclectic interdisciplinary that could lead to implications for practice-oriented research, theory development, or the development of contextual knowledge that inform work practices [95,152]. Such issues have led to considerable debates about how the inter-disciplinary fragmentation, remarkable expansion, and stagnant

[6] Consequently, some have argued for developing a craft-like approach to HCI where the design, implementation, and evaluation of technology is by experimentation. This implies adopting a specific heuristic in addressing the design problems that might not guarantee expected outcomes [110]. Others have considered a science-like disciplinary order in HCI that relies on scientific knowledge – as in theories and models – to support the practices of addressing specific design problems [152]. This often takes the form of exporting theories or applying guidelines that might not necessarily be reflexive to the problem of designing effective interaction between computers and humans to support the domain of work. There is still the issue of how the dominant status of Western epistemologies that are embedded in the sciences might limit the engagement with emerging narratives across knowledge boundaries [42]. Others have argued for an engineering-oriented approach to HCI where the emphasis is on how design activities are to be thrown into design spaces and interaction situations using engineering knowledge as principles to specify the evolution of technology [150].

unification of HCI might denote the chaos of multiplicity in its development [43, 151] – but more importantly is the question of how such themes take form in its turns, shifts, and waves.

Therefore, the debate about the conception of HCI – either as a craft, applied science or engineering discipline – will ultimately lead to more complexities about the inter-disciplinary attributes of HCI. This is primarily about viewing HCI as a community of researchers and practitioners collaborating to solve the general problem of designing a world where many worlds fit [41], or as a scientific programme that relies on the values of objective truth, concrete knowledge, legitimacy and authority, making an impact, and bringing about changes [151]. Regardless of such conflicting narratives, the more prominent opinion has been on how HCI can systematically function in questioning other disciplines and traditions [42], on both micro and macro level.

More recently, a strong emphasis has been placed on identifying the particularities of HCI across professions and disciplines. This is not necessarily concerned with locating the cohesion of its core themes, but more about how to contextualise the generality and applicability of its practices as applied to or in relation to the knowledge practices of other disciplines. What this might suggest is that the vitalities of HCI can be identified in how it acts as a 'catalyst' for innovative ways of understanding technological innovation, and not in how it can be adopted as a service provider for bridging boundaries or interfaces of other disciplines [42, 152].

Regardless of such inspirations, one might argue that HCI as a field of inquiry is a 'child' of indiscriminate mating (e.g., human factor and ergonomics, the social sciences, the engineering disciplines, and design disciplines and so on), a 'second-hand citizen' or an adolescent striving to mature [151]. This is developed on the understanding that its earlier conceptions and current expansions in different disciplines point to how the 'magpie-ism' of HCI research can be a 'double-edged sword' [152, p.56]. Taking such an assertion further might raise the question of which side does African HCI belong? Or rather what does the future holds for African HCI researchers, practitioners, and educators in term of HCI's general problems, practices, and knowledge in African places? If a by-product of the breeding of Western-led inventions, then how does it get practised in spaces and institutions that have continuously struggled to de-Westernize? If an offspring of a second-class citizen, how then would the African perspective gain political recognition within the wider HCI community without the practice of paternalism? If an extension of an adolescent striving to mature, then how does African HCI reconcile the chaos of multiplicity that is inherent in HCI? [43].

Answering this end might shift attention to the fundamental questions of why an African HCI enterprise is needed in the first place, what purpose does/ or could it serve, and how would knowledge practices advance the African narrative in technoscience. What might happen to the African HCI research enterprise when one of the intellectual traditions of decoloniality - specifically those associated with 'delinking and detaching' [122] - are introduced to the expansion strategies of HCI4D? Will the awareness that the conception of HCI is a result of the de-centring of the attributes of human factor and ergonomics and engineering signal a disruption of its turns and waves as an adolescent matures? Or will seeing HCI for what it is, an intellectual creation of Western institutions and practitioners that can propagate the Badlands of modernity bring about submission to its episteme of 'domination' or a 'disobedience' to its principles of differentiation? How this might play out in the diversification of HCI is worth exploring, but not the focus of this section.

The emphasis, however, is that reinventing the future dimension of African HCI identities ought not to be developed on the backdrop of the early traditions of postcoloniality that have reduced the struggle for interrogating modernity/coloniality to tropes of institutional identity and geographical location [119]. As argued by Mbembe, when the emphasis of the 'post' – as in poststructuralism, postmodernism, and postcolonialism - conceptual frames are about emancipation-in-the-making, one might lose sight of the power dynamics that renders unthinkable other categories of knowing [119]. This is not new as decolonial approaches to design have pointed to how the coloniality of design thinking emanated from the relationship between the things that populate the social world [175]; thereby can impose a particular condition of

knowledge and might even dictate the correspondence between the present and the future. What is of relevance here is how the emphasis on individual subjectivities in the early postcolonial approach to computing might have co-opted grassroots efforts to delink from Ethnocentric paradigms as a project that is internal to Eurocentric thought.

2.1.3 Human-Computer Interaction for Development.

Although there has been considered effort in HCI to contextualisation 'interaction' to different cultures and contexts, the universal qualities attached to computing technologies might have created a hierarchical social network whereby the expansion strategy of HCI is premiss on domination and subordination. This is developed on the backdrop that the initial emphasis of HCI4D has been on how the reliance on the traditional assumption of HCI and the promises of ICTD can allow for dealing with the complexities of 'Other' human factors in the design and deployment of innovation [49, 56, 177]. However, the focus has shifted from the narratives of appropriation and translation to how the utilisation of traditional HCI practices within local conditions of work can allow for defamiliarizing the models informing innovation design [2, 32, 185]. Such efforts are meant to highlight how the 'design-reality-gaps' that underpin ICTD research in Africa might resurface in HCI4D's' interventionist approaches' to social scientific research and practices [83].

The fundamental issue with the interventionist approach to design is that social issues are reduced to objects of social engineering that operate on a culture of dependencies and disparities. Such a way of thinking in HCI4D has become hegemonic as it is now framed in the name of doing 'socially good' research that stereotypes African conditions as dystopia and Western situations as a utopia [139]. Equally relevant to understanding the complexities of HCI4D narratives in Africa is that capitalist structures of organisation have pushed for approaching the entirety of being as a social engineering problem that can be addressed systematically using established scientific techniques. This is a myth as one can identify with the learnings from earlier problem-solving approaches that underpin a discipline-free view of what HCI is or should be to international development [135]. The prevailing argument was that the vitality of a discipline-free view of HCI research in a developed context is in how it can provide transformative pathways for a social problem. This is demonstrated by the AltSchool Initiative, a pet project of Silicon Valley that developed on the grand idea that personalised learning can re-solve the problem of lifelong learning in the developed world. Unfortunately, the project ended as a rebranded business venture (Altitude Learning) that quantifies the supposed digital natives as capital, thus creating another layer of complexities in the effort to make digital technologies nurture intrinsic aspirations [23].What this suggests is that even with the abundance of supporting infrastructure and technology, social transformation in the educational landscape of the West is brought about through changes demanded and actioned by people - students, teachers, administrators, technologists, and policymakers.

A practical example of a development project that doesn't adopt a problem-solving approach to sustainability the global south is the Digital Green initiative in India, Ethiopia, and Ghana. What makes Digital Green's programme stand out is the emphasis on building human capacities through the amplification of existing aspirations and capabilities as drivers for intrinsic growth. Specific factors that might have supported its 'partnership/mentorship' approach to social issues is the avoidance of 'handholding activities' that could lead to the utilisation of packaged interventions [179, p.124]. What this might suggest is that people's inspiration brings about structural changes, not technology; technology is merely a 'means' and not the 'end' and that the problem-solution mindset is a dead end on arrival [52]. Even with the proliferation of the religion-like culture of technology as aa panacea of social issues, techno-solutions often present alternative techniques to organisations that could relieve man of the task to satisfy natural necessities, and as such doesn't necessarily demand changes to the underlying principles directing man's being in the program of existence.

More important, one can recognise how the constitution of colonialism - from the Latin word 'Colere' that means to cultivate or to design - is premiss on the need to organise non-Western institutions, territories, and structures under Eurocentric epistemological orders. The primacy attached to the ideology of 'newness' in

globalisation discourses denotes how design thinking emanates from the historical legacies of colonialism, imperialism, and capitalism. Therefore, the politics of thinking in the exteriority of Western logic of progression might be considered as disobeying the foundational epistemes of design. When such revelations are considered in contextualizing the centrality of HCI4D to 'development, design/intervention, and context' [185,186] and not to the 'human, technical artefact and context' focus of HCI [78], one can begin to wonder whether the futuring practices of Euro-American centric HCI would be underpinning the same objectives as that of Western discourses that defutured non-Western institutions and structures.

With the awareness of the primacy given to 'newness' as a rhetorical object of modernity [122], one can identify how the evolution of HCI, from its faces (human, technical artefacts, and context of use [78]) to its big questions (language of study, term of study, and object of study [31]) and grand challenges [169] adopt a universalised consensus towards its corpus. What is of relevance here is showing how the big questioning of HCI that focuses attention on the specific genre of man-as-human, technological artefact and embodiment of interactivity can engage with the geopolitics of innovation as applied to the context of Africa [26, 27]. This might lead to the question of whether African HCI researchers and practitioners ought to have critical reflections on what its big questions are or might be – which could be about the historical forces at work in responding to the implications of branching out from 'Here' to 'There' in HCI. Answering to such ends would ultimately lead to further complexities in futuring African HCI identities – among which is the question that, as pointed out by Shaimaa Lazem, 'What is African about African HCI'? in the first place? (Private conversation)

2.1.4 African HCI.

With the consideration of Africa as a discursive space consisting of a collection of 'imagined republics', the constitution of African HCI as a sub-theme of HCI can be considered as emanating through the synthesis of contested constructs that are open to both analysis and regeneration. Due to the realities of domination and resistance in such spaces, futuring African HCI identities ought to begin by questioning the global modernity template that depicts scenarios where often the African is presented leaning toward an enlightened identity. Such a way of representation denotes leaping from one's state of nativism to an urbanized state of despotism, whereas the use of terms like transitioning and catching up continuously places discourses of African innovation under the Western gaze of economic and political scrutiny. Consequently, such a paternalist approach to futuring Western-led inventions does not denote the aftermath of colonialism in HCI [61,62] but rather presents a new form of post-colonial colonialism [13] or super-colonialism [187] that sets precedence for the agendas of the global techno-future empire.

As recent efforts have shown, the African HCI community has engaged with critical perspectives in different traditions that have shown how indigenous and situated perspectives can direct the design and deployment of computing systems [5,29,37,97, 195]. What this might suggest is that the African HCI wider community has grown exponentially (and still growing) on the awareness of the importance of creating discursive sites where localized perspectives and experiences can populate the knowledge of techno-science.

In response to the calls for dialogue in such spaces and a distinctive identity, the AfriCHI and ArabHCI communities developed on the intersectionality of challenges and opportunities within the broader framing of HCI [11,12]. Other local forums such as the CHI-SA initiative have developed innovation clusters as a way of creating community-wide awareness of the implications of information and communication technology projects in South Africa [194]. Such initiatives have led to the identification of how different dimensions of HCI can be clustered with issues such as power relations, cultural aesthetics, community narrative, and knowledge production [68]. Such efforts have led to the expansion of HCI's practices across the African continent by the creation of local chapters in Egypt, Namibia, Kenya, and South Africa, to the organization of African HCI summer schools and the AfriCHI conference where 'bridges were built, barriers broken, and inclusiveness and empowerment' promoted.

Even with such recognitions, one might grapple with why HCI is not a well-established field of study in African universities [103], and how the practice of African HCI practitioners might not be significantly

informed by the praxis of informatics or HCI than that of computer science or system engineering [102]. One can attribute such issues to how the paradigms of computer science – encompassing themes of rationalism (e.g., mathematics), science (e.g., engineering and design) and technology (e.g., computing, information system, etc.) – might have emphasized the desire for developing a scientific/engineering programs that enforce the authority of rationality, progression, and modernization. It can also be argued that the paradigm shifts in computer science from a theoretical and conceptual focus to more of a practical scientific design are developed on the values of universality that normalize the Western episteme of knowledge production and consumption [151]. The general assumption has been that the sciences - the ideal hard sciences, the support sciences, and the soft sciences - demand recognition and authority due to their qualities of accumulation, replicability, and generalization [152].

In HCI more generally, the qualities of using the material procedures of the sciences are mostly premiss on how it can provide supporting models for examining and producing a formal account of scientific knowledge. When such issues are taken up in understanding some of the rationales why HCI is considered an ad-hoc area of inquiry in most African universities, one can recognize how disciplines like computer science and engineering would be granted scholarly status than areas such as informatics and information system[7]. This is not surprising as research has shown how even during African HCI winter schools, students prefer the engineering and technical dimension of interaction design to the aspects that explore values, culture, and meaning (See. [74, 100, 101]). This is further complicated as society has accorded high status to engineers, technicians and artists that are deemed worthy of recognition since they often engage in extensive mental activities that require rational (and in some cases non-rational) navigation of variations and probabilities. Scientists or intellectuals on the hand are mostly considered ethical social agents that can change the world by their tireless pursuit of concrete knowledge for humanity's sake - and as such conferred certain societal privileges by their choices, and claims.

Another possible rationale for the limited engagement with HCI in African Universities might be premised on the underlying structures that underpin the commodity paradigm of universities. With recent efforts toward decolonizing universities globally, it is evident that African universities are Westernized institutions or ethno-provincial sites of knowledge production [129]. Arguably, when African HCI is framed as an eclectic program that is loosely attached to the epistemologies and methodologies of the global south [1, 20], there might be possibilities to widen its adoption (and adaptation) to existing dimensions of computer science, software engineering and information system [1]. Or might even expand existing efforts for the development of 'living curriculums' and 'localized forums' [103, 143] where technical skillset, expertise, and knowledge needed to close the gap between theory and practice are deliberated and produced.

2.2 African Approaches to Design(s).

With the proliferation of indigenous perspectives in ICT4D and HCI4D research, the perception of technology innovation from developing nations has shifted from a developmental focus to a stationary space where exciting innovations are pioneered and engineered. This shift offers an ideal avenue for the localisation of design patterns, interfaces, and methods to fit into diverse work practices. Such issues have started getting considerable attention in different areas of HCI, among which is reflecting on the political implication of adopting dominant paradigms and methodologies in interaction design projects of the global south [94,195]. Such efforts have shown how postcolonial [92, 120, 144], decolonial [15, 34, 35, 104] and indigenous design paradigm [29, 94, 195] could direct new ways of asking questions about technology, power, politics, culture, and economy.

[7] On the elegant power of science-like discourses, see Green's [77] critical analysis of the materiality of the intellectual war between indigenous knowledge and Western science, an issue that doesn't embody the diversification of knowledge production practices needed to advance our understanding of the social world.

For example, the Afro-centric and Ubuntu models consider how the embodiment of HCI's paradigms in ethnocentric epistemes might underpin certain assumptions about people, places, and practices; but also, how its asymmetric relations of power direct specific priorities of design [94, 195, 196]. Others have considered how a collection of situated approaches to imagination and knowledge might allow for defamiliarizing dominant cultures of innovation in transnational design spaces [5]. Such a phenomenological approach to design focuses attention on the interactivity between different matters of design; particularly on how situated knowing, reasoning, and actioning can allow for understanding the inter-connectedness between indigenous knowledge and interactive design [7].

Following upon the intellectual traditions of decoloniality that points to the ontological dimension of coloniality/modernity [147, 181], decolonization of design is not loosely considered "as a straightforward liberatory process" but deliberation and a "contest over the very meaning of liberation itself" [92, p.5]. Therefore, the emphasis on innovating Africa will focus on how knowing of the pluriverse can be imprinted in the imagination of African designers and artists as the abstraction of 'colonialism as-in to design' often obscures the unintended consequences of their craft beyond the immanent frame of reference. This is developed on earlier studies that have framed decolonisation as a process of interrogating existing knowledge practices of computing research (with 'computing as a characteristic of a colonial movement') with the sole purpose of embracing subjugated knowledge systems, perspectives, and experiences [104, p.9]. Arguably, such an account presents renewed efforts towards articulating what decolonization might entail – by either reflecting on the outlook of the community about the utilities of the decolonial options as living practices or by engaging practitioners in decolonial thinking as a way of bringing about changes to conventional worldviews of technology-related knowledge.

In a nutshell, the background section tries to establish how a collection of sensitivities might have furnished debates about the knowledge practices informing the design and adoption of digital innovation in Africa. What is missing in the African HCI literature is an understanding of how specific African cultures of design (de)future the intellectual landscape that African subject matters of design *know* and *think* of the pluriverse. Therefore, the next section will consider how situated constructs of power and knowledge can expand the futuring practice of HCI to include other dimensions of agency, identities, and subjectivities.

3 INFORMING APPROACHES

3.1 Motivation, Approach, and Positionality.

This paper is motivated by the frustration of how non-western perspectives on innovation are (re)presented in historical technological discourses. The reflection on a range of historical tropes that exemplify the solutionism of post-development HCI and the saviourism of postcolonial approaches to HCI4D was motivated by the attendance at the 2020 British Computer Society's History of HCI workshop. The workshop seeks to examine the historicity of British HCI as a way of identifying directions that could inform the ongoing diversification of the field. The motive for attendance was to remind the more experienced colleagues of the need to approach historical research in HCI as a unit of analysis and not as an analogy.

Concerning the method of analysis, this paper recognises how ICTD researchers have adopted 'strong critical lenes' in understanding the implications of designing and deploying computing systems [54]. The author considers history, or the historical approach to critical research, as providing a working methodology for the periodic critique of our ignorance of the past, uncovering new insights, and laying out fragmentary sources for further analysis. In HCI for example, historical analysis of the evolution of socio-technological systems has developed an awareness of the legacies of the paradigms and approaches informing the design and deployment of interactive technologies [166, 202]. In CSCW, the emphasis has been on how historicist sensibilities can inform the ongoing engagement with issues of politics, economy, materiality, and markets in design projects [165]. Such efforts have thus begun to shift the positioning of HCI/CSCW research from a largely forward-oriented design focus to a broad-based agenda where historical and emerging discourse

informs its genealogy. This background, therefore, necessitates approaching the futuring of African HCI not as an analogy but as a unit of historical analysis that is informed by the values of historicism and presentism.

Equally important in this paper is the disclosure of the epistemological positionality underpinning the analysis; and how it might impact the knowledge production practice of HCI. In Feminist studies, standpoint positionality is considered an ethical practice that affects knowledge production and the knowledge produced. As a Muslim Western African researcher in a design-led research lab in northwest England, I have researched at the intersection of human-computer interaction for development, postcolonial African studies, and design studies. With a background in social computing, I must admit that some of the criticism towards the post-narrative in HCI4D is informed by the subscription to feminist standpoint theory and the Wittgensteinian approaches of Peter Winch concerning the implication of language and logic in understanding other cultures. Having studied and lived outside my base community for most of my adult life, one is aware of how such revelations might be equated to being a WEIRD African – based on a Western, Educated, Industrialized, Rich, and Democratic frame [85]. As such, this disclosure does not suggest how one's supposed positionality direct one's engagement with the postcolony of computing systems but makes clear the importance of relationality and accountability in one's reflection.

3.2 Politics of Manifesto and Design Futuring in and Beyond HCI.

The adoption of a manifesto in futuring African HCI identities was developed on the understanding of its politics in development studies [24, 71], human-computer interaction [25, 80, 109] and different dimensions of decolonization [3]. In HCI, a manifesto is widely considered a political instrument that can challenge existing structures, principles, and discourses of organising society [25, 80]. This often takes the form of a conceptual, functional, or aesthetic provocation that stimulates critical thought and reflection using artistic and revolutionary strategies of campaigning [109]. Within the context of this paper, the adoption of a manyfesto is not considered activism nor entirely a diversification work [105][8], it is rather conceived as a dialectic of an intellectual protest among many protests that sounds the alarm of the existential crisis facing the actively ethnic African outlook towards the past, the present, and the future – the coloniality of the imagination. The use of the term 'manyfesto' in the sub-title against a 'manifesto' is developed on the understanding that its politics demand continual engagement with the plurality of the social world in ways that does not require a particular opening for critical conversations.

Equally relevant to the framing of this paper is the idea of futuring. As the name implies, futuring is an emerging theme of research that examines the default attributes of possible future(s) – i.e., how futures can be imagined, invented, and practised from what is experienced in existing market-driven structures of organisation. In future studies, social futuring often concerns itself with unpacking past situations, present occurrences, and eventful ones through anticipatory work of finding and making alternatives. When the present is considered as a fragment of reality, the critical interpretation of the past aspect of the present would act as a starting point for appraising the living present to find traces that stretch out to the future. This takes the form of pragmatically projecting future identities that link to the historicity of the past [33, 134] or developing grand visions of the future that can engage with the typification of the present [115].

In HCI, futuring as a critical research theme has shown how a reflexive analysis of the past and the present can provide possibilities for exploring new dimensions of the future through design [98]. Although conceived differently in other disciplines, some HCI researchers have argued that design futuring is not future-oriented in any serious sense, but rather a continual process of 'critique, dialogue, and storytelling' of new possibilities of history [167]. This contingent activity of exploring the temporality of the past and the present has made

[8] For example, see, M. Cifor, P. Garcia, T.L. Cowan, J. Rault, T. Sutherland, Anita Chan, Jennifer Rode, A.L. Hoffmann, N. Salehi, and Lisa. Nakamura. 2019. Feminist Data Manifest-No. [online] Available at: <https://www.manifestno.com > [Accessed 25 May 2022].

different foresight approaches to futuring (e.g., future-facing forecasting and back-casting or past-facing recasting and past-casting [33] and methods of conducting futuring exercises (e.g., design fiction, design speculation, storytelling, storyboarding [65, 96, 199]) familiar to HCI researchers and practitioners. The adoption of these approaches has led to a range of studies that view design futuring as a critical lens for drawing attention to neglected design themes (e.g. [45, 87,88, 158]) - themes that when brought into focus might point to how events of the present can either bring about changes to the probabilistic attribute of future or go further in concealing the narratives of the past. This thereby presents design futuring as a politics that can interrogate the nature of thinking and making in themselves [98, 164]. And it is social futuring's potentiality to stimulate critical reflection on the instrumentality of technologies shaping future's that inform its adoption as a theoretical frame in this paper.

3.3 Social Futuring from Africa.

Regardless of such considerations, research has established how the future is imagined and designed; how the future comes to be by a function of design thinking, and how future technologies are adopted and experienced through the operationalisation of design [73]. What this might suggest is that technology as a complex phenomenon is agential, and thus can ordain a particular view of the social world that forms the basis for the preservation of past dystopia or the prevention of future ones [64]. Even with the awareness that technology, in the broadest sense as techne, can enable and limit futures, practitioners have continuously ignored the material implications of its structural abstraction as the one-of-all solution to current societal challenges [69, 156]. This is particularly true as techno-utopia projections have advanced a discursive agenda that Africa as a mysterious design problem ought to be situated in modernistic design principles and templates that demand objects being studied as social engineering entities.

In African studies, social futuring is considered a necessity for and a commitment toward rethinking the knowledge practices of Africa – i.e., thinking of integrative ways of being, knowing, and doing [119, 130]. As the apocryphal narrative of the past has begun to be re-told, abandoned stories of the present are re-lived. Even when social futuring is regarded as an instrument for imagining and performing dimensions of the future [171], there is the fundamental question of how the supposed African social imaginaries could function in politicizing the organisation of labour, resources, and capital. Or rather considering how framing technological innovation as the solution to social challenges might have distracted/or substituted the need for addressing recurring issues facing African communities e.g., globalisation, digital coloniality, and surveillance capitalism[9].

This is relational to recent efforts in HCI that approach 'cultures of design' as known-able predicaments [60]. To paraphrase Paul Dourish, what futuring predicaments does design render think-able and make do-able? What sort of emerging social issues can be addressed when the focus is placed on the structural arrangement of social life in African communities? What sort of interventions can be developed when one focuses on the conditionings of the present and historical learnings of the past? [60, p.68]. These questions situate social futuring the particularities of Africa as an emerging unit of analysis where the problem-making and finding are either on an institutional or individual level. When a better understanding of the effect of 'coloniality of imagination' is established as a think-able intervention, one can then begin to articulate multiple features of autonomy around interpretations that makes 'decolonization of the African social imaginaries' do-able.

[9] When such issues are taken up in directing the future dimension of an epistemic invention, social futuring from Africa will be a network of relations toward the future, the present and the past. It also brings to focus the pervasive blindness of the entire Globalisation project, which includes Euro-American naivete about the political role of China and India across the continent, and its old-fashioned political game that prioritises pop development handout (i.e., development that doesn't develop) against long-term capacity building.

Therefore, design futuring the African personalities requires continual problematization of African narratives of innovation within (and without) the Western canons of historization. Such intellectual positions draw upon earlier decolonial traditions of African studies; where those of the Africana doctrine like Charles Mills and Frantz Fanon seek to construct African discourse from within modernist traditions as a way of reinvention from within, whereas those of the African stand like Kwasi Wiredu and Ngugi Wa Thiong'o' have advocated for developing decolonial narratives outside Western epistemological orders [125]. Drawing on both traditions, the discussion in the preceding section explores how interrogating the colonizing matrix of power in specific African cultures of sociability can provide pathways for situated knowing how the logic of digital technologies (de)future by design instrumentation.

3.3.1 African Cultures of Futuring/or Defuturing.

The modern world is inevitably messy both in terms of construction and function. Any attempt to tidy it up requires power and knowledge about the (un)desirable and the (un)necessary. While it might seem contradictory to the potentiality of Africa as a geographical entity that innovates, the unfortunate truth is that African institutions embrace modernistic 'consumption-inventive patterns' than its 'production-innovative techniques' [116]. Although critics of the Western constitution of science and technology have continuously shown how Africans create and preserve knowledge systems outside formal laboratory or institutional settings [114], one can also identify how African institutions might have undermined indigenous and situated knowledge. The basis for such a proposition is that the sensitizing rationalities of Europhilia and Eurosplain, which are unfortunately embedded in the political ideals directing postcolonial Africa (e.g., in the praxis of leapfrogging and transitioning), have significantly placed Africa in the place it finds itself, and Africans as co-conspirators in their subjugation. To make that clear, the alteration of the image of Africa is not a wholesome product of coloniality, but partly and significantly a by-product of the interactivity between pre-colonial and colonial ideologies. Before coloniality, the subjectivities of the actively ethnic African were subjected to the societal gaze of customary values that renders the African person an object of communal control and manipulation. This is not depicting that the communitarian principles of organization (which is politically Feudal and ethnically partisan) defutures by its emphasis on the community over the self; instead, making the case for its failures to cultivate the capabilities of the persons that form the nodes for the communal network [121].

Critiques of the communitarian principle have argued that the recent formulation of African knowledge economies has not embodied the philosophy of 'possibilities' but rather embraces that of 'appropriation' [172]. For Táíwò, the major issue with such an outlook is that it doesn't demand a critical interpretation and an adequate understanding of what was eagerly emulated and consumed [172]. A classic example of such ideas is the debate about the place of the English language in African literature that goes as follows: something is given to me, either use it as I see fit or out of unwarranted ignorance misunderstand it and never attempt to put it to good use. As noted by Nigerian novelist Chinua Achebe:

> "those of us who have inherited the English language may not be in a position to appreciate the value of the inheritance. Or we may go on resenting it because it came as part of a package deal which included many other items of doubtful value and the positive atrocity of racial arrogance and prejudice, which may yet set the world on fire. But let us not in rejecting the evil throw out the good with it".....or rather recognize that "perhaps the language was not my own because I had never attempted to use it, had only learned to imitate it. If this were so, then it might be made to bear the burden of my experience if I could find the stamina to challenge it, and me, to such a test" [4, p.27-30].

Two issues stand out here: the Africanist school of thought argue that the English language is part of the colonial project that carries with it imperialistic logic and cultures of organisation [191], whereas the pragmatic political school suggest that although the language was part of the oppressor's liberation package, it can be put to good use when it is Africanized, e.g., Pidgin English in Nigeria [172]. When such narratives are linked to modernistic cultures of futuring, the prevailing argument in African studies is that the adoption of Eurocentric logics of modernization reinforces the views experienced and expressed by its cultures [191].

This begs the question of whether the visible coloniality of being in pre-Western colonialism equates to the invisible coloniality of power in post-modern colonialism.

To articulate the implication of such a mode of organization is to consider the geopolitics of conflicting modernity and tradition. For example, the invisible coloniality of being from within current structures of organization in Africa is that of how political institutions propagate social orders that commodify social relations against the lines of the ruler and the ruled. This led to the consideration of whether in the name of African nationalism, modernization might have created an artificial caste system where the anti-colonial projections of the national bourgeoisie re-colonize the organisation of political and social life. The most troubling aspect of being subjugated by one's kins is that it is presented under the flagship of Europhilic structural adjustment/or indirect rules that were meant to re-configure existing knowledge structures but instead go further in atomizing systems of hegemony, patriarchy, and supremacy.

The issue is that such facilities first came about as part of the globalization appeals of the World Bank (WB) and the International Monetary Fund (IMF). Under the inspiration of incorporating Africa into Eurocentric economic models and technological projections, the WB and IMF pushed initiatives that strip Africa of its knowledge and resources and Africans of their personhood and livelihood. The appropriation of such ideals in the fabric of community life has thus internalized the thinking and the reality that Westernization equates to modernization. The issue with adjusting one's view of the world to Eurocentric ways of knowing is that it departs from one's way of being and might even go further in creating a shadowed version of oneself that is detached from the composite of the situated self. Arguably, the different scenarios of structural adjustment denote an investment and a commitment to Ethnocentric structures of thought, which when uncritically embraced in futuring narratives of HCI could postpone the futures of African HCI and might even lead to what has been referred to as 'epitemicide, linguicide, and culturicide' [129][10]. The point raised here is that specific African cultures of sociability, for example, the practice of 'invention and consumption', defuture the outlook of the actively ethnic African outlook towards the past, the present, and the future.

3.3.2 Futuring in African Cultures of Design.

Adding onto how specific cultures might have defuture the African personalities knowing of the present is showing how specific African designs have intervened in changing the organisation of resources, expertise, labour, capital, and power. Although there is an acknowledgement of how creativity has been championed in informal spaces, researchers in HCI have studied and documented the work practices of tech hubs, start-ups, and tech companies (e.g., [6, 26, 27]). Others have focused on how challenges of modernity can be reconstituted as sites for ideating and creating sustainable innovation [142]– be it through critical thinking or in critical engagement with communities [160] A classic example is the work of Dayo Olapade which showcases ways in which the informal sector in Africa dissolves Western ideals of creativity and innovation, in both economic and political terms. The emphasis of Olopade's thesis is that contrary to popular beliefs, the African informal sectors develop temporal infrastructures and systems that might not fall into the formal structures of capitalism [133] Using the metaphor of 'Kanju' - from the Yoruba language that literality means 'to make a haste or to strive', signifies the fragmented creativities that emerge from difficulties- denotes how actors conform inevitably to emerging circumstances and necessities. Considering the formality biases that underpin the presentation of the African informal sector as less innovative, one can deduce how thinking the 'Kanju' way, from the examples of the Matatu transit system in Kenya to the informal van transport in Lagos, showcases a different structure of formal organisation that is embedded in emerging conditions of living.

[10] Epitemicide is simply the dispossession of indigenous histories and knowledge systems; linguicide implies the destruction of people's logic and language of expression, whereas culturicide suggests the displacement of the organizing principles, structure, and mode of representation of a grouping of people.

What such metaphors have shown is that even within the colonial matrix of power that subordinates creative endeavours, actors across the spectrum of industries are continuously innovating new ways of making meaning of the technologically connected social world. To further demonstrate such efforts, one can recognise recent design futuring exercises that rely extensively on situated aesthetics and resources; examples of which have been showcased by the AfriDesignX platform[11]. The relevance of such exercises to the prospect of futuring African HCI identities is that it makes aware of the kind of disruptive design work being carried out across Africa, and especially the material implication of utilising locally sourced materials, techniques, and concepts. Examples of such projects include Kenyan artist Cyrus Kabiru's *C-stunners* collection of spectacles, Nigerian architect Kunlé Adeyemi's prototype of the *Makoko floating school* in Lagos, Kenyan brothers Joseph and Charles Muchene's *Cladlight* smart jacket for motorcycle riders and Ugandan engineer Brian Turyabagye's *Mamope biomedical smart jacket* for diagnosing pneumonia in children. What these design projects have consistently shown are the vitalities of indigenous perspectives in engineering, architecture, construction, medicine, agriculture, and so on.

Such initiatives have also gone further in negating the ecomodernist framing of non-Western settings, particularly ideas that point to how supposedly urbanized subjectivities have normalized the thinking that the social world presents itself as a set of unified technical spaces that when a problem surfaces, apply computation thinking, and if it doesn't work, then there might be no optimal solution after-all. Therefore, the awareness of how the colonial matrix of power manifests itself in the postcolony of innovation could point to how what was deemed as interrogating the coloniality of the imagination might not be emancipatory after all. Such a revelation could present the initial framing of postcolonial computing research in Africa as a wishful narrative of emancipation-in-the-making that does not affect practical changes to how interactive systems are to be sustain-ably produced and consumed. The next section will reflect upon such ideas - showing how specific post-colonial approaches to computing research might embody values of solutionism and saviourism that needed to be problematised.

4 CRITICAL REFLECTION ON POSTCOLONIALITY AND THE POSTCOLONY OF HCI4D

4.1 Of Postcolonial Approaches to HCI.

Historically, postcolonial discourses focus on power and knowledge creation: how values, language, and culture are imposed upon dominated groups by dominant societies. Edward Said's Orientalism discourse emerged as a scholarly undertaking based upon an ontological and epistemological distinction between the Orient and the Occident, or the traditions of the global South and the global North [154]. The orientalist thesis strongly argues that Orientalism in its simplest manifestation is a Western form of dominating the thought processes and narrative of the Other, and as a result has significantly assisted in shaping the grand cultures of the West [155]. Said's seminal work deals with the cultural, political, and material effects of coloniality - with coloniality being the by-product of colonization and colonialism[12]. Early writings in postcolonial theory challenged the universalized narratives of Western knowledge by responding to/reacting to the implications of the epistemic dependencies of colonized people to Western histories, cultures, vocabularies, and concepts. Such a way of presentation might be considered as portraying the vitalities of Western thought, which in effect has made it plausible for some contemporary intellects to embrace the idea

[11] http://afridesignx.com/

[12] For example, the common understanding is that colonialism is not just an episode in contemporary history but a timeline of coloniality-as-modernity in action. Colonization, however, is widely considered a historical process of distorting subjectivities, imposing authority, and controlling the material economies of indigenous communities. This might thereby present coloniality as a by-product of colonization that uses techniques of power in defining systems of organizing resources, expertise, labour, and capital.

that objective knowledge is situated in Western spaces of imagination and discovery. While some could argue that the arguments presented in earlier sections of this paper are underpinned largely by Western vocabularies, one can identify how the practice of detaching and linking the reflection within existing literature as denoting the use of its discursive practices as a weapon against hegemony.

Regardless of the vitalities of postcolonial narratives in decentring the symbolic system of modernity, research has continuously shown how postcolonial thinking is embedded in post-structuralist and post-modernist thoughts of the West [117]. In response to the narrative of the colonialist, earlier framing of postcoloniality might have exhibited forms of epistemic exploitation through its practice of speaking for and writing about the conceptual Other, which inevitably silences local voices and stories [93]. Although orientalism has proven to be useful as an anti-imperialist sensitivity for thinking about the effect of coloniality/modernity, critics are sceptical about its essentialist focus on institutional identities and geographical narratives, and its one-sided outlook toward other modes of historicization [81,82].

Others have suspected Orientalism's rhetoric of blame game that demonstrated that the discourse of the postcolonial was more about the scholars doing the writing than the people from different geographical locations that the orientalist thesis presents and vaguely re-presents [189]. However, a closer analysis of the deconstruction traditions adopted by Gayatri Spivak in subaltern studies and the psychoanalysis approaches of Fanon Frantz in African studies might show that one cannot detach the scholar from the text, but instead, critical reflection ought to focus on how the intellectual creates the imaginary Other and thus unconsciously imagines itself in the process. This points to the subtle conclusion that not all postcolonial writings are viewed from the lens of oppression and domination.

Equally relevant to understanding different dimensions of earlier postcolonial tradition is the consideration of how the postcolony has been conceived as a process of diagnosing the experiences of post-modernity/post-coloniality. For Achille Mbembe, the postcolony is not the same as the postcolonial or postcoloniality, they converge and diverge at various intervals [117]. The postcolony and postcoloniality converge in their effort to grapple with the experiences of modernity/coloniality. The divergence is on how postcoloniality as an intellectual and political movement concern itself with the cultural analysis of the relationship between the colonizer and the colonized, which in effect shows the violence of colonial discourse in both political, economic, and material terms. The postcolony on the other hand is about how Western modernity is being continuously experienced as a reality for the global population [118].

Considering the above, the foundational ideas of postcolonial computing originated from the work of Lily Irani and colleagues where they explore the thorny issues of technological innovation, political economy, power relations, and cultural practices in transnational spaces of technology production and consumption [92]. Although a nascent idea in HCI, the legacy of postcolonial computing lies in how it brings to focus ways on which the legacies of colonialism are embedded in transnational encounters and exchange of innovation. Drawing on the analytical sensitivities of postcolonial theories, science, and technology studies (STS) and computer-supported cooperative work, the orientation focuses attention on the complexities of techno-political relations that are affected by the logic of coloniality [90]. In computing research, it is widely considered a flexible and robust approach for thinking about the socio-cultural and political implications of the encounters between differentiated spaces. Although critiques have pointed to significant shortcomings in its engagement with the locality of the global and the globality of the local (e.g. [14, 104, 173]) postcolonial computing as an analytical lens has been adopted in the studies of technology design and consumption [48, 108, 201], residential mobilities [10], and, surprisingly, religiosity [124] and witchcraft [170].

More importantly, what these studies have shown in HCI4D discourse is that the postcolonial orientation raises a new set of questions that engages with the dynamic relations of power in transnational design spaces. This shift has furnished the understanding of how dominant HCI methods of innovation disregard local practice of healthcare in rural Bangladesh [170], and also how local structure of organisation impacts the adoption and consumption of digital technologies in Indian and Bangladeshi bazaar spaces [48]. As an alternative orientation in HCI4D, it has proven useful in contextualizing how the construct of power-

knowledge operates in shaping the subjectivities of indigenous communities – be it the political and material implications of importing technological innovation, or the potential impact of appropriating transferred technologies within existing institutions and structures.

Regardless of the utilities of postcoloniality and interculturality in computing research, the reflection considers subtle shortcomings in the primary argument concerning the needed shift in HCI4D paradigms from developmental studies to a collective of postcolonial science and technology studies. It is important to highlight that the reflection is not attempting to show how the legacies of domination might have suspended equitable interactions in design work but instead point to the material implication of generating counter-narratives that might not necessarily deconstruct the taxonomic models of development [90]. This is developed on the understanding that although the value of interculturality has brought into focus the hybrid and generative aspects of culture in transnational design [84], what is relatively missing in the postcolony of African HCI is the understanding of how postcolonial encounters could reconcile (or even reproduce) the conflicting parameters directing the approximate adaptation and translation of cultural attributes in such spaces. As research in postcolonial HCI has yet to establish how integrative cultural forms could emerge from the contact, conflict, confusion, and coalescence of culture in community collaborations, there is the need to re-examine the consequences, in material and political terms, of hybridizing cultural elements in transnational space of innovation – and this is what this sub-section seeks to address.

4.2 Of the Postcolony in HCI4D.

With the emergence of the ideas of a specifically African approach to HCI - the sort of fuss about its potential prospect and possible challenges - it has been categorically clear that indigenous communities in Africa do not need Eurocentric palliatives, nor welcome African-diasporic rescues in reinventing its future identities. This assertion might trigger unwarranted emotions in certain persons, primarily those that continuously present an imagery of Africa (an othered, dystopian, third-world nation), and those outlets that convey a particular narrative from the African continent (an emerging market for the global techno empires, a workspace for social-good research, and a laboratory for experimenting ideas). The call out of such narratives in futuring African HCI is that some anti-colonial ideologies embody the dualities of Ethnocentrisms-as-futuring and Africanism-as-defuturing e.g., scientism, userism, and materialism.

While some might argue that there exist disparities in the organizing principles directing community collaborations in Africa, the fundamental issue here is that of how practitioners that are entrapped in local accountabilities, as well as those influenced by external dependencies, can move towards an equitable mode of engagement. Even when there are fewer HCI researchers or practitioners from the African continent, that doesn't necessitate developing narratives that 'speak for' the conceptual Other as doing so would inevitably silence situated accounts of creativity and innovation (see. [47] on how HCI approaches such as UCD might tend to Other Non-Western perspectives about the user, participation, and representation). Even with the increase in the number of tech hubs and start-ups in major African cities, one should not lose sight of how the unequal movement of resources and labour between developed and developing nations shapes the scarce investment in facilities for interactive design. However, this is changing as research in African HCI has begun to show how dominant paradigms of innovation breed a particular way of viewing the African situations as space for finding and making emerging predicaments about modern society [35, 51]– an issue that has drawn considerable attention to how critical engagement with HCI scholarship can amplify local expertise and practices. With the continuous call for decolonising the intellectual landscape that researchers and practitioners' collaboration, recent efforts have shown how alternative sites of technology production and consumption can be enacted in Africa– e.g., in community design space [27,38, 97, 197], and through the design of community networks [26, 35].

Drawing on the ideas that colonial paradigms impose a particular identity of African innovation, critiquing their application in African HCI is not a one-sided historical analysis as it considers how specific ideals of progression defuture the productive outlook of the Africans toward designing emerging conditions of living. To demonstrate the solutionism of *Eurocentric models of futuring* is to consider how techniques of digital

humanitarianism [46] and humanitarian design [22, 132] have directed design projects meant for non-Western settings, whereas the saviourism of *pan-Africanist sensitivities of futurity* can be inferred towards the educational praxis of the 'talented tenth' [63] and the 'Afropolitan' culture of circular identities [66, 118]. As will show below, aspects of post-development and post-colonial approaches to computing research adopt a universalised outlook towards (re)presenting the African experience under the veil of a Western preview of how the world is or should be - albeit in ways that obscure the performance of alternative dimension of modernity-as-in-futurity.

4.2.1 Solutionism of Post-development 'Alternatives'.

To show the performativity of *Ethnocentric solutionism* is to examine how digital humanitarianism and humanitarian design are practised in the design and deployment of socio-technical systems meant for non-Western contexts. The idea of digital humanitarianism develops on the assumption that Western culture of modernity are universal, and thus, can be adopted in analysing the prevailing issues facing non-Western societies (e.g., cultural indoctrination, linguistic alimentation, and economic exploitation). Partly due to the colonial matrix of power in the institutional and social life of the global south, there is the general view that modernistic problems have (or need) modernistic solutions since they were imagined and practised within a particular epistemological frame. When such views are embedded in the framing of developmental design work, social predicaments and resolutions are reduced to systematic appraisal and numerical valuation that imposes a specific way of analysing global social issues.

Taking the problem-solution pair into focus has led to a considerable protest in the international development community on how digital colonialism creates a culture of speculation and a set of practices that entertain stereotyping humanitarian conditions [190]. The solutionist dimension of digital humanitarianism can be identified in how its double-edged-sword analytical model adopts colonialist-like strategies in quantifying and securitizing social relations - albeit in ways that "refashion the tool of social intervention so that a particular kind of digital solutionism necessarily seems the only toolkit available" [190, p.354]. A practical example of such a patronizing and often oversimplified narrative is the billion users' connectivity initiatives across the global south [23, 136]. In Africa for example, the billion-user narrative first portrays digital connectivity/accessibility as a human right [137], and then goes further in normalizing digitization as a development optic for the global south [140].

As Payal Arora has shown in her critical analysis of the aspect of digital life in the global south, technology is being Weaponized as a tool against underdevelopment [23]. Although technology in the development sense is meant to nurture aspirations, drive capacity development and bring about intrinsic growth, the major issue being raised is that 'handholding' programmes [179] like the 'Facebook Zero' and 'Free Basic Initiative of Facebook' promise to close some form of the digital divide that exist [200] on the side-line, they might have amplified pre-existing stereotypes of Africans leapfrogging out of poverty as a result of the mere adoption of digital technologies [149]. Therefore, the userism framing of the billion-user initiative denotes how human beings are reduced to objects of quantification and commercialization [76]. The implication of such a way of thinking about African conditions of sociability is that the introduction of digital technologies can intensify existing disparities by their intrinsic motivation to order the aspiration of a collection of people as underdeveloped.

Arguably, such a techno-utopian initiative has postulated that under-development requires strict scientific measures that imply that technological solutions translate to upward economic, political, and social mobility. What such power dynamic does is that it regulates modes of participation in digital life: first by directing what content is been produced, who produces it, and how it is to be consumed; and second by promoting immaterial labouring [200] through the design of functionalities that urge compulsive consumption while suppressing productive and leisure use [106]. The consequence of such a mode of organisation, as in humanitarianism, is that it normalises a linear view of technological progression - those that have and those that don't. An example of such a divide is the 'criminalization' of digital gold farming and the 'upscaling' of digital buying of status in the game industry (see. [23]. Often, those involved in labouring for work's sake and

those playing for leisure's sake are considered an instrument that can scale up new markets for technologies or act as tools for stratifying the experiences of digital life. The most troubling dimension of such disparities is that all of this operates on a supposedly inclusive market ideal that inequitably commemorates the values of exclusion, thus feeding directly into the spatial expansion of digital coloniality.

Equally relevant to understanding the material implication of digital humanitarianism is expanding the relationship between the histories of 'social-good' and 'bungee' research [54, 55], the promise of 'making a difference' [174], and the realities of 'social-for-capital' and 'good-for-capital' [50, 190]. In ICTD research, for example, Dearden and Tucker [55] have shown how 'bungee' and 'parachute' research agendas are at best unworthy and at worst unethical. In HCI, Pal [138] has shown how the assumptions informing social-good related research conceived non-Western *context* as an Othered-laboratory or workspaces, while also approaching indigenous *cultures* as commodities to be appropriated. However, a critical analysis of social-good research programmes in HCI has shown the limitations of design-for-good and the fallacies of technologies-making-a-difference as applied to non-Western settings [30]. What these accounts point to are the political repercussions of the assumption that the transplantation of Western templates of modernity to other social settings should bring about similar implications as that of the originating site [139]– which in essence conceals the unintended consequences of misplacing/displacing local practices that drive intrinsic growth.

Adding to such revelations is the consideration of the *techno-solutionism* of specific approaches to post-development in Africa – in this case, the practice of humanitarian design. As the name implies, this approach to developmental design considers how the adoption of specialised design toolkits or rule-based packages can assist in framing social issues as tame problems. The analytical emphasis of such an approach is that everyday challenges of modernity can be addressed through the identification of standardized techniques that could support the systematic process of making and actioning solutions. Examples of such specialised packages include the models adopted by global design firms such as IDEO, NESTA or Dalberg. Although these design conglomerates have positioned themselves as key players in doing social-good projects, critics have pointed to how their epistemic frame of reference developed on the assumption that technocratic and scientific instruments can address the social challenges facing humanity; be it social, institutional, political, or environmental [89]. The rhetoric strategy and system thinking adopted by these global design firms and their supportive institutional forums like Stanford TED and Harvard Business Reviews is that of universalism and tautology [22, 89][13].

As decoloniality of design has begun to show how humanitarian design views under-development as an inspiration, a motivation, and a design opportunity [182], others have emphasized how the humanitarian sector operates as a neo-imperialist space for the internalization of neo-liberal ideals in Africa [18, 182]. Such issues raise the question of why humanitarian designs are largely directed toward non-Western contexts (and not the other way around). Although the reality is that 75% of the top 40 most wealth-unequal rated countries globally are in Africa (8 of the top 10) and that 22 of the 30 countries in the world that are most affected by hunger and malnutrition are in Africa, this doesn't equate to reducing practical social issues such as poverty and inequality to systematic appraisal and numerical valuation and indexes. This is not shying away from the fact that Africa has the highest proportions of people unable to affordably access telecommunications services, but unfortunately, the design thinking underpinning project such as the 'Free Basic Initiative of Facebook' is particularly not helpful in these situations (or in fact even genuinely tries to be as it implies

[13] The prevailing argument in design spaces is that design thinking as a form of expertise is HARD and that the realities of underdevelopment are HARD issues that require creative intelligence and innovative expertise [89]. Relying upon such a way of thinking about the dynamic of social issues suggests that supposedly HARD solutions are readily available to specialised institutions that hold the totality of scientific knowledge. This might thereby present humanitarian design, at least to other ways of knowing, as imperialistic and authoritative.

deciding the stake and making a claim). One might argue that such developmental optics are used as a soft instrument to justify the effect of concluding those being judged and defined as underdeveloped.[14]

In effect, this way of thinking can be traced to the One Laptop per Child (OLPC) project in the global south [19, 179] the Global Learning XPRIZE project in Nigeria and Paraguay [23], and the Hippo Roller Re-design Project in South Africa [132]. Both developmental projects were meant to disrupt the practice of education and sustainable living in postcolonial times but does the opposite, i.e., propagate the analytical status of Western techno-philanthropism to non-Western social issues (see. [19, 23, 132, 144, 188]). For example, the OLPC project conceives the idea that improving schooling is a difficult issue that requires computational ideals for industrial education. The XPRIZE started as an autonomous learning project that was meant to disrupt the landscape of liberal education through the design of child-friendly and adaptive learning apps that can improve learning outcomes and attainment. With Africa as a testing ground for such ideas, these projects might be considered as the by-product of the 'intellectual sabbatical' of ecomodernist and philanthropists alike that desperately want to tell the 'good stories' of the responsive technologies destined for the global south - which inevitably conceal the failures of earlier educational palliatives meant for such settings [23, p.138]. The expected failure of these two projects denotes the unsuitability and unsustainability of Eurocentric ideals of attaining upward mobility – and specifically, one that places technology before people, and external provision before capacity development. Consequently, such issues require the continual problematization of how coloniality/modernity might have created temporal design vocabularies where technological innovations are adopted as an analytical vehicle for the internalization of social practices such as thinking, making, and using.

4.2.2 Saviourism of 'Alternative to' Postcoloniality.

To show how some pan-Africanist sensitivities of futurity might exhibit the values of *epistemic-saviourism* is to examine how the doctrine of the talented tenth and the cultural praxis of Afropolitan is practised in re-inventing African narratives of progression. To place within the context of the literature, the pedagogical ideologies of the talented tenth came out of the sympathetic gestures of White philanthropists that felt the need to educate exceptional African Americans as a way of uplifting them from the epistemic double-blind / or bifurcated existence often associated with their African roots. On the surface, the initial emphasis might be about satisfying the 'security needs' of African Americans as marginalised groups, but a close analysis of its problem-solving approach to re-solving structural social issues might suggest a deeply rooted urgency to satisfy one's 'self-actualising needs'. Pan Africanist activist W.E. Du Bois adopted such an idea as a preparatory framework for developing conversations that can elevate the black population of the 'Negro problems' through the creation of 'educational palliatives' (or pedagogical quick fixers) that would unveil the capabilities of those 'worth saving' in the community [63][15].

Such issues have become ordinary in African communities that one can infer how the heritage tourism initiative of 'Year of Return, Ghana 2019' has normalised the thinking that those 'been to' (either by force or by choice) have proven abilities to guide the misfortune others among its racial groupings. This is not a harsh

[14] This is not new as commentaries on the imperialistic dimension of humanitarian design have shown how its underlying assumption towards positive impact, making a difference, and empowerment of stakeholders present Western researchers and designers alike as the new anthropologist or missionaries [132].

[15] To emphasise, the talented tenths are not among the black bourgeoise group in northern America, but a whole set of persons that have supposedly proven abilities to pursue scholarship and attain material status while also willing to guide the misfortune others among its ethnic groupings. Therefore, the empowerment-like praxis of the talented tenth is not the same as the 'mentorship' approach discussed earlier concerning the Digital Green Initiative in the global south [179]. The difference is that digital green partners, in principle, depict partnership and 'capacity building', whereas the rule-based palliatives of the talented tenth exhibit paternalism and 'handholding'. Simply put, the talented tenth doctrine can be considered as exhibiting an anti-colonial saviour mentality whereby one is conditioned to embrace the Ethnocentric canon of thought that privileges the will to power and capital against that of the responsive personhood and the community (more emphasis).

reading of such initiatives as that would equate to the dismissal of African diaspora experiences and their potential contribution towards restoring the historicity of the future. It is, however, a closer reading of a way of thinking that should the actively ethnic Africa adapt to the rationalities of the West as the enlightened rhizomatic African did, might re-awaken the subaltern consciousness of the native towards the dystopia of current situations. As noted by Chude-Sokei, often, the appeal for cultural and economic growth "blurs the line between pilgrimage and tourism, catering primarily to African Americans by appealing to that American lust for an identity that can be purchased and a history that can be exchanged"[16]. Such an account depicts a default Eurocentric future of Africa; a future that is directed by Western assumptions and projections, and one that is to be performed and experienced under the Western gaze.

Taking up in the context of African design, one can identify how the common trope of leapfrogging and appropriation institutionalizes a particular way of framing innovation as largely technological and material. The fundamental issue with such a doctrine is that African narratives about design innovation might be organized across the line of citizens that know and customers that are known [53] – thus emphasizing a blurred caste relation. Although the talented tenth doctrine has championed unveiling the capabilities of the collective, the emphasis on assumed 'needs' denote extending 'help' to those in differentiated situations. The reservation with such a mode of engagement is that 'help' from the high castle might be relevant to the supposed carer, to those supposedly being helped, it might signify an exercise of the invisible power of being cared for (as in meeting one's social needs) and not cared about (as in showing empathy towards one's condition). Such a way of thinking exhibits double marginalisation as it limits participation in knowledge production while also enforcing dominant group perspectives and preferences. It also denotes how power hierarchizes aspirations - be it for survival, security, belonging, self-esteem, or self-actualisation - in ways that depict a stagnation of specific individual traits as beings that might not exhibit subjectiveness.

Another example of the saviourism of pan-Africanist sensitivities of futuring is the emerging theoretical stance of Afropolitanism. In African literature, the Afropolitans are largely considered a collection of passers-by writers that celebrate the hybridity of geo-cultural identities. Often identified with their 'rhizomatic existence' as rhizo-subjects that are distinctively hybrid yet retained the routes they emanated from, the Afropolitans are rooted in diverse cultures and traditions, affiliated to multiple locales, and often perform in transnational identity spaces that are equally stereotyped [21, 66]. However, critiques of the Afropolitan identities have pointed to how its projections of the past aspect of the present emphasise the *arrival* of new multi-cultural identity categories that denounces the ethical descriptors assigned upon arrival; or rather goes further in internalising the connotations attached to the genre-specific dimensions of the assignment [21,67].

In African studies, the prevailing argument is that Afropeans project an anointed vision of African futures from within Eurocentric political and social thought in ways that might be considered as extending second contact narratives of the neo-colonizers landing on the shores of Africa [67]. The arrival of the Westernized character, with their anointed vision for a utopian Africa that resembles the good side of the West often presents a dilemma of not fully understanding the implications of imagining (and professing) within an epistemological frame that objectifies, materialize, and subjugates. This continual process of seeking to *belong* to (longing to be with something) or *become (*coming to a differentiated site of belonging to something) shows how its politics oversimplify being-of-African-roots across relations of institutional identity, ethnic grouping, and geographic locale.

Furthermore, the consideration of the emergence of Afropolitan itineraries or shortcuts from the circular movement of culture might be considered as oversimplifying how "the coming together of people with

[16] See. Chude-Sokei, L. (2010). Invisible missive magnetic juju: On African cyber-crime. The Fanzine [online]. Available at: <http://thefanzine.com/invisible-missive-magnetic-juju-on-african-cyber-crime/ > [Accessed 03 October 2022].

disparate backgrounds, histories, and epistemologies" transport different modes of sovereignty and domination that could shape interactions [90, p.252]. However, the fundamental issue here is how the Afropolitans, with their ethnocentric veiled minds, are meant to portray Westernization as futurity and Africanization/Indigenization as defuturing. This led to the consideration of how transcultural interaction between indigenous peoples and a collection of passers-byers might direct the equitable transformation of creativity, capital, economy, politics, and innovation. This is not new as research in postcolonial studies has sought to develop diasporic intellectual networks for sharing expertise and experiences, albeit in ways that can dissolve the unequal relations between actors in developing and developed nations [119]. Regardless of the utilities of such a network, the associative traces of epistemic-saviourism can be identified in the material forces at play in the dialectics between indigenous and settler researchers and practitioners.

Therefore, the reflection on how such mentality might be manifested in HCI4D discourse arises when social design projects are premiss on the assumption that should the actively ethnic African embrace the palliative guidance from those exceptional persons being saved by Western thought systems and industrial education, can and will attain noblesse. Arguably, this sort of thinking about upward mobility continuously denies local actors any form of knowing when and how to innovate. It also reduces social life in Africa to utilitarian ideals of acquisition of wealth, compulsive consumption, the commodification of social relations, and technology determinism. While some might argue that coloured Euro-US-based researchers engaging with the ideas of postcoloniality might not be doing saviourism work, the focus here is the underlying epistemic worldview directing their engagement with other cultures, locales, and communities. One can postulate that the talented tenth and Afropolitans alike often assume a statutory position of knowing what the future of Africans could be/ or should be, while in essence might be in an oppositional struggle for/against authority and freedom. One can also make inference to how those 'been to' utilize the instruments of power-knowledge in claiming an epistemic position as agents of re-presenting Other worldly events, thus exemplifying the epistemologies of ignorance associated with the perpetuated castlessness of computing [183]. This thereby links both the talented tenth doctrine and the Afropolitan identities to saviour-mentality that embodies values of intercommunal uplifting and empowerment against that of collective advocacy and allyship (more emphasis).

In Africa for example, Giglitto and colleagues reported the saviourism attitude of some engineering students toward the conditions of sociability in Egyptian communities [74]. The specific mindset of the student is that of having the expertise and knowledge to fix the social world, thus conceiving design thinking as an instrument that exists within an Enlightened and agential subject. The major issue with such a way of thinking in HCI4D is that it has become hegemonic as it is now framed in the name of doing socially good research that stereotype African condition as dystopia and Western situations as utopia. Other examples of saviourism mentality of postcolonial design thinking can be identified in the design and deployment of technological interventions meant for specific African settings (e.g., [112, 113, 146, 198]). This often takes the form of engaging in 'bungee' research activities that export pseudo-solutions to problems that might not even exist [55] – and unfortunately by the same mechanisms that define and marginalize them in the first place.

The point being raised here is that due to the colonial matrix of power between dominant Western institutions and subjugated ones, there is the possibility that the informing principle directing transnational engagement will privilege certain experiences over others. As have attempted to show, forms of 'sabotage and subversion' can be attributed to some solutionist and saviourist approaches to futures as applied to the context of Africa. When such issues are taken up seriously in imagining and performing future dimensions of African HCI, there is the possibility of uncovering how what was deemed as interrogating the coloniality of the imagination might not be postcolonial after all, but rather a tendency of something rather complex – i.e., the neo-coloniality of the intellectual landscape that actors know and think of the self.

In a nutshell, what this section set out to show is how the philosophical assumptions underpinning various dimensions of 'post-development' and 'post-colonial' approaches to computing camouflaged the values of solutionism and saviourism. This is particularly important to the prospect of analysing future discourses of

African HCI – first in how it interrogates *'alternative*' and *'alternative to*' relations underpinning transnational encounters and exchanges, and second, in how it can open up relational ways of engaging with the particularities of communities [39] Considering the central ideas that orientalism and the postcolony offer to unsettling the universality claims of techno-science, what I present in the next subsection takes the form of examining how the underlying epistemologies of postcolonial science and technology studies might have reduced indigenous knowledge from Africa – which consisted of the plurality of people, places and practices [29] - to a set of unified socio-technical predicaments that needed the adoption of the 'ruler' specialized sensitivities in the social description of culture. What this section is trying to establish is how a particular way of thinking about African conditions of sociability reinforces a reductionist framing of social experiences that enables mechanical prediction and explanation.

4.3 Of Postcoloniality-as-Coloniality in African HCI.

4.3.1 Theoretical Hybridization.

In the preceding section, the reflection points to how a particular analytical orientation has raised new questions that engage with the colonial histories and realities of computing systems. Although a nascent idea in HCI, it has drawn upon postcolonial theories of science and technology studies that explicate how the relationship between technology, politics, power, and knowledge shapes technological innovation. Few conceptual issues can be identified by the dependence on the paradigms of postcolonial STS studies against that of critical and cultural studies that underpin postcolonial studies. First, there is the prevailing issue that relates to the implication of theoretical hybridization, particularly the effect of concatenating distant ideas to do the heavy-duty analytical work of unsettling coloniality. For example, in postcolonial theory, the focus has been on how to interrogate coloniality through the critical analysis of its performance in different aspects of institutional and social life. In science and technology studies, the emphasis has been on how the analysis of the dynamic of cultures, politics, and economies can inform the framing of innovation in diverse social settings. Relying on these two distinctive discourses leads to the second issue of how a postcolonial orientation can be developed in computing research without the critical questioning of the historical narratives underpinning the discipline upon which these theories were founded upon. Or rather on how an alternative and a hybrid formation of design can be entertained when the link between the colonial and the postcolonial, the developed and the developing are entangled by equally problematic conditions.

Adding onto the complexities of relying on the utilities of postcolonial science and technology studies is the argument concerning the assumption that Western sciences are universal – one that portrays a 'culture of no culture, or at the borderline an 'a-cultural' or worse 'neutral/value-free' and not 'multi-transcultural' (Harding, 1994). With the awareness that there is no wholesome position of neutrality in the politics of design, attempting to uphold neutrality is a position in its own right – and certainly, one that could reinforce orders that might not be equal (in African HCI, see. [162]. Consequently, it appears that postcolonial STS is veiled under the hegemonic view of Western modernity that assumes a statutory position of being apolitical and beneficial to the progress of all. This abstract positioning presents postcolonial computing, at least to other societies, as a cultural invasive phenomenon that exhibit traits of missionary rescue orientation in design work. Although it does not advocate for a sympathetic narrative of the aftermath of colonialism, the interpretive frames directing its interpretation of transnational design work mirrored the classification of experiences across the dichotomy of Us and Them [173]. This takes shape in how its calls for a hybrid formulation of design work might not have expanded HCI's outlook towards the particularities of what's going on 'in here' by paying attention to the historical force shaping what's happening (and not happening) 'out there'.

A closer examination of its tropes of articulation and translation in social design spaces might have risked promoting hybridization as an apolitical network that views the activities and processes of designing as politically given [92]– which in essence reproduces the tactics of interpreting from 'in here' for 'out there' that make strange the Other [173]. This way of thinking about the politics of design links to the benevolently paternalist practice of design as we know it, which in principle is about addressing the conditions of the other.

The concern here is that the hybridization of different ways of knowing might not be premised on the multi-directional articulation of meaning between cultures, which has been identified as providing "a seductive theoretical perspective that neatly joins things up when looking from "here" "out there" and, coincidentally, offers a convenient parallel to the technological metaphor of networks" [173, p.688]. In its simplistic manifestation, this way of thinking about the effect of coloniality in the translation of domain-specific aspects of design denotes a common scholarly practice where a persistent political agenda of normal (mostly Western) and exotic (mostly non-Western) modes of knowledge production are advanced in the casteless world of computing systems [183].

As Feminist research has continuously shown, conventional science and technology perspectives lack a global preview as they are predominantly Western [82], even with their intersectional outlooks [39, 111]. Does it suggest that modern 'science' is discursively and culturally Western? 'How' Western and which Western among the many diverse traditions of the West. When such issues are brought to bear in computing research, does it imply that one can't be modern without being Western? Although commentators pushing for Western scientific agenda have suggested that there might be multiple dimensions of modernity beyond Westernization, what the postcolonial approach often fails to account for is how through design, other features of modernization are excluded in the dominant narratives of technoscience.

Arguably, the postcolonial commandments in HCI4D can be considered as domesticating its arguments in science and technology programmes as a manifestation of advocacy for developing concrete and applicable knowledge that develops on existing scientific knowledge. However, it is argued that the advocacy for applying scientific knowledge in computing systems design goes further in enforcing the authority of rationality against relationality and economic progression against ecological prosperity. This might thereby present the postcolonial computing orientation as exerting 'Winching' and 'Sharrock' moments to elongate its commandments in HCI4D literature [57]. For Dennis and Rooke, "a Winch moment is the point in an account where something not required in the analysis is smuggled in to facilitate the making of unnecessary and unwarranted claims. A Sharrock moment is an incoherent or nonsensical premise or assumption made to get an account off the ground in the first place, without which little of the account remains" [57, p.202]. The inferred moments of the postcolonial orientation can first be linked to the second wave of HCI that championed widening collaboration across discursive traditions, and second to its expansion programmes that lead to the development of mobile computing and ubiquitous computing as sub-themes of computing research.

With the awareness of the analytical status attached to 'postcolonial' traditions in the global South, arguably, the postcolonial computing argument can be considered as practising 'sleight of hand' in directing a paradigm shift in HCI4D research. This is developed on the understanding that earlier traditions underpinning postcoloniality in different parts of the world have reduced the issues of interrogating modernity/coloniality to tropes of institutional identities and geographical location [119]. As argued by Mbembe, when the emphasis of 'post-' narratives is on emancipation-in-the-making, one might lose sight of the power dynamics of the postcolony, i.e., the "in-just-that-moment assemblage of people and things that enact just-that-way-of-seeing/understanding the world" [173, p.691-692]. The accusation of the sleight of hand of the postcolonial commandment is not unfounded as the failure to engage with existing discussions in postcolonial studies signals an unfortunate kind of anti-colonial hoax without which the ideals linking postcolonial computing to colonized experiences will be a collection of distant and strange ideals.

Additionally, the reliance on the materiality of the 'postcolonial descriptor' or 'trendy words' [104] has provided a steppingstone for Euro-centric scholars to take upon themselves that the experiences of practising modernity should be reduced to the creation of counter-narratives to mainstream discourse of technological encounters and exchanges. Taking such issues into critical focus, one can identify how the easy labelling of the nascent ideas developed by Irani and colleagues as the postcolonial manifests an abstraction of reducing the global south to tropes of identities and locale [14]; an overly essentialist and seductive theoretical schema that denotes dependency on colonialist epistemes and vocabularies [173]. In other words, the tactical

orientation is a "deeply specific yet unremittingly abstract model" that portrays how the Other should be approached and presented in design work narratives [144, p.9]. The fundamental issue with the intercultural counter-narratives of postcoloniality is that it exemplifies the rhetoric of comparison against the co-existence appeals of multi-culturalism and the inter-dependence of trans-culturalism [197].

4.3.2 New 'Othering' in Transnational Design.

Critics of postcolonial approaches to HCI have pointed to its silencing of the complexities of race, gender, class, and labour before technological utopianisms. From an overly critical perspective, its deliberate placement within the critical lenses outlined in early postcolonial STS was meant to provide a steppingstone for signalling an extension of patriarchy, privilege, and power through an 'epistemologies of ignorance'; bracketing the asymmetric relations of power and materiality in technological discourse, thus encouraging radical mistranslation and misrepresentation concerning matters of indigenous knowledge and globalist technology [14](Ali, 2016). One can also recognize how the political neutrality stance of the postcolonial HCI might "neutralise rather than problematising questions of power dynamics, leaving them uncovered at worst and un-reflected upon at best, or even carry the risks of unknowingly perpetuating a colonised worldview where local epistemologies are disadvantaged" [104, p.26]. This is exemplified in its language towards repatriation/redemption (in design futuring gone wrong), and more importantly in how its design metaphors of articulation and translation difference might make strange the ongoing relations between peoples, places, and practices.

In unpacking the complexities of a global network of knowledge, the orientation draws upon a selection of design-related fieldworks, larger research projects and technological travel, and the histories of cultural encounters to push for a particular way of thinking and making in HCI [92, 144]. This might merely be passed as an exotic strange tale that conceals the underlying resolution of the epistemology of ignorance as suggested by [15]. This sort of ignorance might have presented its tactics as a scenic concept that could not engage extensively with the underlying structuring principles in communities. The unintended consequence of such intellectual positionality is that it represents "the locals as the researched-at-the-margins to which Western methods are applied and where power might be unbalanced in favour of the researchers" [104, p.11]. This is not a function of methodological indifference often associated with the postmodernist dialectic of questioning and answering problematically, but rather an approach that depicts an overt fetishism towards local capacities and forces.

Considering the initial ideas that Orientalism espouses, the methodological fetishism of the orientation in question can be identified in how its counter-narratives might be doing exactly what Said sought to question and challenge, i.e., predominantly Western scholars constructing the scholarship that forms foundational to investigating other dimensions of political economy, design cultures, and technological innovation in technoscience. This is not calling for an us-study-us type of scenario, but drawing attention to an emerging approach in HCI, an epistemic worldview that depicts *them* that need and *us* that have. This form of fetishism, placing centrality on method over intricacies of the locale does not allow for an intimate engagement with the momentary operations of power but instead seeks to provide counter-intuitive narratives that exemplify the materiality's of the Eurocentric mode of organising the world.

Furthermore, a recent debate that might suggest the othering of the postcolonial sensitivity is that of 'eurosplaining/whitesplaining' in HCI. Under the ideal of political correctness, techno-evangelist similar to those identified in post-development discourses attempt to determine (or undermine) the utilities of non-Western cultures in computing by providing the needed discoursive explanation of what their social predicaments are (or might be), outlining how they can go about understanding them and thus begin to imagine confronting them. The orientation came together in HCI, just as the developmental debates in HCI4D that they argued against, dominated by Euro-American centric scholars – developmental activists, solutionist, utopian theorists and technological philanthropies – that sought that it is their moral responsibility as citizens of the world to turn others into their subjects of experimentation, violently othering particular matters as if they needed rescuing from themselves, and in ways that suggest the sooner the better.

To emphasize, the sympathetic mentality of whitesplaining depicts a humanitarian narrative of the vitalities of packaged intervention; of coming to dystopian situations or arriving with quick fixers, and one that is often camouflaged as a token of capacity building on the values of trust and care. In ICTD for example, it is evident that "packaged interventions work in proportion of the capacity brought to bear"……and that "those delivered from the outside erode communities' own capabilities" [179, p.81-95]. The act of whitesplaining takes the form of those in supposedly privileged positions seeking to announce and enforce specific interventions, albeit on self-licencing appeals for elevating (or worsening) people's underlying aspirations and preferences. In educational projects across rural India for example, there is an awareness of how educational researchers or tech leaders influence the design of institutional structures and policies, teachers acting as implementers and managers of packaged interventions, and students as the beneficiaries of well-intended social systems [179]. Such a mindset presents the supposed saviours as heroic reformists or external providers of social change e.g., the founders of the One laptop per child initiative[17].

Even in popular culture narrative, one can identify how accounts of saviourism operate within a system of thought that is gendered, aged, and classed. Although it is commonplace to accord high status to technology cult heroes, there is the need to politicise their work as a reflection of positionalities and personalities, and as such would demand holding social agents responsible for their reasoning and actioning. When technocrats and researchers are accorded the status of 'scientist-for-science-sake', society enabled the negation of responsibility by self-licensing the culture of saviourism that define people's subjectivities from within an externally enclosed epistemic frame. In its simplistic form, such a way of thinking about social issues internalises a cult-like view of designer and artist that as a result could create artificial dependencies that widen existing disparities and inequalities in computing [183]. On the surface, eurosplaining takes the form of criticism and optimism from within the Eurocentric systems of thought but then goes further in fortifying the 'man knows better than the native' aspect of the emancipation-in-the-making project.

Such a benevolent way of engaging with the global south ultimately breeds enmity as eurosplainers often assume that in the good gesture of the 'citizen', one commits to the enlightenment of the collective as an ethical reaction to nature. Under the intellectual framing of 'alternatives to' narratives, technology evangelist champion building 'a social enterprise' that can act as an interface for providing the needed explanations to social problems, thereby self-assigning oneself as a provider of solutions for their altered and marked marginalisation. The implication of such a method of engagement in a post-development design project is that dominant cultures direct actionability by their request and command.

From the different accounts of how Western paradigms of innovation enforce a particular constitution of non-Western realities, it is evident that the postcolonial framing of computing reproduces subtle binaries that widen the digital divide. This can be attributed to how colonial impulse and relations create contemptuous narratives across both sides of the divide, and specifically, one that depicts how Africans are to think within Western ethical frames but also make with Western constructs, methods, and techniques [28]. Presumably, adopting the postcolonial tactics can easily encore the suggestion that "as far as computing is characteristic of a modern world, it is also characteristic of a colonial movement" [104, p.9]. This is not suggesting that

[17] In 'The Charisma Machine', Morgan Ames noted that the One laptop per child initiative, just as earlier neoliberal globalisation digital divide initiatives depict the "complicated consequence of technological utopianism" [19, p.5]. The critical analysis of the project's inception, development, and legacy highlights how the continual circulation of cultural mythologies reinforces a particular viewpoint about technological transformation. This is demonstrated in the individualistic hero narrative often presented by the founders of the initiative that view the growing population of the world as invisible and passive user needing help: "its every child in the world whether they want one or not. They may not know they want one" (Nicolas Negroponte, as cited in [9, p.219]). In its simplistic manifestation, the ideologies underpinning the birth and death of the OLPC project depict an exercise of elegant power by seeking to care for – as in judge and define by- a broad spectrum of people in the global south. By their constructivist definition, the founders of the project are fixated on techno-determinism and moonstruck by the charisma of technology – thus depicting a classic example of the prescriptive gestures of eurosplainers/whitesplainers use of 'care' as a translation of change.

postcolonial approaches to computing are colonizing in themselves but pointing to how a critical engagement with its underlying assumptions might signal new forms of neo-coloniality.

4.3.3 Next 'Ordering' in Transnational Design.

The critique of colonial and postcolonial relations of power through the decolonial option is about how the unstated assumptions underpinning the monoculture of the West obscure an adequate representation of diverse experiences in the geo-body politics of knowledge [176]. The decolonial praxis came about in computing as a limited, contested, and emerging option for analysing power at the intersection of racial, gendered, and geopolitical relations of innovative design [14, 34]. Recent studies have attempted to show how decolonial approaches to HCI could cultivate a culture of advocacy and pluralism [17, 104, 175].

Besides, through the decolonial option, design thinking sort to achieve two things; first to 'dismember' racialized ways of knowing, and second to 'remember' the unacknowledged implications of the systems that symbolizes the Orient/Occident as opposing tropes of being. Such options emphasize the situatedness and embodiment of the other in the self and how taking a decolonial turn in HCI can respond to emerging impulses of race and gender more profoundly [14]. The decolonial option is also considered an emerging ethics of "attempting to think through what it might mean to design and build computing systems with and for those situated at the peripheries of the world system, informed by the epistemologies located at such sites, to undermine the asymmetry of local-global power relationships and effect the 'decentring' of Eurocentric/West-centric universals" [14, p.21]. The emphasis here is not to consider such a proposition at the margin of computing and ultimately not HCI, but to be regarded as a praxis for reimagining African HCI identities.

As identified by Lazem and colleagues [104], decolonisation is not to be loosely considered as some 'trending word' that has a consolidated meaning or is applied to mean the same thing across the African HCI community. In its simplistic form, it is a political stance that emphasises the power dynamics of the transnational encounters of technological innovation, but also their geopolitical implication in adapting to/and integrating with existing knowledge systems. Such issues have resurfaced in HCI narratives - either as a tactical outlook toward interrogating neo-coloniality of power or as a way of extending postcoloniality of knowledge [39, 111]. Therefore, decolonisation of HCI knowledge is a continuous process that ought not to be reduced to the trope of the colonised and the coloniser.

So far, the section of this paper has critically reflected on a different dimension of postcoloniality and decoloniality in HCI, offering a different reading of their heavyweight analytical work as applied to the context of Africa. This led to the consideration of the solutionism of specific *Eurocentric models of futuring* that inform design projects meant for non-Western settings. The discussion also considers how traces of saviourism mentality can be attributed to specific *pan-Africanist sensitivities of futurity* African conditions of economic development and political prosperity. This led to critical reflection on how the underlying epistemologies of postcolonial science and technology studies might have reduced indigenous knowledge from Africa – which consisted of the plurality of people, places, and practices - to a set of unified technological challenges that needed the adoption of the 'ruler' specialized sensitivities in the social description of culture. The critique also identifies with recent accounts in HCI that have shown how the failure to interrogate the particularities of Western modernity/coloniality in the postcolony (as in the here and the now) might signal the performance of a colonizing reality that promises progress but instead threatens the prospects of being and living in a satisfactory society.

Taking such issues into critical focus, one can identify how the easy labelling of the effect of modernity/coloniality as the 'postcolonial' neutralizes the power dynamic underpinning the production and consumption of technological innovation. This is an issue that needs continual problematization, either through the decolonisation of the intellectual landscape that makes decolonizing research possible or through the deconstruction of the ontologies, epistemologies and methodologies informing its discourses. As such, it is argued that decolonisation is a continual grassroots process and activity that cannot be defeated; its politics is about reimagining and remaking the world, thus too complex to be reduced to tropes of institutional identity

and geographical location. In the next section, I consider different historic accounts in mapping out relational pathways that could point to ways in which combative approaches to futuring can be embedded in HCI's methods of future finding and making.

5 TACTICAL PATHWAYS FOR FUTURING AFRICAN SOCIAL IMAGINARIES

The future is not an empty vacuum nor a reachable destination from the present – the future is here, and unfortunately unevenly distributed. Even the present is not a wholesome stationary space but a social construct that interlocks the conditions of the past and the prospect of the future. Both the past and the present can be considered as discursive constructs of power-knowledge relations; relations that through design can give form to different possibilities for futures. How then can one attempt to resolve historically dependent wicked predicaments such as coloniality and modernity? What sort of sensibilities are to be adopted to reach *wicked re-solutions?* In this section, the tactical proposition is that the decolonial option of 'remembering' [192] can provide temporal ways of engaging the 'subaltern' Other in the dialectical process of 'dismembering' colonial imaginaries of future's [168]. As already established, when the coloniality of the imagination is conceived as a thinkable intervention, one can begin to articulate how decolonisation of the social imaginaries can render imaginable the invisible performativity of modernity. This is precisely attempting to regain the African personalities' ontological densities of sensehood and personhood, either through the remembering of the self – as in knowing the characters and personalities of the conceptual Other clearly, or through dismembering the organizing structures that direct the experiencing of modern societies as given. Here, both dismembering and remembering are considered ontological instruments that draw into focus the complexities of futuring inventions imagined and practised within the Western canon of expression. As such, the brief discussion considers three tactical pathways for building on situated imaginaries; imaginaries that could direct the foresight, reasoning, and actioning of actors towards emerging challenges and opportunities of innovating Africa.

5.1 Theological Re-awakening.

The Arabic expression 'Insha'Allah' implies the firm belief that if GOD wills, events will happen; be it colonialism, poverty, and alienation. In HCI, the expression was adopted as a way of drawing attention to the need for embracing uncertainty and ambiguity as a critical design strategy in futuring [88]. However, the phrase is conceived here as an instrument for showing the interdependence between imagination and reality – that if a person has a forthright intention for morally doing good deeds for themselves and others, ﷲ (Subhana Wa Ta'ala - SWT) will intervene by opening/ and offering new prospect into the future. However, the awakening call upon here is that futuring is not only about having the intention for good causes but of the 'remembering' that ﷲ (Subhana Wa Ta'ala - SWT) ordain the then, the now and the future. For example, in the Holy Qur'an, ﷲ (SWT) vows that "And those who strive for Us -We will surely guide them to Our ways. And indeed, Allah is with the doers of good" (Qur'an, Chapter. 29 Verse 69). From the verse, one can deduce the certainty of a sustainable future should one 'know' ﷲ (SWT) proclamation – here the emphasis is knowing and not believing.

The relevance of considering mythology in reawakening the African social imaginaries is that the ideals of the Western Enlightenment project - Commercialization, Christianization, and Civilization - have led to the dismemberment of indigenous African modes of spirituality. The prevailing argument in faith informatics is that spirituality is the recognition that there is a larger force in the universe, and as such an instrument for making meaning of the objects that populate the world [86]. However, recent efforts in HCI have begun to question the secularization of computing systems – first in how they might have marginalised faith-based values and systems [127], and second in how faith-informatics can widen the link between religious traditions, individual systems of sense-making, and technological innovation [86]. There is also the consideration of how religious values shape identities of innovation; first by understanding how religious practices direct the design and adoption of interventions to support pluralist belief systems, and second by reflecting upon ways in which specific computing systems present opportunities/and limitations for inter-faith communities [153].

With the limited engagement of HCI with the scriptures associated with monotheistic religions, there is the possibility that practitioners would be indifferent to alternative perspectives of sense-making e.g., divine interventions, miracles, and magic. A possible pathway for futuring African HCI identities will be the conviction that wishful thinking will not change the invention of the future; what will actively direct the performance of the future are the minimal actions individuals or communities are genuinely willing to take or have taken to change the structures of knowing.

5.2 Epistemic Re-cognition.

The idea of epistemic re-cognition draws on the politics of consciousness switching that is often associated with the anti-colonial project of W.E.B DuBois. One of the central themes of Du Bois thesis is that of the concepts of the epistemic veil and double consciousness [63]. Of relevance to design futuring African conditions of sociality is that of how intersectional identities can either future or defuture. The initial framing of double consciousness is that being black and American provides a particular outlook on human affairs; a kind of ontological second insight and a feeling of two-ness that can allow for remembering the composition of the single-minded self within the veil of Westernization [40]. With the colonization of space and time, design futuring call for an investment in a 'subaltern consciousness' that could accommodate decolonial epistemologies [192]. As recently identified in designing African identities of technology, sublating one's held identities presents avenues for identifying possibilities within the gaps and silence of contemporary modernity [35]. This temporal space of representation, the gaps of innovation, could provide an opening where the subaltern self can recognize the bazaar nature of orientalist culture of engagement as to maximize one prospect of interacting and experiencing the future.

Therefore, it is presumed that this recognition of a second sight could indicate how design as a politics can redefine the conception of human identities as how things are imagined, fabricated, and consumed become the constituting fragment of remaking of worlds towards other futures. This thereby presents the attempt toward designing the 'human' in African HCI as an object-oriented inquiry that has politically oriented consequences, and one that recognizes the interplay between human universality and cultural plurality in community design projects.

5.3 Political Re-organization.

In the Igbo language of South-eastern Nigeria, the proverb "Onye fe eze, eze elu ya", means when one serves or honors a king, kingship will reach him. This style of organization is embedded in the Igbo apprenticeship programme; a world-class business incubation system that seeks to develop self-reliant members of the community. Often associated with the ubuntu philosophy, it is a scalable system of entrepreneurship that build-up the commonwealth of the community. The apprenticeship framework developed after the Biafran civil war as a pluralistic instrument for building up the defutured economic and political system of the Eastern Nigerian state. Although the programme might have drawn inspiration from the conditions of the past, its culture of reorganizing the present does not exemplify a rescue mission but of building up a complex web of industrial and economic apparatus. Such issues have resurfaced in HCI narratives that seek to provide different thinking (and reading) about limitations in Africa [9] - albeit in ways that point to the politics of naming and the power dynamics directing its performativity in mainstream discourses.

However, in ensuring shared prosperity in the present and the future, the scheme remixes a range of techniques in identifying the talents of the individual, leveraging those talents in providing further training in a sort of guerrilla warfare manners, and then graduating the individual into the network of community wealth. Although the tactics of the system often resemble that of stakeholder capitalism, it emphasizes accountability, relationality, and scalability. Such an entrepreneurship complex considers futuring possibilities that do not rely on the defutured situation of the past (civil war) but instead focus on how fragmented technologies can be harnessed to change the conditions of the present. The entire process of the scheme is that of finding the right lens for nurturing the assets of community members, thus resembling the circular itirenative associated with techniques of future-making in HCI [141]. From the three tactical pathways for futuring African HCI identities, one can recognize how pre-colonial and anti-colonial tactics of social futuring enact possibilities of futures that are both abundant and limited.

6 AN INVITATION, NOT A CONCLUSION

Although the paper has a beginning and a middle, the end is uncertain and undecided, lacking a set of recommendations expected of a provocation on how to approach the conceptual Other or what can be done about the situation of either abundance or ruination. In introducing the possibilities of developing a manyfestor for re-inventing African HCI identities, the paper set out to reflect upon what future dimensions of African HCI would be/should be imagined and performed to allow for subjective things *to know* and *think of* the pluriverse [70]. Similar to Taylor's [173] conviction that drawing upon a collection of arguments to make a case for investigating 'Out there' in its particularities might be considered armchair theorizing, this paper begins and ends with ideas depicting the metaphor of the fruit mixer [197]. The implication of the arguments presented will become performative depending on the purview directing one's reading as attempting to speak to the HCI establishment might be debased by a sleight of hands underpinning the adoption of conventional techniques in one's reflection. This idea, of intellectual and conceptual meandering, is not a new issue, but one that has fascinated HCI from its inception.

Even with such recognition, however, the suggested 'propositions' for diversification emanate from within existing Eurocentric epistemes of ordering the many more 'Out there' from 'In here' – which are mainly administrative and bureaucratic involving changes related to the procedure of locking 'them' up in a particular frame of reference, thus offering little in the way of a fundamental reorientation in ontology or epistemology. As this intellectual exercise is simply meant to question and answer the emerging dimension of the human, the technological artefact, and the cultural context of use, the sincere hope is that the African HCI community and regional initiatives such as ArabHCI and AfriCHI won't become another off-spring of indiscriminate breeding of Western-led disciplines.

Although the ideas underpinning the manyfesto might be embedded in African traditions of postcoloniality and decoloniality, this is not suggesting that their application or evolution can only be directed by African HCI researchers and practitioners. The call-out of solutionism and saviourism of HCI4D in Africa is not a one-time conversation but an extended invitation that could stimulate critical thought and reflection in the global HCI community. This is because conventional narratives about economies, politics, expertise and technology are directed by variation of preferences that could shape societies in different ways; one of which is how the framing of computing research in the global south as doing 'socially good' work has normalised the values of Europhilia and Eurosplain in the social imaginaries directing the African personalities quest for and will towards responsive personhood. How such practices can be dismembered in the organising principles of communities is an avenue that can be considered for future work. The move towards reinventing African identities of innovation in HCI might be sluggish and agonising, the invitation is that the wider African HCI community ought to remember its roots in African philosophies, epistemologies, methodologies, and technologies.

ACKNOWLEDGEMENT

Specially thank to the anonymous reviews for comments that have shaped the arguments presented in this paper. Appreciation also goes to my supervisors, Mark Rouncefield and Philip Benachour, for the multiple ideas that form basis of this paper. I also thank Shaimaa Lazem, Aarti Verma, and Chukwuma Ogbonnaya for their reading and comments on earlier draft. This paper is part of a project funded by the Petroleum Technology Development Fund (PTDF), Nigeria.

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