Teaching Ethics Applied to AI from a Cultural Standpoint: What African "AI Ethics" for Africa?



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Ethics applied to Artificial Intelligence (AI), improperly called AI ethics, is mainly addressed through a Western perspective focusing on continental philosophy. As a result, discussions on ethics applied to AI are shaped by the West. Consequently, the majority of AI ethical regulations are set in the West, by the West (Jobin et al. 2019). In the realm of ethics applied to AI some areas of the world are almost totally absent from the debate, Africa being the most illustrative case. Yet, diversity which makes the richness of our world should be translated into a cross-cultural approach of ethics applied to AI. As Séverine Kodjo-Grandvaux (2011) wrote it, "thinking African philosophy could lead the Western thinker to question his own philosophy and to take a self-reflexive look at his legacy".

Much greater diversity in how we approach ethics applied to AI is urgently required to represent the world's plurality of perspectives. In that sense, a culture-grounded study of ethics and its applications to AI should irrigate any teaching pertaining to the subject.

Short of a wider analysis on ethics applied to AI, we are taking the risk to fall into the trap of some kind of ethical tyranny coming from the West (Goffi 2021b) and ignoring the variety of thoughts that could be used in a global debate.

As Alassane Ndaw (2011) rightly asserted it, "being a philosopher in Africa is about understanding that there cannot be a monopoly on philosophy". Teaching diversity is a way to break this monopoly and give African philosophies and wisdoms the place they deserve in the ethical assessment of AI.

There is an African saying stating that "the sage is the one who perceives a river from the top of the trees". From the top of Western philosophical convictions, it be worth having a closer look at the river of African ethical thoughts.

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Representing 16% of humanity with a huge demographic potential, Africa cannot be ignored. The continent must have a say in the debate on ethics applied to AI. But, in order to enter the debate, the need for education in this specific and promising field is more than ever striking. Africa should not be given a seat at the table: it should bring its own seat and table. In other words, the continent needs to develop its own perspectives and then participate to the global debate. Thus, it will establish standards relevant to its specificities, and inform the rest of the world about divergent perspectives on ethics applied to AI. Doing so it could shape the debate on a global governance of AI and its ethical dimension, instead of enduring the Western universalist perspective.

The debate on ethics applied to AI can only be enriched with new perspectives stemming from the richness and diversity of the African continent. This open mindedness is all the more important as it would open new fields of reflections fed by mindsets and cultures. It would also undoubtedly open new perspectives that could help in establishing a fair AI governance that would be grounded in the respect of cultural diversity instead of being imposed by the West based on the disputable assumption of the existence of universal values.

This chapter, aims at opening a debate on the significance of cultures in the ethical assessment of AI, stressing the role Africa could play in the field. We will first go through a general overview of the existing normative tools, showing that they are mostly produced by Western countries. We will then have a critical look at the African awakening in the field of AI. We will finish by stressing the pressing need for much more African perspectives and initiatives in the field of ethics applied to AI, and by asserting the fundamental importance of education to train future African leaders in ethics applied to AI.

1 The Global North Versus the Global South: History Repeating?

It has become a truism to assert that AI is everywhere, even if it is not exactly true. It is becoming a truism to say that ethics is everywhere as well when it comes to AI. Short of legal tools, ethics appeared as a normative consolation solution to frame and regulate the development and use of AI systems (AIS). Yet, regulation through ethics is not enough. First, it is not supported by sanctions decided by a normative body or an official regulatory system. Second, ethics is a poorly defined notion that can be subject to many interpretations. Third, a direct consequence of the previous, is that it is too flexible a notion to be applied evenly and efficiently.

Nonetheless, this flexibility and ill-defined character are assets for stakeholders that do not want to be formally constrained by legal rules (Fjeld et al. 2015; Greene et al. 2019). In other words, ethics is the easy way to set standards without setting coercing rules, to regulate AI avoiding legally binding instruments.

Then, doors are open for norm entrepreneurs to start a "moral crusade" (Becker 1963) using norms as a tool to gain power and to protect specific interests. This race

for normative power, well-illustrated by the European Union's efforts to impose rules applied to AI to the rest of the world, has led to the multiplication of codes of ethics and other ethical regulations applied to AI (Goffi et al. 2021; Goffi and Momcilovic 2021).

Yet, those crusaders are drowning the field of AI under hundreds of codes of ethics supposed to regulate its development and use. Doing so they are multiplying sources of norms making them unreadable and then ineffective. Thus, the number of ethical guidelines related to AI has grown in a concerning way these past four years or so.

A quick look at the state of the art suffices to notice the pre-eminence of the West in providing ethical norms. The number of codes pertaining to ethical standards in the field of AI has literally exploded in the past five years or so. Depending on the sources and methods, figures go from around a hundred (Dynamics of Principles Toolbox of the AI Ethics Lab; Council of Europe Digital Policies Framework) to more than a thousand normative documents (Jobin et al. 2019). The vast majority of which were established by Western countries (North America and Europe), by private companies and political bodies (Fjeld et al. 2015; Jobin et al. 2019).

Consequently, one can easily infer that there is a strong probability that existing codes of ethics applied to AI are set in a way that they support Western vested interests (Zeng et al. 2018; Hagendorf 2020). It can also be deduced that the norms established as a result are based on Western concerns presented as universal. The need for privacy would be an interesting if not enlightening case study showing that this need is not universally shared, and that privacy is not understood the same way worldwide. For example, "Ubuntu emphasizes transparency to group members, rather than individual privacy" (Dorine van Norren 2020). Consequently, there might be some legitimate doubts regarding the universal relevance and impact of these codes.

To counter these doubts, the only way is to embrace diversity, to accept that even if we ontologically share a universal belonging to the world, we might differ in our ethical views and appraisals. Then, each culture should be entitled to have its own code of ethics applied to AI, built on its own concerns, and protecting its own interests.

Yet, many parts of the world are excluded, explicitly or implicitly, from the debate on ethics applied to AI. For instance, China, which represents 20% of the world population and is aiming at being the leader in AI by 2040, is barely present in the debate on ethics applied to AI. India, with its 1.36 billion inhabitants is almost totally absent. Latin America is struggling to carve out a niche for itself in the field. The Middle East is slowly emerging trying to be heard in the Western ethical noise. Not to mention Russia.

What about Africa then? As the study by Jobin et al. mentioned it, Africa is "not represented independently from international or supranational organizations", which makes AI ethical regulations problematic for many reasons. First, these regulations might address Western concerns much more than African ones. Second, they might mostly protect Western interests and barely African ones. Third, without Africa being fully engaged in the debate, skills and knowledge will remain on the Western side and Africa's influence will remain limited. One can argue that since Africa is present in international fora, it demonstrates it is involved in the AI ethical regulation debate.

However, the play of diplomatic talks, the competitive geopolitical environment, and the interests at stake (Thibout 2019; Goffi 2020b), along with conformism that is at play among diplomats, do not allow to assert that African peoples' voices are either heard, or even correctly represented.

At the end of the day, while widely praised, diversity and its implications in the field of ethics seem to be denied in the field of AI. Ethical reflections are thus conducted like if the West had a monopoly over what is acceptable and what is not. Interestingly even the fact that some viewpoints are not mainstream is deemed unacceptable from this stance. In other words, we in the West act as if we were legitimate to judge upon the level of acceptability of ethical stances.

The question remains open: can diversity regarding ethical perspectives be denied in the name of a quest for universal standards? Making a choice between relativism and the acknowledgment that all ethical standpoints are equal and universalism and its tyrannical, not to say colonial, potential is cornelian. A third option might be interesting: the recognition of the importance of the respect we owe to particularisms stemming from cultural diversity. Thus, we could find a middle way between the excesses of both relativism and universalism, and thus avoid a new "Western cultural hegemony" (Elmandjra 1995) conveyed in a technological Trojan horse.

Africa could be the herald of such a balanced approach based on mutual listening and respect for cultural features.

2 The "Awakening" of Africa

Looking closer we can perceive some slight changes. Indeed, some countries in Africa have perfectly understood the importance of both AI and the need to be part of the AI race.

AI related technologies are slowly spreading throughout the continent. In the financial sector, for instance, young African companies are using mobile phone platforms relying on AI to provide consumers with bank services. Also, in agriculture where mobile phones are used to monitor crops growing and livestock farming, or like in Uganda, to model crops diseases. Furthermore, Africa "has seen the highest rate of increase in internet use and connectivity in the world over the last two decades" (Hafez 2020), and the potential for further improvement is indisputable with projects such as the Digital Moonshot Initiative aiming at digitally enabling the whole continent by 2030, or the African Union's Digital Transformation Agenda aspiring to allow businesses and individuals to access the Internet for free by 2030.

Nonetheless, it is essential to remember that the spreading of technology is quite uneven in Africa (Hu et al. 2019; UNESCO 2021), with for instance, an internet penetration ranging "from 55% in southern Africa to 12% in the central region of the continent" or mobile subscriptions representing "149% of the population in southern Africa and 102% in northern Africa but only 50% in central Africa" (Dannouni et al. 2020). There is a lot of work ahead to fix this digital divide, but AI remains a top

priority for many countries in Africa (Asmal et al. 2020), the dynamics is there and so are the resources, even if still insufficient.

This uneven pervasiveness of AI must also be put in a wider context of profound cultural diversity on the continent (Gwagwa et al. 2020). It is thus important to stress that Africa is not one homogenous mass. It is multiple. It is a huge mosaic of ethnic cultures made of 48 mainland and 6 islands countries and some 3,000 tribes, speaking between 1,500 and 2,000 languages, and representing about 16% of the world population. The African continent is no more uniform than Europe, the Western world, the Middle East, or Latin America. Then one must bear in mind that talking about Africa as a single entity can be misleading.

This diversity is both a drawback and an asset in Africa's journey towards AI ethical regulations. A drawback first since it means that compromises must be found to allow Africa to speak in unison, if all stakeholders are ever willing to. Obviously, such a goal does not go without difficulties. The very relevance of having one voice for the whole continent is as much disputable as the universalist design of the West. However, if the European Union, despite its internal divergences, is able to reach a middle ground on the subject, one might be optimistic that Africa could succeed as well (Gwagwa et al. 2021; UNESCO 2021).

In Africa, countries such as Kenya, Tunisia, South Africa, Ghana, or Uganda are already working to develop data protection and ethics strategies. The critical question now is: Which ethical approaches are relevant in the context of the diversity the African continent is made of? It is obvious that South African expectations regarding AI (Schoeman et al. 2017) and potential regulations (UNESCO 2021) may not be the same as Nigeria's ones, that Morocco's ambitions may differ from those of Kenya, not to mention their disparate respective capacities to develop standards. When it comes to AI ethical regulations, it is then fundamental to go beyond the bad habit to consider Africa as a whole, and to take into consideration its diversity and particularisms. Navigating between different wisdoms such as Ubuntu or animism, several religions and syncretism, various traditions, diverse identities stemming from numerous historical backgrounds, Africa is a patchwork of cultures that do not fit into arbitrary categories or even established borders. Adding geopolitical and political considerations, would definitely make a unified ethics difficult to delineate.

However, despite all foreseeable difficulties, the continent should consider setting its own AI ethical regulations and monitoring bodies specifically focusing on its diversity which also makes its richness. The future of AI in Africa should be African, benefiting a population which is expected to double in the next three decades.

Yet, AI ethical standards and discussion are still set in the West as if Africa was unable to identify its own specific needs, define its own solutions, and build its own ethical framework. Africa has a lot to bring to the debate on ethics applied to AI opening doors to new perspectives stemming from its own experiences and philosophical traditions. Enriched by its exceptional spiritual diversity made of traditional Religions of the Book, wisdom such as Ubuntu and animism and its syncretic practices, African peoples have the power to help us to take a fresh look at ethics applied to

AI. An African perspective on ethics applied to AI would not only shake our conviction and open a new path towards AI ethical regulations, but it would also offer the continent normative tools fitting its very needs for the benefit of its population.

AI is not developing at the same pace in Africa as in the global North. It is undeniable that initiatives, such as the Responsible AI Network—frica, have been launched to bring Africa back in the AI race. Still, there is some work ahead if the African continent wants to take a role in AI at large, and in ethics applied to AI specifically.

One of the biggest challenges will be then to develop a native perspective on ethics applied to AI. This will not be an easy task. However, it is an essential one. Cultures, histories, religions, political systems, identities, geopolitical considerations, technological advancement, and financial interests are among some of the hurdles that Africa will have to go over to set its own ethical regulations. Africa will actually have to deal with the same difficulties to build common ethical norms than ones the rest of the world is currently experiencing, internal competitions and vested interests coming first.

As Gwagwa (2019) stresses, "despite the clear need to understand how AI affects people around the world, a truly global perspective remains a critical blind spot in the ethics conversation." Though, freeing from the universalist Western approach on ethics applied to AI seems difficult. Calling for inclusion of Africa in the debate instead of calling Africa to establish its own strategy on local grounds, is illustrative of this tendency to leave the lead to the West and to request others to join the bandwagon. Thus, while underlining the global ethical perspective blind spot, Gwagwa writes that "[e]thical AI requires the application of universal human values and international standards", adding that "[h]owever, it also needs to take into account Africa's historical peculiarities."

Africa needs more than ever to free itself from the Western universalist tropism to focus on its peoples' needs and ethical stances. Calling at the same time for universal normative standards, and for the respect of particularisms will inevitably lead to dead ends and slow down Africa's journey towards AI and its potential benefits.

The perceptible awakening of Africa in the field of AI needs to be nuanced. If there are some positive signs showing that the continent is aware of the importance and of the potential of AI, Africa is still lagging and Western viewpoints are still pervading, especially when it comes to establishing ethical norms. Africa needs to move from a passenger side to a driver side strategy if the continent wants to become a leader in the field.

"The race for digital advantage in Africa" (Dannouni et al. 2020) can only be won by trained people. Not only should people be trained to run the race, but they also need to be trained running on a specific ground for a specific type of race. In other words, when it comes to AI education, Africa should teach people to run the normative race based on cultural grounds.

3 The Importance of Africa's Native Perspective

A native perspective on ethics applied to AI is thus necessary to unleash the full potential of the continent.

In 2021 the UNESCO released the results of its *Artificial intelligence needs assessment survey in Africa*, stressing the "significant human resource gap in addressing the ethical implications of AI in the surveyed countries" and highlighting concerns regarding the safeguard of cultural heritage and the implication of AI for cultural diversity. Interestingly, the impact on cultural diversity of norms almost exclusively set by Western countries (Jobin et al. 2019) is barely addressed by scholars and commentators.

Culture here is key. Culture is the product of "the collective programming of the mind", lying on specific values and leading to appropriate behaviors (Hofstede 2001). As such cultures are the vehicle for common ideas and shared perceptions. They model communities and provide them with the necessary cement to build a society. They also provide members of the community with a sense of belonging, a structure within which individuals will build their identities and roles, which will in turn give birth to particular "expectations and meanings" that will "form a set of standards that guide behavior" (Burke and Stets 2000). As such, culture is an essential component of societies worth being protected. When it comes to AI ethical standards, if we agree that these standards are the product of culture, we might assume that they will differ from one cultural community to another. This diversity and the range of particularisms it covers need to be defended against any attempt to impose standards, legal and/or ethical, from the outgroups. Cultural diversity and particularisms must be fully considered and integrated into the debate on ethics applied to AI (Goffi 2021a, b). More than just an option, it must be seen as a "matter of survival" (Elmandira 1995).

Incidentally, the fundamental value of cultural diversity is clearly and loudly stated in the Universal Declaration of Human Rights (art. 22) and the Universal Declaration on Cultural Diversity (art. 4), of the United Nations Educational, Scientific and Cultural Organization adopted in 2001. The United Nations Charter, furthermore, calls for international co-operation in the cultural field (art. 13) and for "international cultural and educational cooperation" (art. 55), "with due respect for the culture" of the peoples (art. 73).

Aside from "culture", keywords here are "cooperation" and "respect". Respectful cooperation in the field of ethics applied to AI cannot go through mere inclusion of the African continent into an existing debate of which limits have been mainly set by Western countries. A call for inclusion presupposes exclusion and can even lead to more exclusion. By setting standards without listening to African voices, "the Global North may lead the social inclusion discourse and take decisions on how African civil society should be included" (Gwagwa 2019). Such a situation would eventually lead to the denial of Africa's right to make its own way towards its own AI ethical regulations, excluding de facto the continent from the debate. On the other hand, it must be recognized that African actors need to develop their own

perspective as independently as possible from Western influences. Thus, instead of assessing "the extent to which Africa has been included in the AI ethics discussions to date" (Gwagwa 2019), it is worth assessing what Africa's peoples are and what native solutions might be offered.

Africa should from now on consider developing standards fitting its needs and its cultures. This will be possible if and only if education on native ethical perspectives is developed at all levels from initial to continuing education.

So far, Africa has been following, sometimes from afar, the discussion on ethics applied to AI. Most of the initiatives that are launched in the field of AI in Africa are actually initiated by Western institutions or under the auspices of international organizations such as the UNESCO, where the play of diplomacy and the level of conformism does not allow the expression of grass roots' viewpoints.

African trailblazers in ethics applied to AI will then emerge from the youngest generation that will be educated on the subject from their respective cultural standpoints. This is exactly the claim made by the UNESCO's Director-General when she asserts that "we must empower young people by providing them with the skills they need for life in the twenty-first century" and eventually "to ensure that Africa fully participates in transformations related to AI, not only as a beneficiary but also upstream, contributing directly to its development" (Azoulay n.d.).

Yet, behind good intentions bad methods can be found, and even if the UNESCO aims at being "a universal forum where everyone's voice is heard and respected" (Azoulay n.d.) it does not mean that everyone's voice is actually heard and respected.

Indeed, Azoulay (n.d.), while calling for an international dialogue, also states that ethics applied to AI is a global issue and that "reflection on it must take place at the global level so as to avoid a 'pick-and-choose' approach to ethics". The problem with such a statement is that it closes doors to particularisms trying to merge diverse and intricate perspectives into one single stance. The very ethical question here would be to know why "a 'pick-and-choose' approach to ethics", which refers to the idea that each actor should be entitled to take whatever it considers as relevant to its specific case, should be avoided. Then the very fact that ethics applied to AI is a global issue is misleading for in many places around the world, it is not even a subject either because it is not culturally necessary (for instance in culture where ethics is based on religious beliefs that cannot be questioned by regular people), or because technology is not seen as problematic, or even because technology is not accessible.

So, questions remain open: on what ethical ground can we assert that 'pick-and-choose' ethics are less acceptable than global ethics? Isn't respect for diversity, including ethical diversity, a value for the UNESCO? Is relativism more unacceptable ethically than universal hegemony?

As philosopher Effa (2015), writing on animism, puts it, "Africa has still a lot to tell us. Since she went through the great ordeal, she is in some ways enlightened (*initiée*)". The very first thing Africa could offer to the world is a unique perspective, maybe more pragmatic, on ethics applied to AI. Developing its own ethical perspective, Africa could participate to the setting of a global governance system that would take into account the specificities of the continent.

As an illustration, Gwagwa (2019) relevantly stresses, that "governments of the Global North, with some exceptions, mostly approach the ownership and protection of data simply from a personal privacy angle, without considering the economic value of processed and redacted data, whilst those in the Global South are only beginning to see such datasets as a valuable collective informational resource". Africa might initiate a debate on what privacy really means for African people since "[a]n African approach to privacy and protection is not about personal data, but collective rights" (Romanoff and Hidalgo-Sanchis 2019). Then it should evaluate the importance of privacy compared to the expected economic gains related to the use of data potentially seeing them as a "promising resource" (Goffi 2020a) in the struggle between multinational companies and African actors (Dannouni et al. 2020). The ethical perspective might be then quite different and so would be standards.

As a consequence, "[f]uture regulatory frameworks should not merely be imported from the West as policy transfer but engaged with and adapted to the African context" (Gwagwa 2019) and interests.

What is needed now in Africa, is a huge education program providing peoples with the relevant tools to make their own opinion on what they need and how they want to reach their goals within a specific cultural ethical framework. Equipped with such skills, African peoples will be able to not be included into an existing debate, but to initiate new debates and thus have a real influence at the global level on the future of AI and its normative frame.

Eventually, education at large, and critical thinking specifically, is the key that will open the door to autonomous reflections on ethics applied to AI in Africa and allow the continent to develop and use AI *for* Africans in an ethically acceptable and unbiased way.

4 Education: A Necessary Tool for Africa's Influence in Ethics Applied to AI

Following Swiss psychologist Jean (1990, 1952, 1997), Piaget and Inhelder (1969) works on cognitive development, and Russian psychologist Vygotsky (1978, 1986) writings on the impact of social interactions on cognition and behaviour, social constructivists have demonstrated the importance of culture in the shaping of ideas. If Piaget's and Vygotsky's research focused on children, they can nonetheless be extended to adults whose perceptions of the world are influenced by their experiences and consequently by their early education.

Then social constructivism has been extensively used in the field of education explaining how learners are constructing their knowledge based on experiences. Stating that reality is a social construction (Berger and Luckmann 1966), constructivists offer a method to understand how this reality is built.

Two elements seem essential to stress regarding ethics applied to AI from an African perspective. First, according to social constructivism, education is the vehicle

for the construction of both morality and the reality of the world. Second, language plays a critical role in spreading ideas and thus shaping perceptions.

If we agree with Durkheim (1925) that education, including moral education, and language are both intrinsically linked to culture, this leads us to postulate that any fair ethical appraisal of AI should stem from a specific education and language, in other words from a specific cultural standpoint.

Consequently, education based on local cultural standards is essential to the protection of culture. Conversely, any education based on outgroups cultural standards could lead to some kind of weakening if not disappearance of a specific culture. As Durkheim asserted it "[w]henever two peoples, two groups of individuals belonging to different levels of culture, are brought into continuous contact with each other, certain feelings will develop which will make the group which has or believes itself to have the higher culture tend to do violence to the other group" (Durkheim 1925). Even if Durkheim deducted this law from the specific case of corporal punishment in school settings, it is still relevant considering that the denial of cultural particularism can be likened to a form of psychological violence, sometimes, as History as unfortunately shown, leading to physical violence.

Yet, as stated in the UNESCO's Universal Declaration on Cultural Diversity, "[t]he defence of cultural diversity is an ethical imperative, inseparable from respect for human dignity" (art. 4), and "due respect for the culture" of the peoples is a legal requirement enshrined in the United Nations Charter.

Therefore, adopting ethical rules applicable to AI set by Western countries seems not only irrelevant regarding respect for cultural diversity, but it also seems potentially dangerous for African people. Yet, the tendency is still to ask for help in terms of setting standards (UNESCO 2021).

5 Facing the Turning Point: Towards Conformism or Towards Autonomy

Two alternatives lie before Africa today. On the one hand, the continent can keep on calling for inclusion into the existing debate framed by Western actors and adopting pre-established normative instruments and reflections trying to adjust them to its needs. Doing so, Africa would recognize the influence of other cultures on its own ones, and thus accept the potential risks for its cultures. Falling into "moral realism" (Piaget 1997), i.e. the idea that rules define what is right and what is wrong and that "[a]ny act that shows obedience to a rule (...) is good; any act that does not conform to rules is bad", would lead to the mere application of Western standards to African situations, with the risk that these standards would not benefit Africa's peoples.

On the other hand, Africa could start working on a native "construction of reality" grounded on its own experiences and needs. It would then free itself from the Western moral tutelage. This second option is by far the most relevant if African countries

want to fully benefit from the godsend of AI and be competitive at the international level.

Then the very first step would be to educate people in Africa in a way that would empower them with the sufficient knowledge and skills to take charge of their own fortune. Such an education should be built upon a constructivist approach considering, first, that knowledge is the product of experiences rooted in specific contexts and of social processes and interactions, second, that it results from language use, itself integrated in a cultural setting.

Teaching should not be reduced to mere spreading of existing knowledge. It should challenge learners, give them a voice, support them in making their own theories, building their own perceptions. It should also be contextualized in order to offer students with a full understanding of the context in which ethics applied to AI is implemented. Passive learning, consisting in waiting for the West to provide knowledge, must yield priority to active learning empowering learners with necessary skills to construct native meanings through active engagement with their cultural environment. Putting down learners' roots in a community sharing values and ideas will provide them with a sense of belonging, with a role and identity (Burke and Stets 2000), and help them to acquire meaning "in a system of social behavior" (Vygotsky 1978).

The above-mentioned need for educational shift perfectly aligns with the survey released by the UNESCO (2021), stressing that 84 percent of responding African countries consider that "updating education, skills and training systems to strengthen human and institutional capacities for the development and use of AI" is important.

Educational strategies must be developed in Africa to avoid "moral crusaders" (Becker 1963) to impact local cultures. Once again, the UNESCO's (2021) survey stresses that "[t]he implications of AI for cultural diversity is important for 20 countries, of which ten consider the issue to be urgent" but does not mention potential risks associated with the imposition of non-African moral standards to the continent and the need for native reflections on ethics applied to AI.

Africa has a unique opportunity to make its own journey towards AI and its ethical framework. What it needs is to develop a "theory of experience" rooted in its own settings to move "forward to ever greater utilization of scientific method in the development of the possibilities of growing, expanding experience" (Dewey 1938).

As Honebein (1996) summarized it, such a strategy should aim at reaching several pedagogical goals, among which embedding "learning in realistic and relevant contexts" and grounding it "problems within the noise and complexity that surrounds them".

Education in Africa should be aimed at solving African problems through African reflections based on African cultural perspectives and identified needs. Any attempts to adjust Western standards to the African situation is a risky bet. Ethics applied to AI is no exception. It is all the more relevant that ethics is based on values that are themselves grounded into culture.

6 Conclusion

The wideness of the world barely falls in with the narrowness of our mindsets. Education is a way to open our mind to diversity and to listen to particular perspectives.

Clearly, AI has an enormous potential to generate wealth in Africa. However, framing this potential within ethical standards set by non-African stakeholders may hinder the expected benefits of AI for the continent. Undoubtedly, Africa as a tessellated area will face internal struggles around vested interests related to AI foreseeable godsends. Yet, it might be easier and more relevant to find a compromise, even if unperfect, on AI ethical norms between African actors than to import existing frameworks that would not fit Africa's needs and would potentially jeopardize its expected benefits. So far, the West is leading the normative debate on AI shaping its outlines and slowly imposing its perspective without due consideration of the cultural diversity of ethical stances.

Africa needs to shift to many native educational strategies aiming at empowering its people and providing them with all necessary skills and tools to be competitive in the international AI race.

Things are evolving at a slow pace in Africa. Even if the continent is perfectly aware of the benefits it could withdraw from AI, it is still lagging waiting for inclusion into the ethical debate. Short of a native perspective, African countries are relying on existing codes and normative documents established by non-African countries. Adopting standards set in a different cultural environment might be dangerous for it would give room to cultural influence that might endanger African cultures.

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