

Dr Jason McSparren: Good Afternoon Ladies and Gentlemen, Students, Practitioners. Welcome to The Green Room Episode 7. We're really pleased to have you with us today. We are going to have a great discussion. Our topic today, we're going to be talking about 'Artificial Intelligence in Human Rights in Africa. We are looking at the Sustainable Development Impacts, our grant guest speaker Today is Jake Okechukwu Effoduh, and we like to welcome him to the Green Room Episode 7. Jake is a human rights lawyer, with a demonstrated history of advocacy across domestic and international systems. He has worked within the Justice sector in Nigeria, the West African ECOWAS human rights system, the African Human Rights Commission and the United Nations Human Rights Council. Jake anchor two (2) nationwide radio programs in Nigeria for 12 years, which aired at over 150 stations across the country and earned him several international awards including winning the future Awards Africa for Community Action and the prestigious African broadcaster of the year award in 2016. Jake is a Vanier Scholar at the Osgoode Hall law school. He's conducted research on the legitimisation of artificial intelligence for human rights in Africa. Today Jake is going to present about his work on artificial intelligence and human rights in Africa. So, can we please welcome Jake? We can't hear your applause, but we should do hope that you are clapping. Please welcome Jake Okechukwu Effoduh. Thank you very much, everybody.

Jake Effoduh: Thank you. Thank you very much. Dr Jason McSparren. It is such an honour to be right here in The Green Room. Thank you for the great introduction and for the inspiration that you actually provide personally, professionally and on this platform as well. So I'm really happy to be here in The Green Room and to speak with you about things that I'm very passionate about human rights, artificial intelligence, sustainable development and you know and environmental justice. These are things that really matter to us right now, especially with what we're going through. So it's an honour to share my humble insights and to engage. I hope this would be a collaborative platform where you can ask questions. I can ask questions because you're doing pretty much similar work as I'm doing as well so we can both learn and have a relative discourse on this. So thank you so much.

Dr Jason McSparren: Okay, Jake. If you wouldn't mind audience would like to hear a few of a little summary of your work, if you could give us a little bit of your background on artificial intelligence and how it relates to Human Rights and environmental justice on the African continent, please.

Jake Effoduh: Okay. So, I have a passion for human rights, of in a human rights lawyer for about ten years now. But as we currently leave in the Fourth Industrial Revolution, artificial intelligence being one of the innovations of this time is something that affects us as human beings whether we know about it or we don't. And so, for the past few years, I've been researching on the legitimisation of artificial intelligence, and how it affects human rights for Africans and on the African continent. So maybe I might want to give a little bit of a background regarding like, what exactly is human rights? What is it? Where does it come from so I could just give a little primer as to what is artificial intelligence? What is human rights and then you know, what is when we talk about sustainable development or justice? What exactly are we talking about? So as a starter, people always ask me, you know, where did the concept of Human Rights come from? You know did it come from indigenous pre-colonial African communities? Can it be traced to like the holy books? Where exactly is the aspiration for this concept of Human Rights? Where does it come from? I always say like, you know, when it comes to Human Rights, sometimes it's quite ubiquitous in both academic and contemporary discourses, but it doesn't have any canonical meaning it's criterion less right, but in general common parlance this concepts actually refers to like standards, principles and norms that pretty much allow people to live and interact with certain values.

Values like dignity, freedom, equity, accord, fairness, right? So I know that these values have like various extensive meanings, but the concept of Human Rights simply refers to what human beings should enjoy and inherently entitled to just because they are human beings. Be it the right to life, the right to freedom from torture, the rights of personal security, the right to food and water. These are various categories or types of human rights that are considered indivisible that you cannot take them away from what a reasonable human life should be. So, these rights are interrelated, interdependent on each other. And so, therefore, human beings need them to survive. For people to gain full development, for people and their communities to sort of thrive and live, they need these norms. They need these rights. So when we talked about women rights. Some of it might not be recognised in our local laws, but there's international law that sort of recognises the status of what human rights are and so instead of going to trace like, where did it come from? Is it African? Is it not? I always say, of course, it is African. From a historiographical perspective, where is no starting points for where human rights emanated from, people have said well, maybe it came from the Charter of Mandae. The first human rights African declaration. I think that was in 1222 that from there people began to talk about like what does it mean for us to agree on certain things that we are both equal, even though we look different, even though maybe different genders different, even though you might be rich or whatever. So there's so many philosophical conceptions about what the concepts of human rights are and how they extend, but in summary so that I don't waste much time in discussing what human rights are. From an African perspective, I think consciously or unconsciously we have been carrying this idea of what we understand human rights to be, so it's pretty much the fact that every human being irrespective of who they are where they are from whether they are rich or poor, whether they're black or white, whether they are migrants or whatever tribe that they have. We all have equal footing, and we all have the responsibility to enjoy the necessities of life such as food, water, work, health care, housing, education and you know our culture which is very essential for healthy and dignified lives. So I don't want to bore you with like the international conventions like the UDHR or the ICCPR or the ICESCR are, but pretty much when we talk about human rights were just talking about the ability for people to own who they are and own certain things just because they are human beings and they are deserving of them.

Dr Jason McSparren: Yes. Now, I'm well aware that as you're saying you don't want to go into all of the tributes and all the institutions, but I am grateful Jake because that foundational explanation of what human rights is probably very useful for a lot of people in our audience right? Again human rights is one of these concepts that if you hear about it all of the time, right we often hear it in the context of human rights abuses or people not actually being afforded their human rights. So again, it's one of the concepts that's been turned around so often that yeah, you know, not everybody may understand what it is at its core right? So I appreciate that explanation that essentially, human rights is just about dignity and security and you know freedoms. Just to be whomever an individual wishes he or she would like to be.

Jake Effoduh: Yeah, of course, there's so many ambiguities when it comes to this concept, and human rights always has its criticism as well and it's a growing concept, is a negotiated a concept right? But it's something that I as a human rights activist for over 10 years now. I always say that, you know human right is not one thing. It's constantly evolving and changing because as a society, things around us changes is the only constant thing around us. So with introduction of AI for example, or with climate change, for example, I don't think 20 years ago people were talking about human rights and climate change but in 2020 with the kind of impact we see online environment. Climate change is now becoming human rights issue. COVID-19 has now become a human rights issue. So it's a continuous negotiated process and I don't

want people to feel like oh you okay here comes another human rights issue expect that to happen is always going to be negotiated. But as long as you're within the same value framework that people deserve respect, that we deserve dignity, that we deserve quality, people deserve access to sustainable living, a standardised living that people can feel that they can participate in communal life or in their general well-being then that is what human rights is all about.

Dr Jason McSparren: Excellent. Okay, so moving from human rights, which direction should we go into should we talk about AI or should we start to talk about environmental justice? What would you like to go?

Jake Effoduh: I will talk about AI very briefly. I'm not an AI expert. I'm not a computer programmer or anything as that. I work in the field of law. So I'm always looking at the ways by which AI interact with human rights. I guess artificial intelligence is something that is so difficult to explain to anyone because what is AI keeps shifting, right? Yes. I think it calculates all could have been AI maybe 50 years ago because they can manipulate and calculate things. But Today things like a calculator has pretty much not AI write from a computer science perspective AI as a technology would be like computer programs that are capable of behavior that would normally require intelligence. Right? But as a field of study it is the development of AI systems. So what is artificial intelligence is something that not anybody can say this is AI and that is not AI but generally speaking anything that can think like a human being, can talk like a human being, can reason like a human being, can process like a human being and it's not a human being with a computer system or program, it most likely is AI. There is no standard definition of what AI is but they're different categories, there's like machine learning, there's deep learning, there are also people who have theorise the idea that AI system become super intelligent that they would surpass our level of human thinking. So what AI is most times exemplified, when you think of your Gmail for example, like when you are about to send an email and it gives you suggestions on what you should write or shouldn't write that maybe an AI system. When you're talking to your mobile phone and you can use Siri or any of this robot like Roomba that actually does your cleaning for you and is intelligent enough to know where there's dirt and where there's no dirt that's an AI system. So, people have engaged with AI systems without knowing it right, if they've used Google Maps, they use their phones or they use certain tech devices or even as we're using right here right now, facial recognition devices, these are various examples of AI. The use of robots, robots are called embodied AI because there's like a software but there's a hardware as well. So there's so many ways that people engage and integrates with artificial intelligence, defining it is one thing, but knowing what it is, is another but the major point is recognising that the definition is complex but it is a really big green phenomenon. And it is one of the constructs of the fourth Industrial Revolution AI does not just walk in by itself. You know, we've seen the integration between AI and machine learning, between AI on quantum computing, even things like biotechnology, for example with COVID-19 vaccines, nanotechnology for example, you see that AI has been able to do like research maybe hundred times faster than the human being would. Say, I can process information ten times a hundred times faster than the human being would and AI tax system for example can tell your tax liability 25 times better than a human being would. So, AI actually, I mean the blood line of AI is data. When there's enough data and is an algorithm for the AI system to follow its able to predict things and you know make outcomes now we can have a long conversation about what that means for human rights. We can have a long conversation about what that means for human rights in Africa because with AI systems they have built under certain algorithms, algorithms are not perfect, but they are also trained with certain data and that data may not be fully representative of the people that might be affected by this technology. I will cite two examples

very briefly. I'm very Pro AI, I am tech optimists, but I think that optimism needs to be it needs to be systematised and it needs to be directed in the right direction. If you leave AI as it is, it's not going to benefit us and it's not going to benefit human rights. The two examples I would give is, there was actually an AI system that was developed for self-driving cars. A self-driving car companies developing an AI system that when it sees a human being it would stop. Now, if you've ever gone to a shooting range and you want to shoot you notice that most of the diagrams there are like in a male figure that like a male templates, right? And so the cars were trained with a man like templates and so most people that deserve driving car has injured more women and children because the car had a difficult time to recognise them based on the data that was trained with the self-driving car. Now of course self-driving cars are 100 times safer than human beings driving the cars. So there's a huge value and benefit to that but I'm just pointing out that with the way the data was really a system was strained. It wasn't a robust enough. It wasn't diverse enough for me to recognise, the child that it hits for example as a human being. The second one is one from Africa, where there was an autonomous weapons system in South Africa was being trained to fight War but it turn around and like I think injured about nine people and killed about four people because the AI did not recognise the people it saw as human beings, it actually thought they were like monkeys or gorillas, for example. So again, this is an example of how AI systems can be found wanting for like implicit bias, racism and sometimes it's not really directed that way, is just lack of proper data or lack of training the systems in a way that is more representative. And so this is why the discourse on human rights Mr. Premier different fields of endeavor. Computer scientists and technologists need understand that the things that they create can have a huge impact on the recognition of human rights, can have a huge impact on the lives of other people even though they did not envision it.

Dr Jason McSparren: Yes. So with this beginning of the discussion talking about human rights and now introducing artificial intelligence could we talk a little bit and kind of redirect our discussion to the dynamics on the African continent? So one of your recent articles you talk about seven different ways that AI is being implemented in Africa and one of the things that you mention is that certain countries and you list several are developing national artificial intelligence strategies or institute's to study at war councils to manage it. I was wondering, what does this mean for the spread of AI across government agencies in current commercial enterprises on the African continent?

Jake Effoduh: Thank you very much for that very important question. One of the motivations why I wrote that article is because, a lot of the literature kept saying AI does not exist in Africa or like Africa has no framework for AI, Africa needs to catch up and I'm like wait a minute. There is a lot going on when it comes to the AI space in Africa, but not many people are aware. So beyond the use of AI in Africa, which is proliferating. There are institutional structures, legal instruments that are guiding the field of AI. Of course, it may not be as robust as that of the EU or the US or China, but there is and I call it in normative emergence. There is an AI normative emergence within the African continent that needs to be recognise. So in my article I mentioned seven ways that African states are legitimising AI and I think it's important because I don't think anyone has done this mapping exercise before and I mentioned number one, African state that are developing national AI strategies, number two, advocacies and establishing things like AI agencies task force and commissions. For example, two weeks ago the Nigerian government just launched national AI and robotic center, right which is which is new, but it's one of the first on the continent. Africa states are building strategic partnerships, they are initiating public sector reform on AI. They're driving AI education, AI training and research and they're fostering I think Africa is actually fostering a continental

wide approach to AI. Now, you ask what this means for Africa number one, it means that Africans are realising the impact and the value of artificial intelligence. Not only as a growing technology that we need to leapfrog into or we need to adopt but as a technology that effects various aspect of our human endeavor as Africans. As a technology, what Africa state are realising is that we need to develop strategies to maximise the benefit of this new technology. But we also need to regulate the way that it might affect us disproportionately. Now when you ask about the countries that are developing national AI strategies, this might not be like the very big countries because when people comes to Africa and it talked about AI they look at Nigeria, South Africa, Kenya. They are the big AI hubs. The first country in Africa to develop a national AI strategy I think it was Mauritius. Mauritius developed an AI strategy and they focused on two major areas. One was they wanted to develop a specialised AI academic and secondly, they wanted to see how they can use AI for governance and business enterprise that would drive data science. If you look at the Mauritian or the Mauritius AI strategy, you see that focus on how AI can help with oceanography because they are they are around water. But for some other states like Nigeria looking at how AI can actually help public sector, governance and improve like the education sector within the country. So yes Mauritius, Egypt, Zambia, Tunisia, Botswana. These are countries that are developing AI strategies now my work, my role as a lawyer is to ensure that as they are developing these strategies. They are aware not only of the benefits that it really brings the country, but also all the risk that a particular to these various States.

Jason: You know that that's really fascinating. It is one of those things. You know, I appreciate that, you said you're one of the first people to do such an exercise, to kind of look across the continent see, where these governments are starting to focus their attention on AI and that makes me think. There is this another book that I've been reading recently. It's called Disruptive Technologies, Innovation and Development in Africa. It's a book edited by Peter Arthur, Kobena Hansen and Pupilampu Korbla and it's a really interesting book. Because again, they're looking at disruptive technologies in several different sectors looking at, you know in agriculture, in human rights, in fintech and so on. That is several different sectors in one of the points that they often make in the book and I this is kind of leaning into a question is that you know, a lot of people especially from a western perspective look at Africa as being in such a deficit, in terms of economics and access to technology. But they like to you to focus on the idea that Africa can't leapfrog right? Africa does not have to be path dependent on developing these technologies, Africa can't leapfrog. So I just wondered if you could give us a little bit more insight on again with the article is fantastic in that it identifies. So many of aspects of AI being investigated it also implemented on the continent, but I'm just curious to see if you can start to talk bit more about ways that you're seeing maybe Africa leapfrogging in really starting to you know, you know leapfrogging and you know, really implementing these new technologies in a positive way. Absolutely, and you make a very valid point now, I would say three things. Now. The first thing is AI is pretty much like a double-edged sword right while it does it does provide a lot of issues when it comes to Human Rights. If we do not like engage it properly. It does provide some benefits as well. For example, we have ai automation has resulted in the closure none of setting factories in Africa facts African consumers I've had yeah, they're faxing flaws closed down people who work in a parallel leather Footwear factories. So because computers can do them better and they are cheaper and these are going to replace it with speed factories in Germany, like smart factories in the US so for the past five years Africa has been 600,000 people have been displaced from their jobs because computers took over them in Africa and is a computer that's go over them in other countries, right but on the other side, yeah, a couple of people who have gained jobs in the AI sector. So you talk about Think Tank and Agric right? There are tons of people who have now gotten jobs in areas that do not have gotten

jobs in the past 45 years. So the fin Tech sector in Africa is growing very much the Advocate is becoming more technologies is becoming more AI efficient. And so AI is like a two-sided to like you picked the one hand. And we see providing value but at the other hand is we see a lot of problems with it. So let's talk about some of the issues you mentioned when it comes to leapfrog in Africa developers. Play-Doh African is to just Leap Frog African aesthetic frog let me explain whatever books the first of all what is leapfrogging? Right? Developing nations, what they're saying is that Africa the developing continents needs to bypass the earlier technologies and adopt more advance technology. We are saying that because some of us some African societies have not even gotten electricity right, electricity is still in a problem for a lot of African communities. And what leapfrog in is telling us is that well, there's no time for you to like get electricity, use a desktop and then a laptop and then an iPad and then a phone, you know what, just go straight once you get what you want, just go straight into the latest technology, so you're leapfrogging, your bypassing the various levels of technological advancement. Another example would be that, well instead of if you've never used a computer instead of going from a floppy three and a half disk, to a flash drive or a CD ROM, to cloud just go straight to cloud. Because there's no time, civilisation and globalisation is advancing so fast that you don't have time to catch up. Now, there's a problem with that, the problem with that is that if you do not advance progressively with the technology, there is a gap when it comes to understanding the technology. So, a lot of Africans use AI but they don't understand how AI works. That's number one. Number two how much differential with that, if you're not creating a technology, but you're utilising it and you're using it. There's a chance for people call or they've called it. I mean, it's called algorithmic colonialism that well. Yes, there's a term algorithmic colonisation, whereby certain people who just want the technology will become a new tool for people to be colonised by that. So people always right, you know leapfrogging as a solution but these are not these are not really, many of them are not Africans so they just assumed that this would be the one-stop solution. For example, Nigeria is a very big user of AI but 90% of the AI software in Nigeria is not produced in Nigeria. So we're just adopting this technology without creating them. Leapfrogging is great. But I would say my personal view is two things not every society needs to leapfrog. Certain society might to take their time to acclimatise and get used to the new technologies. And of course some societies need to leapfrog right to if you don't need to wait to you know, use the media, like what is available now as long as you can participate, as long as you can adopt appropriately, as long as can absorb that technology, go for it, but the most important point here about leapfrogging, is the fact that beyond asking Africans to leapfrog we need to think of how do we sustainably develop our own AI systems. How can African learn? How can they learn how to code? How can they create their own systems? It might not be as robust or as well as advanced as the one in the west but realise from research that think that are homegrown are more sustainable. More importantly, there is an African approach to things there's an African perspective to things. I just talked about the value of Human Rights right when we come to the use of technology, in the west technologies seems to be a thing that needs to be owned by 1 person Oh, I have the patent, oh. I have to plate mark oh it's mine, but we do that when it comes to from an African perspective technologies need to be more open more continuous, inclusive, collaborative, more communitarian. So as Africa as a lawyer as a human rights lawyer from Africa, we have the African Charter on human and people's rights that talks about people's rights, right people have a right to yourself, but your s comes with duties to other people. It's not really a western to think about. A Westernize approach to AI is like I created a technology, it's my own and therefore whatever value I made from it belongs to me. But an African perspective would be more critical about that, will be like know if you create a technology that affects the lives of other people that community members are using then, it become, you have the credits as the originator, but it's not more

of a community own technology and that's why when I think about rulemaking, when it comes to new technologies and AI we need to repent on the African perspective, the ethical considerations that are in our own ways African. So yes leapfrogging is great. It's a good idea, people need to leapfrog. We need to use more AI More tech. We need to use more, more, more but we need to create them as well. We need to learn how they are created. We need to make them more homegrown and we need to infuse them with the values and norms from where we are from.

Dr Jason McSparren: Fantastic. This is a great thing to do now. This is a great conversation. We've talked about with AI is, we've talked about what Human rights are, what I like to do is ask you to bring in the third aspect of this discussion, which is environmental justice. And can you just link environmental justice to those other two concepts, maybe a couple three minutes, five minutes at Max and then I would like to do is I'd like to open up to audience questions if that's okay with you.

Jake Effoduh: Absolutely. I think we cannot talk about human rights or AI without thinking about the environment. I think in this day and age with the kind of effects that we see in terms of climate change adaptation and mitigation, the environmental justice is something that needs to be at the Forefront of every single thing that we do. So first of all, what is environmental justice because sometimes I say social justice and environmental justice, but they are very much linked to the same thing, that directed at meeting the basic human needs and enhancing the quality of life of people so environmental justice is about economic quality, is about health care, is about housing, food, jobs, human dignity, but more importantly about environmental protection and security. I think it's the idea that when we talk about justice, it's must be justice for a lot of people or especially the poor because we know that when it comes to environmental degradation or climate change, the poor are the ones who are mostly affected right with the extractive industries taking our oil from the land or taking out coal from the land, they don't take them in big cities, they don't take them in like the state capital, they take them in villages, local areas, where people are disenfranchised by this resources. But also they are exposed to dangerous chemical pollution, and these rural communities are left without resources like land, food and even water. So, environmental justice is pretty much situating that, when it comes to the issue of justice or human rights or equality the approach must challenge the abuse of power but must also recognise the justifiability of the people, especially the poor who do not need to suffer from severe economic abuse, but should enjoy from the environment and the proceed of the environment. Poor people should be able to have access to land, to food, to clean water, clean air, and you know stuff like that. So that's exactly the framework of what our environmental justice is all about. So when it comes to human rights and that's why from an African perspective, it's very important to think of people's rights. How does your own rights? How does your own work affect the rights of other people? Even if you have a license to mine or to do a particular thing or two, tare a road from here to another jurisdiction or another city. The critical question of how it affects the lives of other people is very important, even though you have a legal right to do a certain thing. But how does it affect the rights of other people. A simple example I always give is you have an orchard of like mango trees or orange trees, right? And it's your land. It's your trees and everything so you can do anything on your land, you can break bottles on the land, you can put whatever it is. You can create a fence around it, if and that's yours, but then there's going to be an issue even within the law, but it's going to be a social issue if you put bottles on your orchard knowing fully well that kids are likely to come in into your orchard to pluck a mango or pluck an orange and you bought them right, so you might legal rights to the land, but then you need to think about the social considerations of what you're doing and how it

impacts the lives of other people. Yeah. So the work I have done in terms of socio-economic and I would reference a particular engagement. I use my radio show to do was about two years ago in the local community in Kaduna State Nigeria where the National Oil Company Refinery was situated there, in a local company is called the Debido and in that community that is where oil gets processed, but the community itself, is like they got worse off instead of being better off because of that, right? So, with the extraction and refining going on in their locality. They don't they cannot even boast of like a well-functioning health care system. They can boast of their kids get scholarships to even work in this particular company. They can boast of clean water, in fact their water is actually polluted due to the refining that goes on in there, you know in their community. And so what are the various ways that we need to engage to ensure that sustainable development does not harm people but actually lifes' better. So, yes, that's exactly the way the construct of socio-economic justice come from and so what I did at the time was to I mean, I'm not what I did was to facilitate the conversation between the local community and the oil refinery. So I sat there as a radio presenter and I said, alright so good, local community on one side, oil refinery on one side, here is the engagement between both of you, so you can hook and engage. Of course, the refinery was like wait we pay all our taxes, we follow all procedures, we give the community what they deserve, like we are not doing anything wrong, right but a local communities like well, you need to realize that even though you pay your tax to the government and you fulfill all the things in your rule book. We are disproportionately affected by the fumes that come out of your factory or maybe the jobs that you have here or the way that you treat, even the way that you look at us, the way you engage with us might be problematic. So that platform to engage maybe about human rights, right? So this is an opportunity for them to talk about what their relationship would be like and how it affects the individual work.

Jason: That is a fantastic program. I wish I said it's a radio program. Wish I could have listened to it. Yeah. I know that's fantastic in you're right even in my own research as I mentioned in our earlier conversation. I did my work on the extractive industries transparency initiative in West Africa as well and in the country that I was doing the field research, when I began talking with corporations they would say similar things to what you said. They say, you know, we pay our taxes. It is not really our responsibility to take care of the city. I'm sorry the village in the village people in terms of infrastructure, in terms of environmental protection's Etc. So we pay high taxes that is a state responsibility and not ours. So it's really interesting to see how even if the context is different from state to state, the dynamics between the stakeholders, especially between you know, civil society and communities in the much larger transnational corporations are often very much the same. This has been a great conversation when I like to do is see if there's anyone to leave audience might have a question for Jake. We can do is that is lining up. Jake while we are waiting on the Green Room to get us a question

Jake Effoduh: I can see a question of the comments bar at least you have.

Dr Jason McSparren: I'm actually not looking at that. Okay. Sorry, here we are. Yes. So here is a question from Segun and he asks, how do we ensure the study of artificial intelligence in our schools? I think he's thinking of programs. How can they disseminate this information?

Jake Effoduh: Yeah, so I will say three things. Number one, is the way education is being, the way we think about education these days has completely changed. Education is not being in the four walls of a classroom and I think COVID-19 has disrupted that completely. The first thing I would say is, there's a lot of value in self-education beyond having a curriculum to follow, a lot of people who work in AI say, I just started by looking at YouTube videos, just started to learn how to code. I just picked up a book or I joined

some of these free courses online and that's how I took off and I'm not talking about, I'm talking about the big people in the industry Today most of them started by self-education. The second point I'll make about the study of AI in schools is that they are two things, one is this study of AI and the other will be the use of AI. It is important that we understand like what AI is where it comes from, what does it entail but it's important for us to the best way to study it is to ensure that in one way or the other engaged use of AI especially for like mathematical jobs or like things that can be Practicalise with the use of software algorithms right. So, they are various ways that we can do that even if we think about educating people who are like visually impaired AI seems to be a better tool than human beings have from research. Secondly, AI system seems to be way better in teaching languages than that human beings could. There's so many apps that could teach you how to speak better how to use a different language better than a human being can. An App can track where your proficiency is at and can actually use your data to train you specifically right? I think it will be difficult today to study medicine, if you don't want to engage the use of AI. Let me even pick one field for example, like is it Radiology or Radiography people that like do the scans and everything.

Dr Jason McSparren: Yeah Radiology, please.

Jake Effoduh: Absolutely, So AI systems can do way better. So in terms of the study, I think one way we can ensure the study of AI in schools is to Practicalise what the study of AI but also the use of it and I think the last point I would make is we need to redesign, there are certain jobs that are obsolete. There are certain ways that we teach that are completely obsolete. No one goes to school to learn how to type. There are some jobs are completely gone. So we should scrap some areas of teaching. Any area, I give an example of how speed factory have taken over of people who work in like company. So everything has to do with assembling if your job is to fold clothes or to assemble carton chances are a computer will take over that very soon. Right? So we need to find ways to emphasise jobs that would not be automated in the next five to ten years so that we don't render our graduates useless, right? That's my answer to the question.

Jake Effoduh: Okay. Fantastic. It looks like we have a question. Yes, young lady. Would you please just introduce yourself as before you ask the question to Jake?

Audience (Seun on Demand): Absolutely. Thank you. Jason and Jake for this platform. My name is Seun Akinlosotu but I'm social media, I'm Seun on demand and thank you for putting this together one more time in once again, so I just have a couple of questions for both of you. And so you talked about implicit bias on AI malfunctioning to its failure to recognise gender differences. What steps can we take to breach that gap? What would you suggest?

Jake Effoduh: Thank you very much Seun one demand for your very important question. Yeah, three suggestions for me. Number one would be that people who create AI Technologies need to engage with a much more representative data sets. So data is what AI uses to make its decision. So when they training

the AI systems, they need to use they need to have data from that includes African specifically because not many people engage Africans. I'll give an example. I was in China for a conference and I was in front of an AI system, you speak into the system for one minute and it tells you your height, your age, your weight or sexual orientation, race, it was real. In fact, I was shocked. It got my height, it got my age, but the only thing it failed is that it did not classify me as Africa and I think classified me as some other race and they were shocked. Oh, my God is meant to get it right but I'm like, why are you shocked? How many people bring with this AI? When he couldn't find anybody to tell gauge me with. So, the number one is the data set needs to be representative and it's about the second point I want to make is that we need more and I call them on the sample majority. We need more on the sample majorities in the AI sector. More women needs to be the AI sector, more minority groups, read more refugees, more blacks, more lgbt people, more women, more people living with disabilities to engage in the AI circle. Because when it comes to implicit bias, is not that you are willingly trying to be biased or discriminatory, it can be based who you are and based on your perception of things. You would most likely just impute that bias in the system you're creating. So the second way, would be for more people to use AI and in the development of AI themselves. I think the third point would be that we should be wary about techno optimistic goals. That AI would do everything, AI would solve every problem, AI is the solution. I don't think so. I feel that technology is not the only way for change. Yeah, we need to look at specific sectors where we might be like, maybe we don't really want AI in this sector maybe for Africa, for example, Nigeria has a population of 200 million plus I don't think we need AI to be assembling clothes and assembling boxes. We have people that can do that and we have the labour. We can think of health care maybe because we don't have that many doctors in Africa we can think of Health care, we can think of agric maybe but in terms of certain thing like the floor chain of like a factory we might want to like we don't want AI there so having these conversations very important.

Seun On Demand: It is and then thank you for mentioning that and your responses just makes me think back to I mean, I've been out of Nigeria for I left Nigeria 20 years ago, but I've taken time over the last few years to return as often as possible. I have a nonprofit that takes back to school items each year as well just put in my quarter to say development, I'm very much on the education sector like I'm pushing education and you know children remaining in school. No matter what and it just made me realise by your response comes right now how far back we are with you look at most of the schools and after you know in Nigeria you they had to have a computer. You know, how do you teach AI when you don't even have the most basic which is you know a computer in itself, so we are super far behind. I think a lot of the reorientation stocks from the grassroots which in this case would be from the education sector like how do we start and making sure the children and nursery schools, you know elementary schools are introduced to computers, you know, comfortable with ideas of using computers and only then did it begin to think in the broader sense and stop thinking in artificial intelligence, you know, so that's one area that I feel like is super lagging when it comes to the African continent in general and I feel like a lot of emphasis needs to be on that point, you know, if we can get technologically enabled then, we have a greater chance of introducing advanced technology to them and having them, you know imbibing it and be a part a bit. We just become very comfortable like but you know, how do you how as a doctor? Do you practice medicine with AI when you don't even have the basic understanding of how a computer works and you will find out that because somebody read studied medicine in school, they actually don't have a basic understanding of the workings of a computer because they just is medicine. Never thinking of how technology could actually help, you know diagnosis and I work in the health care industry. Now, my background is also an information systems and I you know, I write that as a program manager bridging

technology and Healthcare together for an healthcare in the US and I see a lot of things like sometimes the programs and projects we work on. I'm just thinking my goodness. I can't wait until Nigeria gets to this point and it also opens my eyes to how far back behind we are. But the reasons to be grateful and thankful for conversations like this and people like you Jake, you know that I having these kind of conversations and bringing and shedding light to the problems that we have given that I have one more question for you guys if that's okay.

Jake Effoduh: Sure.

Seun on Demand: Okay. So, you know you mentioned on the pace of AI advancement and your advice on not forcing countries to leapfrog what developmental strategy do you propose for developing countries and Africa?

Jake Effoduh: So yes. I would make this strategy is I would say is because I talked about homegrown solutions right meeting African countries at the very levels that they are. I'll give an example when it comes to use of technology, Botswana, Zambia, Rwanda, Nigeria, Kenya are not only same level with like Malini Niger or like Burkina Faso for example, so I find a lot of people just say Africa is I think I'm like Africa so diverse and so different levels of the technology,

For some countries not, they are not even talking AI. They need electricity first, for some countries the solar electricity, but they need the technology is the computer that is compatible with all countries. They've got all that they now need the AI. So countries need to be managed at their level of development. Yes, given a one-size-fits-all is really not going to work, but I would make about the point you make sure you about education is that we need to start thinking skills based on education. As a kid for example in growing up in Nigeria. They will tell you recites 2 times 2 for 3 times to see like it's about what you know what you know was what determined that has intelligent. Yes, Today what you know doesn't get you anywhere. Anything you ask me, google can tell me in two seconds. I think about skills based learning people need learn how to do things that other people cannot do by themselves. Even if is learn how to use technology, people need to learn how to speak several languages and I to think for Africa where we have like a lot of manpower, a lot of people who noticed who, I think even if you cannot afford the four walls of a classroom. We need to have like sports universities, you know, people that learn sports right diversify with the value of what we have. China and India are maximising the AI world because they have population right. When I was in China, I mean China has 400 million Workforce. So the same conversation we had where tech can apply and where cannot apply, China was smart about that. You don't just automate the entire factory. You have to pick and choose. The same thing go for Africa as well, maybe for California, it might be great to have like machines assemble your gifts from Amazon and bring it to you. It might be great for drones. Just land in front of your dorm and present you with your food. Yeah, maybe in Africa we don't need everything that, maybe something we take the food for you. So these are the engagements we need to have. I think when it comes to education that needs to be a complete revamp, but I think provides an opportunity for us to create other avenues that were not there before from the more knowledge-based to a more skills based learning.

Seun on Demand: Absolutely, Thank you. That was a great answer. Thank you guys so much.

Jason: Thank you for participating. I see a question but that was a partial question. So what I'm going to do is, I'm going to ask a question based on one of the other ones that was mentioned a little bit earlier and Seun mentioned something, She talked about health care, she talk about education and you started to talk about this, when we think of artificial intelligence, right? We also you know, it's pretty much a domain that is you know, being capitalised on by corporations, right? They have the technology that doing them R&D the research and development etc. Governments have the wealth to purchase products and Implement them. So governments have access to AI. I'm wondering is there any examples you can give us in terms of how AI is being utilised by either civil society, organisations NGOs, anything like that, at the civil society level as opposed to the government or the corporate level.

Jake: Absolutely, and I could even give you instances from Africa. But before I say that, let me talk about something you mentioned which is the fact that the kingpins in the use of AI pretty much private corporations. So Amazon for example is like which other half of the world like that if you put 50 countries together Amazon as a company's way much more richer than States and that's that talks about the role of geopolitics in this fast globalising world, for example, when Amazon was going to set up his headquarters and Amazon ask countries to bid. Countries were bidding for where Amazon would have its next headquarters, right that just change that like that change the dynamic.

Dr Jason McSparren: We had a similar dynamic here in the United States, where cities were petitioning Amazon where they were going to put their headquarters here in the US. So you're talking about it happening internationally, geopolitically, it's also happening within the United States as well.

Jake Effoduh: So we need to think about the capitalistic nature of technology generally. And so when you see activist or human rights activists use artificial intelligence, they are actually trying to disrupt the capitalistic nature of it in a more unique way. So for example, I'm going to cite few examples of how human right, people have use, how activism use AI or are using AI in Africa. So first of all, there is an AI lab in Accra, so the first google lab in Africa is in Ghana and it does a lot of work around socio-economic rights, how to promote the standard of living for like local indigenous with the use of AI. It's a research lab but it also provides a lot of value for locals, but we have situations in Nigeria. For example, where NGOs are using AI to track hate speech or social media, so they are looking at it's an algorithm actually just tracks Twitter, Facebook to find out what Nigerians are saying and where the hate speech is coming from, is it triggered is hate speech triggered from like political statements or political debate, or is it more from tribalistic ones? So what is discovered so far is that people thought that because of where so or such a heterogeneous society with over 300 plus ethnic groups that tribe and religion is really where the tension are but I think the AI system, the AI tracking this conversation on social media and it's showing that Nigerians actually get much more wild when it comes to political debates than tribal debates, right? So it's important for activists to even know this information to know where their interventions can come from. We also have activists, these are also human rights activists, but in Uganda and Kenya people who use AI sort of trap for crop rotation purposes like where's the plan the next set of crops what the weather would be like AI helping them to predict the weather. But also predicts the soil, I think the pH level of the soil, help them predict what farming seasonings are best for what particular crops. Now these things are not things that could have been done in the past 10 to 15 years. Maybe they were like traditional knowledge experts who tell them on, you know, some of these things but AI is able to actually help these local farmers to help them predict what kinds of planting season they are going to meet. We also have activists who are using AI to track human rights violations on the continent. I'll give a very recent example. So there's a big and SAS protests across Nigeria across the world over the end over the push for the end

of police brutality in Nigeria. And one of setbacks from the government has been denial that there was no killings or shootings from military men on protesters.

This actually went really viral like a lot of people believed that the killings were framed. That there were really no killings despite the fact that they were videos on social media despite the fact the activists actually use their phones and Instagram to show what's happening on that particular day. Now what happens, CNN did use AI to use this videos from social media and the AI system was able to track the location where these videos were shot. To trap the time of the day, So you might not know if it's 6:00 or 7:00 p.m. but the AI system was able to trap the time, the location, and the validity of those videos whether that they are fake or not the deep fake. Whether they are real or otherwise, and were able to gather a documentary that has now shown that yes, they were killings on that day in Lekki, Lagos and that the killings were perpetrated by military officials on unarmed protesters. So these are some of the ways by which activist get to utilise at artificial intelligence to promote social justice and social good.

Dr Jason McSparren: Yeah, fantastic. All right. Yeah. Thanks for that example. We do have another question from the audience, please. Could you please introduce yourself before asking the question?

Ayorinde (Audience): Yeah, all right. Ayorinde Ogunyola, I am a PhD students here in the United States and I want to thank Jake and Jason for organising this. I know AI actually has its benefits which has been discussed. But I'm also concerned about some of the risk in terms of probably, what is your perspective based on data privacy that it actually comes with trust and transparency. But actually evolves around developmental AI.

Jake Effoduh: Very valid question and I always say this because I am a PhD student as well and I'm looking at the impact of AI on human rights in Africa, and I'm I always start with the rosy picture. For example, Egypt is projecting to adopt AI that will contribute 7.7 percent to its GDP by 2030. Botswana is thinking of AI projects that we move the country from an upper middle income country to a high income country by 2036. South Africa want to be fully AI integrated. In fact, Senegal, Jason you have been to Senegal, they are building AI system that is 35 kilometers away from its capital. So these are all this very rosy innovative prospects for what the AI can do but Ayo, the major points that you made is why we are doing with the area to show people that yes AI can become a strategic priority for African countries, but there's we need to be wary about the weights hyped, this way that AI is getting such hype is not really the case of all the time. It's not a silver bullet that can solve all of our continents problems. AI can perpetrate and exacerbate some of the extant issues that we face on the continent and it can even introduce new risk that we didn't have before. So, when it comes to things like infringing our autonomy, infringing our transparency, the privacy of citizens including how AI can take over certain peoples' jobs and create job displacement, how AI can perpetrate inequality and how AI can actually promote negative systemic biases. These are some of the things that we as Africans need to be particular about especially because from past history, we've been colonized that we know what it means for a power structure to hegemonize us. We don't want to do the same thing or may be doing even worse. So beyond the fact that yes AI is getting some growth ambition in Africa and it's cascading into this like super great infrastructure that has been adopted really fast, really quick, very profitable, but we need to be very critical about some of these challenges that are particular to us and find ways to mitigate them or eliminate them.

Ayomide: Sure, I just wanted to add, because you made mention that, which is a very interesting point an important point AI itself cannot just like you said other countries have gone through different trajectory and you can just bring AI to for instance Africa and then it works out, you know, it's going to affect a lot of things in terms of jobs, though we could do re-skilling but that also is capital intensive. So I mean it's going to go a long way for AI to actually benefit the African nation. So to say yeah.

Jake Effoduh: Absolutely and that's why we need more research. We need more people doing research in these areas. We need more conversations like we are doing in the Green here about these issues. So that people can actually pick them up learn more about them. And so even our policymakers because it for me as a researcher on AI in Africa, when I pick up documents from the African Union when I look at the various AI strategies by African States, they have a lot more techno heroic than they are critical. So that just copy and paste, like AI would do this, this and this and I'm like, okay, that's it. Block chain, IOT, quantum computing, deep learning, machine learning like will you put it out there without investigating what type. Again, these technologies are great don't get me wrong. We want them, we need them but who are the people making these technologies and do they make them for us? If they are making them for us do we know, did they engage us from the company like we want to make a technology for this sector in Africa. And so, from the beginning you're engaging applicants on the process of, you are engaging Africans on how you know, I just sent an article for publication in a journal and I wrote about self-driving cars in Africa and I say self-driving cars is not an if issue it is a when issue. There will be self-driving cars in Africa, but as they are creating self-driving cars now, we need them to understand that on the Africa roads are potholes, on African roads there are conductors, there are Gala seller. People that sell lacascera. On Africa roads is a different nomenclature, we don't have internet enable traffic light. We have flight, we have wardens, right? Do this AI system recognises that our road structure might not be the same way with all our road structures, you know in other world, right? Maybe when there is adequate computers that could share, but there's nothing new with AI the same way previous technologies have affected us that is the same way it would be. In Mozambique, for example, a car is likely to kill a person 25 times faster than acute police in Sweden even though they are more cars in Sweden than that in Mozambique. Why is it that way? It's not a car that is a problem. It's the infrastructure and the climate around where that car is being ridden. What kind of, what policies govern driving in Mozambique? What kinds of cars are there? What is the efficiency of those cars and what happens when a person drives drunk that particular location? So the car is a great technology. No one doubts that but why does he kill more people in Mozambique than it kills in Sweden even though they are less cars in Mozambique. So those are some of the things we need to be critical about.

Ayomide: Yeah. Thank you so much for answering my questions.

Dr Jason MacSparren: Thank you for participating great to meet you. Okay, Jake, We have a question here from sunny and sunny is asking ahead. Like the way that this question is framed how has AI promoted human rights, seeing that there's you know, it usually has this kind of actual replacement of human labour leading to socio-economic challenges?

Jake Effoduh: Yeah, I don't bash AI because I haven't been critical over here doesn't mean I bash AI. I will tell you so many ways that the AI has promoted human rights, and I can mention it in five quick ways. Number one when it comes to education, right? Oh, I mean, Jason, you are in the US. I know Nigerians who never went to University, but they learn how to code, and they are creating tools and software that

I just like groundbreaking. I have friends who are from like local villages in Nigeria, and the next thing they are in California and they are pitching the ideas, and they're making huge amounts of money from their local idea didn't need to go through the four walls of the University to gain that knowledge. So AI has expanded the scope of education and has given more people outside the four walls of a classroom to gain education and sort of you know, improve their lives with that. So in terms of advanced education, there's so many ways that AI have helped people, learn language is better especially kids with special needs. There are certain kids who might not do well in the classroom with the physical teacher for example, some autistic children learn better with AI tools and technologies than they would with a physical teachers. When it comes to right to education AI has done a good job on that one. Second will be the right to work. I know I talk about job displacement with AI and I mentioned that in the past five years 600,000 people have been displaced by smart factories in Germany or speed factories in the US but 4.1 million people in Africa have gained jobs in fields that came through by the use of new tech and AI. So there's so many job opportunities that have come through within the sector. Of course. These jobs are not like for lower class Africans or fortunately, they are like middle class and up, but at some point they disrupting settled areas and they're providing more jobs, so that's another front. Let's talk about AI and health care. AI has actually helps with the advancement of healthcare. For example, there are certain algorithms that can just take a scan of your entire body and tell you if you would be liable to have a heart disease or can track cancer even at a very minimal stage. A doctor might not tell, you might not have any symptoms but the AI is able to look at certain things. I don't know what it looks at in your body, but it can tell you if you are liable to have a specific infection or disease or there is a cancerous growth in your body. So, in terms of being able to track health care and deliver healthcare services, AI has been able to do that. I'll mention two other examples, I was just mentioning a few areas that AI has advanced human rights, I have talked about the right to work, I've talked about the right to education, I've talked at about the right to health. I think one other way would be okay, Jason, you're back. One other way would be how AI is of is advancing activism on the continent. So people are now able to report certain things with evidence behind them, with the End Sars protest and the #LekkiMassacre, if it was ten years ago when we didn't have mobile smartphones that are connected to the internet and stuff like that will not be able to see or have evidence of what really transpired. So human rights activists are finding really innovative ways to use AI not only to document human rights violations, but to track them and to sort of give them credibility so they can be used as evidence in the court and to advance justice for people whose lives have been affected by these violations.

Dr Jason MacSparren: Great, Jake I have to do it but I do apologise. I don't know if you noticed we had some of my technical difficulty there for the last maybe two minutes. So we had a little disruption in the in the connection. I don't know if it was from my end your end or somewhere else in between so that last step they may be questions about that last comment believe it because, I don't think it was complete for our audience. So as we're starting to wind down I don't see any new questions from the audience, but I think I've got a pretty good question to kind of finalise, this here in kind of wrap things up. We're talking about how artificial intelligence, impacts human rights of the African continent and this has links to things like social justice, environmental justice in one of your articles, you talk about fostering a pan-African approach to AI and I find this really interesting and important, because even as you mentioned some of the AI programming doesn't always recognise race etc. Why you know ethnicities the sorts of things, we really need to have a broad array of data. So we need a lot of different perspectives, a lot of people

working on this. So you just give us a little bit of an idea as we round out this fantastic discussion. He tells a little bit about the the pan-African approach to AI and some of the institutions that comprise that apparatus.

Jake Effoduh: Absolutely Jason. Thank you so much. And this is a really valid question because as a continent, you know, Africa is listed and I mean the African Union is thinking about a pan-African approach to how AI can be legitimised within the continent. Last year the African ministers who are responsible for communication and information, they adopted a declaration that focus on a coordinated approach to AI. So what member states of the AU did is that they have agreed that they want a common position, whereby AI can be used to legitimise the Malabo convention on cyber security. So we do have a convention in Africa that regulate cyber security because when it comes to issues around the internet or the use of cyber well, it's not a jurisdictional thing, AI and the internet's you cannot limit them to one state or one jurisdiction. So therefore there is need for a business for solidarity coordinated approach, especially for African states that are very weak in terms of the use and adoption of these technologies. So what the African Union is doing is that, they have a working group on AI that is fostering a common African stand on in on AI particularly, there is something called the African Union agenda of 2063. It's called the "Africa We Want" so it's actually a blueprint really, like a master plan for how Africa can really transform itself as a global powerhouse of the future and of course Africa cannot transform itself without thinking about how the use of technologies will affects the continent. So this agenda 2063 does talk about ways that we need AI to help our various sets of education, agriculture, healthcare, work, but it also needs to think about data protection. And how do we achieve such economic and sustainable growth development that are hinged on pan-Africanism and African Renaissance ideals. So yes, there is a conversation going on at the African Union level. Yes. It is striving. It is promising and there's a great coordination at the points of how we can use AI to promote African virtues, African values and African interest, but my only critique is that it has not been as deep and as entrenched enough, but again, I give you more credits that I give it more critique because I notice that they actually tie the use of profit of AI on things like our African image and agenda 2063 and the current laws and norms that govern ourselves within the continent.

Dr Jason McSparren: Fantastic, Jake this has been really great conversation. Unfortunately, as we round out the first hour here, we are having difficulty with the internet connection, you know, we have a lot of benefits that are modern technology yet sometimes we have a few difficulties as well. I really am pleased that Jake is here today for our seventh episode of The Green Room. I really want to thank Jake and I want to ask everybody out there again, we can't hear those claps, but we can feel those claps through the universe. So he's going to thank Jake Okechukwu Effoduh for joining us today and talking with us about "Artificial Intelligence, Human Rights and Environmental Justice on the African continent." This is a really fascinating discussion and is something that we are going to have to keep our eye on as this really fast - moving technology develops and it is implemented in Africa, as well as other places around the world. Jake really grateful for you being here. Thank you so much. I want to wish you the best of luck with your academic and professional endeavors. Please stay in touch. We'd love to see you again here on the Green Room in the future.

Jake Effoduh: Thank you very much. Dr. Jason such an honor and a privilege to have had this discourse with you and thank you for having me on board and I'm really inspired by your work as well. I look forward to engaging more with Green Institute and to be back here at the Green Room any day any time. So thank you so much for the opportunity and thanks to everyone who tuned in who joined, who asked the question, who contributed. Thank you very much and have a wonderful day as well.

Dr Jason MacSparren: Excellent,thank you very much. You also have yourself a great day. We'll be following your career. Take care of my friend.

Jake Effoduh: Thank you.