

Openness as a pathway to support SDGs : an exploration of science-society mediation spaces

Plenary talk

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Standpoint

A critical approach of SDGs based on decolonial thinking from an African standpoint.

I- Decolonial approach of SDGs (slides 5 – 8)

Be confident ! This is not a call to rewrite SDGs, but an invitation to seize the opportunity this decade (2020-2030) offers citizens, to fully contribute to the achievement of fair and contextualized SDGs.

- **Is global governance relevant to address local development needs? (slide 6)**

Without waiting for it to pass, one of the lessons we can learn from the COVID19 pandemic is the resounding failure of global governance in managing this crisis. Each country responded about it in its own way, according to its realities and capacities. Drawing a parallel with the SDGs, one may wonder whether it is not illusory to think that a global vision of development can address the specific needs of each country and their citizens.

- **Should we portray SDGs as imperialists? (slide 7)**

First of all, it is important to recall the concept of sustainable development promoted by the United Nations and defined in the Brundtland Report (UN 1987, online) as "development that meets the needs of the present without compromising the ability of future generations to meet their own needs". However, since its introduction in 1987, this vision of sustainable development has been subject to numerous criticisms, the most virulent of which have qualified it as imperialist (Arnaud, Berger, and Perthuis 2011, 12).

How can we disagree with these criticisms, when from the MDGs to the SDGs emerges a universalist pretension of global objectives to be adopted by all the countries of the world, regardless of their realities?

It is true that one might say that each state is supposed to contextualize the SDGs at the national level. To those, I would say that the whole problem starts from the design of these SDGs, where we have a handful of small groups of experts, academics and institutions that think from their ivory towers, how a better world should look like, then propose this vision to the populace.

- **Can we still reverse the process in this decade? (slide 8)**

The way in which these SDGs have been designed prevents ordinary citizens to be fully involved in their own development.

What would happen if, during this decade (2020-2030), attempts were made to reverse the design process? And, how could this be achieved?

it is our responsibility to reverse this trend by making good use of this decade; openness seems to be an interesting avenue to explore.

II- About Openness (slide 9)

Nowadays, it is recognized that, considered together, the three following dimensions of openness constitute Open Science (Chan, Leslie et al. 2020):

- openness to publications and data,
- **openness to society**
- openness to excluded knowledge and epistemologies.

III- Citizen science and science-society mediation spaces (slide 10)

The term "citizen science" covers all the new forms of collaboration between scientists and non-scientists that have transformed the relationship between citizens and researchers as well as the dynamics of production, dissemination and appropriation of knowledge. In citizen sciences, the citizen has an active role in the production of knowledge. They act either as data collectors (instrumental approach of citizen science) or as co-producers of knowledge (democratic approach) (Albagli et al. 2015).

In the instrumental approach, citizen science is seen as a vast network of people who collaborate by providing experimental data and facilities to researchers. Research is open to the participation of non-scientists to improve the knowledge produced on different subjects, notably in biology, astronomy, genomics, botany. Citizens are then involved "voluntarily" in data collection, analysis tasks, etc. (Piron and Mboa Nkoudou 2016). However, I am not very comfortable with this approach, which suggests that all knowledge production only takes place through a well-oiled research process in the university system to which one tries to add the citizen to "make a good impression". This approach is not in line with the logic of cognitive justice; only the researcher seems to benefit from this cooperation, using citizens to obtain data that he could not have collected with the means and time at his disposal. Moreover, the process remains purely within the academic framework where academics hold the knowledge and send their subordinates (citizens) to collect the data.

Citizen science is a good approach to contextualize SDG and anchor them in Commons. However, we must avoid falling into the trap of exploiting citizens through their pseudo-participation. That is why the democratic approach of citizen science sounds relevant.

The democratic approach refers to "participatory" or "cooperative" sciences. Here, research design includes the people as the holders of the knowledge produced. This approach takes into account equally (to academics), the intelligence of citizens, their capacity to understand and produce knowledge (Piron and Mboa Nkoudou 2016). The citizen is the one who asks and asks himself new questions, who participates in the co-creation of a new culture through participatory experiences and the assembly of resources. This approach would be reinforced by the existence of science-society mediation spaces as an enabler for a fair engagement of citizens in support of the SDGs.

Such spaces are:

- events, associations,
- public debates bringing together researchers and non-researchers,
- popular journals and magazines,
- virtual platforms,
- visits by researchers to schools or high schools, information watch activities,
- **science shops and makerspaces;**
- Etc.

IV- Practical examples through the maker movement in Africa (slide 11)

- AfricaOSH Summit (slide 12)
- African Makers Against COVID-19 (slide 13)
- Environmental & climate change (slide 14)
- Open Source Hardware (slide 15)
- Other activities at Mboalab (slide 16)

The challenge : Recognition of citizen science initiatives (slide 17)

The discourse on citizen science is very beautiful, however, many of the resulting initiatives often remain as prototypes that must ultimately be validated by experts.

So we are back to our experts. In other words, our efforts seem to be in vain and we are in dead-end street.

Hence the call for experts to get out of their offices and the ivory towers of universities and open up to other knowledge: this is the third dimension of Open science: **openness to excluded knowledge and epistemologies.**

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