

JUST SUSTAINABLE FUTURES AND KNOWLEDGE PRODUCTION

This text is an edited transcript of the Closing Plenary of the Development Studies Association Conference 2022, chaired by Andrea Rigon

ANDREA RIGON

This closing plenary addresses the theme of ‘Just Sustainable Futures and Knowledge Production’. Three distinguished speakers – Mark Swilling, Kevin Lo Tek Sheng and Farhana Sultana (see their bios below) – will help us thinking through the following key questions: What knowledge and learning are needed for just futures? Who are the actors and what are the possible forms of producing knowledge for a just future? What role can academia play and what partnerships are necessary to enhance effectiveness? What kind of epistemologies and methodologies do we need, if we are to take a justice-oriented approach integral to development? We hope that this closing plenary will bring together a lot of the discussions that we have been having over these three days.

MARK SWILLING

Thanks very much for the invitation. It's an amazing group of people who have gathered in this virtual way. It's a great privilege to talk at the closing plenary. I look forward to the discussion.

What I thought I would do, is reflect initially on the rise and some of the challenges of the ‘just transition’ narrative, in the context of increasing uncertainty. To then apply that to a way of thinking about the core challenge in the ‘just transition’, which is really the financing of the ‘just transition’, drawing on my last eight years of experience on the board of a DFI. Then end off with the discussion of the types of knowledge that we require for transformation.

Starting off with the ‘just transition’, which is a term that has risen to prominence extremely rapidly, especially over the last five years. It has its roots in a radical transformative tradition, which is trying to link the traditional environmental issues – of climate change, biodiversity loss and resource depletion – with the challenge of global inequality and its manifestations in different national jurisdictions. Hence the idea of a ‘just transition’. As a radical proposition it obviously goes up against what is a very distinct possibility, which is an ‘unjust transition’. An ‘unjust transition’ would be a decarbonized, unequal world, which really loses the huge potential that a decentralized renewable energy infrastructure potentially provides for rethinking the fundamental basis of the mineral energy complex, which has been the foundation of a lot of economies across the globe.

The ‘just transition’ is very current in the South African debate. South Africa was the first country to put the notion of a ‘just transition’ in its NDC and at the latest COP 26 many countries have referred to the ‘just transition’ in their respective NDCs. Just drawing very briefly on the South African context, which is quite unique in many ways. We are now officially the most unequal society in the world, according to the World Bank, but we are also the most coal intensive (Sulla, Zikhali & Cuevas, 2022). 86% of our energy comes from coal and we are in the midst of a very serious energy crisis, which is having major political impacts across the board. We have high levels of load shedding and at the core of this is the fact that we have to close down some old coal-fired power stations, which is going to have an impact on coal worker jobs and coal-based communities. In the context of what is happening globally within the

financial community, there's no chance of building a new coal-fired power station, because nobody is going to fund it. So really the only alternative is a rapid deployment of renewable energies. We have extraordinary wind and solar resources in South Africa, so renewable energy does make a lot of sense. Over the last 10 years or so, we have actually built about 6.2 GWs of renewables, which is not nearly enough. We need 10 gigawatts urgently within the next 24 months if we really want to bring load shedding to an end. We need to build 5 GWs per annum for at least the next 20 years. But the politics of the transition from a path-dependent, coal-based economy (which was really the basis of both the colonial and apartheid eras and was not dismantled, but was reinforced after democratization in '94) to a completely new decentralized set of energy infrastructures, is really very much at the center of our political contestation. Civil society is increasingly well-organized around this. Business interests are also pretty much united around the need for decarbonization, but without much emphasis on a 'just transition' (although they pay lip service to the notion). Many vested interests in the coal sector use the 'just transition' as a way of defending the status quo.

So out of this mix, the 'just transition' basically now has four different meanings. For many in the business sector it simply means decarbonization in order to bring load shedding to an end and boost economic growth (and then the job creation is really a trickle-down consequence of that). The second is what we call social mitigation, which is decarbonization with mitigation efforts with respect to the social impact on coal communities and coal workers. The third is social mitigation plus upstream industrialization, so basically 'how can investment and renewables infrastructures drive the re-industrialization of the South African economy?'. Then fourthly, the trade unions, who were the first to use the notion of trust 'just transition' in the South African context, essentially meaning a post-capitalist, socialist alternative.

What I think is interesting is that across the board in many official policy documents, as well as in the cut and thrust of the narrative, the 'just transition' is broadly used and subscribed to, but means different things. I think that's also true at a global level. What we are seeing is increasingly the adoption of the term in mainstream fora, in ways that I think contains some dangers, which I think we need to address. For example, the World Economic Forum has set up a 'just transition' working group and intends facilitating a number of dialogues in future World Economic Forum meetings around the 'just transition'. The International Development Finance Club (IDFC), which is a club of DFIs, have set up a working group to address the 'just transition' with research collaborators.

So the question is, why has it taken off? And, is it in danger of losing its meaning? I think what underpins those questions is a question mark about whether the 'just transition' is yet another one of those ideas that form part of a very long line of hegemonic ideas about linear progress and modernist development that very much lie at the core of a world colonized by a set of western ideas. My concern is that the notion of a 'just transition' (despite its radical roots) could actually be the fig leaf that masks an 'unjust transition'. So in the name of a 'just transition' we have decarbonization with some social mitigation, but no significant transformation of the balance of power, leaving pretty much global inequality intact. In the way it is being used in the African context it has echoes of modernization theory, harking back to WW Rostow's notion that developing economies are like airplanes waiting on the runway ready to 'take off', except the runway now is the 'just transition'.

To counterpose that and maybe rescue it, we need to think about what justice means. I get taken back to Walzer's work (Walzer, 1983) rather than Rawls (Rawls, 2003) for this purpose. We need to start thinking about 'complex equality'. Instead of imagining a 'just transition', can we

start deepening the narrative about a plurality of 'just transitions' in an increasingly uncertain and complex world. So for me it's really about - following Walzer - giving meaning to what justice means in contextually specific ways, rather than the attraction of the Rawlsian 'original position', which I think reinforces what I'm concerned about.

In their recently published book *The Politics of Uncertainty*, Scoones and Sterling (2020) make the following statement in the Introduction, which I think talks to this 'complex equality': "in today's complex, turbulent, interconnected, globalized world, uncertainty must be embraced as perhaps more central than ever before. We argue that opening to uncertainty offers opportunity, diversity and a politics of hope." (Scoones & Stirling, 2020: 10) That's where I want to end off. What does a politics of hope in an uncertain world mean for transdisciplinary research that is transformative?

Before I do that, I want to just pull in some of my recent work on the global financial system and start off with a quote from UNEPS Green Economy Report of 2011, which reads as follows: "The causes of these crises vary but at a fundamental level they all share a common feature: the gross misallocation of capital. During the last two decades much capital poured into property, fossil fuels and structured financial assets with embedded derivatives. However, relatively little in comparison were invested in new renewable energy, energy efficiency, public transport, sustainable agriculture, ecosystem and biodiversity protection, and land water conservation." (UNEP, 2011) For me, in this framework of an increasingly uncertain world with a multiplicity of 'just transitions', none of that is really possible if we can't think of a way in which capital stops being misallocated.

So how do we think about the allocation of capital within the context of a global financial ecosystem, which is dominated by private financial institutions? The total asset base of the global financial institution was \$430 trillion in 2022 which was equal to 630 % of GDP in that year. Back in the 1950s, financial assets as a percentage of GDP was 30-50% of GDP. Finance as detached itself from the real economy, resulting in shift in investment from productive value to non-productive financial transactions. This kind of shifting of the balance of power over the last 20-30 years (the era of neoliberalism), is responsible for this imbalance. So as somebody who's been sitting on the board of a DFI, I've started to think about, what is it that we do when we make a decision to allocate capital, or allocate credit? To answer this question I have turned to Jens Beckert's book, *Imagined Futures* (2016) (Beckert, 2016). Jens Beckert is trying to come to terms with what is unique about capitalism. He settles on this notion of 'fictitious expectations'. So, what this means, is that the allocation of capital is premised on the assumption that you are going to generate returns on activities in the future that must still happen; and that those activities in the future that must still happen have a high potential for generating the returns to recover the capital with interest. That is really the core business of extending credit. To put it another way, the present is a function of the fictitious expectations of past decisions by particular groups of people (primarily white men) who imagined certain worlds and allocated capital to achieve that imagined world.

If we don't start thinking about the allocation capital in that way, we are not going to be able to really think through what a 'just transition' really means in practice. At the core of that art of allocating capital to achieve fictitious expectations is risk analysis. Frank Knight (1921) was the person who introduced the distinction between 'uncertainty' and 'risk' back in 1921. The essential argument was that risk could be quantified. That really becomes the basis for over a century of quantitative analysis of risk as the driver of investment decisions. Risk analysis is designed to protect you from uncertainty. In an increasingly uncertain world, does risk analysis

need to be reinvented? If your answer is yes, then you go up against a massive paraphernalia. In particular, the general equilibrium models that have emerged as, what Mkandawire calls 'intellectual monocropping' (Mkandawire, 2011), where you have a shared set of general equilibrium models all interlinked with one another, that create the basis for a shared understanding of risk within the global economy. This is what Anthony Haldane, from the Bank of England, said helps to explain what happened when the economists never predicted the global financial crisis.

This brings us to a really interesting phenomenon. According to some very recent research, 95% of the equity of the 11 biggest European Union banks are fossil fuel related (Institute Rousseau, les Amis de la Terre France & Reclaim Finance, 2021). Now what that means is this: we have a risk analysis in the 11 biggest European banks that results in the greatest risk of all, which a planet that cannot sustain human life as we know it. So there's something wrong with our risk analysis. If you look at all the commitments to divesting from fossil fuels and then you look at the actual practice, between 2016 and 2020 (i.e. since the world signed off on the Paris Agreement) the 60 largest banks in the world invested 3.3 trillion dollars in fossil fuels.

What I'm really looking to try and think about in the context of the 'just transition' is, can we reinvent risk? Stephen Spratt (2010) in the book *The Politics Of Green Transformations* (that the Sussex group published), argues that the way in which the global financial ecosystem is configured is probably likely to fund light green investments, but definitely not the dark green transition (Spratt, 2015). Dark green investments are green investments with a 'just transition' or a social justice outcome. How can this be changed? How can we rethink the role of banks as creators of money? How can we rethink the role of central banks as drivers of the kinds of investments that could result in a different outcome? How can we rethink the role of small financial institutions, savings and cooperative banks, that have in various places in the world survived the consolidation of the big banks?

It's in that context that I start to think about appropriate knowledge. In our research center we use the notion of transdisciplinary research and we make a distinction between 'systems knowledge' (knowledge of how the system currently functions), 'target knowledge' (which is the traditional focus of policy analysis, i.e. where you'd like to get to), and we do most of our work around 'transformation knowledge' (the knowledge about how systems change and what it means to support that change) – this entails the active involvement of researchers as activists in both knowledge production and the production of change. What this means in practice is interdisciplinary research with societal actors, to co-produce 'transformation knowledge' that helps to generate solutions to real world problems. It works well when it comes to building counter-power, working with social movements and so on. But what about working with incumbent institutions that are feeling the pressures of an increasingly uncertain world where risk analysis is increasingly dysfunctional for holding back uncertainty. It is in this context institutions start cracking up and start realizing that they need to change – this is the challenge addressed by the new literature on incumbency? (Stirling, 2018)

Science, in my view, hasn't really done very well coming to terms with incumbency, especially in the energy transition. So we've been doing a lot of work with the state-owned power entity (ESKOM) which is really feeling these pressures. Inside of these kinds of institutions change agents emerge. We've used the literature on institutional work that talks about 'creating, maintaining and disrupting institutions', to make to make sense of these change agents (Lawrence & Suddaby, 2006). But the question is, how do we work with them? How do you

work with these kinds of change agents in incumbent institutions that are still dependent on fossil fuels, who in turn talk about a 'just transition' and are trying to figure out a way in which to redirect those institutions? When you start working in these kinds of powerful institutions, what happens to the academic ethos of 'speaking truth to power'? Speaking truth to power in certain of those kinds of environments gets you excluded from the dynamics of change that you are trying to study. So these judgment calls that need to be made (which are very difficult) for staying in the game, in order to influence, but in the process compromising talking truth to power. That really talks to the dilemmas of the engaged researcher.

To conclude, under conditions of deepening uncertainty, consolidating a new consensus on a kind of linear modernist project called a 'just transition' contradicts a politics of hope in an uncertain world. I would very much rather start thinking of letting a thousand flowers 'bloom and wither' (failure is also important), so that struggles for an authentic 'just transition' can make sure that the life and vibrancy of the term survives. I think the last thing we need is a taxonomy of the 'just transition', which is what the EU and OECD are drawing up. But so much depends on the allocation of capital. We can't simply trumpet around the walls of Jericho and hope that they're going to fall down. We have to engage the global financial system and in particular the development finance institutions, which have rocketed in number and size since 2007. Publicly owned banks have a key role to play in securing long-term thinking with a greater sense of justice. We also need to recognize that the depth of the crisis does translate into an institutional crisis that many members of these incumbent institutions face every day. That, in turn, creates a space for riskier, but equally important, engaged research using a transdisciplinary method where the focus is not so much on what exists or where we're getting to, but knowledge about the dynamics of change and the outcomes that are emerging.

KEVIN LO TEK SHENG

Thank you for the invitation. I'm very happy to join this panel. I'm a political geographer. I spend most of my time studying environmental and climate energy politics in China. I always say I only study China, I haven't really spent much time studying the other parts of the world yet. So recently I've been working with the idea of 'just transitions', which is the core topic today, and again in the context of China. I agree with Mark about the many different definitions of 'just transitions'. It is always about distributional, procedural recognition of justices, which seems to be everywhere in the literature these days. Are these definitions of justice universal or they should only be applied cautiously in certain contexts? And, how do we encourage the appreciations of diverse and contextual interpretations of justice? Those are very important questions that we need to think about.

Now in response responding to the guiding questions: what knowledge and learning are needed for the just future? And, what are the roles of academia and partnerships in enhancing the 'just transition'? Obviously these are very important questions, because the challenge of achieving a just sustainable future is immense. I think this is definitely a case where the literature is lacking. A lot more studies need to be done, especially as the knowledge production on 'just transitions' remains quite geographically narrow, very much focusing on western, neoliberal society, the global North, etc. In this regard I want to remind everybody again, I'm only speaking from the Chinese context. I think academics can do a much better job in helping China, or by extension the global South, to advance a just and sustainable transition.

What we can do includes three things. First of all, we can identify the forms of injustice, especially with the awareness that injustices may take different forms from those in western societies. So we need two new interpretations, new theories to analyse those injustices. We also need to analyse the underlying reasons or causes that produce these kinds of injustices, with the intention to develop solutions to address these situations, to facilitate 'just transitions' towards sustainability. The third thing we can do is to identify the partners that can help us to make a real impact.

I thought I would start by talking a little bit about the Chinese context, because I'm sure that not everyone understands what is going on in China. Partly because the media doesn't really help. China definitely has a pretty appalling environmental record. That's a given. It has serious air pollution, water pollution, soil pollution problems. It is by far the biggest carbon emitter in the world, so there is definitely a big task there when we talk about the need for a sustainable transition in China. I would say that there has been some strong and robust academic interest in studying this kind of transition in China recently. For example, from a political or governance perspective, we now understand the barriers to transition in China quite well. The high degree of autonomy that the local governments enjoy when they are in charge of policy implementations. Coupled with the conflictive incentives given by the central government, this has resulted in many policy implementation problems that present a problem to the sustainable transition.

Recently I noticed that there is increasing interest in the social justice issues of the transitions in Chinese academia. This is in part because in recent years the central government has improved its environmental governance, especially through political centralization. Xi Jinping has been pretty consistent in centralizing this power vis-à-vis the local government. For example, in the environmental domain nowadays there are regular essential inspection teams sent down to check if the local officials and local governments are following the rules and there will be some kind of consequences or punishment, if these inspection teams detect that some policies are not implemented. So it's fairly accurate to say that environmental implementations have become stricter. The local governments now have to take environmental protection more seriously than before.

This is another problem, which is the social impact, or social injustice associated with the climate, sustainable, environmental initiatives. These kinds of issues are not very visible. They are never reported in the media. They are definitely not allowed to be discussed via social media. When solely relying on media or social media, it is difficult to access useful information regarding the 'just transition' perspective. Academia can play quite an important role here, by identifying and articulating the kind of injustices caused by these kind of environmental policies.

For example, one of my recent studies focuses on the coal mine closure in China. Coal mine closure policy is not a new policy. It has been around for 20 years, but recently the implementation has become very strict (as other environmental policies). The coal mine closure policy is a very typical command and control policy. It sets a threshold of production capacity and basically the rule is that if your coal mine is smaller than that threshold, then you have to close it immediately (without exception). My research team has done some work in Mongolia, Shaanxi, and other places with many coal mines. We found that the policy has reinforced the traditional inequalities, of the rural-urban divide, as well as between the state-owned and the private economy. Even though the central and the local governments emphasized the importance of maintaining people's livelihoods, in this kind of transition – in

the coal mine closure policies – it appears that to the government, “people” only refers to those who work for the state-owned enterprises. If we speak to these state-enterprise workers we do get a sense that the transition is more or less just, according to conventional definitions of how their livelihood is affected, etc. The SOE (state-owned enterprises) worker will be offered early retirement, with food bonuses, if they are over 50 years old (close to the retirement age), or they are offered re-employment within the SOE systems. For example, if a coal mine SOE close down, many will transfer to another mining enterprises, such as iron or even logging. However, those working for the private coal mines (mostly migrant workers or farmers), are simply ignored or not recognized by the local governments. These workers were laid off without any kind of compensation, seen as outsiders of the social welfare systems. That's the problem.

In authoritarian systems the voices of these kinds of marginalized groups are easily submerged under very forceful policy implementations, especially because nowadays the central government emphasizes rapid and effective transitions. They want to get it done. So it is particularly important for scholars to champion the importance of ‘just transition’ processes by articulating this kind of social impact of the policies, especially for the vulnerable groups.

While it is important to produce this kind of knowledge as a driver to ‘just transition’ in China, it is always important to disseminate the knowledge. Academia in general (and myself included) is not very good at this. We publish papers and present findings at conferences, but there is often a lack of meaningful ways to convey the message to policy makers, especially at the central government level, to impact the policy making process. This is where partnership building (the core message of this panel) is coming to play. ‘Just transitions’ (even in China) is not just about governments and businesses. I think the civil society and NGOs do play an important role here. One recent example is *Friends of Nature*, which is a local NGO working from Beijing, which has a very long history fighting for clean energy transitions in China. They recently filed several lawsuits against SOEs. They filed a lawsuit against the renewable energy curtailments about four or five years ago. China has very serious curtailment issues. In several provinces the level of curtailment was up to 30%, or even 40%. So, 40% of the energy is wasted, because the state grid company refuses to connect that power to grid. Lawsuits were fired against the state grid. Recently they've also been filing quite a few lawsuits against renewable energy projects, especially wind farms with adverse environmental impacts; for example, wind farms being built in ecologically sensitive areas. Quite surprisingly they achieved quite positive results in court. Partnering with organizations, such as *Friends of Nature* (which have a lot more experience, as well as access to the government than us academics) does open up more means of influence for us working in the Chinese context.

(As a side note, I'm writing a paper with them and I want to argue that from a cultural-political perspective, *Friends of Nature's* actions can be understood through Confucian ideas, such as the pursuit of collective interest, nature, humanity, harmony, the conservation of natural resources for future generations, self-cultivation and political obligations, etc.)

I would just like to conclude by reflecting on the challenge we face in studying just and sustainable transition in China. This is really a point of open discussion. One of the key challenges in conducting political or justice-based studies in China, is always how to gain access to knowledgeable and reliable information, as well as how to ensure the trustworthiness of the source of information. From my experience it's important to build strong connections to the field site and with informants, in order to gain the trust and the

confidence of informants to obtain more reliable data. It's also important to have some triangulation methods, because you're never sure about the reliability of the data you collected. The more sources you have, the more confident you are in evaluating your information from different sources, to assess the credibility of the evidence and the trustworthiness of the informants. I do think it's getting increasingly difficult to pursue political studies in China's increasingly closed political environment.

FARHANA SULTANA

Thank you to the conference organisers for inviting me to present at this closing plenary of the 2022 Development Studies Association Conference. I am currently speaking to you from Dhaka, Bangladesh. My remarks today will be somewhat informal and I'll keep it very brief. I would like to invite everyone to continue the conversations hereafter. I'm going to be drawing insights from two of my recent publications, which are also available for download on my website.

It is rather ironic and surreal that I'm joining you in England to talk about 'just sustainable futures', given that I'm joining you from my ancestral lands, where I've just recently buried my father, and while my mother is hospitalized. It feels like my world personally and climatically are falling apart. I'm sitting in the sweltering heat of a very monsoonal Bangladesh, which is a post-colonial, small nation-state in south Asia, which is often struggling to define what 'just sustainable futures' even means in the midst of climate impacts that it's been dealing with for decades.

So what 'just futures' mean even here is going to be very different from what is envisioned in the UK, but at the same time it depends on who you ask. This is because 'just futures' or 'just sustainability' is very contested, as I'm sure my esteemed colleagues before me have commented upon. One of the reasons why 'just futures' becomes contested or contestable is because there are so many different imaginaries or images of what these futures look like. How do we get there? How do we know we've arrived? Who got to define the terms of what this means? How are we measuring it? Who are the actors and the decision makers? How are risks and rewards measured and distributed?

One of the reasons is because the ontological and epistemological differences create fractures and these "fuzzy and buzzy" notions such as 'sustainability' and 'sustainable development', which make it harder to define what these just features look like and how we have arrived there. We know from decades of research from many folks around the room, in the conference and around the world, that these debates on these terms are very contested, because they are contestable terms. When we step back even further, we're seeing very open debates about how we come to know what's important, and how knowledge is produced, given these moments of climate breakdown, overlapping injustices (such as through the pandemic), socioeconomic fractures within the social fabric. As a result we're starting to question whose knowledge counts and in what ways. Why do we hold certain truths, but question other forms of defining and practicing sustainability or well-being? And lastly, how did we get into this mess (in terms of, what is this mess that we're trying to envision other futures away from)?

Many scholars (including myself) have argued that we are in this mess because of very dominant Eurocentric, capitalist, racist, heteropatriarchal knowledge systems, which have

become dominant, so normalized that they have conditioned much of our education, our institutional arrangements, policy making, decision making and how we structure and organize our very lives; or how we learn to value ourselves and what we hold dear. As a result, envisioning alternatives becomes harder to imagine or actualize in this system of rampant greed and destruction, apathy, poverty, and degradation. What Eurocentric hegemony has done over centuries is it has marginalized and Othered various other forms of knowledge systems, such as Indigenous and local knowledges, or the ability to even question who has the valid right to question things. This is a knowledge system that is very much masculine and very technocentric. It often tends to also push aside or marginalize insights from other knowledges within the system, emanating from critical feminist, anti-racist or post-colonial scholarship and more recently from wider decolonial scholarship, which has begun to really question and try to bypass this Eurocentrism.

If we want to decolonize our knowledge and the institutions, then we're going to have to create alternative forms of epistemic justice. We have to create and foster other forms of epistemological knowledge and knowledge holders, and to value them. This is because different ways of knowing and being in the world in Eurocentric models have gotten us into this capitalist, colonialist crisis of climate breakdown. Perhaps it's time to unlearn, so we can relearn differently, to conceptualize and practice these 'just futures' that we want to get to, but we really don't know how to get there or how to conceptualize it well.

My argument is that we really need to decolonize received conventions and systems. In order to do that we have to decolonize our educational systems and the structures that enable us to ask questions, to peel back layers; to basically question our understandings, our epistemologies, our methodologies and our pedagogies. This is not easy. It is often not desired. It is often very much pushed back against. For instance, buzzy and fuzzy notions are imported into countries like Bangladesh via the development industry, often ruled by former colonial masters and other emerging powers. While these are refashioned to some extent locally, there are hegemonic Eurocentric and capitalist epistemologies that guide what 'development' or 'sustainable futures' should be here. And the patron-clientelism of development continues through reinventions of well-intentioned development industry policies and practices.

If we're trying to think about decolonizing institutions and structures, in order to decolonize the development industry, we need to start to think about how those wisdoms are received, how they're refashioned, how they're imported into these countries and how patron clientelism of development continues, through the reinventions of new terms and new approaches because they're still dominantly Eurocentric. If we want academics to think about our role in this, my thought is that we can start to (from whichever field we're in) question and challenge the dominant knowledge bases and power structures. Therefore, we then also need to think about what we teach, because we end up training the folks who go on to work in the development industry. If we don't hold ourselves accountable, we're not going to be able to train future generations (whether it's through certification programs, graduate programs, or undergraduate degrees). As academics we can start to shed light on those historical connections, the epistemological narrowness of these various capitalist colonial structures, and again we can draw on feminist, decolonial, post-colonial, anti-racist epistemologies, which are critically important and are available to us as important tools. We can also learn more in the collective journeys towards transformative justice.

If we want to figure out these ‘just sustainable futures’, we need to also think about how we build long-lasting relationships with local communities and scholars, without romanticizing or fetishizing them. Unfortunately, this is often what happens. We're often in situations where we hear about “local partners” or “the community” (and there's plenty of books that have been written about this in the last 20 years). If we want to think about these long-lasting relationships without fetishizing communities, we need to therefore figure out what does collaborative learning, investigating and listening mean. Listening is not always easy, because they're always co-optations, failures and stalling. There also can be different ways of producing knowledge that is beyond Eurocentric, or some blend of conventional and non-conventional.

We can start to refashion systems slowly, to be more just and fair. This is again where academics are incredibly critical to both teach and train ourselves, to teach and train others. For that to happen, educational systems, the curriculum, and the staff must be appropriate and be supported. If we want to decolonize educational systems in order to envision ‘just futures’ or practice ‘just futures’, we need to have different forms of knowledge production in-house, different forms of sharing, and different forms of valuing epistemological methodological and pedagogical decolonizations. That is influenced by institutional politics in higher education, which are simultaneously local and global. That politics matters. It's important that we start to think about this praxis of ethical collaborations and that is not easy.

Finally, while who has a seat at the table in all this absolutely matters, but what is the table matters too. In other words, what are the terms of debate and who set those? All this needs querying. Decolonizing doesn't mean just diversifying, or tokenizing Othered people's participation in already set agendas and plans. It involves redefining power relations so that epistemic justice can exist to begin with. This means we must decolonize our minds and educate ourselves away from systems that result in runaway unsustainability and valuing profit and destruction in the name of growth and progress.

Ultimately, if we want to think about decolonizing institutions and higher education, we need to think about it as a collective project. No one single individual or any single university is going to be able to achieve this, or any single academic on their own. It's essential that we start to create systems where we support each other, support other colleagues to be able to ask those difficult questions, and envision alternative possibilities that are collectively created for these transformative planetary justice goals.

Q&A

ANDREA RIGON:

The opening plenary was lacking hope in some ways, especially about the possibility of the transformation of the political system. That was in reference to the democratic system, and now [Kevin made reference] to the authoritarian one. But you [Mark] presented this hope for transformation through engagement and were also talking about engagement with the civil society organization. Do you see hope there?

MARK SWILLING:

The debate about democracy being fit for purpose is quite a significant debate across the African continent, not just in the context of the 'just transition' and development strategies. My point of departure is democracy, not as a system or a structure, but as a way of relating. The degree of democracy is directly proportional to the strength of the voice of the least powerful. For me that is the best definition of democracy. If that is your point of departure, then from a knowledge production point of view (as researchers), how do we deploy our knowledge in a way that reinforces voice? That often leads to the conclusion of working with grassroots movements, with NGOs, or civil society coalitions (like for example we work with a civil society coalition called *Life After Coal*). Maybe it just reflects my own positionality, having decided to take up a position as a board member of a state-owned bank and also being part of what is called the National Planning Commission, which reports to the president. When you take these decisions to be an insider, without being a functionary (so you're an insider as a researcher) with the capacity to facilitate engagements amongst those who have influence and power, how do you make sure that you don't lose your identity? How do you retain sufficient integrity so that you can still have conversations with civil society coalitions on the ground and move between environments, facilitating the exchange of information?

I think it's very risky, but I think it is something that more academics need to do. There needs to be more mutual support between academics who choose to take the risk "working behind enemy lines". What that means for organizing research, I spend quite a lot of time training and equipping young researchers for doing transdisciplinary research in difficult environments; whether it's violence prone local communities, or institutions which don't do very nice things. There's nothing that I can really do to prepare them for the shock. I've noticed over the years that researchers go through a period of emotion and exhilaration, and then deep depression as as they come up against raw power within communities or within institutions. That dynamic of how close they get and then how they extract in order to reflect, is something about supervision of transformative research.

KEVIN LO TEK SHENG:

When people think about China as an authoritarian state the usual image would be government making some policies by itself, very exclusive, not influenced by actors passing these down to local governments for implementation. The reality is China is at a very experimental state where lots of policies are developed by local governments. Some of these policies might get picked up by the elite in Beijing and when suitable for their purposes they can become national policies. The point I want to make here is that when the local government make policies, they don't do it behind closed doors. There are lots of opportunities for engagement with the local government when they are trying to make new policy.

I'll give you one example. The carbon trading policy in China, which has been progressing slowly for many years, but recently picked up again. Guangdong is the leading and most robust of seven pilots in China. When the Guangdong government made this policy, it formed an international policy network that closely consulted British NGOs and a company from the U.S. What this means is that for academics working in China, it's important to engage not just with each other, but also with international academics and NGOs. This is one of the channels for us to become more aware of the importance of justice and sustainable transitions in China, as well as fostering collaborations between China and anywhere else in the world.

JO DAVIES:

I was really interested to hear a little bit more about how you [Mark] were classifying different knowledge and how you're using this? Are you using that to map the types of stakeholders you're speaking with? Can you say little bit more about 'transformative knowledge'? What were the other types of knowledge that you were mentioning?

MARK SWILLING:

Following a lot of mainstream thinking in the transdisciplinary research literature, we distinguish between 'systems knowledge' (knowledge about the way the system currently works, which is primarily what sociology has traditionally been interested in), 'target knowledge' (which is really the world of policy analysis and modeling), whereas we tend to focus on what we call 'transformation knowledge' (which is really knowledge about the process of change. [Transformation knowledge] is often assumed or derived from 'target knowledge' and reverse engineered to the present. It takes its most extreme form in scenario-building and future studies, where the futurists depict the present as a burning platform between the past and the future and you've got to get off it as quickly as possible. They don't like the present very much, so they spend time figuring out how one builds imaginaries of the future. That's important because we can't really build a new world if we haven't imagined it; fair enough.

The evolutionary potential of the present lies all around us. There's stuff happening. There's stuff bubbling up and it doesn't necessarily express itself in clear terms, about what it has in mind. Experimenters and activists react to the contradictions of the present and mobilize without necessarily always translating that into an imaginary of the future. So, one has to bring these together. We talk about 'radical incrementalism' and we call it radical because quite often incrementalists are written off as not really understanding the fundamental contradictions of capitalism sufficiently and so they're not really all that relevant. In my view the most radical person in the room is the person who asks the question "What next? What do we do next?". Because they're figuring out the next move in a particular context and so what then we need to do is start joining the dots and imagine imaginaries that are not derived from some kind of idealistic position; that are emergent from struggles happening, either on the ground, or in and through institutions.

Now to answer your question about classification of different forms of knowledge. I suppose we get close to that way of thinking by using the literature of institutional work that is interested in and change agents who are engaged in three different kinds of activities: creating new institutional forms, maintaining existing ones and disrupting institutions. That is quite a productive way of understanding what people are doing and working with them to make sense of what they're doing, because they don't always fully get it. They're just in crisis mode.

BIOS

Mark Swilling

Mark Swilling is a distinguished Professor of Sustainable Development and Co-Director of the Center for Sustainability Transitions at the University of Stellenbosch. The primary research focus of his career can be defined as societal transitions, initially with respect to democratization and governance, and subsequently within the wider discipline of sustainability studies. The dynamics of urban change has always been a consistent theme in his work. His published research was coupled to major institutional building collaborations, an achievement that was recognized in 2010 when it/he was awarded in the Aspen Faculty Pioneer Award for successfully introducing sustainability into leadership education. His most significant academic output is his book entitled *Age of Sustainability: Just Transitions in a Complex World* and this builds on the co-authored book with Eve Annecke entitled *Just Transition: Explorations of Sustainability in an Unfair World* (2012) that was awarded the runner-up prize for the Harold & Margaret Sprout Award in 2013 for best academic book in the environmental governance field. In 2014, he was appointed by the South African Minister of Finance as a Board Member of the South African Development Bank and in 2021 he was invited by the President of the Republic of South Africa to be a Commissioner on the National Planning Commission. In 2015, he was invited to become a Fellow of the World Academy of Art and Science. In 2016, he was appointed Advisor to the Creator of the International Architectural Biennale in Rotterdam. Amongst many more achievements, he was invited to become a member of the prestigious Club of Rome in 2012.

Kevin Lo Tek Sheng

Kevin Lo Tek Sheng is Assistant Professor of Geography and Associate Director of the David C. Lam Institute for East-West studies at the Hong Kong Baptist University. He is a political and urban geographer, with expertise in the interdisciplinary fields of environmental studies and energy studies. He has won several major competitive grants from the research grants council of Hong Kong, including the Early Career Scheme and General Research Fund and has published over 90 peer-reviewed articles in leading journals, including *Global Environmental Change*, *Political Geography*, *Geoforum*, *Energy Research and Social Science*, *Renewable and Sustainable Energy Review*, *Energy Policy*, *Energy for Sustainable Developments*, *Environmental Science and Policy*, *Cities*, *Habitat International*, etc. In 2018 he founded the *Journal of Asian Energy Studies*, an international peer review journal dedicated to interdisciplinary research and all aspects of energy studies in Asia.

Farhana Sultana

Farhana Sultana is a Professor in the Department of Geography and the Environment at the Maxwell School of Citizenship and Public Affairs, where she is also the Research Director of the Program for the Advancement of Research in Conflict & Collaboration. Professor Sultana is an internationally recognized interdisciplinary scholar of political ecology, postcolonial development, water governance, climate justice, transnational feminism and decolonizing academia.

SOURCES

- Beckert, J. 2016. *Imagined Futures: Fictional Expectations and Capitalist Dynamics*. Cambridge, MA: Harvard University Press.
- Institute Rousseau, les Amis de la Terre France & Reclaim Finance. 2021. *Fossil assets : the new subprimes ?* Paris: Institute Rousseau, Les Amis de la Terre France & Reclaim Finance.
- Lawrence, T.B. & Suddaby, Roy. 2006. Institutions and Institutional Work. *The Sage handbook of organization studies*. 215–254. Available: https://criticalmanagement.uniud.it/fileadmin/user_upload/lawrence-suddaby-2006.pdf.
- Mkandawire, T. 2011. Institutional Monocropping and Monotasking in Africa. In *Good Growth and Governance in Africa: Rethinking Development Strategies*. N. Akbar, K. Botchway, H. Stein, & J. Stiglitz, Eds. Oxford: Oxford Scholarship Online. DOI: 10.1093/acprof:oso/9780199698561.003.0003.
- Rawls, J. 2003. *A Theory of Justice*. New York: Routledge.
- Scoones, I. & Stirling, A. Eds. 2020. *The Politics of Uncertainty*. New York: Routledge.
- Spratt, S. 2015. Financing green transformations. In *The Politics of Green Transformations*. I. Scoones, M. Leach, & P. Newell, Eds. New York: Routledge. 153–170.
- Stirling, A. 2018. *How Deep Is Incumbency? Introducing a 'Configuring Fields' Approach to the Distribution and Orientation of Power in Socio-Material Change*. Sussex, UK: Science Policy Research Unit (SPRU). DOI: 10.2139/ssrn.3289586.
- Sulla, V., Zikhali, P. & Cuevas, P. 2022. *Inequality in Southern Africa: An Assessment of the Southern African Customs Union, Report 169233*. Washington D.C.: World Bank.
- Sultana, F. 2022. *The Unbearable Heaviness of Climate Coloniality*. Political Geography. <https://doi.org/10.1016/j.polgeo.2022.102638>
- Sultana, F. 2019. *Decolonizing Development Education and the Pursuit of Social Justice*. Human Geography, 12(3): 31-46. <https://doi.org/10.1177/19427786190120030>
- UNEP. 2011. *Towards a green economy: pathways to sustainable development and poverty eradication*. Nairobi: United Nations Environment Programme.
- Walzer, M. 1983. *Spheres of Justice*. New York: Basic Books.