

The importance of diversity and equity in sustainability research: an anthropological reflection on the productivity of frictions Spierenburg, M.J.

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The importance of diversity and equity in sustainability research: an anthropological reflection on the productivity of frictions



The importance of diversity and equity in sustainability research: an anthropological reflection on the productivity of frictions

Inaugural Lecture by

Prof. Dr. Marja Spierenburg

on the acceptance of her position as professor in the
Anthropology of Sustainability and Livelihood
at Leiden University
on 25 February 2022



Introduction: the Anthropocene

Welcome to the Anthropocene! The Anthropocene as a concept has become popular across different scientific disciplines, and also beyond the scientific community – as testified by the song recorded by the <u>Hangyouth</u>, an Amsterdam punk band, which you just heard.

Atmospheric chemist Crutzen and ecologist Stoermer (2000) have been credited with coining the concept, describing it as a new period of geologic time, marking substantial human transformations of the Earth's environmental systems. They warned us that we are rapidly exceeding – and in some cases already have exceeded - the planetary boundaries (see fig. 1), notably the ones related to biodiversity loss, climate change and the nitrogen cycle.

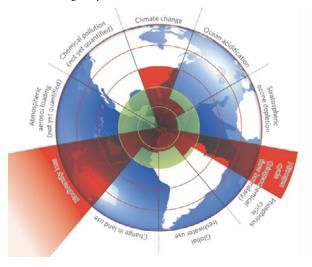


Fig. 1 Planetary boundaries. Rockström, J., Steffen, W., Noone, K., Persson, Å., Chapin III, F. S., Lambin, E., ... & Nykvist, B. (2009). Planetary boundaries: exploring the safe operating space for humanity. *Ecology and society*, *14*(2).

Steffen and colleagues (2015) proposed the mid-twentieth century as the start of the Anthropocene, at the start of the Great Acceleration, a period of intense global economic growth marked by an increased dependence on fossil fuel. They argue that it is during this period that human activity becomes the measurable main driver of change in the Earth's environmental system.

Since then, the concept of the Anthropocene has been subject to fierce debates about its usefulness, but also about its starting date (see e.g. (Mathews 2020; Tsing, Mathews, and Bubandt 2019; Davis and Todd 2017). Most of these debates relate to the fact that the Anthropocene and the planetary boundaries are based on global modelling, relying on the concept of the 'noosphere' (Crutzen and Stoermer 2000) - an abstract sphere detached from the biosphere and geosphere, detached from the land and those living on it. Thinking globally, Crutzen and Stoermer (2000) argue, allows us to use our brainpower to think about how to tackle the problems and technologically develop our way out of the mess we created as humankind. But who is the 'we', who is the Anthropos in the Anthropocene? Do we all contribute equally to the damage to our planet? Do we suffer from the consequences equally? Why do we choose the mid-twentieth century as a starting point when so many indigenous groups in for instance the Americas have already witnessed the near-total destruction of the environment they relied on at a much earlier stage, and several times over? What can we learn from them? Whose brainpower and technology can we use to steer us onto a more sustainable pathway?

Most sustainability problems are complex. There are different social and economic driving forces causing the problems. What happens at local levels, is connected to global trends or other places in the world. Furthermore, both the problems and their possible solutions may result in different impacts on different groups in society. Take for example the growing popularity of electric cars and bikes in the Netherlands – wonderful contributions to the reduction of our carbon

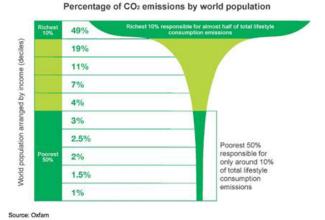
footprints, or not? E-bikes and cars are expensive, so they are not accessible to everyone, and plans to phase out fossil fuels may impact on the mobility of poorer Dutch citizens. In addition, e-bikes and e-cars require powerful rechargeable batteries, which increases the demand for metals such and lithium, cobalt, and nickel. Mining these metals may result in serious environmental damage, but also in the displacement of local residents in Latin America and Africa (Kramartz et al. 2021; Sharma and Mathiram 2020), either directly when their lands are taken over by mining companies - often without compensation - or because pollution renders agriculture and livestock husbandry impossible. Working in the mines is often dangerous and not well-paid, and may not compensate for the loss of land. In some cases, such as the Congo, the presence of certain minerals may also fuel armed conflict. Yet, the EU has been very reluctant to integrate those metals crucial to the production of e-bikes and e-cars into legislation to promote responsible mining, as this would interfere with the EU objective of reducing fuel dependency and reducing carbon footprints. It is currently preparing new legislation on batteries (European Parliament 2022), but how this legislation will address the social impacts of battery production is not yet clear.

In this – far from complete - example we see in a nutshell some of the common tensions and frictions related to sustainability problems and to our responses to these problems, which I would like to address this afternoon: 1) Frictions between and within societies; 2) Frictions between different ways of modelling and seeing the world; and 3) Frictions between the particular and the global.

Frictions between and within societies

Let's start with the frictions between and within societies, and which forces us to engage with the issues of diversity and inequality in the Anthropocene. These frictions surfaced in the debates related to the Global Climate Summit in Glasgow, last year. Activists complained that wealthy countries, whose contribution to climate change has been and is much more significant, are not honouring their promises of assisting low-income countries with funding for climate change adaptation. Many countries in for instance Asia and Africa are already experiencing severe impacts from climate change, with alternating droughts and floods (Kashwan et al. 2020). Some parts of India will soon become uninhabitable due to rising temperatures (Balsari et al. 2020). But even within wealthy countries both contributions and vulnerabilities to the impacts of climate change are not equally distributed.

Figure 1: Global income deciles and associated lifestyle consumption emissions



The unequal distribution of vulnerability to climate change and other impacts of environmental change, is referred to as differential vulnerability (cf. Thomas et al. 2019). Differential vulnerability is no accidental condition, but the result of the way in which our globalized economy is organized, the ways in which institutions (at local to global levels) have or do not

have the resources and capacities to adapt, and quite often the result of discrimination as well (Dixon and Ramutsindela 2006). Poor people have fewer resources which allow them to adapt to climate change, and they are more likely to suffer from dispossession – lose their land as well as access to other natural resources – which further weakens their position. They are also more likely to be located in – or to be relocated to – areas prone to environmental problems such as flooding and pollution.

Solutions to sustainability problems may sometimes further increase inequality. Take, for example, the biodiversity conservation initiatives my colleagues and I have studied in South Africa. South Africa is one of the countries with the highest rate of inequality in the world. Colonial conquest came with the destruction and exploitation of wildlife, the transplantation of flora and fauna from other parts of the colonial empire, and large-scale land theft (see e.g. Beinart and Coates 2002). Apartheid further entrenched racial discrimination and inequality. Die Boer en sy roer, that is the Afrikaner and his gun, and big game hunters like Frederick Selous, who killed more than 3000 elephants during his exploits in southern and east Africa, were responsible for the decimation of wildlife and the extinction of some species. When it finally dawned upon these hunters that the animals they were after were becoming scarce, these 'penitent butchers' as they were mockingly referred to, argued in favour of the establishment of protected areas, which were initially set up to protect the most commercially valuable animals (Ramutsindela et al. 2013). The creation of these areas, however, was again at the expense of Africans, who were evicted from these areas. To add insult to injury, they were also labelled as poachers, and saw the blame for destruction of wildlife shifted onto them (Neumann 1998). Evictions from conservation areas continue into the present: 7000 people living in Limpopo National Park in Mozambique were threatened with eviction after the area was declared a national park in 2002 and became part of the Great Limpopo Transfrontier Park which also includes Kruger

National Park in South Africa and Gonarezhou National Park in Zimbabwe (Milgroom 2017; Milgroom and Spierenburg 2008). Most people living in the Netherlands are not aware of these evictions, or may believe in this narrative of local populations threatening the existence of wildlife in Africa, and so may not question the fact that our National Postcode Lottery sponsors the Peace Parks Foundation, the organization promoting this and other transfrontier parks in the region, with more than 9 million Euros. On its website, the National Postcode Lottery states that its objective is to contribute to a transition to a just world in which large conservation areas contribute to economic development in Africa. Our research, however, showed that the economic development mainly benefitted local and international business elites, definitely not the people who either were resettled in areas which were dry and barren, or are still awaiting their fate inside the park while elephants and lions threaten their lives, crops and livestock (Spierenburg et al. 2008).

The privatization of wildlife in South Africa, which allows landowners to claim and commercially exploit the wildlife on their properties by selling it to hunters or to 'eco-tourists', and was also heralded as a win-win strategy contributing both to biodiversity conservation and economic development can, however, equally be labelled a 'green grab' by land owning elites (Spierenburg and Brooks 2014). 'If it pays it stays' - a frequently heard catch phrase in the promotion of game farming - does not always result in meaningful biodiversity conservation strategies, as the breeding of golden gnus and other new huntable species shows, neither does it provide the job opportunities as promised, but on the contrary quite often results in the eviction of farm workers, for whom the farms were not only a workplace, but also their home (Thakholi 2021; Brandt 2013; Mkhize 2014). Many of them end up in forever expanding informal settlements in between the game farms, pretty much left to their own devices with little hope of finding a new job, without unemployment benefits, and without

¹ See https://www.postcodeloterij.nl/goede-doelen/overzicht/peace-parks-foundation, last consulted March 7, 2022

access to land for cultivation. Despite these often devastating consequences, our team struggled to have farm workers recognized as stakeholders in policy discussions about game farming (Brandt, Josefsson and Spierenburg 2018). For those of you who are able to understand Dutch and would like to learn more, I can advise you to watch the Frontlinie documentary made by Bram Vermeulen on Green Apartheid, featuring a Dutch entrepreneur investing in game farming.

Many game farmers complain about the informal settlements along the roads to their lodges and hotels, claiming that the 'squatters' pose a threat to the security of tourists and their wildlife. And indeed, the high levels of inequality in South Africa go hand-in-hand with high levels of violence. The frictions between the wealthy and the poor in South Africa also go together with a loss of faith in government, on both sides (Kamuti 2018; Brandt 2013). In the Netherlands, which we always imagined as a rather egalitarian society, inequality, nevertheless, is also entering the public debates, and we see similar fracture lines, and loss in faith in our institutions.

Debates about energy poverty point to the frictions between wealthy homeowners who can afford to remodel their houses to cut down their energy use, and people who rent badly insulated and mouldy houses from homeowners who do not invest in these places and leave their tenants to foot the bill. A lowering of the energy tax rates to compensate for this, however, also benefits wealthy homeowners. Also here, lower income groups are hit harder by crises, the energy crisis, and Covid-19. This results in resentments against elitist 'dogooders' who can easily afford to shop at Ekoplaza or Marqt with a q, or buy an electric car, but who just as easily become well-organized NIMBYs - not in my backyard - when certain transitions threaten to be manifested in their immediate surroundings. Those who are bearing the brunt of the costs of sustainability problems and solutions, may rebel against green discourses, even downplaying the extent to which environmental change is occurring.

Frictions between diverse ways of modelling and seeing the world

The examples provided also show us a glimpse of the frictions between different ways of modelling and seeing the world in relation to sustainability (cf. de Castro 2019). The slogan of South Africa's game farmers 'If it pays it stays' is a very crude way of linking sustainability to the economy (Kamuti 2018), but many policies do suggest that the market economy model can be used to solve sustainability problems (Fletcher and Rammelt 2017; Corson and MacDonald 2012). There may be some problems related to calculating the 'real costs' of production, such as the costs of environmental damage, but believers in this model argue that adding a price tag to nature will stimulate entrepreneurship and innovation. Citizens as consumers are supposed to push businesses by demanding more sustainable produce. Sustainability then becomes an issue of individual choices. However, both the examples of the game farms and the e-cars and e-bikes show that the previously discussed frictions may limit the possibilities. Which consumers are able to demand and consume more sustainable products? How do we ensure that the real costs or the externalities as they are referred to in economics - are included in pricing, how do we ensure that armed conflict and displaced farm workers feature in the pricing? And then there is of course the issue of the 'sjoemel diesel', the fraudulent diesel, the deliberate lack of transparency about production processes. The global connections and the breaking up of different parts of production and value chains and dispersing these across the globe makes it difficult for policymakers and consumers to keep track. Nevertheless, the EU has recently announced plans to force 9.400 European companies and 2.600 non-European companies active within the EU to report on the environmental and human rights impacts of the activities of their suppliers beyond the EU boundaries, and do develop plans to prevent harm (European Parliament 2022a).

Given our globalized economy, global modelling of the planetary boundaries for instance, may then seem like a

logical solution, especially if we add the social foundations as proposed by Kate Raworth (2017; see figure 2).



Fig. 2 Source: Raworth, K. (2017). *Doughnut economics: seven ways to think like a 21st-century economist*. Chelsea Green Publishing.

While it is important to incorporate global connections, global modelling does not take into account the different ways in which the global interacts with the local. Take for instance the proposed solution of land sparing (Pimm, Jenkins and Li 2018; Fischer et al. 2014). The idea is that we set half of the Earth aside for the protection of biodiversity, and that we use the other half to produce the food and other necessities that humankind needs, using all the technology at our disposal. How do we calculate global food demands, do we use calories, or do we also take food quality into account? How do we determine quality of food? How do we distribute the food thus produced? And what are the spill over effects of technologies

like genetically modified crops on 'the other half' of the earth? Land sparing also assumes that there is a separation between humans and nature. The opposite solution that is proposed is land sharing – developing ways of fulfilling our needs by working and living with nature.

Such an approach seems to fit well with the concept which has become mainstream in sustainability science, the concept of socio-ecological systems (Preiser et al. 2018; Fischer et al. 2015). This concept is based on the understanding that humans are an integral part of nature. Human-nature relations, or nature-culture relations have been an important subject in anthropology for a long time. The idea that in the Global North over time a clear separation was made between the two is very much a simplification. However, some degrees of separation have occurred, and the model of the national park as a means to protect pristine nature builds on that (Beinart and Coates 2002). Research has shown, however, that even an area like the Amazon has been shaped by gardening and harvesting practices of local populations long before colonization (Balée 1999). People's influence on the environment dates back much longer than we think, as Wil Roebroeks and his colleagues have also shown us (see e.g. Nikulina et al. 2022). In many parts of the world people see themselves as much more part of their surroundings, entangled with non-humans. Animals and even rocks, trees and rivers may be credited with souls and agency, and respond to what we do (De La Cadena and Blaser 2018). Glaciers can be grumpy and easily unsettled, so it is important to listen to them and take care of the Earth (Cruikshank 2012). Such ideas may seem outlandish to some of you, but they are slowly making their way into law, for instance (Fitz-Henry 2018). Discussions are taking place about whether rivers and mountains should be assigned rights that need to be protected. In 2017 four rivers were granted legal rights, one in New Zealand, Colombia and two in India (O'Donnell and Talbot-Jones 2018). Like corporations, these rivers are now rightsbearing entities - but unlike the rights of corporations, river rights are not yet recognized in international treaties.

Nature matters to people, in different ways in different places. Much of the sustainable development thinking is based on the idea that we need to understand the value of nature for our livelihoods, our economies, and especially poor people are believed to protect nature only when they can benefit materially from it (Bologna and Spierenburg 2015). But the stories about living rivers and animals with souls tell us differently. That does not mean that people's aspirations for better and more secure lives should be ignored – ideas about local and indigenous people who are poor but living in harmony with nature are too often used in an instrumental way by nature conservationists (Neumann 1997), without doing justice to their knowledge or their ideas for the future.

People identify with certain landscapes, feel attached to them, and can have strong ideas about what landscapes should look like, and act on those ideas. Environmental history has taught us not only about the Amazon as a garden, but also about how colonizers tried to import their ideas about landscapes, and how these should be managed and protected to the colonies, where they have long lasting impacts (Beinart and Coates 2002; Cronon 1996). Wilderness set apart from domesticated, cultural landscapes - but I would argue that all landscapes are cultural. Sometimes management practices and the infrastructure that shape these landscapes seem to be forgotten, like the water management practices that shape the polders in the Netherlands. Attempts to change these landscapes, even when the aim is to make them more sustainable, may run into resistance. Changing the way we 'have always done things around here', such as specific farming practices, may be difficult, especially when farmers are also locked in in certain practices, value chains and subsidy regulations, as Jan Willem Erisman has discussed in his inaugural address (Erisman 2022; 2021). But it is also about how we are attached to the landscape, farmers and other residents may feel that the landscape with its open meadows, canals and windmills should stay the way 'it always was' (Holloway et al. 2021). However, attachments to places and landscapes can also be mobilized in struggles to prevent damage and pollution (Daneri et al. 2021).

Frictions between the particular and the global

How do we make sense of these different ways of seeing the world? How do we deal with the different impacts and interests related to sustainability problems and their proposed solutions? By not ignoring them, I would argue, by not trying to erase the differences and striving - too soon - for consensus or a one-size-fits all solution. It is important to address the tensions and frictions, to 'stay with the trouble' as Donna Haraway (2016) puts it. This is what anthropology can contribute to sustainability science, as these frictions are central to much of the research we conduct. We can contribute by sharing insights, knowledge, and experiences of the people we study - or study with I should rather say - who experience the trouble on a daily basis. Rather than searching - in vain - for silver bullet or one-size-fits-all solutions, it may be more fruitful to look for, what Anna Tsing and colleagues (Tsing, Mathews, and Bubandt 2019) refer to as 'patchy hope', and others have called the Seeds of good Anthropocenes (Pereira et al. 2018): learning from different experiences and experiments at different places across the globe, learning to hope against hope in the Anthropocene, "the impossibility of doing nothing" but without losing sight of the politically fraught nature of collaboration across disciplines, species, and different world views. "Patchy hope works within a register of [learning from] internal failure rather than heroic action" (Tsing, Mathews, and Bubandt 2019: 5194).

In this patchy-hope-approach we recognize the third type of frictions I mentioned – between the particular and the global. We are all connected in one way or another to a globalized economy, and global flows of goods and ideas. The Covid-19 pandemic has reminded us of that, not just by the virus spreading across boundaries despite the closure of some borders, but also by resulting in price hikes and shortages

resulting from the disruption of global trade. Yet how the pandemic affects people differs. Do you live in wealthy country which can borrow freely against low interest rates on the international financial market so it can spend billions of Euros to compensate households and businesses, and buy lots of vaccines, or do you live in a country that cannot? And even within wealthy countries we have seen inequality in terms of impacts, for instance in the way children in poorer households struggled with access to online teaching.

The interactions, or the frictions, between the local and global play out differently in different places. But it is also in these interactions that anthropology can contribute to sustainability sciences. Since George Marcus' (1995) seminal article on Ethnography in/of the world system: the emergence of multisited ethnography, much effort has been put in how to study across spatial and institutional scales, linking the local and the particular to the global. Susan Crate (2011) argues that ethnography has the methodological power to bridge local understandings to a multitude of stakeholders on different scales. The physical transformations of the earth have cultural implications, and culture frames the way in which people perceive, understand, experience and respond to these transformations. Through their long-term engagements in specific localities, anthropologists are strategically well-placed to interpret, facilitate, translate, communicate, advocate, and act in response to the cultural implications of unprecedented change (Crate and Nuttall 2009). They can provide insights into how people adapt, but also into the limits of people's resilience, and how both adaptation and failure to do so are connected to historical pathways, and changes taking place at scales beyond the local. Adaptation is not a simple function of technical solutions, but more often determined by socialcultural relations, the networks of solidarities, reciprocities and obligations (Crane et al. 2010). While technology can certainly help, it is important to study how technological solutions impact these relations, who benefits, who has access - as the example of the e-bikes and cars also shows. What do

these technologies suggest about the nature of problem, its causes and the way forward? Too much faith in technology may also obscure the need to make choices – and the politics of these choices (Cech 2013; see also Taebi et al. 2014). Here it is also important to mention the increasing popularity of the anthropology of policy, which focuses on how these choices are deliberated by policymakers, and how they are implemented (Tate 2020).

Anthropology's focus on local-global frictions is reflected in the increasing popularity of place-based approaches in sustainability sciences (Balvanera et al. 2017). This approach too is based on the idea that by studying the local in interaction with the global, we develop better insights in what helps, and what hinders transformations towards sustainability, and how solutions can be adapted to particular tensions between the local and the global. Rather than just arguing that 'it all depends on the context', this approach can help us in investigating what it is, in this context, that helps or hinders.

Inter- and transdisciplinarity: where all the frictions meet

Susan Crate (2011: 176) argues that it is only through vigorous cross-scale local to global approaches and interdisciplinary projects, which effectively accommodate and integrate qualitative data, that anthropology's offerings will bring the greatest contributions. Sustainability science indeed has become much more interdisciplinary over time, and is now moving beyond that to promote transdisciplinarity, which does not only involve the collaboration of researchers from different disciplines, but the actual co-creation of knowledge with stakeholders (Norström et al. 2020). While this offers all kinds of exciting possibilities – what better way than to learn from and with the people who are experiencing the trouble first hand - co-creation of knowledge is easier said than done, as I have argued in a blog posted on our institute's Website. All the frictions I discussed so far come together in this process. In addition, there is often a tension between the need for researchers (and their partners as well) to demonstrate the

relevance, impact, and efficiency of research projects, versus facilitating co-production processes, which require exploring and redefining how sustainability problems are understood by the various actors involved (Chambers et al. 2022).

Research funders, who equally increasingly promote this approach, and increasingly make it a requirement to obtain research funding, often underestimate the time it takes to organize knowledge co-creation processes - and so do we as academics. Not only do researchers from different disciplines need to learn to understand each other, understanding the way stakeholders perceive the problems at hand also takes time. The same words may mean different things to different people, even when they agree to work together. How do we value these different interpretations? How do we value the different knowledges people bring to the process? In a project led by Maria Tengö we proposed ways to weave this knowledge together (cf. Tengö et al. 2017) without using one knowledge system to validate another. The questions I asked do not only apply to the relations between academics and other stakeholders, but also the relations withing these groups - the frictions between and within.

Other important questions relate to how the decision-making power is distributed among the actors. Co-production requires dealing with different, and often seemingly contradictory agendas by different actors. These agendas are shaped by the knowledge, values and goals of the various actors – including the researchers themselves – which they use to support their claims about what kind of change is needed and how this is to be achieved (Chambers et al. 2022). Inclusive co-creation and transformation towards sustainability requires a willingness from actors to explore these different agendas, and regard them as part of the inherently complex interdependencies which are part of sustainability problems, rather than as competing interests. In paper I contributed to, Josie Chambers and colleagues (2022) refer to this as co-productive agility, as it requires a lot of manoeuvring and balancing. Making sure

that marginalized groups are also heard may require additional efforts (Brandt et al. 2018), including engaging with protests organized outside of multi-stakeholder meetings. As Eefje Cuppen argued yesterday, not engaging with social conflicts, trying to suppress them by de-politicizing conflicts, may very well backfire (Cuppen 2018). We need to embrace difference and even conflict, as conflict informs us what the trade-offs are between the various solutions proposed, and it also informs us about power relations involved.

On a day like this, with the images of the invasion of the Ukraine still on our minds, embracing conflict may seem odd. And of course, I do not mean we should embrace the pathetic men who foment hatred and division, and spread misinformation to stay in power. But even here, I'm afraid we need to stay with the trouble: how does misinformation work, with whom, and with whom not? What are the images used, of 'national culture' under threat, and why do these appeal to some people?

Engaging with conflicts about sustainability solutions means we will also have to engage with people we may feel uncomfortable with, or even dislike. Engaging not just with farmers who are trying to adapt their methods to become more sustainable, but also with members of the Farmers Defence Force for instance, and look at the reasons why they drive their tractors to the Hague. Why have they lost faith in government and in science? And who else may actually benefit from their protests? This may result in awkward engagements, but as Anna Tsing remarks, it is these awkward engagements, that we learn what is at stake, what the limits are of change, but also where we can find possible levers for change. Special attention may need to be paid to those whose voices may not be heard, the 'unusual suspects'. People who may be affected the most, have limited access to decision-making bodies, but who, as James Scott (2008) has taught us long ago - may use the 'weapons of the weak' to undermine sustainability projects. It may require 'studying up' as well, to investigate how dominant

voices in debates and policymaking manifest themselves (Tate 2020; cf. Nader 1969). How do processes of inclusion and exclusion work, how are different interests and visions weighed in decision-making processes? We also need to engage with the dominant voices to share the insights of knowledge co-creation processes and make sure that these do make a difference in policies and practices.

I realize that I have asked a lot of questions, and perhaps some of you are disappointed that I have not provided many answers. But I think there is value in asking questions, and 'the art of noticing' (Tsing 2015). The complexities of sustainability issues mean that we cannot design solutions solely from within our labs or behind our desks. We need to interrogate these solutions and their impacts – both intended and unintended. In policy-circles there tends to be a preoccupation with uptake and scaling up of solutions, which is fully understandable (Sherwood, Van Bommel and Paredes 2014). But perhaps scaling up is not about finding solutions that we can 'roll out', but about creating a set of questions, or a diagnostic tool, questions that need to be asked in different contexts to ensure that solutions are embedded in local historical, socio-economic contexts.

The Leiden University's interdisciplinary programme <u>Liveable Planet</u> offers me a great opportunity to contribute to this, with the solid backing of the <u>Institute</u> of Cultural Anthropology and Development Sociology. With its research programme focusing on Sustainability, Diversity and Digitalization, the institute provides a perfect base from which to contribute to the Liveable Planet. It's Multi-modal ethnography – which includes the use of photography, film, soundscapes, comic books, and digital anthropology – offers us exciting ways of studying, but also showing and sharing insights in the frictions I just discussed.

The Liveable Planet programme has adopted what could be referred to as a 'patchy-hope-approach', with a focus on the

study of and involvement in bottom-up initiatives, but always situating these in the larger historical, socio-cultural and political contexts. With the other members of the core team we have started to connect with colleagues from other faculties and institutes within the university through our monthly lunch meetings and a series of other smaller meetings, somewhat hindered by the pandemic during which many interactions had to take place online. Through joint applications with these colleagues, but also in collaborations with municipalities, water boards, and other stakeholders, we are hoping to contribute to the establishment or the further development of a number of living labs - including the Polderlab in the Vrouwe Vennepolder and the Sustainable City lab in the Hague. In these living labs, we will not only engage in knowledge cocreation processes, but also study these, to develop better insights in how to organize them, and how to ensure that the co-created knowledge does make a difference. We benefit from the Leiden, Delft, Erasmus collaboration, with programmes such as Port City Futures, the Centre for Sustainability, and with Delft's Climate Action Hub we are currently working towards Fairer Futures. We are also aiming to connect with Leiden's strong tradition in regional studies in the majority world – a much more appropriate term for what used to be called 'the developing world' and later the Global South - as indeed we have many lessons to learn from people who have seen their life worlds transformed and threatened long time ago.

Word of thanks

Bijna aan het eind gekomen van mijn oratie, wil ik een woord van dank uitspreken, aan allen die aan de totstandkoming van mijn benoeming hebben bijgedragen. Ik aanvaard deze hoogleraarpositie met veel plezier. Ik wil het College van Bestuur bedanken dat zij mij de verantwoordelijkheid voor deze leerstoel heeft toevertrouwd. Veel dank ook aan het Faculteitsbestuur van de Faculteit der Sociale Wetenschappen. I received a very warm welcome at the Institute of Cultural Anthropology and Development Sociology, thanks also to

the former WD Cristina Grasseni and the current WD Bart Barendregt. I am switching to English again, as we are quite an international bunch. Some colleagues I have known for a very long time: Sabine Luning, Jan Jansen, Peter Pels, Erik Bähre. We met when I was still a PhD-student, supervised by Peter Geschiere and Bonno Thoden van Velzen – I am very happy Peter is here today. Other colleagues, I was fortunate to meet in the few months prior to the first lockdown, and in between the difficult periods we spent confined to our homes. I enjoy the intellectual exchanges as well as the very friendly atmosphere. A special thanks to the colleagues in the research cluster on sustainability, who really challenge me in my thinking. The monthly meetings with our PhD-students in the Bring Your Thesis seminar are a true joy, and we are fortunate to have such a dedicated group of PhDs in our midst. I would also like to thank the support staff – and while they are indeed very supportive, I think that title only covers half of what they mean to the institute. And of course, I thank the students in our bachelor and master programme, who had to study under very difficult circumstances for almost two years. It seems there's finally light at the end of the tunnel - fingers crossed.

I also thank the Liveable Planet core team, Arnold Tukker, who due to an unfortunate accident could not be here today, Jan Willem Erisman, who presented his inaugural address last month, Eefje Cuppen, who will present hers in May, Wil Roebroeks, and Suzanne Marselis. We are discovering how we can work with our different ways of modelling and seeing the world, and I find this a very enriching experience. Over time we have discovered many colleagues in this university and within LDE with whom we have connected. Unfortunately, well... actually, quite fortunately, they are too numerous to mention each one by name. Thanks to you I am involved in numerous challenging research proposals, in the development of which we are also greatly supported by our societal partners. I would also like to thank the team with which we are currently developing a new bachelor programme Science for Sustainable Societies.

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