Introduction: Cartographic explorations with indigenous peoples in Africa[1]

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Prologue

He took his wand, touched the parchment lightly and said, 'I solemnly swear that I am up to no good.' And at once, thin ink lines began to spread like a spider's web from the point that George's wand had touched. They joined each other, they crisscrossed, they fanned into every corner of the parchment; then words began to blossom on the top, great, curly green words, that proclaimed:

Messrs. Moony, Wormtail, Padfoot and Prongs
Purveyors of Aids to Magical Mischief-Makers are proud to present
THE MARAUDER'S MAP

It was a map showing every detail of the Hogwarts castle and grounds. But the truly remarkable thing was the tiny ink dots moving around it, each labelled with a name in minuscule writing. Astounded, Harry bent over it. A labelled dot in the top left corner showed that Professor Dumbledore was pacing his study; the caretaker's cat, Mrs. Norris, was prowling the second floor, and Peeves, the poltergeist, was currently bouncing around the trophy room. And as Harry's eyes travelled up and down the familiar corridors, he noticed something else. This map showed a set

1 This research was undertaken within the framework of the Collaborative Research Centre 806 *Our Way to Europe*, funded by the German Research Foundation. Support was also provided by the DFG-AHRC project *Etosha-Kunene-Histories* (www.etosha-kunene-histories.net). I would like to thank all the contributors for their inspiring input that has influenced my own thinking around the topic. I owe my special thanks to Thomas Widlok, Stephan Henn, Mara Jill Goldman, Saskia Vermeylen and Margaret Wickens Pearce for their invaluable comments on earlier drafts of this introduction.

of passages he had never entered.
(Harry Potter and the Prisoner of Azkaban by J.K. Rowling 2011 [1999]: 143-144)

Imagine this miraculous map, not static, timeless and 'dead', but with agents moving around (including animals and spirits), and with hitherto undiscovered paths.

When I re-read Harry Potter, it was not just this map that excited me, but I also discovered many aspects that reminded me of what I have read about or experienced of hunter-gatherer being-in-the-world (in the sense of experiencing, apprehending and acting in the world),[2] e.g. the agency of non-human beings or agency evolving from relations between different beings (e.g. wands and wizards), ontological hybridity, the possibilities of ontological transformations, sharing substances or essences, the power of imagination, dreams, prophecies, and so on.[3]

The incredible success of the Harry Potter novels gives proof that these ideas are not untranslatable or incomprehensible for a 'western'[4] public, but are apparently highly appealing.

Yet, this volume is not about novels and whimsical maps therein, and their potential to mediate non-western experiences of the world. We are looking at actual maps as a medium through which to visualize relational ontologies and other issues related to hunter-gatherers' being-in-the-world. That's where I start my introduction. This volume endeavors to bring two rather different strands of research and practices, namely cartography/mapping and relational anthropology/writing, into a closer dialogue and aims to explore their potential for integration.

2 The hyphenated phrase being-in-the-world was introduced by Heidegger. Ingold took it up to describe the organism-in-its-environment, and to stress its active engagement with the world (2011 [2000]: 76; 2018b: 221). I draw here on Ingold's use of the term.

3 Of course, there are also many differences, e.g. the wizard- and muggle-centrism (as opposed to an ecological integrated world with every entity playing its own role in the ecology). I do not mean to draw a direct analogy, but rather find the parallels useful to think through.

4 I am aware that I use the term 'western' as a "foil against which to contrast the particularity of experience for people living someplace, sometime" (Ingold 2018a: 49).

Cartography, mapping and counter-mapping

It is widely acknowledged nowadays that maps are powerful (Harley 1989; Wood 1992; Wood/Fels/Krygier 2010; Dodge 2011; Glasze 2009; Monmonier 2018). For centuries, cartography and the production of maps were under the control of powerful elites, states and their allies in the west and – albeit to a lesser degree – of academics who used maps as tools to categorize, to designate, to (re)produce and to propagate certain conceptions of the world (Crampton/Krygier 2005: 12; Glasze 2009: 181). Maps defined empires and helped to maintain control over indigenous peoples (Chapin/Lamb/Threlkeld 2005: 620).

Since the late 1980s, critical cartography has played a strong role in critically scrutinizing maps both methodologically and theoretically, initially drawing mainly from semiotics, deconstructivism and discourse analysis (e.g. Harley 1989; Wood 1992). Studies in this field revealed how particular worldviews are privileged by particular mapping practices (Harris 2015: 51), and how perspectives and interests were turned into 'knowledge' through maps. Later, the ontological focus shifted from the map as representation towards the process of mapping (Dodge/Perkins 2015: 38; Rose-Redwood 2015: 4; Kitchin/Gleeson/Dodge 2013: 480), a shift which was also called a "processual turn" (Halder/Michel 2018: 13). These post-representational analyses looked at the numerous practices and actors bringing mapping into being and at the effect that maps have for users (e.g. Harris 2015; Perkins 2008; Del Casino Jr./Hanna 2005; Harris/Hazen 2005).

Maps for/of the less privileged: Using the master's tool

As Nietschmann put it: "More indigenous territory has been claimed by maps than by guns" (Nietschmann 1994: 36). Since the 1970s, indigenous peoples have started to counteract with their own mapping projects, with the goal "to appropriate the state's *techniques* and *manners of representations* to bolster the legitimacy of 'customary' claims to resources" (Peluso 1995: 384, original emphasis). In other words, indigenous people appropriated the "master's tool" in order to challenge and to protest against the prevalent representations promulgated by governments and their allies. The rise of an international indigenous peoples' movement in the second half of the last century, the realization that maps were sources of power for the powerful (cf. Wood 1992), and the rapid development of new mapping technology (cf. Crampton/Krygier 2005),

were all factors which played a role in this regard. Hunter-gatherer communities have been involved worldwide in indigenous mapping projects in which geospatial technologies (e.g. digital maps, satellite images, geographic information systems [GIS], and global positioning systems [GPS]) are increasingly employed in order to bring indigenous or local perspectives to the attention of those in power, who usually hold control over (official) maps (Crawhall 2009: 5-7).

The maps produced in these projects are known under different labels, also due to their slightly different foci, from "participatory tenure maps", "community maps" and "counter-maps" (coined by Peluso 1995) to "cultural maps" (e.g. used by UNESCO) or "indigenous maps" (see Chapin/Lamb/Threlkeld 2005, for more details of the terminology).[5] Under the broad umbrella of human ecology mapping, other often similar approaches have been used, e.g. "tenure and resource use mapping", "local ecological knowledge mapping" or "sense of place mapping" (see McLain et al. 2013: 651-652 and references therein).

The maps are almost as diverse as the actors involved and the methodologies applied, and can be categorized in different ways. Rocheleau, for example, lists cadastral maps; political/administrative maps (to claim property or contest boundaries); thematic maps; sketch maps; GIS-Generated Geo-References Maps of Land Use and Cover, Resources, Demography; and integrated and expanded GIS (combining multimedia records with geo-referenced maps, to combine qualitative and quantitative data on culture and ecology) (Rocheleau 2005: 337).

Cultural mapping was included in the support programs of UN Organizations, other internationally operating organizations (e.g. World Wildlife Fund for Nature, the Technical Centre for Agricultural and Rural Co-operation, the Forest Peoples Programme, the Rainforest Foundation), and national or local non-governmental organizations (NGOs). For example, the United Nations Educational, Scientific, and Cultural Organization (UNESCO) held "cultural-resource mapping" seminars in Bangkok and UNESCO also worked with the Indigenous Peoples of Africa Coordination Committee IPACC) on "participatory mapping" to foster the capacity of Africa's Indigenous Peoples to protect their cultural and biological resources. The Ford Foundation, the World Wildlife Fund and several Indonesian NGOs in Indonesia jointly published a

5 All the terms bear their specific problems. I will mostly use the terms "cultural maps", "indigenous maps" and "counter-maps" for maps made with/for indigenous communities. For a critical assessment of the term "cultural maps", see Dieckmann, this volume.

manual that included summaries of seven pioneering case studies of "community-mapping projects" in Kalimantan, Sulawesi and Sumatra (Rundstrom 2009: 316). Manuals on cultural mapping/participatory mapping have also been developed in many other regions (e.g. Tobias 2000; Cook/Taylor 2013; Rainforest Foundation UK 2015a; CTA 2010).

Cultural mapping was praised as possessing manifold advantages and benefits. UNESCO Bangkok, for example, lists these as: documentation of cultural resources, community empowerment, effective cultural resource management, community economic development, transmission of local knowledge and promotion of intercultural dialogue (Cook/Taylor 2013: 25-26).

Tobias listed the following purposes in his guidebook for First Nations in Canada on "land use and occupancy mapping, research design and data collection":

- "Documenting elders' oral history before more knowledge is lost.
- Determining shared use areas and reconciling boundary conflicts between neighboring aboriginal communities.
- Providing evidence for court cases involving aboriginal rights and title; settling treaty and claims under federal land claims processes; supporting compensation claims.
- Negotiating co-management agreements.
- Negotiating protective measures and benefits from industrial development.
- Determining probable impacts of development; supporting injunctions to stop unwanted development.
- Providing baseline data for long-term community planning and resource management.
- Supporting administrative programs such as land use permitting.
- Developing education curricula." (Tobias 2000: xii)

According to Alcorn, "community-based maps" could:

- "reveal areas where rights and responsibilities are cloudy;
- serve as evidence in courts of law;
- build consensus and mass support for policy reforms;
- renew local commitment to governing resources;
- promote community cohesion and self-actualisation;
- develop new links with administrative agencies;

- clarify rights over natural resources;
- promote cross-generational communication;
- renew cultural heritage;
- help control development." (Alcorn 2000: 11)

In an overview report for UNESCO, Poole summarized the various purposes of "cultural mapping" under the rubrics of tenure security and cultural revitalization (Poole 2003: 13), which seem to cover most but not all of the manifold purposes listed above.

It appears from these long lists that cultural mapping has been appreciated at times as an almost magical instrument in finding solutions for the diverse issues that indigenous peoples around the world are struggling with. It has been undertaken in many different contexts, with different agendas and different actors, at times with a top-down approach, at times more with a bottom-up approach (Rundstrom 2009: 316). In their review on indigenous mapping worldwide, Chapin et al. considered it as "a powerful tool for indigenous peoples in their struggles to defend and claim their ancestral lands, manage their resources, plan economic development, and preserve their cultures" (Chapin/Lamb/Threlkeld 2005: 630).

"Cartographic chainsaw massacres"[6] or strategically selected tools?

Despite the above discussed acceptance of indigenous/cultural/counter-mapping, there has also been far-reaching critique by mapping practitioners, activists, geographers, anthropologists and other academics. As Rocheleau pointed out, "[t]he new wave of community-based resource mapping and counter-mapping risks using the master's (blunt) tools to frame the infinite complexity of local places and peoples on the planet within a two-dimensional global grid of property rights and political authority" (Rocheleau 2005: 327). There is a danger, therefore, that maps may fix people, resources, habitats and territories in the Cartesian grid, "the iron grid of Descartes", and thereby reduce the multi-dimensional, dynamic and complex realities to a two-, or three-dimensional static construct (Rocheleau 2005: 328). In the mapping process, indigenous ontologies need to be translated into dominant cartographic tools, which brings the risk of distortion of original meanings and therefore the risk of appropriation by those in power (Halder/Michel

6 I borrow the term from Rocheleau (2005: 339).

2018: 16). And finally, indigenous maps might be "double-edged", functioning as tools both of political and territorial empowerment and of cultural and technical assimilation (Hirt 2012: 117).

The lack of theory and critical reflection in the indigenous mapping craze is of major concern. Due to the pragmatic origins of indigenous/counter-mapping rooted in empowerment and activism, the emphasis has mostly been on praxis over theory, action over reflection (Duxbury/Garrett-Petts/Mac Lennan 2015: 17). The approaches within the field of critical cartography have been employed for indigenous/counter-mapping to a rather limited degree. In 2009, Rundstrom stated: "With only a few exceptions, experienced scholars have considered counter-mapping a pragmatic exercise. They have tended to focus on establishing an empirical record of successes and failures, the reasons for the outcomes, and what practices do and do not work in the regional contexts in which they have worked. Theorizing their work in a broader context has been of secondary or no concern, perhaps understandably so." (Rundstrom 2009: 315)

Other points of critique have concerned the issue of participation in counter-mapping projects (e.g. Rocheleau/Edmunds 1997; Abbot et al. 1998), the social and cultural implications of technology transfer (e.g. Aporta/Higgs 2005), the risk of increasing conflicts within or between communities (Fox et al. 2005: 1; Taylor 2008), the (re)production of boundaries (e.g. Sletto 2009; Thom 2009; Hodgson/Schroeder 2002; Vermeylen/Davies/van der Horst 2012; Boden 2007), the tendency to treat or represent communities as homogeneous and static entities, or to fix dynamic systems within static representations (Roth 2009: 208), and the production of new property regimes (Bryan 2011: 41).

The implications and consequences of participatory mapping have been described, for example, as the "counter-mapping dilemma" (Roth 2009), the "ironic effects of counter mapping" (Fox et al. 2005), a "contradictory pursuit" (Rundstrom 2009: 316) or – referring to participatory GIS – questioned as being an "oxymoron" (Abbot et al. 1998). These critiques confront the actors, anthropologists and cartographers, as well as communities and their individual members, with the question of whether to map or not to map. Roth stated in 2009 that the majority answer to this question was at the time that the benefits of mapping would outweigh the costs (Roth 2009: 208).

Despite the well-known contradictions and side effects, I agree with those who would not entirely abandon maps for the purpose of making indigenous perspectives visible. First, it would mean to leave mapping and maps to those

in power, which would strengthen their hegemony via the representation of their 'reality'. Second, maps are a seminal tool to convey 'information', one possible medium of communication. Maps tend to be more accessible and can be more easily understood than texts by anyone with the basic ability to read such graphical representation (Eide 2015: 183).

The English adage "A picture is worth a thousand words", becoming popular in the early 20th century with regard to promoting images in advertisements in the United States, summarizes a notion which is even more broadly applicable today. Our "lives are now determined by visuality and its screens to a degree that was unimaginable until recently" (Alloa 2016: 2). Some scholars have detected a "pictorial turn", although it not always clear if this 'turn' only refers to the objects (images) of enquiry or to the enquiry itself, a new way of thinking about the objects (ibid.).

Maps are images, though they have more similarities with texts than photographs do. It is much easier nowadays to design and publish maps online (or on paper) and, as Halder and Michel have put it: "Maps are probably more present in many people's everyday life than ever before" (Halder/Michel 2018: 13).[7] For some time now, there have been new ways of producing, distributing and using maps that lend them new weight as a medium for communication; there is a growing presence and relevance of maps in art, activism and social movements. The ubiquity of spatial information technology, GIS, low cost GPS and remote sensing image analysis software and the spread of participatory mapping techniques offer new opportunities, such as the production of a multiplicity of maps and the possibilities of combining them with multimedia and multilingual content (see e.g. Fox et al. 2005; Rocheleau 2005).

Thus, in a nutshell, maps and the technologies linked to them provide a multifaceted field for communication. As Eide has pointed out, each medium can be seen as a tool, and in order to build something, one can choose a combination of tools suited to the task (Eide 2015: 187).

However, the task must be well-defined and the tools must be chosen consciously: mapping and maps are not an end in themselves but a means to achieve 'something'.

7 The ubiquity of digital maps on the temporal distribution and occurrence of the coronavirus (Covid-19), updated daily or several times a day, is a vivid proof of this at the time of writing.

It is therefore necessary to identify, beforehand, what exactly is to be achieved by making a map.[8] Rocheleau's 2005 notion is still relevant today: "To avoid cartographic chainsaw massacres we need to stop, look, listen, think, and then map carefully." (Rocheleau 2005: 339) I would add that even before stopping, looking and thinking, we first need to respond to the why, what and for whom questions. Maps are *not* representations of reality but media to convey certain information, knowledges, practices, experiences and messages; we therefore need to be clear about what information, knowledges, experiences, practices and messages we would like to convey, for what reason and for/to whom. That is where I draw on recent scholarship within anthropology.

Ontologies, relationality, animism and ecology

During the last two decades, anthropology, like other disciplines, has (re)turned to questions of ontologies, from different perspectives and in different theoretical frameworks. This trend includes "ontological approaches to anthropology" (Eide/McCarty 2018: 209), "ontological anthropology" (Bird-David 2018: 307), "anthropology of ontologies" (Kohn 2015: 311) and "anthropology *as* ontology" (Holbraad/Pedersen/Viveiros de Castro 2014, n.p.). Within this broad field, the understanding and usage of the term "ontology" varies. Kohn, for instance, defines ontology as the study of "reality", which encompasses but is not limited to humanly constructed worlds. Others understand it as the study of "being" or "becoming" (Kohn 2015: 312). Holbaard et al. define the anthropological concept of ontology as "the multiplicity of forms of existence enacted in concrete practices, where politics becomes the non-sceptical elicitation of this manifold of potentials for *how things could be* – what Elizabeth Povinelli (2012), as we understand her, calls 'the otherwise'" (Holbraad/Pedersen/Viveiros de Castro 2014, n.p.). Notably, in the original (Greek) meaning, ontology referred to the *discourse* about the nature of being

8 The mapping of the coronavirus (Covid-19) comes to my mind again: while, in the initial stages of the pandemic, the maps were easy to read for people familiar with these kind of maps and the maps themselves provided an overview about where (and how much) the virus was present, later in time, the globe (and at times countries) seemed to be covered in frightening and overwhelming clouds (and the where and how much became much more difficult or impossible to grasp). What did the maps achieve then?

(Graeber 2015: 15). Some detect an "ontological turn" in anthropology[9] (mainly associated with the writings of Philippe Descola, Eduardo Viveiros de Castro and Bruno Latour – what Kohn calls the "narrow ontological turn" (2015: 316).[10] The wider ontological field would encompass works which rely on Latour's actor-network theory, the "ecological phenomenology" of Ingold (Eide/McCarty 2018: 209) and many others (cf. Kohn 2015: 315-316).

However one defines it, and despite all the differences, the common denominator within this otherwise broad field is the questioning of previously seemingly fundamental ontological certainties in order to generate new and different insights into 'the world' or 'the worlds'. It is, as Course pointed out, a "dual movement towards, on the one hand, exploring the basis of the western social and intellectual project and, on the other, of exploring and describing the terms in which non-western understandings of the world are grounded" (Course 2010: 248). The concept of ontology, or rather, the plurality of ontologies, invites both a reflection on our own 'reality' and an exploration of how other people and non-humans (e.g. Kohn 2013) configure their world, how things could be otherwise than we know them to be (Bird-David 2018: 307). Ontological anthropology sets out to open us up to other kinds of experiencing and thinking of and in the world, of other ways of being-in-the-world.

It is not the scope of this introduction to philosophically analyze the arguments and counterarguments within the context of the ontological turn. The debate has been productive in as much as it has (again) increased awareness of our own certainties by "destabilising our own forms of classification" (Heywood 2017: 4), or as Astor-Aguilera and Harvey put it: "In contrast to force-fitting the 'other' into our academic logics – regardless of archaeological, historical and ethnographic contexts demonstrating different world engagements – the world of 'others' is often a world not composed by and for humans but one in which humans are part of a larger relational community where a multitude of agents, seen and unseen, interact." (Astor-Aguilera/Harvey 2019: 3). Nevertheless, like many others, I have a number of concerns about the concept of

9 It is not the scope of this introduction to discuss whether it can in fact be considered as a 'turn', especially in anthropology. Furthermore, I am suspicious about as well as disoriented by all these so-called intellectual 'turns'. For critiques of the ontological turn see e.g. Pedersen 2012; Graeber 2015; Heywood 2017, 2012; Laidlaw/Heywood 2013.

10 Others might conceive of it as just filtering new wine into old bottles; see Guenther 2019b: 155.

ontology. Most importantly, originating as a concept with its partner epistemology, isn't this conceptual duo based on our own ontological assumptions, namely that there is a world out there which can be apprehended through different epistemologies, an idea which many ontologists would clearly reject? Doesn't ontology still imply something constructed in the mind, and therefore perpetuates a body-mind dichotomy? Barad stated:

> The separation of epistemology from ontology is a reverberation of a metaphysics that assumes an inherent difference between human and nonhuman, subject and object, mind and body, matter and discourse. Onto-epistem-ology – the study of practices of knowing in being – is probably a better way to think about the kind of understandings that are needed to come to terms with how specific intra-actions matter. (Barad 2003: 829)[11]

I also endorse Ingold's suggestion of exploring "ontogenesis" and "ontogenetic multiplicity" as "open-ended pathways of becoming within one world of nevertheless continuous variation", rather than a multiplicity of ontologies (Ingold 2016: 303).[12]

Another, partly overlapping, inspiring field of research in the present context is that of the ecological (also environmental) humanities. This "interdiscipline" (with sub-disciplines like environmental literature, environmental philosophy, environmental history, environmental anthropology, feminist/queer/indigenous science and technology studies) addresses much more explicitly the current ecological crisis, including climate change, loss of biodiversity, water degradation and many other anthropogenic events, as well as the fact, that we are, from this point of view, no longer "able to sustain the idea that humans are separate from nature" (Rose 2015: 1).[13] This interdisciplinary field emerged from the acknowledgment across humanities and the social and environmental sciences of the need for a more integrated

11 I am grateful to Mara Jill Goldman for reminding me of the writings of Karen Barad in this context.

12 Personally, I would simply prefer the term "the study of *being-in-the-world*". Although *being-in-the-world* is also burdened with some scientific-historical baggage, it embraces experience, apprehension and activity, evades dichotomies and can be understood without an intensive pre-occupation with philosophy and phenomenology.

13 Although some scholars promulgating the ontological turn in anthropology, e.g. Kohn, consider the ontological turn in anthropology as a reaction to certain conceptual problems arising from the specter of the global environmental crisis (Kohn 2015: 312), I doubt that all ontological anthropologists would subscribe to this.

and conceptually sensitive approach to environmental issues, rethinking the ontological exceptionality of the human. Ecological humanities seek to position humans "as participants in lively ecologies of meaning and value, entangled within rich patterns of cultural and historical diversity that shape who we are and the ways in which we are able to 'become with' others" (Rose et al. 2012: 2). In this regard, anthropological studies on ontologies which reveal the diverse ways in which humans made themselves at home in the wider ecology, and which also reveal the particularity of the nature/culture conceptualization as embedded and plausible only within the framework of the western history (e.g. Sullivan/Hannis 2016: 5), are vital for the approaches of ecological humanists in their re-positioning of humans (in general) in the ecology of life. The Australian philosopher Val Plumwood identified two tasks of ecological humanities: first, to (re)situate the human in ecological terms, and second, to (re)situate non-humans in ethical terms (Plumwood 2002: 8-9). It becomes evident that the political ambitions (in case we consider ethical claims as political ambitions) of ecological humanities are far more outspoken than those of many ontological anthropologists. However, from my point of view, all of them are (at least implicitly) political as well, as they challenge the dominant view of "being-on-top of the world" (Ingold 2011 [2000]: 76; see also Sullivan 2017).[14]

Relevant for the topic of this volume, both fields also share an interest in the "relational ontologies" or "connectivities" (as it is rather called within ecological humanities) of indigenous peoples (e.g. hunter-gatherers, hunter-pastoralists and hunter-herders), an interest which is also linked to the insight that there is something to be learned from their direct involvement with the non-human environment (see e.g. Sullivan 2017). Some scholars call for "relational politics" (Castree 2003).

In relational ontologies, beings (including non-humans) are regarded as persons[15] in relationships and they are constituted by these relationships, not because of any taxonomic designation (as in the western world) or according

14 Ingold is explicitly not one of the scholars of the "narrow" ontological turn (e.g. 2016: 303), but his works have much to say about ontologies and are generally referred to under the rubric of ontological anthropology or the new animism, e.g. Eide/McCarty 2018; Guenther 2015.

15 See Bird-David 2018: 307, for a brief critique of the concept of "person". I prefer "actors", "beings" or "others", who are endowed with their own subjectivity. "Person" is, from my point of view, too burdened with its western philosophical history, starting from "persona" in Latin, which referred to masks worn by actors on stage.

to my understanding of what Ingold describes as "populational thinking", as opposed to a "relational thinking" (Ingold 2018a: 103-104). This understanding implies the agency of non-human others as a fact of life and that sociality and historicity are indisputably inclusive of non-human others (Poirier/Dussart 2017: 9). Non-human others may include any other 'entities' in the environment, including rocks, mountains, rivers, other animals, plants, artefacts, thunder, winds or spirits.

The concept of animism is fundamental within relational ontologies. Graham Harvey defines animists as "people who recognise that the world is full of persons, only some of whom are human, and that life is always lived in relationship to others" (Harvey 2006: xi). The understanding of the concept has radically changed since Taylor introduced the term in the late 19th century (Bird-David 2018: 306; Willerslev 2013) and animism is no longer regarded as mistaken belief but as a mode of being that implies a set of ontological assumptions distinct from those on which a Cartesian understanding of the world is based – an understanding which still dominates large parts of science and public domains (Kohn 2015: 317; Bird-David 1999). This rather recent approach to animism has come to be known as the "new animism".

Another concept brought into the discussion on relational ontologies is kin, understood not as genealogical ties but as relational bonds. Following this understanding, kin is not restricted to humans but includes all beings with whom one entertains (inter-subjective) relationships (Bird-David 2017; Haraway 2015).

Relational ontologies and animism are widespread in hunter-gatherer societies. Based on Hallowell's work with Ojibwa in Northern Canada (Hallowell 1960), "new animism" flourished in South America (e.g. Descola 2013; Costa/Fausto 2010; Descola/Palsson 1996; Viveiros de Castro 1998), but spread over to North America (e.g. Scott 2006; see also contributions in Poirier and Dussart 2017; Brightman/Grotti/Ulturgasheva 2012), Siberia (Willerslev 2007; Pedersen 2001; Brightman/Grotti/Ulturgasheva 2012) and South Asia (Bird-David 1999; Århem/Sprenger 2016). Though not under the label "new animism" (Descola (2013) subsumed Australian indigenous ontologies under "totemism"), studies along this line were also conducted in Australia (see contributions in Poirier/Dussart 2017; Rose 2000; Povinelli 1995).

Of course, countless other anthropologists have earlier published relevant material all over the world in this regard, from different theoretical back-

grounds and with different labels, e.g. "worldviews", "belief systems", "cosmology", or "religion", feeding into the more recent analytical frameworks.[16]

Mapping relational ontologies?

Relational ontologies have a clear reference to space. Indeed, I would argue that spatiality is an indispensable component of relational ontologies and maps are the medium par excellence to convey spatial information. However, the discussion above on ontologies, relations and ecologies remained somehow abstract. What do the insights within these fields exactly imply for mapping and what exactly could be mapped?

I point to some of the issues with regard to cartographic visualization which came to my mind when engaging with relational ontologies, the "new animism" and ecological humanities. These are certainly extensible and should be read as suggestions for further exploration. Furthermore, these are only general ideas; case studies of different groups living in different landscapes would raise different cartographic questions. Some of the issues will be addressed in this volume, while others might still have to wait for provisional or definitive answers.

Animism: If we take seriously the insight that people living with relational ontologies do not consider humans as ontologically particular but as being incorporated in a wider ecology of a variety of beings, we need to consider how to integrate people into maps. If I am not mistaken, most conventional maps do not depict people (people are the subjects who look at the map, not the objects to be looked at).[17] Occasionally, on colonial maps, there might be 'native' groups depicted on the map (rather as 'objects'). On indigenous/countermaps, plants and animals are mostly represented as resources but people are absent *on* the map. At times, people appear on photographs to pay honor to their participation in the mapping project or to indicate that it is based on their knowledge; the map might be said to be the map *of* a specific community, but the people are hardly integrated into the map itself.[18] Certainly, there

16 See e.g. Descola 2013 and Ingold 2011 [2000] (especially chapters 4, 7, 8) for references.

17 Some maps might present accumulated data referring to "people", like population density or coronavirus infections, or, in short, "objects of knowledge".

18 I am aware that I am generalizing here and in the following when I point out to the shortcomings on existing maps. There are exceptions. For example, some maps produced in the area of the Kgalagadi Transfrontier Park in Southern Africa (unpublished)

is the risk, according to the western subject-object separation, that people are objectified when put on the map. Is there any way to circumvent this?

Linked to this, can non-human beings become de-objectified on maps? How can animals and plants turn from resources or cultural heritage items into agential subjects?[19] How can less tangible agents, like ancestors, spirits, potency or winds be depicted on maps? Even more challenging, how can ontological mutability, ambiguity or hybridity be captured on maps? I would presume that GIS and cybercartography (see below) with dynamic visualization has much to offer in this regard.

Relationality: If relations are the constituting part of many hunter-gatherer ontologies, how can their meaning be visualized? I cannot imagine simple lines or double-pointed arrows doing justice to their significance and qualities. This refers both to human-human relationships and human-human networks (including inter-ethnic relations, which are often excluded from indigenous/cultural maps), but also to other kinds of relations, between human and non-human beings and between non-human and other non-human beings. The same goes for kinship (including between human and non-human beings) as relationships with specific qualities. Is there a way to visually weave social networks and relations into the landscape? Relationality also refers to the land. Are there no better ways to convey people's relations to the land and to places than putting indigenous place names (at times with explanations of their meaning) on the map?

Perspectivism: As maps are not the representation of one overall agreed upon reality, multi-mapping from different perspectives (see e.g. Rocheleau 2005: 358) becomes an imperative. This would include mapping from the perspectives of different human groups or individuals (e.g. women, men, children, elders, hunters, shamans, etc.) but it could also include mapping from the perspective of non-human agents (as perceived from the human perspective).[20] It would also imply leaving the conventional bird-eye's, panoptic view for various perspectives from within.

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on family territories or maps in Etosha (unpublished) on the lifelines of specific individuals clearly depict people on the maps.

19 The pleonasm is deliberately chosen to stress the point.

20 What would Amazonians think the world would look like from the jaguar's perspective? How would lions perceive the world according to San? How would ancestors and spirits conceive of their world?

Mapping for whom?

As mentioned above, one needs to consider the *what* questions (which I have attempted above), as well as the question of the target group, the beholders of the map. Indigenous mapping projects often target policy makers, judges or decision-makers in the field of nature conservation in order to gain land rights, participation in nature conservation management for indigenous people and/or recognition of their cultural heritage. These indigenous maps are produced for quick results, sometimes in urgent political situations. Maybe integrating relational ontologies into the maps would have a rather longer-term impact, although they would not go smoothly with policy makers at first as they are used to the "Cartesian grid".[21] I imagine that the relational and animated maps ask for a new cartographic literacy. Thom, in the Canadian context, hoped for:

> The idea of this 'radical cartography' could well lead to the recognition of kin, the flexibility of group membership, and the protection of customary property rights in the kinds of powerful reconciliation arrangements being negotiated at treaty and self-government tables throughout the indigenous world. Reframing territories according to these less familiar references (at least to a western Cartesian cartography) will not undermine territorial land claims. Rather, it is likely to produce and sustain more harmonious political relations between related communities in a contemporary world of treaty settlements and self-determination. (Thom 2009: 201)

The "radical cartography" could avoid squeezing indigenous ontologies into Cartesian straitjackets. It could counter the risk of political empowerment being gained only by means of 'cultural' assimilation: using the master's language eventually leads to the loss of the mother tongue.

And on the other hand, to stay with that metaphor, it might help 'us'[22] to understand 'their' mother tongues a bit better. From my point of view, the unprecedented ecological crisis requires re-conceptualizations of the human within his/her environment. Relational ontologies could help us to re-think our being-in-the-world. I suggest that maps could help us to at least *imagine*[23] relational thinking (in the sense of "not kind but kin", adopted from Haraway

21 They might have an immediate impact within legal negotiations though.

22 'Us' refers to 'us westerners' here.

23 I don't use imagination as opposed to knowledge here, but as one kind of experience.

(2015: 161) – less anthropocentric and less anthropo-hubristic) with the potential of regarding and experiencing other-than-humans as agents and beings. This could contribute to an understanding that living *with* the environment instead of living *off* the environment might be a viable option.

Ingold suggested:

> [T]hat we reverse the order of primacy [of western ontology, the 'givenness' of nature and culture], and follow the lead of hunter-gatherers in taking the human condition to be that of a being immersed from the start, like other creatures, in an active, practical and perceptual engagement with constituents of the dwelt-in-world. This ontology of dwelling, I contend, provides us with a better way of coming to grips with the nature of human existence than does the alternative, Western ontology whose point of departure is that of a mind detached from the world, and that has literally to formulate it – to build an intentional world in consciousness – prior to any attempt at engagement. (Ingold 2011 [2000]: 42)

Two decades later, his proposal is even more relevant. However, as long as academic analyses and debates are mostly carried out in academic journals and publications, but are hardly accessible and incomprehensible for a general – even if sympathetic and interested – public, the political and environmental potential of this vision risks evaporating.

That's where maps can come in, not exclusively, but as one tool amongst many others, including other visual art, documentaries, novels, and whatever media one would like to explore for the purpose of unsettling 'our' own certainties while proposing new ways of apprehending and acting in the world. Maps are important to consider because they are easier to read than texts and thus more accessible to people from different linguistic and educational backgrounds (Lewis 2012: 40). Last but not least, they are the tool *par excellence* for expressing spatial interrelationships and therefore the spatiality of relational ontologies.

Why Africa?

The reasons for the regional focus of the book, namely Africa, are twofold, one referring to relational ontologies and the other to cartography.

In terms of relational ontologies, Africa was not on the radar of "new animists" or of scholars focused on relational ontologies until recently, and, as

already mentioned, a one-size-fits-all approach to relational ontologies and animism did not prove productive. Guenther stresses: "[A]nimism is not some monolithic schema or cosmologico-religious complex but something diverse and multiplex, structurally varied, ecologically and historically contingent" (Guenther 2019a: ix). Some works on Khoe-San groups of Southern Africa (e.g. Sullivan 2017; Low 2014; Guenther 2015, 2019a, 2019b) have recently been published, and Skaanes has worked on the cosmology of the Hadza in Tanzania, though with a different theoretical approach (Skaanes 2015, 2017). These studies reveal similarities and differences from the "new animism" in other parts of the world which would need further examination. In Southern Africa, for example, ontological mutability, the significance of transformations (Guenther 2019a, 2019b), the relevance, transmission and sharing of "potency" (Low 2007), the agency of ancestors and of rain (Sullivan/Hannis 2016) seem to be important features of "San-imism" (Guenther 2019a: ix). This volume aims, therefore, at contributing to the spectrum of studies of relational ontologies.

As for cartography, indigenous/counter-mapping has been more prominent on other continents for a number of interconnected reasons: a) the movements and self-organization of indigenous peoples began earlier than in Africa (Niezen 2003, pp.72-86); b) indigenous/counter-mapping started earlier there (Chapin/Lamb/Threlkeld 2005); and c) indigenous peoples in other countries launched and won important land claims earlier (see e.g. Barume 2010), in which indigenous maps often played a significant role (see e.g. Wainwright/Bryan 2009; Thom 2009; Peterson 2017).

In Africa, indigenous mapping projects only began in the 1990s and were, to begin with, mainly conducted with agriculturalists (Chapin/Lamb/Threlkeld 2005: 625); later, hunter-gatherer groups and other indigenous peoples also became part of mapping projects (e.g. different San groups, Baka, Bagyeli, Ogiek). Projects were conducted in Central Africa,[24] Eastern Africa[25] and Southern Africa.[26] Critical anthropological analyses of these projects are rather limited to date (Hodgson/Schroeder 2002; Boden 2007; Taylor 2008; Vermeylen/Davies/van der Horst, 2012). Most of the indigenous mapping

24 E.g. Lewis 2012; Rainforest Foundation UK 2015b; Defo/Njounan Tegomo 2008; Nelson 2008; Njounan Tegomo/Defo/Usongo 2012.

25 E.g. Rambaldi et al. 2007; Muchemi/Kiteme 2015; Hodgson and Schroeder 2002; Adaptation Consortium 2015.

26 E.g. Crawhall 2009; Taylor 2002; Taylor and Murphy 2006; Xoms |Omis 2018; Boden 2007; Future Pasts 2015-2019.

projects in Africa have, by and large, followed rather conventional cartographic routes, based on western Cartesian ontology; that is, they represent plants and animals as resources to be exploited and complex land use patterns of hunter-gatherers as territories marked by fixed boundaries, i.e. indigenous being-in-the-world is transformed into a representation within the Cartesian grid and those issues not fitting into it (e.g. animistic experiences) are silenced.[27] What remain largely invisible are social relationships (with human and non-human others), 'potency', non-human agents and the dimension of time.

However, a number of examples, mainly from other continents, though not dealing explicitly with relational ontologies, illustrate that maps, and the cartographic techniques and technologies involved, are not inherently inappropriate to mediate indigenous ontologies. In a case study in India, Robbins (2003) demonstrated that satellite images can be classified according to land cover categories used by different local groups instead of following the classification system of the GIS/ecological analyst. Pearce and Louis (2008) reincorporated the seasonal and cyclical variations into maps of Nu'alolo Kai (Haiwaii) for a better portrayal of the "depth of place" knowledge of Hawai'ians. Developing a place name map in the Penobscot territory (Maine, US), Pearce (2014) transformed the conventional map design using tools of narrativity and translation for the purpose of expressing the depth of meaning of the place names. Participatory three-dimensional (3D) modelling (P3DM), as promoted by Rambaldi et al. (2010), is another promising method, because it brings the geographic information technology closer to local people.

Furthermore, cybercartography is used in a number of indigenous cases outside Africa (see contributions in Taylor/Lauriault 2014; Anoby/Murasugi/Dominguez 2018; Geomatics and Cartographic Research Centre and University 2011a, 2011b). Cybercartography and cybercartographic atlases allow for a more comprehensive type of documentation and communication of spatially referenced information, including indigenous relational ontologies. Cybercartography uses multimedia formats, is interdisciplinary and highly interactive, and also explores "the possibilities of using all five senses in its

27 This is not to say that the 'conventional' maps produced cannot yield any success. In fact, they can be appropriate for securing land rights or for participating in conservation. However, the side-effects would need to be thoroughly explored, e.g. that this kind of cartographic representation risks perpetuating hegemonic notions of environment and human 'users'.

representations in order to make cybercartographic atlases as reflective as possible of sensory realities" (Taylor 2014: 2-3). It allows for story-telling and story-building beyond the limits of the traditional maps and is a promising instrument complementing two-dimensional paper maps (Aporta et al. 2014: 241).

Also, the concept or rather "discursive frame of reference" (Roberts 2016: 4) of *deep mapping*, used e.g. in the Digital Humanities, might also be worthy of further exploration for the current purpose. Deep mapping refers to the development of more complex maps of "the personalities, emotions, values, and poetics, the visible and invisible aspects of a place". Deep maps integrate a "reflexivity that acknowledges how engaged human agents build spatially framed identities and aspirations out of imagination and memory and how the multiple perspectives constitute a spatial narrative that complements the verbal narrative traditionally employed by humanists" (Bodenhamer/Harris/Corrigan 2013: 174). Roberts identifies some common threads in this wide field, "a concern with narrative and spatial storytelling; a multi-scalar and multilayered spatial structure; a capacity for thick description; a multimedial navigability; a spatially intertextual hermeneutics; an orientation towards the experiential and embodied; a strongly performative dimension; an embrace of the spatiotemporally contingent; a compliance with ethnographic and autoethnographic methods and frameworks; an 'undisciplined' interdisciplinary modality; a time-based cartographics; an open and processual spatial sensibility; and, perhaps most telling, a reflexive – yet 'aspirational' – sense of the fundamental unmappability of the world the 'deep map' sets out to map." (Roberts 2016: 5)

Contributions

The two strands of enquiry and praxis outlined above, loosely lumped together as counter-mapping/cultural mapping/community mapping/indigenous mapping on the one hand and relational ontologies/animism/being-in-the-world on the other, provide the basis for the contributions to this volume. The authors (all of them presenters at the workshop *Mapping the unmappable? African hunter-gatherer relations with their environment and cartography*) were invited to explore the potential of cartography and spatial technologies in mediating African relational ontologies and animism(s), thereby both contributing to the field of indigenous cartography and relational anthropology. While

some of them apply a general scope or present cartographic examples from outside Africa, most of the contributions build on case studies in Africa.

As a conceptual opening, **Øyvind Eide**'s chapter can be read as an invitation to reflect on the concept of maps. Although many if not all of us have clear ideas about what maps are, these ideas are rarely spelled out. The chapter makes evident that it is worthwhile reflecting on our own concepts of maps and to state clearly how we understand maps. He further discusses the purpose of maps and draws attention to the relationship between maps and control, maps and politics, and pinpoints the distinction between topological and topographical maps. He suggests considering maps – one kind of spatial media product – as models, which allows us to focus more on their function than on their essential attributes.

In a thematic opening, **Hugh Brody** takes us back to the very beginning of cultural mapping projects, to Canada in the 1970s. He was involved in one of the first major mapping projects, the Inuit Land Use and Occupancy Project. This and subsequent mapping projects played a major role in indigenous land claims. Brody explains both the difficulties in representing multidimensional ways of using and occupying the land on two-dimensional maps and the challenges of using indigenous conceptualizations in western courts at the time, a topic also taken up by Saskia Vermeylen in this volume (see below). From Canada, Brody takes us to South Africa around two decades later, where he was involved in another cultural mapping project related to a potential land claim. This project was different in that the community involved, the ǂKhomani, [28] had experienced land dispossession for centuries and had therefore disappeared from official South African maps, an experience which they share with many Khoekhoegowab-speaking groups all over Southern Africa and which Sullivan, who worked with another group of Khoekhoegowab-speaking people in Namibia, addresses in her chapter as well (see below). The large-scale land dispossession left ǂKhomani living dispersed over large parts of the region. Unlike the maps produced in the Inuit Land Use and Occupancy Project, the ǂKhomani maps had to be built around memories of living far away from their ancestral homelands and around the experience of marginalization and loss of home, language and, partly, identity. However, despite their differences, both mapping projects, the Inuit and the ǂKhomani

28 In Khoekhoegowab (including the languages of ǂKhomani, Hai||om and Damara), some consonants that sound like clicks are written with the symbols |, ||, ! and ǂ (for information on pronunciation, see Footnote 3 in Sullivan's contribution).

case, arose from threats to land, subsistence practices, heritage, cosmologies and identity. Despite all the challenges involved in cultural mapping projects and associated land claims, Brody strongly calls for a continuation of mapping efforts within indigenous peoples' struggles for land and other rights and recognition.

Ute Dieckmann was involved in a similar project to the ǂKhomani project (in fact, Hugh Brody was involved as well), which was carried out with the Hai||om in Namibia at the turn of the millennium. The Hai||om have been evicted from their ancestral land (including the famous Etosha National Park). Unlike the ǂKhomani maps, whose main purpose was documentation for the purposes of the land claim (this seemed impossible in Namibia at the time), the Hai||om maps were developed for the documentation of cultural heritage of the Hai||om within the National Park, and for use in tourism, as the existence and history of the former inhabitants had been erased for the sake of Etosha as an African "untamed wilderness". Dieckmann critically assesses the Hai||om maps in retrospect with regard to both academic discussions on relational ontologies and loosely connected fields of enquiry, and to her own research on Hai||om-being-in-relations and being-in-Etosha. The concerns she raises for this particular case study also pertain – in her view – to many other (African) cultural mapping projects. She urges researchers working with indigenous communities in mapping projects to continuously reflect on their own ontological bias and stresses the risk of (unintentionally) reinforcing the primacy of western ontology. She suggests a new approach to mapping Hai||om being-in-Etosha which might come closer to their own epistemiology and ontology.

Sian Sullivan and **Welhemina Suro Ganuses** have conducted a mapping project with neighboring groups (Damara / ǂNūkhoen and ||Ubun) to the Hai||om in north-west Namibia, who have also suffered from a long history of land dispossession and marginalization. The project aimed at (re)inscribing the (former) presence and connection of these people to the land, which had disappeared from official maps. In their chapter, they describe the history of land dispossession and focus on three 'un-mappable' dimensions of cultural significance, whose significance was brought to light during the project, namely genealogies, ancestral agencies, and song-dances, all highlighting the deep connection of the people to the land. Sullivan and Ganuses therefore argue against the observed *de*coupling of indigenous/local cultures from nature which has been undertaken in the colonial and (partly) post-colonial creation of 'wild' African landscapes in the name of nature conservation,

tourism and trophy hunting. They call instead for a stronger integration of 'cultural heritage' into conservation activities in the area.

Leaving Southern Africa, we continue our cartographic explorations in Eastern Africa. **Mara Jill Goldman** conducted a mapping project with Maasai in Tanzania. Like the research of Dieckmann and Sullivan/Ganuses, Goldman's project was related to the nature conservation activities in the area. Her cartographic attempts with Maasai had grown from frustration with existing 'participatory' land-use mapping project in the region, which generally silenced Maasai multiple ways of being-in and knowing the landscape and in which 'participation' was very limited, while colonial practices of land exploitation and knowledge extractions were reinforced. She calls for a decolonization of mapping and – drawing on Mol and Law (2002) – suggests *mapping multiple*, a concept she elaborates in her chapter using Maasai place name practices and their dealings with boundaries, which were introduced by various players, including colonial administrators, nature conservationists and the state. With mapping multiple, she hopes to reconcile various epistemologies and ontologies without hierarchizing one over the other (and thus decreasing the tension between mapping and counter-mapping), with an acknowledgement that all these ontologies and epistemologies are more than one and less than many.

With **Thea Skaanes,** we stay in the same geographical region but she invites us to a very different exploration. She worked with Hadza in northern Tanzania. She takes us to three specific material objects – what she calls power objects – belonging to individual Hadza women. She argues that these objects cannot be assessed adequately within a discourse of property and socio-economic value. Instead, she reveals how these objects are materializations of social relations, how they are entwined around identity and names, kinship, time and ritual. The objects are linked to the spirit of women and their kin relations in the past and in the future. Skaanes argues that since there are conceptual intersections between objects and land, it is promising to look at land and places as materializations of social relations too. She illustrates this with the example of various mountains/gods within the Hadza homeland. Drawing on Appadurai (1996), she suggests comprehending land as different 'scapes', e.g. cosmoscapes, kinscapes or transactionscapes, all of which imply social relations. Like the objects she analyzes in her chapter, the maps produced should also be inherently multiple, flexible and shadowy. She imagines a hodological perspective – connecting kinship, places, and time – as a

promising way forward. This kind of mapping, in her view, would allow us a look at the land from within, from the point of view of its inhabitants.

Saskia Vermeylen not only takes us to another region (Australia) but also invites us to deeper reflections on the relationship between law and cartography and on the (conceptual) connection between maps and art. She sketches the joint history of law and mapping and reflects on the problematic consequences of this joint history when indigenous peoples are asked to provide evidence of their ancestral connection to land in court cases. She argues that western cartographic practices reinforce a legal culture that allowed for the dispossession of indigenous peoples from their land by silencing alternative ways of being-in-the-landscape. She argues that mapping practices, in order to be helpful in native title claims, need to show the tension between the different legal cultures that come together. Two case studies of Aboriginal art, used in native title claims, illustrate her arguments and provide vivid examples of alternative ways of mapping the land, of *mapping the unmappable*.

Frederik von Reumont uses a phenomenological approach to start his cartographic enquiry. He asks how maps can communicate the experience and therefore meaning of places and spatiality. He points to the power of narration and visual art for the communication of meaning and suggests a multimodal approach to the communication of meaning. He introduces us to the world of comics – as a combination of visual art and narrative – and reveals the multiple potentials of fusing maps with comics. With comics, humans can (re)enter the map through various ways: their perspectives on, experiences of, relations to and interactions with the land (and other human and non-human agents) can be visualized and narrated. Furthermore, and equally important, comics within maps offer the possibility of taking a meta-look at the map. The map-making process and the map-viewing process can be communicated, and the map can become populated not only with inhabitants or beings-in-relation-to-the-land but by the authors and readers of the map as well. Merging comics and maps can illustrate that the meaning of land and places only evolves from the interaction and relationship between different agents (including the land). Therefore, the use of comics within maps can help to de-objectify the (conventional) map.

Finally, **Margaret Wickens Pearce** lets us participate in her personal journey of cartographic endeavors to map the unmappable. She rejects the idea that the map is an explanatory scientific document, the reader only being a passive consumer, but looks at cartography as a mode of creative expression, similar to creative languages of music and architecture and sharing qualities

with speech and writing, a view which is also expressed by Vermeylen and von Reumont (this volume). Her work is cartographic art; she takes the common cartographic language and conventions apart and experiments with new forms of cartographic expressions. With her collaborative mapping projects, she provides inspiring practices and techniques of – *inter alia* – mapping the emotional depth of the landscape; of introducing dialogism and heteroglossia on maps; of the expression of Indigenous[29] ontologies (e.g. Indigenous concepts of time, space and perspective); of following Indigenous methodologies; of mapping the (epistemological) meaning of place names; of mapping stories as portals to Indigenous ontologies; of mapping relational ontologies; and last but not least of the deliberate representation of silences. Her chapter also reveals that cartography and the use of maps is an embodied experience: e.g. by retracing journeys on paper and travelling in the landscape, through choices about the format and layout of the map, through the need to look at the other side of the map in order for meaning to be disclosed, etc. Her chapter also reminds us that there are no universal techniques that can be used in order to map Indigenous relations to the land and its agents, and that mapping with Indigenous People is a long process of deep involvement, of careful and respectful listening while engaging in the map making process. With her approach to cartography, there is no reason left to believe that the unmappable cannot be mapped.

An introductory epilogue

This introduction deliberately did not offer any definition of "map". When I started the project leading to this book, I had a rather conventional concept of maps, maps fortified with "the iron grid of Descartes" (Rocheleau 2005: 328), depicting the land and its objects in a certain order. During the course of the project and thanks to the inspiring contributions, my reading of a "map" changed significantly: while being occupied with contemplating maps *on* relational ontologies, I started to see maps *through* the gaze of a relational ontology. I began to think about maps as expressions of specific *relationships* – first

29 In this volume, it is deliberately left to the individual authors to decide whether to capitalize or not to capitalize "indigenous" and related words. For my own part, I use a capitalized form only when clearly referring to a political category of people identifying with a global version of Indigenous Peoples.

and foremost, the relationship between the mapmakers and the environment, the space, the land (and the spatial agents therein), but also as expression of the relationship between the different collaborating/participating parties in the mapping project; between the map maker and the materials used, the paper, the so-called data, the colors or computers, etc. In this perspective, western (conventional) maps are manifestations of a rather *detached* relationship with the land: the viewer looks *upon* the land, from above, with *objects* on the map, signified by symbols or icons; authors (the cartographers) are mostly invisible (as in many scientific texts). The (conventional) map constitutes a depersonalized representation of an 'objective' reality, and is thereby a manifestation of a Cartesian worldview with a positivist/essentialist ontology. At the other end of the spectrum, the Aboriginal art that Vermeylen discusses in her chapter provides a very different example of a visualized expression of relations to the land, though this art would hardly be considered as maps at the first glance. Social organization (including ancestors and other agents), time and space are woven there into an inextricable meshwork, and the relationship to the land is performed on the canvas and bark. [30]

Reading maps as expressions of *relationships* renders a number of troubling issues obsolete.[31] It dissolves the disconcerting dichotomy of science versus indigenous knowledge or science versus art. It brings the author back into the picture. It could also open the legal floor for other forms of evidence than (western) maps to be accepted as evidence for depicting the relationships of indigenous peoples with the land in native title claims. It could also assist with the de-colonization of the map by simply re-conceptualizing it and opening up space for alternative visualizations;[32] it could indigenize mapping by re-framing it through the lens of indigenous values of relations/relationality. This re-conceptualization would call for the audience of maps to open up to new ways of mapping which move away from the Cartesian grid; in

30 I find the concept of "meshwork" introduced by Ingold, in which he integrates the "flesh" of phenomenology and the "web of life" of ecology (Ingold 2012: 437), very productive for all kinds of being and thinking in the world, e.g. Ingold 2012, 2011, 2007. I take it up again in my chapter in this volume.

31 Many of these troubling issues have been dealt with within the field of critical cartography, but I have not come across any ways of expressing them through the lens of a relational ontology.

32 In this way, maps might be models, as Eide (this volume) suggests. For understanding models, in his view, one needs to take the model makers and the model target (what is modelled) into account.

other words (as mentioned earlier) it would ask for a new cartographic literacy. This notwithstanding, reading maps as expressions of relationships still leaves space for multiple mapping and the combination of different ontologies in endeavors of visual representations, as promoted in many of the chapters in this volume.

In this way, the subtitle of this volume, *Cartographic Explorations with Indigenous Peoples in Africa*, can be read in two ways: it is an invitation to look at African indigenous being-in-the-world from a cartographic point of view. Meanwhile, it is also an invitation to look at cartography from the point of view of (African) indigenous people (and equipped with relational ontologies).[33]

As the Marauder's Map showed Harry Potter a set of passages he had never entered, I hope that this volume will show us a number of paths and perspectives to be further explored.

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33 The idea of seeing from another's point of view is also central in the chapter of Skaanes (this volume).

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