

Editorial: The “new pastoral commons” of Eastern and Southern Africa

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Key words: Africa, conservation, new commons, pastoralists

Acknowledgement: This Special Feature originated with a panel at the American Anthropological Association’s annual conference in 2013 in Chicago. The Feature profited from intense discussions with all colleagues who participated in the panel, including the authors of articles in this Special Feature and also Tobias Haller, Peter Finke, Terrence McCabe and Olaf Zenker who presented papers at the conference or commented upon them. We thank everyone for their contributions to the ideas presented here.

I. Introduction

Social scientists, politicians and practitioners concerned with pastoralism in sub-Saharan Africa have focused on the demise of the pastoral commons since the 1980s. The fragmentation of rangelands and the increasing establishment of enclosures have captured the attention of social scientists for a number of decades (for a summary see e.g. Galvin 2009). Lately, however, there has been a distinct trend towards a re-assertion and re-organization of the commons in rural Southern and Eastern Africa. The social sciences as yet have not made in-depth efforts to analyze this process: while re-assertions may have been too erratic and non-institutionalized, the emergence of new forms of natural resource commons management has been state- or NGO-led and non-traditional. Hence, much of the literature is either

aimed at applied work or anecdotal. However, this move towards common pool resource management has been of great significance for most pastoralist communities in the region and has changed livelihoods and social organization alike. On the one hand, pastoralists have invaded freehold farms, occupied stretches of land for which titling was unclear or conflictual and/or sought selective access to neighbouring, privately owned farms. In many instances they factually re-asserted commons on freehold farm land. Unused or underused stretches of farmland were occupied by pastoralists and in other instances communal access to freehold farm land was granted by authorities. In northern Namibia, for example, freehold farms that were parceled out in an ambitious land reform program are nowadays factually handled as commons in a number of instances. On the other hand, governments in Eastern and Southern Africa established new commons around forests, water sources, pastures and game in the 1990s and early 2000s, often organizing them according to guidelines set out by Elinor Ostrom's design principles (e.g. Jones 2010; Kelbert 2016). Typically these "new commons" were focused on specific natural resources: conservancies were established to manage game communally, communal forests paved the way for community participation in forest management and water point associations were founded to facilitate equitable cost and benefit distribution of water infrastructure such as boreholes, dams and piping systems.

The motivation to introduce "new commons" was diverse and varied from ecological concerns, considerations of cost effectiveness and efficiency, to preferences for participation and decentralization. A key idea of the "new commons", however, is that natural resources should be handled in an economically rational way. Natural resources need to be valorized. This implies two points: resources need to be priced, and those who use more should pay more. That is, wherever there is a market, natural resources should be commoditized to the benefit of rural resource owners. A market approach is seen as a solution to ecological, economic and social problems.

In this introduction we will first deal with the idea of the "new commons". In what way are they different from the "old" commons? This approach prompts reflection on how anthropologists and other social scientists produced ethnographies of the pastoral commons: often focusing on its ecological considerations (commons being essential for sustainable land use in dry lands), its social basis (group membership, access rights), but less frequently seeking its anchoring in shared values and moral standards. For example, a longstanding concern of theorists and practitioners has been the differentiation between common pool resource and open access. Frequently, environmentally detrimental dynamics were attributed to open access regimes. However, contributions in this Special Feature argue that under specific circumstances, including shared cultural and moral values, open access may be ecologically sustainable, economically efficient and much more widespread than previously thought (see Moritz 2016). Drawing upon the contributions to this Special Feature, we summarize evidence from Eastern and Southern Africa showing that bottom-up re-assertions of commons as well as planned establishments of commons are progressively shaping pastoral land use

at the beginning of the 21st century. Finally, we discuss the contribution these analyses make to property rights debates and theories of common pool resources.

2. Old commons – new commons

In this Special Feature, we explore the socio-economic, political and ecological ramifications of the new pastoral commons in Eastern and Southern Africa. The concept “new commons” was proposed by Arun Agrawal (2003, 245) who argued that co-management programs have assigned local communities partial control over and shares of benefits from a large diversity of natural resources which “might be called the New Commons”. While Agrawal sees the new commons as a consequence of decentralized and more participatory state projects, Charlotte Hess (2008, 1) applies a wider definition. She defined “new commons” as “various types of shared resources that have recently evolved or have been recognized as commons. They are commons without pre-existing rules or clear institutional arrangements.” We use the term “new commons” here in Hess’ sense to describe commons that are defined within the context of government programs and state legislation or result from the re-assertion of commonage principles on freehold or state land. In many ways, they are commons in the making without stable, consensual and long-tested institutional arrangements. Of course, both types of “commons” discussed here differ on a number of points: while re-asserted commons usually lack a clear definition of access rights and entitlements, do not define social or spatial boundaries systematically and lack acknowledged governance structures, co-managed commons that are based on government legislation have all of those characteristics, but represent new forms of governance of natural resources and are often still in an experimental phase. The two types are also similar in many ways. First, they have identifiable user groups that, even if vaguely defined, constitute communities of practice making efforts to share costs and benefits of natural resources. Second, they are new in the sense that they are instigated by donor policies and government programs rarely older than the mid-1990s. In fact, many were inaugurated during the first decade of the 21st century or result from very recent re-assertions of commonage on private farmland. Hence, the “new commons” are not just transformations of earlier forms of commonage. Instead, they introduce the principle of communal sharing and communal obligation in fields where responsibilities and rights were different before: the re-assertion of commonage principles on freehold farmland or the introduction of such principles in contexts where the state has been the sole owner and manager of the resource.

These new commons are characterized by the emergent character of institutions. They are shaped by continuous negotiations between state agents and local actors and among local actors fostering new ideas of sharing. New commons also necessitate negotiations of the relations between older, traditional forms of commons management and more recent forms. Agrawal (2002, 41 and 44) reports that new commons are a global phenomenon as governments in many developing countries have turned to local-level common property institutions since the

1990s in an effort to decentralize the governance of natural resources. To be effective, the new commons must establish new rules specifying who is included or excluded as potential resource users and find new ways of monitoring and sanctioning vis-a-vis the new rules. While these are truly important effects, the case studies presented here suggest that there are further factors to be considered beyond the Ostromian paradigm. A very strong sense of sharing undergirds access to pastures among the Maasai and Samburu, even on land that is legally privatized, and not only allows for re-assertions of the commons in such situations but lauds them as moral and virtuous. Furthermore, a material perspective matters. It is not only people that create commons or open-access systems; savannahs have their own properties (e.g. soils, vegetation) and infrastructures (e.g. networks of boreholes) have their own peculiar effect on access systems. This is not to argue for simplistic deterministic models. Along with environmental historian Timothy LeCain, we argue that institutions regulating access co-evolve with the material world and are in many ways a “mix of humans and things, culture and matter, society and technology” (LeCain 2015, 15). We will develop both perspectives further towards the end of this introduction.

These “new commons” prove that commons do not belong only to a past period in which economies in rural Africa were shaped by subsistence agriculture. To the contrary, in many contexts commons’ principles seemingly supersede other property rights and are thriving in a context of global environmental governance. The contemporary, emergent commons function in contexts in which many assets are in private hands, and where rural economies are increasingly commoditized and shaped by diversification and de-agrarianization. They belong to an epoch which is characterized by intense trans-local mobility and labour migration. In a number of ways the globalization of “new commons” may be analysed along the lines of Comaroff and Comaroff’s (2014) “theories from the South”. Successful “new commons” models may even be exported from the Global South to the North, as exemplified in the case of the Namibian conservancy model that has been presented as an exemplar for similar experiments around the world. John Kasaona, one of Namibia’s advocates of commonages for game management told an audience in the United States:

“And now, what the world really needs is for you to help me and our partners take some of what we have learned in Namibia to other places with similar problems: places like Mongolia, or even in your own backyards, the Northern Great Plains, where buffalo and other animals have suffered and many communities are in decline. I like that one: Namibia serving as a model to Africa, and Africa serving as a model to the United States.” (Applause). (https://www.ted.com/talks/john_kasaona_from_poachers_to_caretakers/transcript)

3. Commons and open access

Research on the commons has always been informed by theoretical agendas. Garrett Hardin’s famous explication of the “tragedy of the commons” (Hardin 1968) had far reaching consequences both in theoretical discussions and in appli-

cations. According to Hardin, the absence of any delimiting, monitoring and sanctioning principles has grave environmental consequences: overuse and eventual collapse are unavoidable and the controlled transfer from commons to private tenure or state ownership is the only way out of the dilemma. Hardin’s example of pastoralists’ destruction of the commons gained traction with policy makers in the 1960s, influencing policies aimed at transforming pastoral commons to group ranches in Kenya, for example, which was the first step toward privatization.

Subsequently, social scientists claimed that Hardin overlooked the profound differences between open access regimes and commons. Ostrom’s path-breaking comparative work on traditional commons showed that, under certain conditions, commons could provide the framework for sustainable, long-term use of natural resources (Ostrom 1990, 2002). Her work became exceedingly popular with anthropologists who saw in it support for their observations that rural populations in the Global South could manage natural resources sustainably and with a true concern for the equitable distribution of benefits and costs. While successful commons adhered to the design principles delineated by Ostrom and many others, open access regimes were believed doomed to failure. It was open access that brought about environmental degradation. As users failed to coordinate resource exploitation and abstained from monitoring resource flows, degradation was the inevitable outcome. Anthropologists found much evidence that local actors themselves saw this eminent dilemma and prevented open access situations from arising. Development interventions were to foster and support commons solutions in order to prevent them from slipping into an open access mode – especially so if transformations of commons into freehold tenure was not feasible.

This Special Feature convenes a number of papers that adopt a fresh perspective on the commons-open access debate. Mark Moritz (2016) argues that open access is not the absence of rules and does not necessarily lead to a tragedy. Instead, open access refers to the right that every pastoralist has to common-pool grazing resources. Moritz argues that what he terms “open property” regimes establishes a fourth category of ownership rights, in addition to state, freehold (private) and commons. That is, “open access” is itself one of the rules governing use of grazing land in these systems. He argues that “the combination of open access to common-pool grazing resources that are highly variable in space and time and independent decision-making of highly mobile pastoralists results in an ideal free distribution of pastoralists in which the distribution of grazing pressure matches that of the distribution of grazing resources” (Moritz 2016). In his reading, open access grazing regimes are superior to commonages in situations that are characterized by a very high degree of uncertainty and resource fluctuation. Open access leaves more lee-way for self-organization and seems to be characteristic of complex adaptive systems. This conveys numerous advantages to pastoralists utilizing arid and semi-arid environments. The adaptive advantages of open access management have been particularly highlighted for disequilibrium systems, i.e., ecological systems with more than 30 percent inter-annual variation (generally with less than 300mm precipitation). In these systems vegetation dynamics are

structured by the stochasticity of rainfall events rather than by stocking numbers (Behnke et al. 1993; Scoones 1994).

While Moritz offers a comparative ethnographic description of four cases of open access in pastoral systems, the contribution by John Galaty (2016) addresses the same issue with a perspective on Kenyan pastoralists. He reports on the case of freehold farm plots in Laikipia County that are not regularly used by their owners (due to their uneconomic small size) and instead have been progressively occupied by Samburu, Pokot, Turkana and Ndorobo herders from Laikipia and neighbouring counties. There is little evidence that these illegal pastoral squatters regard the occupied farmland as commons. Apparently they think of these pastures as open access resources and behave accordingly. While in Moritz's cases environmental decline was not problematic, in the Laikipia case there is evidence that (a) environmental decline is connected to open access and (b) some actors currently using the pastures as open access aspire to transform the open access situation into a commonage. While in Moritz's case there are not high levels of pressure on the resources and an open access system can be sustained, in Galaty's cases overuse of limited resources appears to be a problem. These diverse outcomes indicate that the material realities of natural resources are an important element in understanding the effects of various institutional arrangements whether these are considered "open property" or property managed more along the lines suggested by the design principles. In all of these cases, political, social and ecological processes combine to shape diverse sets of institutional arrangements that remain dynamic over time.

Transitions from open access to commons and vice versa are a challenge to pastoralists and scientists alike. In contrast to earlier theorizing regarding open access situations, there is some evidence that complex rules and shared codes of conduct based on a deeply seated sense of obligatory sharing of natural resources allow for open access in some cases, such as those discussed by Moritz. If and how such moral standards change to establish functioning commons, complete with a package of more exclusionary rules, is as yet unclear. While there is ample literature on the transition from commons to freehold farm land, there is little literature on transitions from commons to open access, freehold to commons, or open access to commons. An open question is whether governments, NGOs and CBOs can "engineer" the transition from open access to commonage.

4. Two trajectories of establishing new commons

New commons in pastoral Africa are of two different types. On the one hand, commonages have been re-established bottom-up on freehold farmland. Pastoralists occupy farms and use them communally or they negotiate their way in, often by activating social networks and kinship ties. Owners of freehold farmland are either not able or interested in defending the status of the farm, or they hope for reciprocal compensation themselves (e.g. gaining access to neighbouring freehold farms). On the other hand, governments, in an effort to decentralize resource management and empower the local level, have installed commons following global blue-prints. Both processes are observable in Eastern and Southern Africa.

4.1. Bottom – up: re-asserting commons/open access in East and Southern Africa

The demise of the pastoral commons in East Africa has been a salient topic in literature since the 1980s. Fratkin and Wu (1997) provide an overview of the appropriation of pastoral lands by the state, private firms, and conservationists. Examples are numerous. In the late 1960s, the pastoral Barabaig were disowned by the state and their lands were transformed into wheat farms run by foreign owners. Maasai pastoralists had to leave their lands in order to make way for conservation in the Mkomazi National Park (Brockington 2002) and the Serengeti and Tarangire Conservation areas (McCabe et al. 1992) in northern Tanzania. In Kenya, pastoral commonage was converted to state owned conservation areas in the cases of Amboseli (Butt 2007), Maasai Mara national parks along the Kenyan/Tanzanian border (Homewood and Rodgers 1991) and in the case of Samburu National Game Reserve in northern Kenya (Lesorogol 2008). Galaty (2011) offers comprehensive documentation of land grabbing in East African pastoral areas with a focus on Kenya. He shows how the successive privatization of commons through land adjudication processes dominated by local elites or well-connected outsiders led to the eventual fragmentation of rangelands. Galaty claims that only those pastoral lands marred by low intensity warfare for protracted periods of time were saved from fragmentation. However, whether such conflict zones are then operated as commonages or as ranges with open access is debatable. Bollig and Österle (2008) argue that such areas between Pokot and Turkana are habitually used in an open access mode.

In his contribution to this Special Feature, Galaty shows that the well documented shift from commonage to freehold farmland is partially reversible or, for at least the past two decades, has been accompanied by a process which works in exactly the opposite direction. Galaty reports that in many regions of Eastern Africa pastoralists are progressively re-asserting informal rights over freehold farms and are partially restoring common access. He identifies a counter current of resistance against rangeland enclosures, land fragmentation and pastoral sedentarization. One prominent case which Galaty takes as evidence for this contemporary trend are the so-called abandoned lands of Laikipia County, mentioned above. These farms, totaling about 970 square kilometers, were originally owned by white settlers during the British colonial regime, and, beginning in the 1970s and 1980s, were parceled out to 85,000 land holders by land companies who profited from selling off tiny un-economical plots (Williams 2013). The great majority of those who bought parcels of land never used or physically occupied them. Instead, since the 1990s, Samburu, Turkana, Maasai and Pokot pastoralists occupied these lands permanently or seasonally. The occupiers have little security of tenure and face eviction, hence there is overuse and degradation (Williams 2013). Recently, the Kenyan government has embarked on a process of legalizing land occupation with plans to formally sanction transfer from freehold farmland to commonage or open access. In some instances the occupiers form rather loose, multiethnic ad hoc groups, but in one case they have formed

a community-based organization (CBO), Sukutan Naibor. Members of the CBO are Samburu and Ndorobo groups that have a long history of close association, which may have facilitated the reinvention of this commons. The so-called “Rumuruti Process” is a long-term undertaking to accomplish the paradoxical reversal of private farmland to pasturage used by a larger community. Williams (2013) favours a scenario that advocates the outright purchase of lands from the absentee landowners at market prices by a cooperative, trust, conservancy or company. The cooperative or conservancy could then lease the land to the pastoralist land-occupying communities.

In his contribution, Galaty describes other cases in which Maasai herders attempt to re-establish commonages by contesting the private ownership status of farms in court cases. In some instances judges have declared a prior transition from communal to private lands as unlawful and have given back the land to the group of plaintiffs. In many other cases, Maasai and other pastoralists living on privatized land revert to communal use of pasture during drought. Galaty describes how, during the major 2008/2009 drought, few people were in a position to exclude others from their private land and had to allow those who asked for it access to the last remaining spots with grasses. This perspective is nicely phrased by one of Galaty’s informants who voiced his idea that “without rain, no land is private”. Such lands are apparently neither truly private nor common property: from year to year, perhaps even seasonally they can switch from one tenure regime to another, or in many instances have features of both at the same time.

Caroline Archambault focusses her research on Maasai communities in Kenya’s south. Here, rangeland sub-division came with significant long-term costs to pastoral communities and to rangeland eco-systems. Progressive privatization of commons has been on-going since the 1960s when the first group ranches were established through the government’s land adjudication process. The Kenyan state saw such group ranches as an intermediary step from commonage to the allegedly economically more efficient private property. Many of these group ranches were later dissolved and sub-divided into privately owned farm lands through highly contentious processes. Now, a countercurrent gains in relevance. Archambault observes that many Maasai herders rely on their social networks to access grazing outside their private parcels. In Archambault’s case study, the social networks of women are of particular importance in gaining access to neighbouring farms temporarily, signalling the increasing importance and shifting nature of womens’ roles in livestock production. While under previous commons arrangements, membership in a specific community was significant for gaining access to pastures, now individually formed social networks provide the basis for access to pastoral resources. Giving mutual access along kinship and friendship networks apparently keeps transaction costs to a minimum and provides sufficient flexibility to react to the uncertainties of a semi-arid environment. A shared ethic of commonage and the equation of virtuous behavior with permitting access is significant.

Carolyn Lesorogol and Randall Boone’s contribution deals with similar phenomena among the Samburu of northern Kenya. They observe that “contrary to what theory predicts, most individual land owners continue to allow other herders to access their lands”. This specifically holds true for those who own livestock in greater numbers. Similar to Galaty’s example, Lesorogol and Boone find that during times of stress, particularly drought, granting access to private land for herders becomes a strong moral imperative. Even land owners who are firmly committed to individual land tenure and aspire to enclose their private land completely with fences, admitted that social pressure to allow access during droughts was irresistible. Here, we see an emergence of a new commons, on privately owned land, provoked primarily by appeals to pastoralist morality and shared values. For members of the Samburu community with larger numbers of livestock, access to pasture beyond their private parcels is necessary and, similarly to Archambault’s case, many community members negotiate such access by activating social networks. In addition, informants reported gaining this access surreptitiously, without asking, and the practice of sneaking onto others’ land appeared fairly widespread and was often tolerated, if not actually approved, by neighbouring land owners. Lesorogol and Boone also demonstrate the trade-offs between different land use choices made by Samburu households through simulation modeling, showing that reduced access to grazing land and expansion of cultivation has potentially serious negative welfare outcomes.

The processes observed by Galaty, Archambault and Lesorogol and Boone are consistent with the activities of a good number of non-governmental organisations. The mindset of the 1970s and 1980s favoured private tenure over communal tenure and enlisted theoretical treatises like Hardin’s “tragedy of the commons” as proof of their basic axioms. Nowadays, public opinion seems to favor commons solutions over freehold tenure. Several NGOs run by pastoral communities in East Africa are active in the struggle for communal land rights. They share a commitment to commonages and strongly oppose enclosures and fragmentation. The Ilkerin Loita Integral Development Project and its affiliated Maasai CBOs (<http://ilkerinloita.org/introduction.php>) actively promote commons management, specifically for forested areas that hold a deep religious meaning for them. The Maasai Development Organisation of Kenya fosters the communal management of water holes (<http://www.maasai-association.org/projects.html>). The Pastoralist Development Network Kenya (<http://www.pdnkenya.org/index.php>) runs projects to foster community awareness and empowerment and maintains a blog that opposes land grabs and land alienation. The Ereto Ngorongoro Pastoralist Programme (<http://www.oecd.org/dac/povertyreduction/48869545.pdf>) is fighting for continued community access to the Ngorongoro Conservation Area. A key characteristic of many of these initiatives is that they are not just advocating for commonages, but are defending the preferential use of a resource by one ethnic community. Commons are ethnicised in manifold ways. This move is consistent with the history of pastoral communities agreeing to participate in land adjudication processes not so much out of support for the concept of private

property, but rather as a way to protect their claims to lands they have historically used (Lesorogol 2008). The difference now is that the claims are being made to retain communal access, rather than adjudicate land into group or individual ranches as happened in the 1970s and 1980s.

This turn towards commons is shared and facilitated by international non-governmental organizations. Action Aid for example actively promotes community access to rangelands (<http://www.actionaid.org/kenya/what-we-do>) as a solution to poverty alleviation and livelihood insecurity. WISP (World Initiative for Sustainable Pastoralism), a global advocacy and capacity building organization, promotes pastoral commons. Last but not least, international organizations and even UN bodies have joined the commonage turn. Nori et al. (2008, 13) document that since the 1990s UN bodies favor communal tenure over private forms of tenure when it comes to the management of natural resources in remote rural areas and/or when the use of natural resources is to be combined with conservation efforts. The United Nations Conference on Environment and Development (UNCED) legitimized commons and its Agenda 21 strongly advocates community participation for communally managed natural resources. The platform of the UN sponsored Commons Cluster supports communities that “organize themselves as commons” when managing their environment (<https://sustainabledevelopment.un.org/index.php?page=view&type=6&nr=2922&menu=139>).

Much of what has been discussed above pertains to Eastern Africa. However, there is also evidence for the re-assertion of commons in Southern Africa. There are historical cases where a transition from freehold farmland to commons was facilitated by the South African apartheid government; in the 1970s about 200 freehold farms in the arid north-western parts of the country were bought by the State and allotted to the emergent Damaraland Homeland. While some of the farms were kept as private farmlands by an emergent elite, the bulk of land reverted to a commonage controlled by local elders and used by mobile livestock herds. When Namibia became independent and set up an ambitious land reform program, different models of redistribution were laid out. One model discussed was the purchase of commercial farms adjacent to communal land, thereby expanding the commonages. Although the government officially abstained from a communal area expansion, *de facto* processes occurred as a number of resettlement farms were at the borders of communal lands (Werner and Kruger 2007). The expansion of the commons in northwest Namibia required some ingenuity from herd-owners, because the communal areas and commercial farm land were divided by a mighty, impenetrable fence, meant to prevent the spread of livestock diseases. Michael Bollig (2016) researched a number of cases in which communal area farmers sold their livestock on the northern side of the fence and then went off to the other side to buy livestock with this money. They then turned to relatives and friends settling on resettlement farms and asked for permission to use grazing there. In this way the resettlement farms on which 10–25 families have leaseholds reverted to *de facto* commons. Travelling along roads bordering resettlement farms in Namibia’s Kunene Region gives a first idea of this turn: many

fences along the borders of former freehold farms have been torn down or are in disrepair and livestock apparently move freely between these farms.

In South Africa a pertinent attempt has been made to combine features of freehold and commons. In the context of the land reform program, groups could register as joint owners of land gazetted for restitution or redistribution. Common Property Associations (CPAs) were created as legal entities whereby groups of people could acquire and hold land in common with all the rights of full private ownership (Lahiff 2002, 110). In restitution cases the CPA forms around a joint claim to a parcel of land from which ancestors were evicted in the past. Often the claimants originate from a former community of rural dwellers but do not form a community any longer. In practice, CPAs were fraught with a number of problems: in order to obtain a grant large enough to buy a farm under various governmental funding schemes, large numbers of people (often 100 and more) were amalgamated in CPAs. Formally all members of a CPA enjoy the same procedural rights in a farm. However, the rights and obligations of individual CPA members were not specified. In most CPAs, only a minority of members are actively working on the land, while most members make their living from non-agricultural employment and businesses (Zenker 2015). In contrast to the Kenyan group ranches, CPAs cannot be sub-divided. The South African CPA statute however, was an important experiment in how to formulate a legal basis of “new commons”.

4.2. Top-down: co-managed pastoral commons

In Southern Africa (and to a lesser extent in Eastern Africa) commons were not only re-invigorated by virtue of subversive acts of trespassing pastoralists or use of social ties and norms to negotiate access. In fact, throughout the 1990s and the 2000s the establishment of co-managed commonages have been a distinct policy choice favoured by governments and international donors alike. Communal rights in natural resources (game, land, water, forests, pasture) were reorganized in the context of far-reaching governmental legal reforms (see Roe et al. 2009 for an overview of CBNRM in Africa). Existing commonages were re-organized profoundly and in a way that Agrawal (2003) in his review of sustainable governance of common pool resources addresses as the “new commons”.

This trend towards a re-organization of communal resource management in the Global South was conditioned by a number of factors: (1) adherents to the new institutional economics and affiliated thinkers alleged that a clearer definition of rules regulating the use of common property resources would contribute to more sustainability, (2) proponents of local knowledge emphasized that rural farmers were more capable of cooperative and sustainable management than the state (3) conservationists hoped that a valorization and commoditization of natural resources would incentivize rural dwellers to use resources more sustainably, and (4) supporters of rural populations and in some cases of indigenous communities found that the co-management of natural resources opened venues for meaningful participatory development between state and local community. The theory promul-

gated by Elinor Ostrom had proven that sustainable rural resource management was possible on a common pool management basis if certain conditions were met (Ostrom's design principles) and neo-liberal thinkers alleged that market solutions would fit well to solve economic, social and ecological problems of rural communities. The architects of Namibia's conservancies, commons focused on game (see Bollig 2016), were, for example, directly inspired by Ostrom (Jones 2010). Deduced from Ostrom's design principles but also informed by global developmental concerns about participation, ownership and accountability, blueprint formulas (see Schnegg and Linke 2016) were packaged at a global level and then translated into national legislation and finally communicated to and adjusted by local actors. A formalization of membership status in a resource using community (e.g. conservancy, water-point association, community forest committee) often was a first step. A second step often consisted of a clear definition of the territorial and physical properties of the resource used. The "new commons" brought about new and more clearly defined boundaries as Bollig shows in his contribution. While previously border areas with an overlap of user rights and unclear tenure had been acceptable, now such ambiguities were to be eliminated in order to conform to standards set by the legislation. Once constituted, such groups were required to elect a governing committee, which would be responsible for cost sharing in the case of water-point associations and/or benefit sharing in the case of conservancies. These travelling models of new commons administration in natural resource management informed rural development policies in many countries of the Global South.

Legal changes pertaining to commons management were shaped by emergent forms of global environmental governance in which powerful international INGOs (e.g. IUCN, WWF), conferences (e.g. United Nations Conference on Environment and Development in Rio de Janeiro 1992), and donor policies asserted influence, as Schnegg and Linke show in their contribution. The re-organization of the commons is meant to contribute to poverty alleviation, rural democratization and participation and sustainable land use. This paradigm, often dubbed Community-Based Natural Resource Management (CBNRM) in the Southern African context, takes off from the Ostromian assumption (Ostrom 1990, 2002) that local communities are able to manage resources sustainably and in an equitable manner if a number of well-defined social and political conditions are fulfilled (e.g. Jones and Murphree 2001; Agrawal 2003; Fabricius and Collins 2007). Across Southern and Eastern Africa numerous well-funded CBNRM initiatives have transformed environmental governance in communal areas over recent decades (Fabricius et al. 2004). In the 1990s the Namibian, Botswanan, Zambian and Zimbabwean Governments transferred administrative rights (not ownership rights!) over wildlife, forests and water sources to rural communities (Roe et al. 2009). These measures had a threefold aim: (a) to ensure the sustainable management of natural resources in rural areas (the conservationist/environmentalist agenda), (b) to democratize decision-making in rural communities (the political agenda), and (c) to ensure that the benefits of natural resources could be harvested at the local level (the developmental and/or market based neo-liberal agenda).

Social institutions (rather than, for example, technology) were seen as the key to the sustainable management of common pool resources (e.g. Baland and Platteau 1996; Agrawal 2002). Hence there was a lot of emphasis on institution building in the “new commons”. Scientifically approved sound institutional designs were to be engineered around key principles like participation, equity and gender equality and accountability (see Schnegg and Linke 2016).

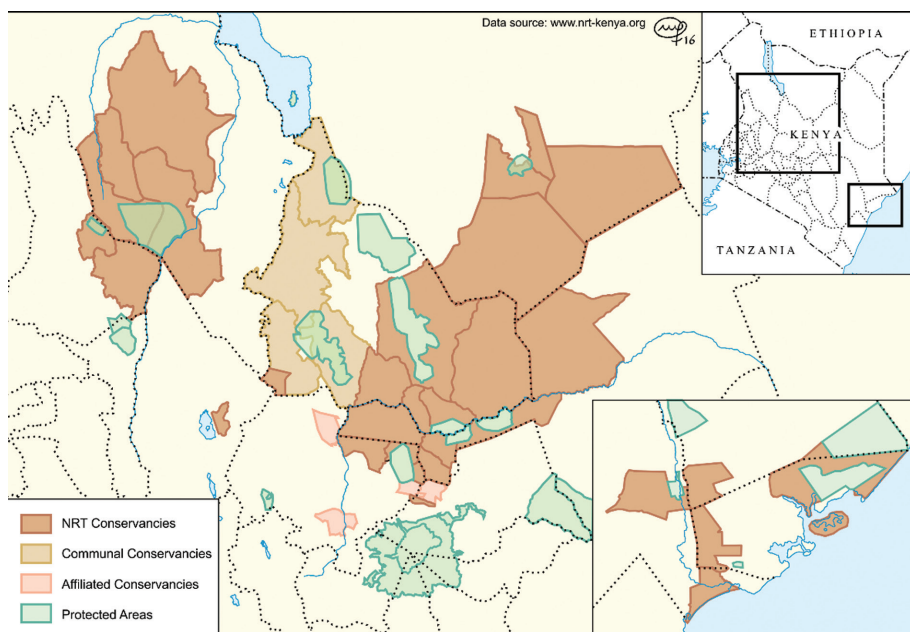
Michael Bollig reports in his contribution that the hopes and aspirations of the Namibian government in the establishment of new commons corresponded to changing concerns about natural resource management on the international level: the state was meant to devolve the day to day management of natural resources to rural communities, provide conditions that locals benefitted economically from resources in the best possible way and that co-management of resources would result in management plans geared towards sustainability (Barnes et al. 2002; Bollig and Menestrey-Schwieger 2014). There was a general consensus that a heightened sense of ownership, economic incentives and stable local social institutions were the key to sustainable resource use in the poverty-stricken, post-civil war communal areas of Namibia’s north. The Namibian Ministry of Environment and Tourism in 1996 passed legislation that allowed rural communities to profit from game (until then solely used and protected by the state) while the Ministry of Agriculture gazetted new laws on water management and forest management in the late 1990s and early 2000s.

The idea that community-based participatory approaches to natural resource management could add significantly to the democratisation of rural communities was of significance in most other Southern African countries as well (Roe et al. 2009, 34–39), whereas in Eastern Africa, either local income generation or more effective protection in zones adjacent to protected areas motivated participatory approaches. Northern Kenya has seen the emergence of numerous wildlife conservancies over the past ten years, promoted heavily by international conservation NGOs such as The Nature Conservancy, African Wildlife Foundation, and Northern Rangelands Trust. This development is stimulating changes in pastoral landscapes and management structures. Although these organizations promote “commons”, their primary interests are wildlife conservation, resulting in management techniques that are often at odds with pastoral management including establishing protected areas, buffer zones, and instituting “holistic range management”. The implications of these new forms of land management for pastoral livelihoods and ecology remain largely unexplored to date. While in principle the Kenyan conservancies work in a similar manner to conservancies in Namibia, there are notable differences: (1) in Kenya, conservancies have thousands of members while in Namibia they usually have less than 2000; (2) in Namibia conservancies are usually ethnically homogeneous, but in Kenya they are more heterogeneous; (3) in Kenya the boundaries of conservancies usually are congruent with administrative boundaries, but in Namibia they conform to the boundaries of chieftaincies or are newly defined altogether; (4) in Kenya game guards are anti-poaching specialists with military training, but

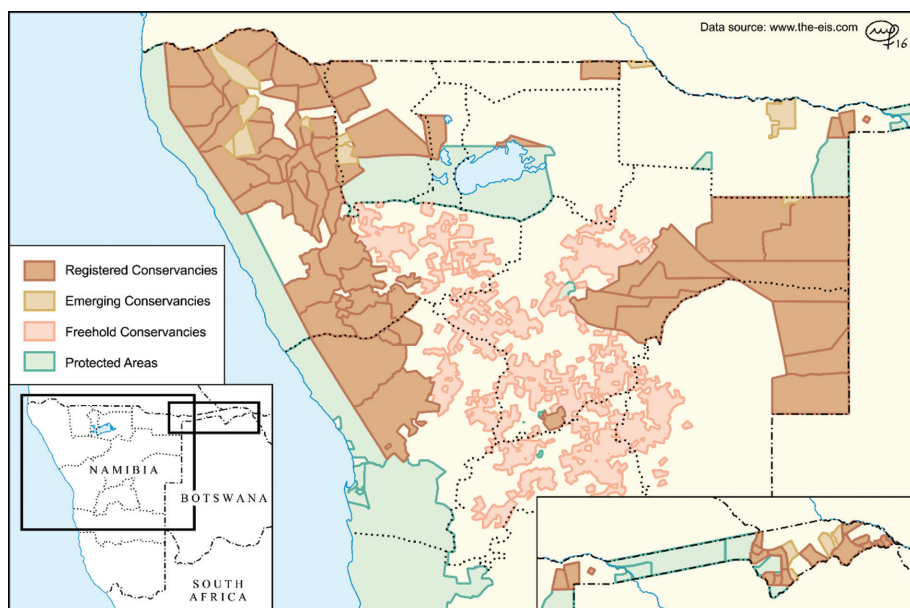
in Namibia they are not militarily drilled and do not carry weapons; (5) violent conflicts in northern Kenya are frequent, while such violence is absent in Namibia (see Maps 1 and 2).

Community based approaches were tested in different fields including rural water supply, forestry management and game. Marks and Davis (2012, 1572) report on community water committees in Kenya and their ability to deal with the financial and administrative management of community water supply. Glew et al. (2010) present a methodologically sophisticated account of social-ecological change in northern Kenyan conservancies, comparing three conservancies in Laikipia with a number of non-conservancy communities. They attest that social-ecological conditions in general, and specifically grazing, has improved, incomes at community level grew and that conservancy organisations contributed positively to security and health. Michael Schnegg and Theresa Linke (2016) report on different aspects of Namibia's ambitious reform of rural water-supply with case studies from north-western Namibia. They explore how globally circulated blue-prints for communal water management are translated to the local level and to what extent efficient institutions arise from efforts to co-manage resources.

Community forestry management has been promulgated in many states of the Southern and Eastern African region. While historically forests had been strictly protected by colonial and post-colonial administrations, recent efforts



Map 1: Conservancies in Northern and Coastal Kenya.



Map 2: Northern Namibia's Conservancies on Communal and on Private Land.

allow rural communities selective use of forestry resources. Schusser (2012, 215) notes that the Namibian government created 13 community forests in 2006, and that the harvesting of firewood for household use and the collection of permit fees for selective extraction of wood from the forest created new income options for local communities. Revenues were not distributed to members of forestry groups but rather invested in community projects. Scrutinizing the evidence of community governance, he points out that community forest committees are not very powerful and are dependent on support from ministries and donors. Roe et al. (2009, 28) summarize efforts in community forestry in Kenya where the option to devolve rights from government to communities was made possible by the Forest Act in 2005. Despite this new legislation, Kenyan communities are still very limited in their capacity to manage forests outside of state-controlled areas. However, some notable experiments have taken place with partial community participation under the tutelage of governmental agencies inside a park (see e.g. Min'gate and Bollig 2016 for the Arabuko-Sokoke Forest Reserve at the Kenyan coast).

Although some analysts claim that the heyday of funding for CBNRM projects is over due to frustrations with unfulfilled developmental promises and unmet expectations about ecological sustainability, CBNRM is still of crucial significance wherever approaches to sustainable natural resource use are to be fostered in rural communities – not only in the Global South but progressively also in the Global North.

5. Commons theories: towards an advanced, post-Ostromian theory of the commons

The current state of theories on property rights changes applicable to pastoral communities is succinctly summarized in Galaty's article (2016). An evolutionary bias in these theories is noted and the hypothesis put forward that theories would be richer if diverse changes in property rights, e.g. from private or state ownership to commons tenure and vice versa were more fully studied and better understood. Galaty argues that such changes are often triggered by changing transaction costs and changing relative prices, as predicted by new institutional economics (NIE) theories, but that such forces do not necessarily push systems in one direction (e.g. toward more privatization), or into one permanent tenure status. We need good ethnographic descriptions of such transitions including analysis of transaction costs and changing relative prices. The two may work in different directions. For example, transaction costs increase due to the rising number of stakeholders, but relative prices of land decrease due to drought. In order to develop commons theories and make NIE approaches digestible to broader social science research, a clearer operationalization of such costs is required.

The study of "new commons" may add importantly to our understanding of commons. Traditionally scientists interested in commons focused on well-established commons and documented, for example, how social and spatial boundaries of commons were defined, monitoring systems functioned, and conflicts were adjudicated using traditional rules and codes of conduct. In the "new commons", boundaries, rules and monitoring systems have to be established first of all, and we can learn much about the temporal and qualitative dimensions of emergent institutions of common pool resource management. When Namibian conservancies become established, the definition of spatial and social boundaries usually takes a long time and is much contested (Bollig and Menestrey-Schwieger 2014). The definition of internal zonation is another tricky step which is negotiated within a conservancy. Once such external and internal boundaries have been agreed upon they need to be monitored and enforced, often by taking recourse to the national legal system in which lawyers and courts are engaged to sort out internal problems, rather than engaging traditional authorities. Under what conditions such boundary making is effective in a situation in which local rules and national legislation are entangled in manifold ways is a crucial issue. That institutions are multiple and overlapping is the norm and not the exception. There is a strong bias in literature identifying such overlapping institutions as malfunctioning and leading to forum shopping, in which actors favor those institutions granting them most individual benefit, often at the cost of communal benefits. But there is also evidence that a multiplicity of institutions can be adaptive, addressing a highly variable environment. In the case of the 30 Namibian conservancies Bollig reports on, there is a strong countercurrent to such boundaries: generally dry seasons and even more so droughts necessitate migrations across such boundaries. Schnegg and Bollig (2016) show that during the drought of 2012–2015 many households

temporarily left the area of their conservancy to seek grazing. The same holds true in Kenyan cases, as the papers in this issue demonstrate, when there is drought, the appeal to provide grazing access is very strong. Even private land owners are under moral and social pressure to grant access to herders. Apparently, actual ecological conditions make a difference and when there is more stress on the system, then pressure for communal access increases.

Bollig and Olwage (2016), however, report that there is a trend in north-western Namibia to accept in-migration during drought, but that quietly another process has set in, in which locals “clean” their conservancies of people perceived as outsiders, such as households that immigrated into a conservancy in the past, often during drought, but did not leave again. There is also an attempt to enforce internal boundaries by linking contemporary conservancy regulations with the aspirations of traditional authorities. Lesorogol has observed that in Samburu, too, some group ranches have begun to demarcate and enforce boundaries many years after being gazetted. This may hint at a gradual rigidification of new commons.

How boundaries are defined in cases in which communal rights are re-asserted in an informal manner as described by Archambault (2016), Galaty (2016) and Lesorogol and Boone (2016) is more difficult to say. Is there any perception of inclusion and exclusion in such networks? Who is denied access to a farm? A network of herders mutually entitled to access may include only close patrilineal kin, but it may also encompass friends, neighbours, matrilineal and patrilineal kin, clansmates and agemates. The issue of shared values seems to be significant in this context. How are such values established and how is mutual reference to such values communicated? Lindenberg (2000) forwarded the idea that strong solidarity groups inevitably put up ‘moral signposts’ signaling a preparedness to share or not to share. Such signposts usually come along with strong moral commitments and often have linkages to religious sentiments and practices.

5.1. New trajectories I: A neo-materialist perspective on the new commons

Contributions to the literature on common pool resource management only shed a haphazard light on the material qualities of the commons. They attempt to analyze under what conditions communal institutions are capable of managing commons effectively, positing explanatory variables such as political embeddedness of cases or path dependence of institutional development but rarely touching upon the materiality of the commons (Agrawal 2003). In fact, many contributions suggest that the institutional development of the commons is independent from the concrete materiality of the resource. The terms *commons* or *common pool resource* are abstract and in contrast to commonage (which is conceptually tied to pastures held in common) do not have any material base. Such social constructivist approaches have come under profound critique recently (LeCain 2015, 2). American historian LeCain suggests that “any adequate materialism must thus recognize the creativity and generativity of real matter, a dynamic materialism

that accounts for the surprise and opacity that are so typical of techniques-as-things.” (LeCain 2015, 15).

For our context, this implies that the materiality of the commons including natural materialities (e.g. grasses, water, livestock) and manmade materialities (e.g. boreholes, roads, fences) have to be taken fully into account. They unfold their own history and directly impact institutional development. While Western philosophers and anthropologists may still feel uneasy with this eliding of nature and culture, pastoralists would surely suggest that, for example, cattle have their own will. Pokot herders who had trespassed onto a grazing reserve managed communally by their neighbourhood, said, in their defence, that it was not them who had taken cattle there, but that the cattle themselves had decided to walk there. In their narrative, the shepherds had just followed their herds. It is easy to take this statement as mere pretence or a cultural topos, but what if the cattle themselves are a formative force in the management of the commons? They stroll off in certain directions, their behaviour is not fully controllable by humans (at least by the standard one or two shepherds per herd). Boreholes are another example. It is the materiality of boreholes and their technical capacity that impacts commons management in north-western Namibia. Institutions before the advent of boreholes are different from later institutions. Other elements of the material world unfold other kinds of agency. Straight et al. (2016) have recently referred to the agency of landscapes called *ntoror* in Samburu language. These landscapes are believed to bring about violent conflict, they are “sweet” and “enticing”, and they inevitably enforce violent conflict upon humans. For Himba and Herero pastoralists, trees exercise agency. Some of them are *omihupise*, the OtjiHerero-term for “trees that make others survive”. Landscapes with ancestral graves or sacred stone cairns (commemorating funeral processions) are believed to have power to prevent outsiders from entering. Game has its own species specific mobility patterns, its own demographic patterns and its own diseases, and commons institutions touch upon them only minimally. The growing elephant herds of north-western Namibia are perhaps the most pertinent example of the material dynamics of an emergent common pool resource. Boreholes (Schnegg and Linke), fences (Lesorogol and Boone, Archambault) and the disequilibrium dynamics of grasses (Moritz) are further examples of the materialities of commons. Thus, commons are not only social institutions, they also have a material aspect. They are cultural landscapes with their own geo-biophysical cycles and processes. These processes are (if at all) only partially captured by commons institutions.

In summary, institutions for commons management are the outcome of long processes of human-nature interaction leading to a set of practices, norms, morals, and rules. They are social institutions, but have evolved over time in particular landscapes and with particular livestock, for example. In the “new commons”, institutions are prescribed from above (e.g. conservancies, government policies of CBNRM) or emerge from local adaptations and strategies, often in reaction to prior policies or laws (such as land adjudication in Kenya). In these recent cases, there has been much less time for people, livestock, wildlife, and the environment

to interact and gradually evolve workable relationships. The time scale is sped up, leading to more unpredictability, instability, and uncertain outcomes for both people and the environment.

5.2. New trajectories II: Virtuous behaviour, morals and the new commons

When looking for answers to Agrawal’s (2002, 43) question regarding what kind of institutional arrangements account for equitable and sustainable resource use another variable is underrated. He suggests that policy choices that encourage fairness in the allocation of benefits from the commons is of crucial significance (Agrawal 2002, 71). We would like to broaden this perspective by suggesting that the moral dimension of sharing a resource has been undervalued in the analysis of common pool resources. When Maasai or Samburu land owners allow neighbours or friends from afar onto their farms for the period of the dry season, they often do so without the explicit expectation of reciprocation. They do so because sharing pasture in times of need is a defining moment of Maasai or Samburu identity. When Namibian herders pay their dues for water, they rarely do so because they think that everyone will pay. In fact, they do so despite knowing that there is free-riding and a reluctance to pay among many others. In his “outline of an anthropology of virtue” Thomas Widlok (2004, 57) urges us to look for conditions and practices in which “people strive for happiness and a good society and the ways in which they make decisions in the pursuit of individual goals”. Virtuous practice is not reducible to rule abiding moral behaviour and “may not be seen in pre-existing designs but is internal to a virtuous practice.” (ibid 59). Sharing pasture is not motivated by a conscious long term strategy hoping for reciprocation or the creation of specific obligations, but by the wish to create and/or reinforce a shared identity. Moritz’s contribution on the sharing of pasture under an open-access regime has exactly this perspective: sharing is a good in itself that is cherished and that defines pastoral identities (Cleaver 2000, 2002).

Sharing is an internalized moral good—part of being a “good” pastoralist in many cases. Of course, that may not last if free-riding becomes extreme. This takes us back to the question of who shares the commons. When they are shared among people with the same values and morals (e.g. an in-group), then even when not everyone shares equally, most people do, since they value that and want to be approved of in the community. If the boundaries of resources extend beyond that group, then it seems the moral obligations will be more likely to break down. If we are creating a brand new commons, then this implies we also have to create a new moral community to make it work.

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