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COVID-19 has caused unprecedented health, economic and societal impacts across the world, including many low- and middle-income countries (LMICs). The pandemic and its fallout have laid bare deep-seated social and economic inequalities with marginalised groups being at greater risk of infection and being disproportionately affected by containment measures and their socioeconomic consequences. Stigma is a central element to such inequalities but remains largely overlooked in the debate on the response to COVID-19, including in LMICs. Yet we know from experiences with other infectious diseases such as HIV/AIDS and Ebola that disease-related stigma is detrimental to halting and controlling pandemics and achieving equitable development. Emerging evidence suggests that stigma associated with COVID-19 is already taking hold. This paper assesses potential driving factors of COVID-19-related stigma, and how this intersects with existing stigma fault lines and explores mechanisms through which COVID-19-related stigma may be counteracted, with a focus on LMICs.

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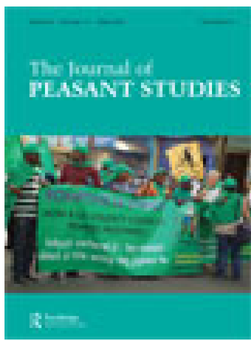

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Pastoralists and peasants: perspectives on agrarian change

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ABSTRACT
For many years, studies of peasants and pastoralists have run in parallel, creating mutual blind-spots. This article argues that, despite contrasting research traditions and conceptual framings, there are many commonalities. The classic problematics of agrarian studies – around production, accumulation and politics – apply as much to pastoralists as they do to peasants. Processes of social differentiation and class formation, the role of wage labour and questions around mobilisation and politics are consistently relevant. However, a reflection on a large literature on pastoralism across nine world regions reveals that there are nevertheless some important contrasts with classic representations of a settled peasantry. These are: living with and off uncertainty; mobility to respond to variability; flexible land control and new forms of tenure; dynamic social formations; collective social relations for a new moral economy; engaging with complex markets and a new politics for a transforming world. The article concludes by arguing that, under contemporary conditions, these are all important for understanding settled agrarian systems too, as today pastoralists and peasants face many of the same challenges. These seven themes, the article argues, offer a new set of lenses for examining pastoral and peasant settings alike, helping to expand perspectives in agrarian studies.

KEYWORDS
Peasants; pastoralists; agrarian change; uncertainty; mobility; production; accumulation; politics

Introduction

The great debates on the peasantry and agrarian change, especially in Russia (e.g. Lenin [1899] 1964; Kautsky [1899] 1988; Chayanov [1925] 1966), and then from the 1970s in the pages of this journal,[1] have frequently ignored livestock-keeping peoples across the world.[2] The study of pastoralists has been mostly the

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[1]See, Levien, Watts, and Hairong 2018; Akram-Lodhi and Kay 2010a, 2010b; Shanin 1973, 2009; Bernstein 2009; Byres 1995; Brass 1984; Harrison 1977; Hobsbawm 1973, amongst many others.

[2]For example, a Scopus search of title/abstract/keywords in the *Journal of Peasant Studies* and the *Journal of Agrarian Change* identified respectively 17 and six mentions of pastoralist/ism or shepherd/herder, while searches of the journals, *Pastoralism* and *Nomadic Peoples* found only three mentions each of 'social differentiation' or 'class' or 'accumulation'. Agro-pastoral systems are discussed in the agrarian studies literature, but the features of livestock keeping and herding across variable landscapes are less emphasised. That said, in the important discussion of 'food regimes' and the historically-changing relationships between agrarian systems and capitalism (Friedman and McMichael 1989), meat production from rangelands is highlighted; first, as an extensive form of capitalist production relations from the late-nineteenth century in the US, and then as part of the 'transnational meat complex', as the food regime intensified reconfiguring around new forms of production and accumulation.

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preserve of anthropologists, asking very different questions with contrasting conceptualisations.[3] Yet pastoralism is an important livelihood for many millions of people in over 100 countries, involving production from perhaps a billion animals, with extensive rangelands occupying between 25 and 40 percent of the world's surface (Dong 2016; Reid, Fernández-Giménez, and Galvin 2014; Galvin 2009), and as a consequence should surely be central to the study of agrarian change.

Pastoralists are livestock-keepers who specialise in taking advantage of variability, managing grazing itineraries at a variety of scales so that livestock feed better than without a herder (Krätli 2019). As discussed further below, there are of course many types of pastoralists, including those who combine livestock production with agriculture (agro-pastoralists) and those who manage livestock from urban settings (urban and absentee pastoralists). Equally, there are many different forms of mobility involved, including transhumance (a seasonal cycle of movement) and nomadism (regular movement without a fixed residence). While acknowledging this diversity, this article focuses on the core features of pastoralism, of whatever form, which centre on the exploitation of variability, particularly of natural environments, and the importance of flexible forms of mobility in the face of diverse uncertainties.

The article explores why there has been a separation between debates about pastoralists and peasants in analyses of agrarian change, and whether connecting the two might open up some important new avenues of enquiry for 'peasant studies', broadly understood. Can we learn from diverse pastoral settings about the nature of transformation in more settled agrarian contexts? And equally can we learn from the conceptual framings of agrarian studies to understand changes in pastoralist societies? Much scholarship on pastoralism has ignored core debates in agrarian studies, frequently failing to address questions of social difference, class formation and the dynamics of accumulation, for example. There have of course been important exceptions, which have taken different conceptual starting points.[4] As the sections below show, such perspectives reveal important features of pastoral systems that are more similar to peasant settings than divergent conceptual framings emerging from different scholarly traditions suggest.

As discussed below, we observe empirically across very diverse pastoral regions many of the key features of a differentiating peasantry. These include, for example, the emergence of new classes of rich, sometimes absentee, owners with a hired labour force; a core group producing for the market, but retaining subsistence production and with only few if any hired labourers; and a growing group of herders, often footloose and migratory, providing support to herding enterprises and contracted in various ways, including providing fodder, water and other services. This article argues that such dynamics have many similarities with what is observed in more settled peasant settings. However, they take on different forms in mobile pastoral systems and these, in turn, offer important new insights into fast-changing contemporary contexts for understanding peasant and pastoralist settings alike.

[3]Anthropologists of course also study settled, agrarian peasant studies (Silverman 1979) – including, as in the classic early work of Redman, in terms of 'folk society' – but studies soon went beyond the bounded village community to wider questions of intersections of global capital (Mintz 1986) and forms of political mobilisation (Wolf 1966).

[4]Notable was the flurry of work inspired by French Marxist anthropology (cf. Rey 1979; Meillassoux 1972), linking to debates about class, the emergence of wage labour and inequality within pastoral regions, as traditional social organisation was transformed through engagements with market-based capitalism (e.g., Chang and Koster 1994; Rigby 1980, 1988a, 1988b, 1992; Bradburd 1984, 1990). This work perhaps bridged the divide between pastoralist and peasant studies more effectively than the larger corpus of British social anthropological studies on pastoralism.

The aim of this article therefore is to examine the long line of in-depth empirical research on pastoralism from different world regions and ask how core agrarian studies questions and framings can help inform a more nuanced perspective on pastoralism. At the same time, the article draws from this extensive literature on pastoralism to explore how it might suggest a recasting of some of the debates within the classic 'peasant studies' tradition. The article concludes that pastoralists have more in common with peasants than would first appear from divergent conceptualisations and theoretical traditions, but that understanding mobile pastoralism sheds important light on the contemporary conditions of all small-scale agrarian producers.[5]

In the following sections, this article takes Bernstein's (1996, 2003) 'three problematics' of agrarian studies – production, accumulation and politics – as the starting point. These build on classical debates in agrarian political economy,[6] and can be extended further to address changed settings (Akram-Lodhi and Kay 2010a, 2010b). The three problematics centre on a number of questions. For example, in relation to production, we can ask, in Kautsky's ([1899] 1988, 12) words, 'whether and how capitalism is seizing hold of agriculture, revolutionising it, making old forms of production and property untenable and creating the necessity for new ones'. This, in turn, leads to explorations of what impediments exist to the emergence of wage labour and capital that can overturn pre-capitalist relations (cf. Lenin [1899] 1964). In relation to accumulation, classical agrarian questions centre on how surpluses are generated through production, circulation and exchange, and how these can be appropriated and directed to other capitalist activities, including industrialisation (cf. Preobrazhensky [1926] 1965), and so how expanded reproduction emerges. And, in relation to politics, classical questions focus on the balance of class forces and the nature of alliances that lead to structural transformations in agrarian societies, including away from pre-capitalist forms of feudalism (cf. Engels [1894–5] 2000). Such political questions also highlight wider forms of political mobilisation; asking, following Marx, how to how to transform 'class in itself' to 'class for itself'.

Such classical formulations in Marxist agrarian political economy must of course be expanded upon today. In the context of liberation and decolonisation, national agrarian questions remain unresolved (Moyo, Jha, and Yeros 2013) and questions arise around how peripheral nations are situated within a global system, shaped by unequal development, financialised capital and imperial wars (Patnaik and Patnaik 2016; Amin 1977). As O'Laughlin (2016) points out, the three problematics are relational and connected, affected by contradictions of class, generation and gender and the way production and social reproduction is organised (Bhattacharya 2017). In the context of contemporary globalised capitalism, as Levien, Watts, and Hairong (2018) argue, a contemporary 'agrarian Marxism' – or more generically and with a wider theoretical frame, what has been labelled 'critical agrarian studies' (Borras 2009) – must go beyond rigid binaries (between wage

[5]Some argue that pastoralists are simply a subset of peasants, as they both operate at a small scale, confronting the penetration of capitalism with peasant styles of farming and livelihood (cf. van der Ploeg 2009). I have much sympathy with this argument; and indeed this article argues overall that there are more features in common than distinct between pastoralists and peasants. However, it is the distinct characteristics of pastoralism, as a system of production that makes use of variability through mobility and with inputs of herding labour (Krätli 2019), which suggest crucial contrasts. These in turn, the article argues, have implications for how we understand settled peasant societies more generally, especially in the current era.

[6]The three problematics were identified in a discussion of Byres' important work on the classical agrarian question (Byres 1991), and how transitions between a pre-capitalist to capitalist mode of production occur.

labour and capital, for example) or ideal-type 'paths' of transformation[7] and extend any analysis from a focus just on agrarian systems to processes of urbanisation, financialisation, the consequences of the environmental and climate crisis and the globalised nature of markets (Fairbairn et al. 2014). These extensions are as relevant to pastoralists as they are to peasants, but this article goes beyond this to ask: what is particular about pastoralism, and how do questions around the core problematics of agrarian studies need to be adapted yet further?

Overall, then, the article argues that, while the classical concerns of agrarian studies, even when extended by more recent debates, are important, there needs to be more attention paid to pastoral settings, where important nuances and contrasts emerge. At the end of the paper, seven themes are highlighted, which together signal new directions for studies of agrarian change in both pastoral and peasant contexts. An appreciation of how flexible, mobile responses to environmental variability, alongside wider market, social and political uncertainties, shift patterns of differentiation and accumulation, and so class formation and agrarian politics, challenges the narrow determinism of some models of agrarian change, which just do not match up with the empirical complexity of highly dynamic and fast-changing pastoral settings.

The article first explores empirical insights from pastoralism from different world regions, before examining the implications across the three problematics of production, accumulation and politics. The article ends by identifying seven themes emerging from understanding pastoralism, which, it is argued, are of equal relevance to peasant settings under contemporary conditions.

Changing pastoralism: a global overview

What does the literature on pastoralism say about how change happens based on pastoral forms of production, accumulation and politics? In other words, how are the classic themes of agrarian studies played out in pastoral settings?

Ever since the colonial texts on geographically-delimited pastoral 'tribes' by the likes of Evans-Pritchard (1940), the literature on pastoralism has grown into a large and diverse body of work, covering all world regions. Much of the older literature draws on often rather functionalist social anthropological perspectives, but has also been extended more recently with contributions from human ecology, geography, history and economics, among other disciplines. Reading only a fraction of this vast corpus for this paper, I was struck by the depth of the empirical work, rooted in thick description and detailed cases, often based on long periods of fieldwork. But also striking is the frequent failure to engage with broader contexts of political economy and wider debates in agrarian studies, with studies of pastoralists and peasants seemingly often in parallel conceptual universes, rooted in different scholarly traditions.

What follows in the next nine short sub-sections is a necessarily highly summarised overview of different regional literatures (nearly all in English; although see also Nori 2019), aiming to draw out how central questions in agrarian studies – as briefly profiled

[7]This follows Marx's notion of the 'Germanic community', developed in the *Grundrisse* (Marx 1973, 471–454), where there is a voluntary association of co-residential family units and a common use of resources to support domestic production, as described by Bonte (1981b) in East African pastoralism, for example.

above – are addressed, even if not explicitly. As each of the regional profiles illustrate, there are many important themes central to wider studies of agrarian change.

Eastern Africa

The classic anthropological studies of eastern Africa and the Greater Horn are perhaps some of the best-known works on pastoralism. Examples include Evans-Pritchard's (1940) study; Gulliver's (1955) study; Spencer's (1965, 1973) many studies of the Samburu and Rendille; Lewis' (1961) reflections on the Somali organisation and politics and Dyson-Hudson's (1966) ethnography of the Karamojong. With important variations, these are all detailed studies of particular peoples, highlighting *inter alia* the importance of segmented lineage arrangements (and age-sets), and so patterns of social organisation and inheritance. Notable in these studies are discussions of sharing arrangements (through reciprocal friendship exchanges, gifts, marriage alliances) and the societal 'functions' of these, particularly to spread risk in the face of environmental uncertainty or conflict. Older studies of 'raiding' as a route to redistribution following disasters took on this functionalist analysis, explaining conflict as part of well-adapted survival strategies. The idea that such pastoral societies were 'classless' and 'egalitarian' took hold, despite many studies showing how trade and exchange had long been important (Galaty and Bonte 1991; Kerven 1992; Swift 1976, 1979), and forms of religious and cultural hierarchy (such as the 'prophets' of Maasailand) were present (Rigby 1988a, 1988b, 1992). In the past, while relatively equal access to communal rangeland resources was possible, unequal accumulation of livestock across domestic groups occurred, even if such possibilities were offset by collective ties across age-sets, livestock population crashes and shortages of labour (Rigby 1992; Bonte 1981b). More recent studies have challenged the assumptions of egalitarianism and classlessness (Anderson and Broch-Due 2000; Hogg 1986), and emphasised diverse livelihoods and responses to risk (McPeak, Doss, and Little 2011; Little, Mahmoud and Coppock 2001a; Hutchinson 1996). Today there is a much greater emphasis on settlement and urbanisation, and the emergence of a town-based elite and merchant class (Fratkin 2001; Fratkin, Roth, and Nathan 1999; Dahl 1979a, 1980; Salih 1995); the disruptions of development schemes, whether group ranches or conservancies (Galaty 1992, 2013b; Rutten 1992); market integration (Meadows and White 1979), including to booming export markets in the Middle East (Catley and Aklilu 2013); links to crop production and forms of land privatisation (Lesorogol 2003, 2008; Mwangi 2007), often for focused fodder provision and sale (Tache 2013; Greiner, Alvarez, and Becker 2013; Anderson 1988); the growing presence of migrant wage labour and absentee owners (Little 1985, 1992) and the importance of social-ecological dynamics and conflicts with conservation land-uses (Homewood 2008; Ruttan et al. 1999; Homewood and Rogers 1991). The penetration of capital through investment – in transport corridors, new energy plants, wildlife conservation and large-scale agriculture – is evident today across eastern Africa's rangelands (Lind, Okenwa, and Scoones 2020; Chome et al. 2020; Enns 2018), raising questions about the 'terms of incorporation' in such deals (Hall et al. 2015). Such 'grabs' are often fuelled by narratives on land degradation and resource scarcity (Scoones et al. 2019), which serve large-scale agriculture and conservation interests and result in dispossession and marginalisation of pastoral populations (for Tanzania, see Bergius et al. 2020; Walsh 2012; Neumann 2002; Brockington 2002; Lane 1996).

West Africa[8]

The major trade routes involving pastoralists, traversing the Sahara and moving to the coast from the Sahel, have given the literature on West African pastoralism a rather broader perspective. Even the early ethnographies, such as the classic by Dupire (1970) on the Fulani in Senegal, chose very different foci for study, compared to the rather static British anthropology that dominated Eastern Africa. Her study highlighted the flexibility of Fulani production and the close relationships with cultivators. In West Africa, the significance of hierarchical societies is emphasised, with caste-like classes evident among the Tuareg, Fulani and Moors. Key themes include the importance of links with agricultural peoples, through various forms of exchange and entrustment (Bassett 1994; White 1990; Blench 1985), such as exchanges of manure for grazing on crop fields (Toulmin 1983), as well as shifts to agro-pastoralism; the importance of markets and trade (Turner and Williams 2002; Amanor 1995), including changes in transhumance routes from the dry Sahelian region to the coast to the south (Moritz et al. 2015; Turner et al. 2011; Turner and Hiernaux 2008; Bassett and Turner 2007); the management of labour availability and quality for herding (Turner 1999) and changing ownership patterns (White 1990), including the emergence of absentee herders and urban-based pastoralists, with links to the pastoral hinterlands (Moritz 2012). Across the region, a sense of a dynamic, but fast-changing, variegated pastoral economy is evident, with increasing inequality (Gonin and Gautier 2016; Sutter 1987). A different relationship between to demography and resources to that posited elsewhere emphasises adaptations to changes in grazing resources involving intensification, extensification and movement to new areas (Moritz et al. 2009), alongside changing relationships between production, property and politics (Benjaminsen and Lund 2001). The controversial debates about 'desertification', in particular following the devastating Sahelian droughts of 1972–1973, were often centred on Sahelian West Africa (Mortimore 1989). Mainstream narratives found pastoralists to blame for 'overgrazing' and so environmental degradation and the 'expansion' of the Sahara (Swift 1996). Challenges to these assumptions emerged through the new rangeland ecology, including through satellite image analysis, long-term rangeland monitoring and the identification of historical 're-greening' encouraged by pastoral land use (Dardel et al. 2014). In recent years, debates about investment, the creation of corridors and the emergence of violent conflict – including between herders and settled farmers – have emerged in the West African literatures (Mbih 2020). As Benjaminsen and Ba (2019) explore for Mali, the involvement of pastoralists in jihadist armed groups is a new development, reflecting their distance from state power, patronage and support.

Middle East and North Africa

From 'Lawrence of Arabia' onwards, travellers' commentaries and other research on pastoralism in this region offered a distorting, romantic view of the 'true Bedouin', usually a male camel herder from an aristocratic clan. From the 1960s largely anthropological work focused on particular 'tribes', such as the Kababish of Sudan (Asad

[8]As noted earlier, this review is highly reliant on Anglophone literature. This gap is especially evident in this section, where many important Francophone studies are omitted. This linguistic separation in the literature adds to the conceptual disconnect, especially given the tradition of Francophone Marxist anthropological studies.

1970), the Zullam Bedouin of the Negev (Marx 1967), the Baggara of Sudan (Cunnison 1966) and the Basseri of Iran (Barth, Firth and Yamey 1964; Barth 1961). Conflicts between central authorities and tribal confederations had long characterised this region (Chatty 2006a) but, with colonisation, efforts to 'detribalise' and settle nomads were central to the colonial project of pacification and 'modernisation'. Old social formations based on large segmentary lineage groups, which allowed for flexible, mobile military responses to states – such as the Yomut Turkmen in Persia (Irons 1974) – mostly disappeared (Chatty 1996). Conflicts with pastoral populations frequently emerged over colonial settlement policies (Asad, Cunnison, and Hill 1976 for Sudan) and state planning (Roy 2001 for the Gaza strip; Marx 2000 for Israel), as well as with environmental policies (Davis 2004). Many colonial policies persisted in independent states with Bedouin peoples incorporated into state systems of welfare support, subsidy for animal feed and settlement. A commercial elite emerged in pastoral areas, with strong links to public bureaucracy and national politics (Mundy and Musallam 2000). While national agrarian debates centred on the relationships between peripheral production of cotton, wheat or olives and the capitalist core (Ajl 2020; Ayeb and Saad 2012), pastoralists were often not central to the new politics of liberation. With social and market relationships stretching across national borders, they were peripheral even in the periphery. With the discovery of oil and the promotion of wildlife conservation and tourism, marginalisation accelerated (Chatty 2006b; Gardner 2003), while further commercialisation of the economy meant that vibrant, mobile market relations emerged (Breuer and Kreuer 2012; Gertel and Breuer 2007). Research in this region has long noted the significance of social differentiation among pastoral societies. For example, Bourgeot (1975) highlighted how, in the highly hierarchal pastoral organisation of the Ahaggar of southern Algeria, 'predatory', subservient relationships with farmers and other herders allowed pastoral nobles to engage in profitable, commercial trans-Saharan trade. Equally, Barth's (1961) classic work in Iran showed how differentiation accelerated when pastoralists with large flocks of smallstock resulted in accumulated surpluses from the sale of meat, and these were invested in trading business or land ownership, cementing links with settled populations. Skilled herding labour, particularly when livelihood activities are split, has long been noted as a constraint in the Middle East (Gardner and Marx 2000; Beck 1980). Much work has emphasised the importance of wage labour for herding in increasingly differentiated pastoral societies, as in the case of Komachi pastoralists (Bradburd 1980). The social formations of these regions also reinforce patterns of class formation, intersecting with traditional hierarchies, including sheikdoms, sultanates and wider kingdoms. Both North Africa and the Middle East have been central to trade and smuggling routes involving pastoralists and connections to transnational markets are centuries old (Meerpohl 2013; Bradburd 1997). Yet, across the region, pastoral systems have changed dramatically (Marx 2006; Gardner 2003; Cole 2006). Over time, trucks have replaced traditional transport by camel or the movement of herds to feed and water, but a pastoral system persisted despite dramatic changes (Chatty 1986, 2010a, 2010b), resulting in new forms of land-use politics (Kreuer 2011). With increasing capitalisation and market integration, a flexible form of ranching is observed, where social relations, and strong family, kin and clan ties are important for assuring security. Camels may no longer be so

important for milk, meat or transport, but have huge value for racing and beauty contests (Khalaf 1999). Combining pastoralism with crop farming has long been important, with transhumant livestock herding combined with cultivation in valley-bottoms and oases. Indeed, pastoral production systems emerged as populations expanded beyond the 'fertile crescent', and farming and livestock-keeping remained firmly linked, as in the case of barley production and sheep farming in Syria. Gender divisions of labour become important when combining agricultural and pastoral livelihoods. In some places, such as the Sinai, women manage the flocks and men farm, while in others, such as among the Yoruk of Turkey, men go to the high pastures, while women stay in villages and grow crops (Bates 1973). However, imperialist wars, frequently focused on oil-rich formerly pastoral areas, along with on-going inter-ethnic conflicts and international sanctions have disrupted many pastoral areas in these regions, undermining production capacities (Ajl 2020; Cole and McQuinn 2015). Many pastoralists have had to take up new livelihoods in other countries, now as refugees, frequently being forced to abandon extensive livestock production due to insecurity, generating new forms of exclusion and social differentiation.

South Asia

Pastoralism across South Asia varies from camel-keeping in the deserts of Rajasthan (Kavoori 1999; Köhler-Rollefson 1994) and Gujarat to the high-montane pastoralism of Himachal Pradesh, Assam and the Karakorams (Agrawal and Saberwal 2004; Kreutzmann 2011a, 2011b; Chakravarty-Kaul 1997). Pastoralism in South Asia is therefore immensely varied, but universally marginalised; often being squeezed in terms of territory, political status and economic opportunity. Mobility, flexible social organisation and diverse political negotiations with both the state and agriculturalists characterise pastoral settings in South Asia (Axelby 2007; Agrawal 1999; Saberwal 1999; Kavoori 1999). Pastoralists are often identified in relation to 'caste' – a highly flexible social-religious designation often associated with a particular occupation – and so may be marginalised by dominant groups in wider society. Caste and class intersect therefore making the dynamics of social differentiation among South Asian pastoralists highly complex and very site-specific (Sharma, Köhler-Rollefson, and Morton 2003; Rao 1995). Economic marginalisation, whether through the expansion of cities, industrial parks or the growth of agriculture following the Green Revolution, has meant that pastoralists have had to find means of incorporation into other production landscapes, adapting mobility and pastoral practices (Mehta and Srivastava 2019; Axelby 2016). Spatially this has meant finding grazing along roadsides, in peri-urban areas and on crop farms, and this has required negotiation and compromise. As Robbins (2004) points out, though, this need not be construed just as simple peripheralisation, as actually pastoralists have become more and more central to the core agricultural economy through the provision of manure and the exchange and marketing of livestock products for grain. While the social relations and forces of production have changed dramatically for pastoralists, flexible strategies of mobility and political negotiation remain at the centre of pastoral practice, even if accumulation possibilities from livestock rearing are constrained.

China and Central Asia

Some of the great pastoral societies dominated the steppes of Central Asia, most famously Genghis Khan and the Mongol empire. Seen as 'barbarians' by the settled agrarian communities, military might and the conquering of vast areas meant that for centuries such pastoral formations held sway (Lattimore 1951). Integration of pastoralism into both imperial states and later the Soviet Union and communist China was fraught, with ruthless attempts at settlement and, for a time, collectivisation. The creation of huge collective farms based on livestock farming was a dramatic failure, whether in the Soviet regions of Kazakhstan, Tajikistan or Mongolia (Kerven et al. 2012; Visser and Schoenmaker 2011; Kerven 2005; Humphrey and Sneath 1999) or in China, including following the incorporation of Tibet into the People's Republic of China from 1950 (Yeh 2013). The high mountain pastoral societies of Afghanistan and north-west Pakistan have long been highly differentiated, with identifiable classes associated with different livelihood strategies (Kassam 2010; Balikci 1981). As in other parts of this region, these areas have been affected by state intervention, invasion and war, as well as major infrastructural developments such as the Karakoram highway (Kreutzmann and Schütte 2011; Kreutzmann 2004; Ehlers and Kreutzmann 2000). Market reforms following the collapse of the Soviet Union in 1991 and decollectivisation in China from the early 1980s have allowed the return of individual holdings of livestock in pastoral regions (Bauer 2005). Despite the non-equilibrium dynamics of montane rangelands (Kerven 2004), there is now less mobility without state-managed pasture use; more reliance on private cultivation of fodder, as state provision disappeared; few organised markets, and so a shift in many regions from sheep to goats and increased out-migration and settlement schemes, resulting in shortages of herding labour (Sabyrbekov 2019; Kerven et al. 2004, 2012, 2016; Gyal 2015; Mirzabaev et al. 2016; Sheehy, Miller, and Johnson 2006). Changes in land tenure regimes have meant that there is now a hybrid mix of tenure types, with some communal, some private/leasehold and some a combination, with a range of authority structures and land governance systems (Gongbuzeren, Huntsinger, and Li 2018; Cao et al. 2013; Upton 2009; Behnke et al. 2005; Robinson, Finke, and Hamann 2000). Whereas in Russia the return to individualised forms of production was slower due to the long period of collectivisation, in Mongolia the re-emergence of a private household system was rapid, but more disruptive (Visser and Schoenmaker 2011). This turbulent history – continuing today with on-going attempts at state intervention around settlement and land management across the region (Kreutzmann 2013) – has meant that pastoral systems have radically changed. The growth of market demand for livestock products, as in all pastoral regions, has been important, and there is now greater integration in regional markets and links to urban areas (Bruun and Narangoa 2011). Processes of differentiation and displacement may accelerate in the future as major investments in infrastructure occur, particularly led by China and its 'Belt and Road Initiative', which aims to connect this whole region and beyond (Olinga-Shannon, Barbesgaard, and Vervest 2019). In the period since the end of collectivisation, social differentiation has increased in pastoral communities. Absentee herding arrangements have emerged as pastoralists move to urban areas; although in the case of Mongolia these have been embedded in kin relations and subsistence production, resulting in less differentiation than seen elsewhere (Sneath 1993, 2006; Fernandez-Gimenez 1999). As Levine (1999, 2015) records for Amdo Tibet, over the last 30 years, increasing class-

based differences are observable in pastoral communities, reflecting accumulation of stock and associated private resources to support production and a decline in engagement with pastoral production by others, including a shift to wage-earning jobs, and increasing engagement in trade (Gruschke 2011).

The Arctic

Research on pastoralism in the Arctic regions has focused on the reindeer- and smallstock-keeping populations of Norway, Sweden, Finland and parts of Russia (Forbes et al. 2009; Williams 2003; Krupnik 2000; Paine 1972), as well as the horse-cattle systems of Taiga forests of Siberia (Takakura 2015). As Ingold (1980) describes, the shifts from hunting to pastoralism to ranching can be seen in terms of changes in property regimes, both of animals and land; although recent archaeological evidence suggests that reindeer pastoralism is much older than the seventeenth or eighteenth centuries as originally thought (Bjørklund 2013). Reindeer pastoralism is focused on meat production from fast-reproducing animals, which are semi-wild, communally-held, but individually-owned. The transition to ranching may be partial, as individually-held ranch areas may be difficult to manage, resulting in a transformation inside the frontier (Ingold 1980); indeed pastoral systems of production – without fences and with herding – persist across the region.[9] Ecological debates about 'overstocking' and the need to manage populations within 'carrying capacities' have provoked major controversies, as state policies seek to restrict and control herding populations undermining flexible control of territory and herds (Benjaminsen et al. 2015; Reinert and Benjaminsen 2015; Brännlund and Axelsson 2011). While tundra environments and boreal forests may have state-protection, the transformation of reindeer pastoralism through the effects of mineral extraction, tourist investment and climate change are all significant (Johnsen 2016; Maynard et al. 2010; Chance and Andreeva 1995). With the boom in national economies, out-migration of younger people occurs, but recruitment into Sámi pastoralism in Norway at least is not a problem as states restrict the extent of pastoralism, reserving land for investment projects and tourism (Johnsen and Benjaminsen 2017). Conflicts between Arctic pastoral populations and conservation, tourism and extractive industries has therefore characterised recent times, with pastoralism often being cast by the state as backward and in need of modernisation (Johnsen, Benjaminsen, and Eira 2015).

European mountain and hill regions

European pastoral regions have seen a process of massive de-population over several decades in everywhere from the Scottish highlands to the Pyrenees to the Alps to the Balkans to Greece and the island systems of Sardinia or Corsica.[10] Traditional pastoral

[9]In parts of Finland and in southern Norway, where the space available for herding is limited due to competition from other land uses, there are shorter migrations and a greater focus on breeding females and the slaughter of calves. These areas resemble ranch systems, but with herding and without fences, while governments encourage the adoption of standard ranch management principles. Exclusive private property, as in formal ranches, would however be politically impossible, given other recreational uses of the land and the demand for land for wind farms and other uses (Tor Benjaminsen, pers. comm.; also Marin et al. 2020).

[10]See the collection on European pastoralism edited by Kerven and Behnke (2011) covering many countries; also for Corsica and Sardinia, see: Mientjes (2010) and Giordano (2003).

transhumance or common grazing in hilly and mountainous areas persists, documented so well for the Swiss Alps by Netting (1981), but has much declined (Liechti and Biber 2016; Biber 2010; Collantes 2009) or been transformed (Jurt, Häberli, and Rossier 2015), despite European Common Agricultural Policy support recognising the value of traditional pastoral land-uses for marginal areas (Nori and Gemini 2011). Nevertheless, due to out-migration, herding labour has been replaced by migrant workers from elsewhere in Europe (notably the Balkan states, including especially Albania and Romania) and from North Africa (Morocco, Tunisia) (Nori 2016, 2017; Nori, El Mourid, and Nefzaoui 2009). While some pastoral regions' economies have seen a revival through the influx of small-scale artisanal producers (e.g. Whited (2018) and Métailié (2006) for the French Pyrenees) and investment via tourism, the nature of European pastoralism has dramatically shifted. There are fewer owners, more consolidated flocks and herds and more migrant herders, with much livestock production shifting away from the hills and mountains to the plains, as part of intensified, mixed farming systems. Conflicts between new wildlife uses in mountain areas and traditional pastoralism have escalated, especially with the reintroduction of bears (Cummins 2009). As a result of these changes, new social-cultural and class relations emerge between long-standing pastoral families and newcomers engaged in pastoral production or other activities and between producers and hired migrant herders. Meanwhile, contestations over landscape and territory increase as new land-uses for ecosystem services, wildlife and tourism are promoted by states and through subsidy regimes.

The Americas

The literature on pastoralism in the Americas is dominated by the emergence of ranching through processes of colonisation, including in the southern US and Mexico (Sayre 2017; Perramond 2010; Salvatore 1991); in the Pampas of Argentina; across the savannas and Amazon fringes in Brazil, Ecuador and Colombia (Walker et al. 2009; Hecht 1985) and throughout Central America – for example, Guatemala (Grandia 2012), Mexico (Bobrow-Strain 2001) and Panama (Ficek 2019). Here the more familiar themes of agrarian studies come to the fore: colonisation, enclosure and accumulation by dispossession, leading to a stratified form of commoditisation. A standard narrative centres on the emergence of 'hamburger' ranching (Edelman 1995), with indigenous systems focused on harvesting semi-wild livestock in expansive common territories being overcome through colonisation, and the establishment of large, private ranches focused on beef production for growing urban markets in emerging settler states. This wholesale transition to a market-based, commercial and individualised production system was made possible through force and violence, often resulting in the extermination of once partially pastoral indigenous populations. Colonisation was enhanced by the availability of technologies, such as new forage varieties and barbed wire especially from the late 1800s, and the growth of markets. This was typified by the establishment of processing industries, such as Fray Bentos beef in Argentina, with links to the Chicago commodities exchange and beyond. Although happening in different periods and through contrasting processes, from the southern United States to the southern Cone, a similar expansion of ranching systems occurred. Livestock on the frontiers helped create the conditions for the extension of capital, with ranching and other extractive industries combining (Grandia 2012), and a

profitable, commoditised beef industry boomed (Van Ausdal 2009). However, while cattle and colonisation are inextricably linked, 'uncontrollable ecological relations' result in unpredictable outcomes that occur 'without human approval', as attempts at control unravel in the face of unruly 'more-than-human' natures (Ficek 2019, S260-1). In the process of colonial expansion in the Americas, animal and human histories are intertwined, as livestock move in and out of colonisation projects. Key moments include the deployment of fencing, the employment of workers, the improvement of rangelands, the extension of roads, the creation of canning factories and the improvement of veterinary control of disease (Sayre 2017; Friedberg 2009; Sheinin 1994). Thus, only with the taming, control and confinement as 'modern cattle' in fixed, Texas-style ranches was the process of colonisation, dispossession and commoditisation possible (Ficek 2019), effectively eliminating pastoralism as a system of production and livelihood, outside limited high-mountain Andean areas (Postigo, Young, and Crews 2008; Browman 1990).

Southern Africa

Given the history of colonisation, echoes of the story in the Americas are seen in southern Africa. The extensive pastoral systems of the Ndebele, Tswana and Himba, for example, were thoroughly constrained by colonisation by white settlers and the creation of racially-segregated populations. Through a process of massive dispossession, local African populations were allocated to reserves, communal areas or homelands (Bollig 1997; Cousins 1996; Comaroff and Comaroff 1990), while 'European' farming and ranching areas were established across large areas, often on favourable land (Palmer and Parsons 1977). The emergence of ranching in South Africa, Botswana, Namibia and Zimbabwe was the result of the imposition of a settler economy, with a dualistic agrarian structure distinguishing privately-owned livestock ranches (for European settlers) from traditional agro-pastoral 'communal' lands (for Africans) (Mazonde 1994; Behnke 1987). Forms of transhumance and mobility persisted, both as part of ranching systems with flexible boundaries and as central to dryland livestock production, now largely integrated in settled agrarian systems (Beinart 2007; Scoones 1992). While the vast herds of earlier times no longer exist, livestock, notably cattle, are central to these agro-pastoral systems, and have remained an important signifier of social differentiation and class formation (Cousins et al. 2018; Cousins, Weiner, and Amin 1992). Agro-pastoral systems remain reliant on flexible mobility across varied landscapes, with careful herding ensuring access to 'key resource' patches and longer transhumant movements occurring during droughts (Scoones 1995). As with earlier, more extensive pastoral systems, livestock also have retained important social and cultural significance, as a particular kind of property and social wealth, embedded in social and economic relations, which in southern Africa generates social bonds for absent, migrant men (Ferguson 1985).

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As this inevitably highly partial review shows, sustained in-depth empirical work by many scholars of pastoralism – from the tundra of the Artic to the plains of East Africa to the hills and mountains of Europe to the high montane grasslands of Central and East Asia – demonstrates many of the features typically associated with an agrarian studies framing, even if not conceptualised as such. Long-running engagements with markets,

often linked with global circuits of capital over many centuries, intersect with processes of social differentiation, with new pastoral elites emerging, alongside hired labour to manage herds and flocks, for example. This work therefore relates squarely to agrarian studies themes, exploring how differential processes of class formation and accumulation affect trajectories of change and wider politics in pastoral settings (cf. Caravani 2019).

Three problematics of agrarian studies: insights from pastoralism

While many of the debates on pastoralism have particular regional characteristics, all point to the importance of thinking about how processes of differentiation and accumulation intersect in changing the nature of production and politics in pastoral settings. But what is distinct about pastoral settings? How can an engagement with pastoralism expand our understandings of these core questions of agrarian studies? The following sections examine the three problematics introduced earlier in turn, drawing on the regional overviews above to explore their implications in pastoral settings.

Production

Starting with production – and the linked processes of circulation, exchange and consumption, and their implications for social reproduction – there are a number of key features of pastoral systems, hinted at in the regional overviews presented above, that encourage us to move beyond the classic treatment usually elaborated for settled agrarian societies.

Perhaps most significantly is the role of livestock as capital – as an investment, store of wealth, source of speculation and a generator of interest (Gardner 2009; Hart and Sperling 1987; Schneider 1980b; Konczacki 2014; Galaty and Johnson 1990). In *Pre-Capitalist Economic Formations*, Marx (1973, 513) observed: 'the still migrating hordes with their herds on the Asiatic high plateau are the biggest capitalists, since capital originally means cattle … '. As others have noted, the Latin word for money, *pecus*, also means a head of cattle, while the Greek word for loan interest, *tekhos*, refers to livestock offspring (Ingold 1980, 229). There are of course limits to these simple analogies since livestock represent other values, beyond material wealth and a source of exchange. Animals are also embedded in social relations through shared, joint co-ownership and constitute embodied wealth, with livestock's physical condition – even beauty – and ritual, symbolic value being important (Borgerhoff Mulder et al. 2010; Comaroff and Comaroff 1990), with use, exchange and social values always being intertwined (Appadurai 1988).

Nevertheless, as Dahl and Hjort (1976) show, the basic features of livestock reproductive biology and ecology: the dynamics of growth of different species and the productive characteristics of each – and the contrast of keeping of animals for milk or meat – has a huge effect on how herds and flocks grow and so how livestock 'capital' is accumulated or lost. This basic biology thus influences the nature of production and the potentials for accumulation, with strategies such has herd splitting and dispersion and changing species composition and herd/flock sex and age structure central to production strategies (Dahl 1980).

In classic scholarship on peasant production there have been extended debates about the underpinnings of production logics, including notions of the rational, profit-

maximising individual farmer (Popkin 1980), together with wider appreciations of 'optimisation', risk aversion and safety-first production under variable conditions (Lipton 1968), contrasting with more social perspectives, rooted in understandings of 'moral economy' and 'subsistence ethics' (Scott 1977). Similar debates surround understandings of pastoral production. For example, misleading interpretations of Herskovits's (1926) notion of the 'cattle complex', whereby herders were assumed to keep animals simply for 'prestige', held much sway, although have now been long dismissed (Dyson-Hudson and Dyson-Hudson 1980; Dyson-Hudson 1966; Schneider 1957). Most analysts agree that large herds or flocks are kept for good reason as part of a complex production system where animals may have multiple economic, social and political functions, including the production of meat, milk, blood, wool, hair; as a risk-offsetting strategy in the face of drought, flood, snowfall or disease; for religious and ritual functions and as a contribution to domestic reproduction, through gifts, bridewealth, loaning and so on. In other words, the economic and social dimensions of production are intimately intertwined and, in the context of uncertainty in production environments, there is a necessary emphasis on risk management and asset redistribution in production systems (McPeak, Doss, and Little 2011).

The social practices associated with the circulation of livestock through kin and associates has been a long-running focus of social anthropological studies of pastoral societies. Such practices help bind people together, generating social and political order, responding to uncertainties and facilitating production at individual and collective levels. In the past, as the regional reviews show, these practices fostered a narrative about 'egalitarianism' in pastoral societies, with such social relations supporting production, where labour is limiting (Borgerhoff Mulder et al. 2010; cf. Schneider 1980a, 1980b; Spencer 1973; Lewis 1961). Redistribution and sharing arrangements thus become essential when herds grow too large for family labour to manage; and this in turn offsets the risks of catastrophic loss. Evans-Pritchard (1940, 5) famously described the Nuer as having 'no sharp divisions of rank, status or wealth'. As discussed earlier, this contrasts with others who argue that forms of social differentiation have always existed, with merchant trading classes, slave-owners, varied rural-urban connections and links with farming, all featuring stark gender divides. It is the historically-produced social relations and forces of production, and particularly the connections with a wider economy, which necessarily generate differentiation, frequently accelerated by the booms and busts of pastoral economies (Murphy 2014). In other words, egalitarian 'pre-capitalist' pastoralists are a construct, a figment of a romantic imagination (Waller and Sobania 1994; Black 1972). In this argument, there is therefore no well-defined, particularity to pastoral production; no pastoral 'mode of production', with wholly distinct productive forces – labour, skills and means of production – linked to unique social and technical relations of production (Asad 1978).

That said, while making the case for pastoral exceptionalism is misplaced, there are particular characteristics of successful pastoral production. Skilled labour for livestock management in a mobile system – for herding, breeding, milking, watering, disease management and so on (Sikana and Kerven 1991) – is vital, for example. Managing dispersed, seasonally-variable grasslands, with diverse nutrient content, through mobility is crucial, requiring much knowledge and skill. As kin-based family labour proved insufficient or as new commodified production relations emerged through investment in livestock by 'absentee' owners, herding labour has become increasingly commoditised, reliant on

wage-workers (Murphy 2015; Little 1985). Labour, argues Bonte (1981a), is the source of accumulation in mobile pastoral systems, where the organisation of labour is key, involving splitting residences, flexible use of pastures and moving across transhumance routes.

Further, the more-than-human relations at the centre of animal husbandry, and the importance of learned (and trained) behaviour of animals as individuals and in groups (Krätli 2008), is central to understanding how they survive harsh environments and how herding labour is effectively deployed (Archer 2018). Add to this the influence of environmental factors and the impacts of disease agents, which may wipe out livestock populations at a stroke – whether the rinderpest pandemic that swept across Africa from 1886 (Ofcansky 1981) or foot-and-mouth disease in the UK (Woods 2013) – we see how a biological-ecological understanding must be central to understanding economies of production, circulation and exchange.

Given the complex role that livestock play, there are multiple, overlapping property systems at play (Khazanov and Schlee 2012; Dahl 1980). Animals may be held individually, but also in common – through stock friendships, entrustment and other sharing mechanisms – allowing the flexible reallocation of animals and labour between herding units. Different people may have different rights; for example between fathers and sons, or between men and women. Herders may have usufruct rights to milk and may gain benefits with payment through heifers or other offspring. Marriage alliances may also bestow rights to livestock through various exchanges (Kuper 1982). Even within the same animal, there may be multiple rights – with direct and indirect loans and commitments to future transfers (Schlee 2012). Property constitutes relationships between people as much as it does between things, so such flexible and overlapping forms of livestock property are important in constructions of identity and citizenship in pastoral settings (Khazanov and Schlee 2012; cf. Lund and Boone 2013), fostering collective forms of social wealth. Commenting on Basotho livestock owners, Ferguson (1985, 659) argues that those with livestock 'know the poor', while those with cash only 'know themselves'.

In pastoral systems, fixed forms of property – whether around livestock or land – are frequently avoided as mobility and flexibility are essential for production. Even with the expansion of privately-held land in once 'communal' rangelands the articulation of property systems, between private and communal through 'open' property arrangements, may be important for land control (Robinson 2019; Moritz 2016). Property in land and livestock is thus 'assembled' (Li 2014) through complex social relationships between humans and non-human networks. There is no simple 'tragedy of the commons', where rangelands are a free-for-all form of open access (Hardin 1968), nor are all rangelands rule-bound forms of 'common property' (Ostrom 1990); moral orders and diverse practices construct property relations in pastoral areas in complex ways, as Berge (2001) shows for the Tuareg. With ideas of property and ownership flexible and mutable, the classic forms of capitalist expansion may be curtailed. Yet, even in the expansion of formal ranching systems through the 'spatial fixes' of ranch technologies – barbed wire fencing or fixed water points, for example – very often there is more flexibility and negotiation at the heart of property arrangements. Mobility in such landscapes, even if across large paddocks, is still necessary.

In pastoral systems attention to the underlying ecological dynamics is especially important. This has been a central feature of the debate about pastoralism since the late 1980s (Behnke, Scoones, and Kerven 1993; Ellis and Swift 1988), resulting in what has been

dubbed the 'new range ecology'. Non-equilibrium dynamics that dominate both dry and montane rangelands means that 'carrying capacities' are not reached and livestock populations show a boom and bust cycle, as droughts, floods, disease outbreaks or heavy snowfalls cause crashes, and often catastrophic losses of livestock. In order to respond to seasonal and inter-annual variations, as well as the highly variegated patterning of forage in rangeland landscapes, movement is essential. Traditionally this involves moving animals, where skilled labour and trained animals are required, but in some systems, people move fodder and water to the animals to sustain them in the face of high levels of variability. This variability is central to production and the possibilities of consumption and exchange; indeed, as Krätli and Schareika (2010) put it, pastoralists do not just live with uncertainty (Scoones 1994), but they live off it.

This requires a much greater focus on spatial and temporal dynamics than standard approaches to agrarian systems. An emphasis on mobility highlights the importance of thinking about how domestic organisation (including gender and age relations) and labour relations (kin-based and hired) must articulate with a dispersed, frequently mobile production system that must make the most of variability by 'harvesting nutrients', especially protein, across very diverse landscapes (Krätli et al. 2015; Croze and Gwynne 1980).

Therefore, while pastoral production has many commonalities with other settled agrarian settings, there are important contrasts both in the social relations of production and the nature of the associated productive forces. These include the nature of livestock as 'capital'; the multiple forms of ownership and flexible property relations and different styles of mobility responding to non-equilibrium ecological dynamics. All these combine to make pastoral production – and the circulation of commodities, the nature of exchange and the forms of social reproduction – different to sedentary agricultural populations, requiring in turn new perspectives on the classic explorations of the production problematic in agrarian systems.

Accumulation

As the brief reviews of pastoral systems across the world have shown, successful pastoral production can provide opportunities for moving from simple to extended reproduction and so accumulation. But such processes are inevitably highly differentiated, dependent on the social relations at the heart of production and reproduction. Selective 'accumulation from below' (Shivji 1987, 2017; Neocosmos 1993) and differentiation into rich, middle and poor agrarian classes, as classically predicted by Lenin, may occur, with the emergence of a rich, commercial pastoral elite alongside widespread impoverishment seen in many settings. However, such transformations are limited by state policy and alternate paths of 'accumulation by dispossession', whereby accumulation of productive surpluses are constrained, as land and other resources are expropriated by the state or capitalist enterprises (Harvey 2003; Shivji 1987).

However, there are particularities in pastoral settings that contrast with classic discussions of class formation, accumulation dynamics and dispossession in agrarian studies. The social relations within pastoralists' domestic formations make a big difference. Bonte (1977, 1979, 1981b, 1981c), for example, emphasised the relationships between individual and kin or community-based accumulation in Nilotic pastoralist societies of East Africa,

explaining how class formation is complex, intersecting with wider social relations, religion and ideology. Equally, in such segmentary lineage systems redistributive relations involving a diverse array of stock-sharing and entrustment practices may act to offset individualised accumulation; instead accumulation occurs at the kin-group or community level. As Goody commented (1973, 12; quoted by Dahl 1979b), 'even when differentiation occurs, polygyny dissipates'. This may or may not result in sufficient surplus for external investment, but the role of pastoralists in markets, regional trade and urban investment is witness to the possibilities of accumulation.

Such patterns of accumulation have gender and age dynamics, with women often excluded from certain trajectories (for example, market-based sales of large-stock, such as camels, cattle and yak), although they may be involved in small-stock trading, so offering some opportunities for individual profit. Gendered relations of access are governed through family and wider kin networks, acting both to constrain and enhance accumulation (Hodgson 2000; Davis 1996; Dahl 1987). Gender relations intersect with inheritance patterns, where opportunities for inter-generational transfer of wealth may be limited. Young people, for example, may not gain access to livestock assets until older male kin pass on or access is granted through graduation to a particular age-set. Again, generational dynamics of accumulation depend on quite specific social and cultural dimensions.

Access to diverse, often spatially-distant, rangelands is also vital for accumulation. Here, in contrast to the classic image of the sedentary farmer with a single plot, various forms of open and common property resources are central. This in turn links to forms of 'community' organisation and the rules around resource use that emerge. As discussed earlier, such ideal-type patterns of common property resource management (following Ostrom 1990) rarely exist and more complex forms of property rights, land tenure and sustainability emerge (Moritz et al. 2018); although the basic point that shared access to resources across large areas is central to mobility and the possibilities of accumulation remains. Forms of exclusion and enclosure, through land investment and expropriation in rangelands (Galaty 2013a) or various forms of elite speculation at a local level (Lind, Okenwa, and Scoones 2020; Korf, Hagmann, and Emmenegger 2015), very often justified by narratives about rangeland degradation (Bergius et al. 2020; Benjaminsen 2015; Scoones 1996), are therefore especially damaging to pastoral livelihoods. These are not 'wastelands' or 'idle', 'empty' or 'degraded' areas, but are sites for diverse processes of pastoral accumulation.

Basic livestock ecology is important too, as fast and slow-breeding animals result in different patterns of population growth and so potentials for offtake (Dahl and Hjort 1976). Spencer (1973), for example, contrasts the camel-keeping Rendille with the cattle-keeping Samburu of Kenya. Whether management practices focus on milk offtake or increasing numbers and so favouring calves, lambs or kids ultimately for meat production or herd growth as savings makes a big difference to trajectories of accumulation. Ingold (1980) contrasts Eurasian reindeer-keeping and Iranian smallstock pastoralism for meat production with milk and blood producing pastoralists, such as the East African Maasai. Herd or flock size and structure matters, too. Only above a certain size, and with a certain proportion of females, can a pastoralist expect offtake beyond subsistence, whether this is for milk or cheese or meat (Brown 1971). In Botswana, for example, Behnke (1983, 1987) estimated that a herd size of ten was the minimum required for

surplus offtake and a self-sustaining herd. With frequent droughts or other shocks, maintaining a minimum herd size is challenging, as catastrophic losses may occur with only slow re-building. For this reason, the opportunities for accumulation may vary dramatically over time, and, in the case of milk production for example, be very seasonally focused.

The ratio between herd or flock size and herding labour is a crucial factor in accumulation opportunities. In the past, researchers frequently commented on the limits of family labour availability as constraining accumulation and encouraging non-commercial forms of redistribution, alongside the importance of large family sizes for herd expansion (e.g. Dahl 1979b). Today, however, most pastoral areas rely to some extent on hired herding labour. This has to be skilled and trusted, as managing valuable mobile herds often in remote places means a herd owner has to rely heavily on herders who may not be kin, or even the same nationality or ethnic group. The expansion of wage labour in herding has allowed some herds and flocks to grow, including through outside investment from absentee herders with incomes derived from jobs in far-away cities (Little 1985, 1992; Murphy 2015). Others, unable to maintain even subsistence herds and too poor to hire labour have dropped out of pastoralism, sometimes getting employed as herders and shepherds themselves.

As some pastoralists expand their livestock holdings, supported by wage labour, increased differentiation is observed, with selective engagement in markets and trade. Of course, as already noted, most pastoralist groups have always been engaged in extensive, cross-border commercial trade (and smuggling), so the increasing commercialisation observed today is not new. Swift (1976), for example, documents barter trade among Somali pastoralists from 1847, showing how structural changes in pastoral economy and society result in differentiation and the emergence of a wealthy, urban-based trading class, with strong links to the state (Samatar 1992; Aronson 1980). However, today's individualised, commercialised systems, linked to export markets and subject to health and safety requirements, show new characteristics. Opportunities for accumulation are reliant on new productive forces and social relations. These include, for example, the adoption of new technologies (such as veterinary care, sometimes tagging for traceability or mobile phones to gain access to market information) and they must draw on new relationships (including linking traders along market chains) and may involve new forms of mobility (trucks rather than trekking, for example) to ensure market access.

In some regions, the growth of such market engagement, both for live animal sales and meat, is huge, amounting to around US$1 billion from the Horn of Africa per year by some estimates (Catley, Lind, and Scoones 2013, 7; Aklilu and Catley 2009; Behnke 2008). This represents a significant proportion of national income of countries across the region. The large mobile production systems of cattle, camels, goats and sheep in southern Ethiopia and Somalia, and the market networks that connect them to the ports of Berbera and Bosasso and so to the Gulf States, are highly-developed and complex (Musa 2020; Little 2003). These arrangements do not look, at face value, like a standard form of capitalist production, but the scale and concentration of accumulation – extracting surplus from wage labour and resources and being reliant on market connections and political patronage – show many similarities.

Taking a more broad-ranging perspective on 'primitive accumulation' (cf. Hall 2012), the emergence of externally-driven capitalist accumulation in pastoral areas has parallels with other 'frontier' settings where the expansion of state and business investments can

undermine local livelihoods and production systems (Rasmussen and Lund 2018). Here an emphasis on local agency and diverse social, institutional forms result in opportunities for some and exclusion of others (Hall, Hirsch, and Li 2011). This need not result in the classic sequence of enclosure and the dispossession of peasants to create a working class, as Marx described in *Capital* for England (Marx 1977). While the formation of ranches and a similar dynamic of enclosure and commodification occurred through settler colonialism across the Americas, in Australia and in southern Africa in particular, in other areas capitalist forms have emerged within pastoralism. Such systems make use of mobile production and flexible market systems to sustain successful accumulation, often in the very same places where ranch experiments imposed by 'development' have failed (Müller-Mahn, Rettberg, and Getachew 2010).

In pastoral settings, therefore, there are hugely diverse trajectories of accumulation. Some emerge through processes of dispossession and enclosure, such as through the formation of ranches, the creation of industrial enclaves or the conversion of rangeland to agriculture. These new forms of primitive accumulation – or in Harvey's terms 'accumulation by dispossession' – result in the displacement of pastoral livelihoods and so wider marginalisation and impoverishment. Such processes sit in tension with other trajectories of accumulation that occur internally within pastoral societies with accumulation from production based on the mobile use of variable rangeland resources. This results in increasing social differentiation and class formation, mediated by social and cultural relations and the degree to which capital is able to expropriate surplus from local production through the control of inputs, markets and value chains (cf. Shivji 2017). Which pattern of accumulation dominates or what combination emerges in any place will depend of course on wider political-economic factors, including the scale and intensity of investment in such areas, the form of elite politics in pastoral areas and the degree to which the state supports pastoralism, as against other forms of external investment. As shown in the earlier regional overviews, there are multiple outcomes observed, with pastoralism under capitalism taking on many different forms.

Politics

Pastoralists have often been cast as outsiders: the 'barbarians' outside the settled city states, where civilisation dominates (Lattimore 1951). But this is of course a highly positioned view, reflecting the discourse that sees mobility as backward and agrarian settlement and urbanisation as modernising (Scott 2017). As discussed in the regional overviews, pastoralists have long been central to cross-continental market-based trading systems, often deeply linked into state polities. In some areas, forms of redistributive egalitarianism, combined with mobility and the fluidity of pastoral organisation, may have offset the emergence of a centralised pastoral state rooted in class stratification (Burnham 1979), while in others more differentiated state-like political formations emerged. Bollig (2006), for example, contrasts the highly-stratified Himba society of Namibia with the more egalitarian Pokot of Kenya.

Bonte (1979) describes the contingent and fluid nature of pastoral political relations, based on mobile residence, cyclical migration and circulation of resources through bridewealth across Nilo-Hamitic Eastern Africa. Nevertheless, political configurations have arisen, reflecting hierarchical forms of political structure in some pastoral societies,

including those based on religious elites, an age-based gerontocracy, patron-client or slave-based tribute systems (Winter 1984; Dyson-Hudson 1980). Such forms of centralisation and stratification are in turn frequently linked to sedentarisation and the possibility of accumulation outside the pastoral economy (Baxter 1975).

With the formation of contemporary states, the centres of power often shifted towards settled regions and cities, where the administrative and political structures of state-building were concentrated (Tilly 1989). This process of uneven state-building left pastoral populations on the margins of state power, with ethnic groups and trading routes often straddling national borders. As national territories were established, those living in the borderlands – once at the centre of markets and trade – were now seen as potential threats to sovereign authority, and were sometimes ruthlessly controlled through settlement programmes and violent incursions by state forces, whether through the expansion of imperial power in Ethiopia (Markakis 2011), the sedentarisation of sheep pastoralists in Iran (Salzman 1972; Barth 1961), the decimation of Kazakh horse nomads in the Soviet Union or the displacement of the Bedouin in Egypt or Israel (Horowitz 1981). In these periods of conquest, constructions of pastoral citizenship were fraught, as ethnic identifications across national boundaries were in conflict with newly-assigned citizenship linked to an independent nation state. The contemporary politics of pastoralism in many world regions is thus dominated by this history (Salzmann 2004). Once central foci of political and market power were increasingly marginalised and neglected, as well as violently brutalised, through the imposition of centralised state power.

The prevalence of conflict, war and armed insurgency in pastoral areas is striking. As discussed in relation to the Middle East and North Africa earlier, imperial wars focused on resources such as oil found in extensive rangelands continue, causing dislocation and the collapse of livelihoods. The political settlements that created nation states over the last hundred years or more are not yet resolved, particularly in pastoral areas that straddle arbitrary national borders. While inter-ethnic warfare has long characterised interactions between pastoral groups, often linked to livestock raiding (Hendrickson, Armon, and Mearns 1998) and flexible, autonomous military organisation in small groups was important in pastoral-state conflicts (Irons 1975), the form of conflict has changed. The availability of small-arms is one contributing factor in many parts of Africa, making such conflicts more deadly (Mkutu 2008). But wider insurgencies, as well as focused flashpoints, reflect the failed resolution of post-colonial national questions, and the dynamics of unequal resource access, power and control in such regions (e.g. for Africa, see: Lind, Mutahi, and Oosterom 2017; Lind and Luckham 2017; Eriksen and Lind 2009; Hagmann and Mulugeta 2008; Bogale and Korf 2007).

Very few contemporary states are dominated by pastoral populations, and so gaining access to power, and asserting a pastoralist voice in the political domain, is deeply challenging. In some countries, attempts at decentralisation have aimed to offer some level of autonomy, as in the case of Tibetan regions of China, and forms of state decentralisation may channel funds to 'deprived regions', 'marginal populations' or 'drought-prone ASALs (arid and semi-arid lands)', as in the case of Kenya following the 2010 Constitution or via European Common Agricultural Policy subsidies to certain regions. But in all cases, centralised regional and state power still very much holds sway, as they hold the purse-strings and the political control. The extensive interventions in pastoral regions as part of state-led modernisation projects, whether through the Belt and Road Initiative in China or

Central Asia (Olinga-Shannon, Barbesgaard, and Vervest 2019) or the expansion of infrastructure corridors and associated external investments in eastern Africa (Lind, Okenwa, and Scoones 2020; Regassa, Hizekiel, and Korf 2019), are witness to the control that mostly agrarian, now urban-based, state politics have over pastoral regions. Yet, as state power reconfigures and becomes challenged by other forms of authority – for example Islamic political configurations, such as Al-Qaida in the Sahel or Al-Shabaab in the Horn of Africa – it is no surprise that pastoralists find new alliances, focusing their grievances against the settled state after decades of neglect (Benjaminsen and Ba 2019; Lind, Mutahi, and Oosterom 2017).

Resistance and opposition is evident, of course, whether through struggles against the extension of colonial or imperial power into the pastoral hinterlands or to contemporary 'land grabs', processes of commodification and external investments. But resistance is of course shaped by the changing social, cultural and economic configurations of pastoral societies. With increasing differentiation and engagement with externally-driven capitalist forms of accumulation, as described earlier, there is an emergence of a new form of pastoral elite. No longer is it the sages, prophets and traditional clan leaders, but it is the market-savvy, urban-connected and educated pastoral elite, who may live and work in cities, dress in suits and hire labour in pastoral areas to manage large herds and flocks. Such individuals may be well-connected to centres of power, including the state; sometimes being offered posts as 'representatives' of the pastoral areas as parliamentarians, advisors even senior ministers in government. Such forms of incorporation of course counteract processes of mobilisation from below. As dispersed populations in marginally, poorly-connected areas, building political alliances among pastoralists is challenging, made even more difficult when ethnic animosities trump political, class-based commonalities (Hodgson 2002); although examples of pastoral advocacy and organisation, especially at the international level, do exist (Upton 2014). In most pastoral settings, however, there is a sense of marginalisation from and disenfranchisement with the state and the new pastoral elites who notionally represent them. This may result in some signing up to secessionist, ethnic-nationalist movements or radical jihadist Islamic groups, thus dividing a collective pastoral political position in opposition to state hegemony.

However, just as the long-heralded disappearance of the peasantry has not occurred, nor has pastoralism been eliminated, despite economic challenges and political fracturing. Marginalised and transformed for sure, but persisting in new ways. What are the implications, then, for political mobilisation? Marx ([1852] 2008) famously described the French peasantry as 'sacks of potatoes', unable to transform from a class in itself to a class for itself, and so reliant on alliances with workers and bourgeois intellectuals for wider mobilisation. Yet, such a formulation ignores peasant agency and forms of frequently hidden 'arts of resistance' (Scott 1990) and 'vernacular' traditions of struggle (Shanin 1983, 2018). A more populist vision therefore emphasises that the inherent belonging, solidarity and commitment to the land, agrarian lifestyles and a 'peasant way' will generate peasant-led mobilisations against forms of capitalist oppression. The same applies to pastoralism, whereby flexible evasion of the depredations of states and capital has long been central to 'seeing like a pastoralist' in marginal areas (Lind, Okenwa, and Scoones 2020; Johnsen, Benjaminsen, and Eira 2015; cf. Scott 2010). Do

these contrasting visions of transformation match up to contemporary realities in peasant or pastoralist settings?

With the 'peasant wars' (Wolf 1966) of the past century over and the mass mobilisation of peasant-worker alliances unlikely anywhere under globalised forms of transnational capitalism,[11] the stylised, imagined forms of agrarian resistance rarely apply today (Hall, Scoones, and Tsikata 2015; Akram-Lodhi and Kay 2010a, 2010b). With the fragmentation of agrarian and working classes, we instead see much greater challenges of political mobilisation, with elite forms of politics – sometimes taking an authoritarian, nationalist and populist form – dominating, supported by well-connected, fluid globalised capital (Scoones et al. 2018; Fairbairn et al. 2014). The distance from state power that pastoralists have long experienced is now similarly felt by agrarian populations, who were once served, if only in a limited and partial way, by a 'developmental state' with a sense of belonging as citizens to a nation.

Might pastoralists and peasants therefore gain common cause in a joint struggle against the violence of neoliberal capitalism and a disinterested, elitist state? As pastoralists and peasants face the same challenges, and indeed become increasingly intertwined through reliance on the same land and resources, through common market exchanges and the formation of joint communities, there is perhaps a possibility. Yet, as we look around the world to movements that purport to represent pastoralists, we see a disjuncture. For example, global movements around 'food sovereignty' talk about pastoralists, but often only as an addendum to a long list of 'others' who are not farmers.[12] In what ways do pastoral movements, usually narrowly focused on 'indigenous' and 'cultural' rights, seek to forge alliances with peasants, seen often as in opposition to a now usually long-gone pastoral way-of-life? How can peasant-led movements, focused on family farming, local food systems and land reform take notice of pastoral ways of life and rights over land? Currently, signs of progressive alliance-building between peasants and pastoralists are few-and-far-between, but, as discussed in the concluding section, maybe new opportunities can emerge as we identify how challenges faced by peasants can be reframed from the perspectives of the pastoral world.

Rethinking agrarian studies from a pastoralist perspective

Drawing on a necessarily highly partial review of the changing forms of pastoralism across the world, I have so far argued that the three problematics of agrarian studies – production, accumulation and politics – clearly do apply to pastoral settings. A shift in conceptualisation, embracing critical perspectives from agrarian studies, offers new insights into long-term, rich empirical research on (agro-)pastoralism from across the world. However, this research also suggests new angles of enquiry that are often not central to examinations of more settled agrarian settings that to date have dominated 'peasant studies'. For example, as discussed above, in pastoral contexts non-equilibrium ecologies and the basic biology of livestock management influence production, consumption, exchange and accumulation possibilities; the nature of the resulting property relations for both land

[11]Although some argue that exceptions exist, including Zimbabwe (Moyo and Yeros 2005).

[12]The La Via Campesina 2007 Nyeleni declaration offers a limited exception, with two short sections (pp. 28, 36) dedicated to supporting mobility among pastoralists, see: https://nyeleni.org/DOWNLOADS/Nyelni_EN.pdf (accessed 18 June 2020).

and livestock mean that more flexible patterns of production emerge; different forms of mobility, sometimes linked to redistributive practices for reducing risk, are important in most pastoral settings; and political marginalisation, the consequence of uneven state-building, results in conflicting constructions of citizenship and belonging, influencing political dynamics and the possibilities of mobilisation.

But equally, despite these contrasts, the challenges of settled peasant systems and more mobile pastoralist systems today are increasingly similar. The incursions of capital through resource extraction and land grabbing result in dispossession and marginalisation in both agricultural and pastoral areas (Lind, Okenwa, and Scoones 2020; Hall et al. 2015). As access to resources diminishes, agricultural and pastoral populations must increasingly interact, via exchanges of everything from land to manure to wage labour (Scoones and Wolmer 2002; Hjort 1980), and many formerly pastoral systems are increasingly agro-pastoral, as agriculture is combined with livestock keeping. Today, agrarian populations are less fixed, tied to particular plots over generations and are more mobile, linked into migration circuits and reliant on off-farm labour and piece-work, as peasants become 'footloose' members of 'fractured classes of labour' (Bernstein 2006; Breman 1996), influenced by a 'relentless micro-capitalism' (Davis 2006). Subject to similar processes of accumulation, a more capacious description of 'working people' seems appropriate, uniting various groups across conventional class categories (Shivji 2017).

And among such groups, spatial and temporal diversification linked to mobility – the watchwords of successful pastoralism – are becoming central to all contemporary rural livelihoods (Scoones 2015). The consequences of devastating environmental change – notably an increasingly variable climate – have impacts on pastoralists and peasants alike, as non-equilibrium systems become the norm (Scoones 2004). And the impacts of a globalised and financialised capitalism are felt across rural spaces, as are the political realities of disconnection from an increasingly remote state (Fairbairn et al. 2014).

What then can we learn from pastoralists in thinking about the new challenges for peasants, and *vice versa*? Many of the challenges faced by agrarian populations everywhere are similar – the consequences of late-stage capitalism, consequent environmental destruction and the failure of state-building and democratic opportunity in many rural settings. But in this section I want to argue that the knowledges, practices, skills and forms of political-social organisation – both the social relations of production and productive forces – that we see among pastoralists are perhaps especially well-suited to deal with these features of the contemporary world, characterised by uncertainty, fragility and precarity. Can these features in turn provide a critical lens for a reinterpretation of the intersections of production, accumulation and politics to meet contemporary challenges for both pastoralists and peasants, and so help reframe the questions we must ask in agrarian studies?

Therefore – to generalise massively – if today pastoralists are more like peasants (combining livestock keeping with farming, moving to towns, mixing movement with sedentary lifestyles; for example van der Ploeg 2009) and peasants are more like pastoralists (reliant on mobility through different forms of migration, adopting flexible, diverse livelihoods to adapt to uncertain change), then a more common approach is needed, avoiding the mutual blind-spots generated by contrasting conceptual frames highlighted earlier. This new approach can draw on the diverse empiricism of pastoral studies, but be

inflected with perspectives from agrarian studies, including exploring the implications of the three problematics discussed throughout this article.

This becomes even more imperative as both peasants and pastoralists – in all their variety – as a consequence of being subsumed by globalised capitalism, show strong features of capitalist relations at the centre of processes of production, accumulation and politics. As discussed already, these include heightened inequality due to accelerating social differentiation; reliance by some on exploited wage labour; investment in technologies for upgrading production; engagement in interconnected, global markets; commodification of production, including an increasing individualisation of property relations; and the emergence of elite projects and selective alliances that alienate and marginalise the majority.

So, if today peasants and pastoralists are more similar than they were once assumed to be (maybe they always were, but frames of enquiry and theoretical conceptualisations from different scholarly traditions created false separations), what do we learn from pastoralism in order to recast our understandings of agrarian contexts? And how does an engagement with core themes of agrarian studies in turn inform the analysis of themes repeatedly emerging from a study of pastoral settings? Here I suggest seven themes that cut across the regional literatures on pastoralism discussed earlier and that also resonate with contemporary debates about peasants and agrarian societies.

Living with and from uncertainty

A key feature of pastoral production strategies is to live with and from uncertainty (Krätli and Schareika 2010; Scoones 1994). This has always been essential given the variability of natural environments in pastoral areas. It is even more significant now, as variability in environments is compounded by variabilities in economies, given longer and more complex links to markets, and variability in social contexts, given rising insecurity and conflict in many areas (Schlee 1990). Without glorifying or romanticising the often very harsh conditions under which pastoralists must make a living, the principles that are followed – increasing reliability through tracking context and adapting locally, for example (Roe 2020) – are ones that are relevant to any setting where uncertainty and so lack of knowledge about the future dominates (Scoones and Stirling 2020; Scoones 2019). Learning from pastoralists about strategies for diversification (in space and time) and across production and livelihood strategies is essential. What is the parallel of splitting herds, mixing pasture types, redistributing animals through stock-friendships, building alliances through kin- or clan-based collaboration and solidarity in agrarian settings? Various responses come to mind, including focusing on diversified crop choice; being attuned to seasonality and spatial variation in soils and ecological conditions; ensuring that on- and off-farm income add up to a sustainable livelihood; participating in joint ventures, such as group gardens and irrigation activities, involving the sharing of equipment and building social and political solidarities in farming communities and beyond. None of these are new, but focusing on how to build capabilities to respond to uncertainty brings a new lens, beyond the narrow and negative focus of 'adaptation' and 'building back'. Uncertainties create both vulnerabilities and opportunities, and these are highly differentiated across societies. There are always winners and losers as production, accumulation and politics become reconfigured by the impact of uncertainty, whether from climate change, the

effects of a pandemic or market volatility (Shariff et al. 2020; Little et al. 2001b). For pastoralists, strategies for addressing uncertainty are about exploiting variability and so generating the conditions for successful production and accumulation. This is not just 'coping' or creating 'resilience' yet maintaining poverty. In contrast to much of the literature on 'disasters', uncertainty can be seen as an opportunity; a driver of success, not just a threat and so something to be avoided, mitigated or escaped. Yet, both threats and opportunities are conditioned by the structural features of vulnerability, and so by class and other intersecting axes of difference. Uncertainty as a core theme therefore must be understood not just as a generic property of the contemporary world, but as deeply social and political (Scoones and Stirling 2020), influencing how processes of production, accumulation and politics play out.

Mobilities

Central to living with and from uncertainty is mobility (Turner and Schlecht 2019; Adriansen 2005; Niamir-Fuller 1999; Turner 2009), even in a sedentary world (Khazanov and Wink 2012). Often seen as a reflection of the 'backwardness' of pastoralism, mobility is a thoroughly modern response (Behnke et al. 2011). As Bauman (2013) suggests, we all live in 'liquid times', and movement and mobility is at the core. For sure, restrictions and limitations exist, imposed by states that wish to maintain borders, regulate immigration, create surveillance and restrict flexibility. The desire to control people and territory is strong, and becomes stronger with a nationalist authoritarianism that dominates much contemporary politics. But whether it is the cosmopolitan capitalist elite or those migrating from zones of conflict or environmental disruption, all are making active choices about their livelihoods. Movement offers opportunity and hope, and with this flexibility, responsiveness and the ability to navigate a complex world (Kleist and Thorsen 2016). Pastoralists are adapting styles of mobility – using trucks, motorbikes and snowmobiles – to move themselves, animals, fodder or water, and are enhancing their capacity to manage movement – through mobile phones, satellite weather forecasts, even monitoring with drones (Butt 2016). Mobility is still essential, and this always requires a spatial knowledge of conditions, combined with strong networks of relations. Negotiation is central and brokering, facilitation and exchange relations are key. Mobility is a social, cultural and political process, as much as it delivers the economic livelihood benefits. While peasant and agrarian studies have identified the importance of 'footloose' labour and the diverse 'fragmented' classes associated with 'working people', can we learn about the skills and aptitudes and the networked social relations and politics required to make such livelihoods, now deeply linked to agrarian systems, more effective, positive and hopeful? Pastoralists have always been mobile, and are adapting their forms of mobility to new conditions so as to sustain production and enhance accumulation opportunities through making use of variability. But assuming that peasants are settled and just farm, as some populist, romantic narratives suggest, does a disservice to a more complex reality. Explorations of an agrarian politics of mobility (and often enforced immobility) – whether of pastoral herd movement or migration of people and labour – is a central challenge for future work, bringing an understanding of the lived experiences and skilled practices of mobile pastoralists and peasants together.

Flexible land control

Mobility requires flexibility and adaptability in land control and governance (Peluso and Lund 2011). As already discussed, while individualisation of land holdings in pastoral areas continues apace, in most settings this is not complete and pastoralists combine individual land holdings with more open, flexible property regimes. In highly variable environments, restricted movement and demarcated property boundaries can massively undermine production and accumulation opportunities. Even in ranch systems, as discussed earlier, a greater flexibility is seen in practice than the criss-cross divisions of barbed wire paddocks suggest. The identification of 'open property' systems – hybrid constructions of private, communal and open access – in pastoral areas emphasises how production, accumulation and longer-term sustainability can be achieved outside a standardised, regulated tenure form (Moritz 2016, Moritz et al. 2018). The tendency to carve up landscapes through processes of land privatisation, either driven by local elite interests and land grabbing or 'tenure reform' projects, can seriously undermine potentials for pastoralists and peasants alike. With the demands of increased flexibility and opportunism in farming, just as in livestock grazing, delimiting plots and erecting fences and carving up communally-held territory can have devastating impacts. While the image of the peasant yeoman farmer is a man (usually) intimately attached to a plot of land, inherited over generations, the reality is more complex. Men, women and younger people may have different plots in different parts of the landscape, each held and managed in different ways. The nature of authority that governs these patches varies too, as kin, marriage, spiritual/religious and state relations intersect. And different resources within these areas – soils, water, trees, crops, grasslands – are governed in different ways and transformed through different technologies and practices – irrigation, gardening, soil enrichment, and so on. The point is that, once again, the practice of 'peasant' farming is very different to the colonial visions of a static 'yeoman farmer'; or indeed the more radical, but still unrealistic, construction of the 'food sovereign' peasant. Peasant practice is more similar to what pastoralists have always done – making use of complex landscapes, deploying technologies, social relations and networks in order to generate production and in turn accumulate from a highly diverse, variable environment. Depending on local agency, social relations and institutional negotiations, different people – pastoralists or peasants; men or women; young or old – are able to generate opportunities from such a dynamic setting in different ways. As a result, there are inevitable inclusions and exclusions in such complex land control arrangements (cf. Hall, Hirsch, and Li 2011), with implications for social differentiation and class formation. Hybrid and flexible land control regimes, with a 'bricolage' of institutional forms (Cleaver 2012), thus create a variegated land politics in both pastoral and peasant settings; one very far from the imagined regulated system of land and tenure reform programmes around the world.

Dynamic social formations

The effectiveness of pastoral responses to uncertainty is enhanced by particular domestic social formations and production practices that facilitate flexibility. Examples include the splitting of households to allow for mobility; developing skills and assigning responsibilities to different people, based on gender and age, to enhance production; and deploying

labour, including wage labour, to allow for new forms of residence pattern and urban income earning. Redistributive practices, including stock friendships, loans and sharing of animals, and flexible property arrangements for livestock, including with labour, are also important in many pastoral settings, as discussed earlier. These strategies not only act to spread risk, but crucially, and of course linked, build networks and solidarities to increase opportunities for accumulation. Domestic formations may be linked to particular historical, ethnic-cultural traditions, but these are flexible, and the reinvention of 'traditional' forms of household, age-set and gender, generational and kin relations more widely are important features of how pastoralists adapt. Forms of social reproduction – and the gender and class intersections that these imply – are thus flexible and dynamic, responding to change yet often under-played in standard accounts of accumulation and its politics in agrarian studies (Cousins et al. 2018; Bhattacharya 2017). Old ideas of the fixed, delimited peasant 'household' are thus challenged, as flexible arrangements become the necessary norm for everyone navigating today's turbulent world, with gender and generational issues centre-stage. Within a household, different people may be pursuing different livelihood options – looking after animals, maybe doing some farming, having a trading business or migrating to urban centres. Such processes of diversification and 'de-agrarianisation' mean that livelihoods are increasingly constructed between different spaces and social formations: between rural and urban, the family and individual (Bryceson 1999). A focus on social organisation, within and beyond the household, emphasises a more complex view of social reproduction, differentiation and class formation, beyond simple processes of rural wealth stratification. As White (2018) argues, and just as the empirical literature on pastoralism implies, bringing together Chayanovian and Marxist perspectives can generate important insights into social differentiation, as demographic change and shifts in domestic formations intersect with more structural, socio-economic processes.

Reimagined communities and moral economies

Such social dynamics, in turn, require a reimagining of forms of community and moral economy too, as old practices of social redistribution give way to new ones, informed by contemporary challenges. In pastoral areas, networks for collective well-building or protecting water points for livestock may be built through WhatsApp groups, cutting across traditional social barriers; redistributive exchanges may be through mobile money transfers and forms of solidarity and welfare support may be facilitated less by kin groups, but more by mosques, temples or churches (Tasker 2018). All these features of a contemporary moral economy, rooted in flexible associational life, linked to extended but changing networks and assisted by new forms of technology, are central to contemporary pastoral production, accumulation and politics. As households become fragmented and livelihoods more diversified, forms of collectivity and solidarity may change, as activities become more individualised and less reliant on the family or clan. Peasant societies are no different. The 'moral economy of the peasant' (Scott 1977) still exists, but in new forms, inflected by and responding to today's challenges (Edelman 2005). Yet moral economies are not unitary or necessarily unifying, as in increasingly unequal societies there are differences in patterns of redistributive support by gender, age and wealth. This has important implications for social difference and class dynamics and so wider agrarian politics, as

some are able to draw on such social resources and networks to survive shocks while others are not. Whether in relation to climate change or pandemic disease threats, these changing features of moral economy and social solidarity become increasingly important. Despite the trend towards individualisation, commoditisation and financialisation, driven by the penetration of globalised capitalism into the remotest of rural areas, perhaps paradoxically such new forms of moral economy are even more significant today for peasants and pastoralists alike, especially for the increasingly precarious poor.

Real markets

As emphasised throughout this article, pastoralists have long been connected to markets and trade; without long-distance exchange, across borders and trade between livestock and grain, pastoral livelihoods would be impossible. The nature of circulation and exchange has changed of course as economies shift and specialisation and differentiation occurs, but the necessity of market engagement is undisputed. The idea of isolated, 'subsistence' producers relying on local economies has never fitted. Under changing economic conditions – whether shifting demand for products or regulatory requirements for quality – market relations change, but the importance of markets, often across long value chains, as a central part of livelihoods cannot be denied for pastoral systems (Mahmoud 2008). Of course peasant producers have always engaged in markets too, but the image of the mythical subsistence peasant is strong, from older populist accounts[13] to more recent political interventions around 'food sovereignty' and 'local autonomy'. In engaging with the extension of capitalist relations, one response is to suggest a retreat into an imagined past, while another is to recognise that markets are constructed through social relations and politics; and these can be reconfigured. Trade and markets are not good or bad, just features of exchange and circulation in any economic system. Thus, work looking at pastoral markets is especially informative, as it emphasises the political and social dynamics of market exchange, being embedded in 'real markets'. These are far from egalitarian and riven with power dynamics, often dominated by pastoral elites, but how to navigate such markets or create new ones is a major challenge for pastoralists as it is for peasants. This may mean thinking about new forms of trade that allow for safe products that are compatible with mobility, as in 'commodity-based trade' of livestock in Africa (Thomson et al. 2004) or it may mean exploring new market options for 'artisanal' products of high value that are less subject to price volatility in oligopolistic markets for milk, cheese and meat in Europe (Reinert 2006; De Roest 2000). In each case, this means articulating market-making with socially-embedded practices, creating 'real' or 'nested' markets (Van der Ploeg, Jingzhong, and Schneider 2012; de Alcántara 1992) suited to local conditions. Yet such reimagined markets and food systems must articulate with unequal relations within global food systems. Whether in conventional agricultural product markets or around initiatives in fair-trade or organic-certified marketing, this means thinking about the social and political dimensions of market networks, and how

[13]Although of course Chayanov, perhaps greatest promoter of peasant 'populism', was well aware of market connections: 'Where are the social threads that bind Sidor Karpov's farm, lost in the Perm' forests, to the London banks and oblige him to feel the effects of changes in the pulse rate of the London stock exchange?' (Chayanov [1925] 1966, 257; quoted by White et al. 2012, 622).

patterns of accumulation through market engagements influence the emergence of capitalist classes amongst pastoralists and peasants alike.

Networked politics

As production and accumulation are reconfigured through new uncertain, highly volatile contexts in environmental, economic and social conditions, so are politics. Studies of pastoralism highlight a range of political formations: from hierarchical arrangements to more horizontal forms. In all cases, hybrid, networked arrangements are observed, suited to responding flexibly to rapidly-changing situations under conditions of uncertainty. As discussed earlier, across regions, processes of differentiation are increasing local inequalities, resulting in the emergence of pastoral elites. Such new forms of elite politics often do not serve broader pastoral society well, just as in agrarian settings. The challenges of alliance-building and mobilisation to challenge state-capital alliances have already been noted, both in pastoral and peasant settings where similar challenges of fractured classes undermine the generation of strong cross-class coalitions. Identity politics, with appeals to indigeneity, tradition and place, may sometimes even undermine progressive moves, due to capture by older male elites, assisted sometimes by well-meaning outsiders, and the reinforcement of the patriarchal norms of 'tradition'. As pastoral and peasant societies are incorporated into global debates about the future of food, economy and environment, precipitated by discourses around the climate crisis for example, the importance of articulating a political perspective rooted in the local conditions of production, circulation and exchange is essential. With environmentalist discourses emphasising global carbon reduction targets, making the case for low-impact livestock production and sustainable farming becomes vital in a new agrarian politics that takes climate change seriously. This means going beyond simplistic targets (Garnett et al. 2017) focused on proclamations about required dietary shifts and food-mile reductions to thinking more deeply about how meeting the climate challenge requires addressing the shifting the nature of globalised production and food systems, and so the dynamics of capitalist accumulation, in ways that protect the environment and livelihoods especially of poorer and marginalised peoples (McMichael 2013). Here pastoralists and peasants across the world may be able to point in important ways to a new politics of food for a fast-transforming world.

Conclusion

These seven themes – living with and off uncertainty; mobility and movement to respond to variability; flexible land control and new forms of tenure; dynamic social formations; collective social relations for a new moral economy; engaging with complex 'real markets' and a networked politics for a transforming world – each draw on fundamental insights from pastoralism, as highlighted in the diverse literatures reviewed in this paper. Each of these themes also articulates clearly with the central concerns of agrarian studies, but offer new directions for analyses of the three problematics of production, accumulation and politics. As the discussion has shown, these themes are also increasingly relevant to more settled agrarian 'peasant' contexts. In sum, as argued throughout this paper, pastoralists and peasants have more in common than we often think, and insights

from studies of pastoral settings can be useful in recasting questions, perspectives and approaches more broadly.

Coming from a different conceptual and theoretical tradition, studies of peasant societies have highlighted important themes that, as this article has shown, are vital for understanding pastoral settings and can help us reinterpret and extend rich empirical literatures. However, equally, insights from pastoral studies, as encapsulated by these seven themes – and their nuances, inflections and particularities – suggest significant extensions to the classical agrarian studies framings of conventional peasant studies. Across the themes, two additions in particular are suggested. Studies of pastoralism emphasise a greater articulation with understandings of ecology, landscape and environmental change. While political ecology has had some influence on agrarian studies (Perreault, Bridge, and McCarthy 2015), it has been partial and incomplete, even though ecological conditions influence each of the three problematics quite fundamentally, while of course agrarian political economy in turn influences ecologies and environmental change too. In addition, in order to complement the structural analysis of the material basis of production, accumulation and politics, a greater attention to the social and cultural relations at the heart of how agrarian dynamics emerges as important. Perhaps it is the strong anthropological influences of studies of pastoralism, but the importance of age, gender, kinship and domestic and wider social and domestic formations are all seen to be key in constructing how production is organised, how accumulation occurs, as well as the possibilities and constraints of political formations.

As a result, a focus on socially- and culturally-informed micro-politics comes to the fore to complement the big-sweep historical analysis of some agrarian political economy. For, as Marx ([1857–8] 1973) points out in the *Grundrisse*, it is 'the multiple determinations' – the particularities of people and place – that must dialectically inform our understanding of 'the concrete' – the structural features that explain change, in terms of trends and tendencies, such as class and political alliances and long-term trajectories of accumulation within and outside rural spaces. And it is this broader, and more flexible, empirically-grounded, but theoretically sophisticated, version of method in political economy that Marx was advocating. In some ways this perhaps suggests a productive combination of the particularities of anthropological method with the broader insights from historical political economy, as reflected in past work on pastoralism and agrarian studies respectively.

So can studies of pastoralism, informed by these seven themes, help update 'peasant studies'? Certainly, yes. But, equally, studies of pastoralism need to get beyond existing theoretical, disciplinary and regional silos and sometimes narrow particularism to reflect on changes on pastoralism more comparatively, historically and in globalised settings. This should encourage studies of pastoralism to take seriously the core problematics of agrarian studies – around production, accumulation and politics – as part of a more flexible, but still historical and materialist approach. Drawing inspirations from pastoralist contexts would in turn allow a more expansive analysis of the agrarian studies problematics through the seven themes highlighted above.

To conclude, the separation of pastoral and peasant studies over so many decades does not make sense today, if it ever did. There are far more commonalities than differences, and drawing on a long tradition of rich empirical studies of pastoralism, a more open, flexible outlook encompassing a greater range of disciplines and methods for agrarian studies is called for. The seven themes emerging from an understanding pastoral settings

highlighted earlier – uncertainty, mobility, diversification, flexible social relations, moral economies, real markets and networked politics – can therefore each help inject new questions and empirical foci into a reinvigorated understanding of the contemporary dynamics of agrarian change – for both pastoralists and peasants, and their many hybrids, across the world.

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References

Adriansen, H. K. 2005. “Pastoral Mobility: A Review.” *Nomadic Peoples* 9 (1/2): 207–214.

Agrawal, A. 1999. *Greener Pastures: Politics, Markets and Community among Migrant Pastoral People*. Durham, NC: Duke University Press.

Agrawal, A., and V. K. Saberwal. 2004. “Whither South Asian Pastoralism? An Introduction.” *Nomadic Peoples* 8 (2): 36–53.

Ajl, M. 2020. “Does the Arab Region have an Agrarian Question?” *Journal of Peasant Studies*. doi:10.1080/03066150.2020.1753706.

Aklilu, Y., and A. Catley. 2009. *Livestock Exports From the Horn of Africa: An Analysis of Benefits by Pastoralist Wealth Group and Policy Implications*. Boston: Feinstein International Center, Tufts University.

Akram-Lodhi, A. H., and C. Kay. 2010a. “Surveying the Agrarian Question (Part 1): Unearthing Foundations, Exploring Diversity.” *Journal of Peasant Studies* 37 (1): 177–202.

Akram-Lodhi, A. H., and C. Kay. 2010b. “Surveying the Agrarian Question (Part 2): Current Debates and Beyond.” *Journal of Peasant Studies* 37 (2): 255–284.

Amanor, K. S. 1995. “Dynamics of Herd Structures and Herding Strategies in West Africa: A Study of Market Integration and Ecological Adaptation.” *Africa* 65 (3): 351–394.

Amin, S. 1977. *Imperialism and Unequal Development*. Hassocks: Harvester Press.

Anderson, D. M. 1988. “Cultivating Pastoralists: Ecology and Economy among the Il Chamus of Baringo, 1840–1980.” In *The Ecology of Survival: Case Studies From Northeast African History*, edited by D. Johnson, and D. Anderson, 241–260. Boulder: Westview Press.

Anderson, D. M., and V. Broch-Due, eds. 2000. *The Poor Are Not Us: Poverty And Pastoralism In Eastern Africa*. Oxford: James Currey.

Appadurai, A. 1988. *The Social Life of Things: Commodities in Cultural Perspective*. Cambridge: Cambridge University Press.

Archer, A. P. 2018. "The men on the Mountainside: An Ethnography of Solitude, Silence and Sheep Bells." *Journal of Rural Studies* 64: 103–111.

Aronson, D. R. 1980. "Kinsmen and Comrades: Towards a Class Analysis of the Somali Pastoral Sector." *Nomadic Peoples*, 14–23.

Asad, T. 1970. *The Kababish Arabs: Power, Authority and Consent in a Nomadic Tribe*. London: C. Hurst.

Asad, T. 1978. "Equality in Nomadic Social Systems? Notes Towards the Dissolution of an Anthropological Category." *Critique of Anthropology* 3 (11): 57–65.

Asad, T., I. Cunnison, and L. G. Hill. 1976. "Settlement of Nomads in the Sudan. A Critique of Present Plans." In *Some Aspects of Pastoral Nomadism in the Sudan*, edited by A. Ahmed, 174–192. Khartoum: Sudan National Population Committee and the Economic and Social Research Council.

Axelby, R. 2007. "'It Takes Two Hands to Clap': How Gaddi Shepherds in the Indian Himalayas Negotiate Access to Grazing." *Journal of Agrarian Change* 7 (1): 35–75.

Axelby, R. 2016. "Who has the Stick has the Buffalo': Processes of Inclusion and Exclusion on a Pasture in the Indian Himalayas." *South Asia Multidisciplinary Academic Journal* 13.

Ayeb, H., and R. Saad. 2012. *Agrarian Transformation in the Arab World: Persistent and Emerging Challenges*. Cairo: The American University in Cairo Press.

Balikci, A. 1981. "Pastoralism and Class Differentiation among the Lakenkhel." In *Change and Development. In Nomadic and Pastoral Societies*, edited by J. Galaty, and P. Salzman, 150–157. Leiden: Brill.

Barth, F. 1961. *Nomads of South Persia: The Basseri Tribe of the Khamseh Confederacy*. Redditch: Read Books Ltd.

Barth, F., R. Firth, and B. S. Yamey. 1964. *Capital, Investment, and the Social Structure of a Pastoral Nomad Group in South Persia*. New Brunswick, NJ: Transaction Publishers.

Bassett, T. J. 1994. "Hired Herders and Herd Management in Fulani Pastoralism (Northern Côte d'Ivoire)(Bergers salariés et gestion du troupeau chez les éleveurs peuls du Nord de la Côte-d'Ivoire)." *Cahiers d'Etudes Africaines* 34 (133/5): 147–173.

Bassett, T. J., and Matthew D. Turner. 2007. "Sudden Shift or Migratory Drift? Fulbe Herd Movements to the Sudano-Guinean Region of West Africa." *Human Ecology* 35 (1): 33–49.

Bates, D. G. 1973. *Nomads and Farmers: A Study of the Yoruk of Southeastern Turkey*. Ann Arbor: University of Michigan: Ann Arbor.

Bauer, K. 2005. "Development and the Enclosure Movement in Pastoral Tibet Since the 1980s." *Nomadic Peoples* 9 (1–2): 53–81.

Bauman, Z. 2013. *Liquid Modernity*. Chichester: John Wiley & Sons.

Baxter, P. T. 1975. "Some Consequences for Social Relationships of Sedentarization." In *Pastoralism in Tropical Africa. Studies Presented and Discussed at the XIIIth International African Seminar, Niamey, December 1972*, edited by T. Monod, 206–228. London: Oxford University Press for International African Institute.

Beck, L. 1980. "Herd Owners and Hired Shepherds: The Qashqa'i of Iran." *Ethnology* 19 (3): 327–351.

Behnke, R. 1983. "Production Rationales: the Commercialization of Subsistence Pastoralism." *Nomadic Peoples*, 3–33.

Behnke, R. 1987. "Cattle Accumulation and the Commercialization of the Traditional Livestock Industry in Botswana." *Agricultural Systems* 24 (1): 1–29.

Behnke, R. 2008. "The Economic Contribution of Pastoralism: Case Studies From the Horn of Africa and Southern Africa." *Nomadic Peoples* 12 (1): 45–79.

Behnke, R., M. Fernandez-Gimenez, M. Turner, and F. Stammler. 2011. "Pastoral Migration. Mobile Systems of Livestock Husbandry." In *Animal Migration: A Synthesis*, edited by E. J. Milner-Gulland, J. Fryxell, and A. Sinclair, 144–252. Oxford: Oxford University Press.

Behnke, R., A. Jabbar, A. Budanov, and G. Davidson. 2005. "The Administration and Practice of Leasehold Pastoralism in Turkmenistan." *Nomadic Peoples*, 147–169.

Behnke, R., I. Scoones, and C. Kerven, eds. 1993. *Range Ecology at Disequilibrium: New Models of Natural Variability and Pastoral Adaptation in African Savannas*. London: Overseas Development Institute.

Beinart, W. 2007. "Transhumance, Animal Diseases and Environment in the Cape, South Africa." *South African Historical Journal* 58 (1): 17–41.

Benjaminsen, T. 2015. “Political Ecologies of Environmental Degradation and Marginalization.” In *The Routledge Handbook of Political Ecology*, edited by T. Perreault, G. Bridge, and J. McCarthy, 354–365. London: Routledge.

Benjaminsen, T. A., and B. Ba. 2019. “Why do Pastoralists in Mali Join Jihadist Groups? A Political Ecological Explanation.” *Journal of Peasant Studies* 46 (1): 1–20.

Benjaminsen, T., and C. Lund, eds. 2001. *Politics, Property and Production in the West African Sahel: Understanding Natural Resources Management*. Uppsala: Nordic Africa Institute.

Benjaminsen, T., H. Reinert, E. Sjaastad, and M. Nils Sara. 2015. “Misreading the Arctic Landscape: A Political Ecology of Reindeer, Carrying Capacities, and Overstocking in Finnmark, Norway.” *Norsk Geografisk Tidsskrift-Norwegian Journal of Geography* 69 (4): 219–229.

Berge, G. 2001. “Tuareg Notions of Space and Place in Northern Mali.” In *Politics, Property and Production in the West African Sahel: Understanding Natural Resource Management*, edited by T. Benjaminsen, and C. Lund, 182–207. Uppsala: Nordic Africa Institute.

Bergius, M., T. A. Benjaminsen, F. Maganga, and H. Buhaug. 2020. “Green Economy, Degradation Narratives, and Land-use Conflicts in Tanzania.” *World Development* 129: 104850.

Bernstein, H. 1996. “Agrarian Questions Then and now.” *Journal of Peasant Studies* 24 (1/2): 22–59.

Bernstein, H. 2003. “Land Reform in Southern Africa in World-Historical Perspective.” *Review of African Political Economy* 30 (96): 203–226.

Bernstein, H. 2006. “Is There an Agrarian Question in the 21st Century?” *Canadian Journal of Development Studies/Revue Canadienne D’études du Développement* 27 (4): 449–460.

Bernstein, H. 2010. *Class Dynamics of Agrarian Change*. Sterling, VA: Kumarian Press.

Bhattacharya, T. 2017. *Social Reproduction Theory: Remapping Class, Recentering Oppression*. London: Pluto Press.

Biber, J.-P. 2010. “Transhumance in France.” *Pastoralism* 1 (1): 91–98.

Bjørklund, I. 2013. “Domestication, Reindeer Husbandry and the Development of Sámi Pastoralism.” *Acta Borealia* 30 (2): 174–189.

Black, J. 1972. “Tyranny as a Strategy for Survival in an ‘Egalitarian’ Society: Luri Facts Versus an Anthropological Mystique.” *Man* 7 (4): 614–634.

Blench, R. 1985. “Pastoral Labour and Stock Alienation in the Sub Humid and Arid Zones of West Africa.” *Pastoral Development Network Paper*, 19e. London: Overseas Development Institute.

Bobrow-Strain, A. 2001. “Between a Ranch and a Hard Place: Violence, Scarcity, and Meaning in Chiapas, Mexico.” In *Violent Environments*, edited by N. Peluso, and M. Watts, 155–185. Ithaca: Cornell University Press.

Bogale, A., and B. Korf. 2007. “To Share or not to Share?(Non-) Violence, Scarcity and Resource Access in Somali Region, Ethiopia.” *The Journal of Development Studies* 43 (4): 743–765.

Bollig, M. 1997. “Risk and Risk Minimisation among Himba Pastoralists in Northwestern Namibia.” *Nomadic Peoples* 1: 66–89.

Bollig, M. 2006. *Risk Management in a Hazardous Environment: A Comparative Study of Two Pastoral Societies*. New York: Springer.

Bonte, P. 1977. *Non-Stratified Social Formations Among Pastoral Nomads*. London: Gerald Duckworth.

Bonte, P. 1979. “Pastoral Production, Territorial Organization and Kinship in Segmentary Lineage Societies.” In *Social and Ecological Systems*, edited by P. Burnham, and R. Ellen, 203–234. New York: Academic Press.

Bonte, P. 1981a. “Ecological and Economic Factors in the Determination of Pastoral Specialization.” In *Change and Development in Nomadic and Pastoral Societies*, edited by J. Galaty, and P. Salzman, 33–49. Leiden: Brill.

Bonte, P. 1981b. “Kinship and Politics. The Formation of the State among the Pastoralists of the Sahara and the Sahel.” In *The Study of the State*, edited by J. Claessen, and P. Skalnik, 35–58. The Hague: Mouton.

Bonte, P. 1981c. “Marxist Theory and Anthropological Analysis: the Study of Nomadic Pastoralist Societies.” In *The Anthropology of Pre-Capitalist Societies*, edited by J. Kahn, and J. Llobera, 22–56. London: MacMillan.

Borgerhoff Mulder, M., I. Fazzio, W. Irons, R. L. McElreath, S. Bowles, A. Bell, T. Hertz, and L. Hazzah. 2010. "Pastoralism and Wealth Inequality: Revisiting an old Question." *Current Anthropology* 51 (1): 35–48.

Borras, S., Jr. 2009. "Agrarian Change and Peasant Studies: Changes, Continuities and Challenges – an Introduction." *Journal of Peasant Studies* 36 (1): 5–31.

Bourgeot, A. 1975. "Analysis of Production Relationships Between Pastoralists and Farmers of Ahaggar." In *Pastoralism in Tropical Africa*, edited by T. Monod, 263–284. Oxford: Oxford University Press for the International African Institute.

Bradburd, D. 1980. "Never Give a Shepherd an Even Break: Class and Labor among the Komachi." *American Ethnologist* 7 (4): 603–620.

Bradburd, D. 1984. "Marxism and the Study of Pastoralists." *Nomadic Peoples*, 3–14.

Bradburd, D. 1990. *Ambiguous Relations: Kin, Class, and Conflict Among Komachi Pastoralists*. Washington, DC: Smithsonian Institution Press.

Bradburd, D. 1997. "Nomads and Their Trade Partners: Historical Context and Trade Relations in Southwest Iran, 1840–1975." *American Ethnologist* 24 (4): 895–909.

Brännlund, I., and P. Axelsson. 2011. "Reindeer Management During the Colonization of Sami Lands: A Long-Term Perspective of Vulnerability and Adaptation Strategies." *Global Environmental Change* 21 (3): 1095–1105.

Brass, T. 1984. "Permanent Transition or Permanent Revolution: Peasants, Proletarians, and Politics." *Journal of Peasant Studies* 11 (3): 108–117.

Breman, J. 1996. *Footloose Labour: Working In India's Informal Economy*. Cambridge: Cambridge University Press.

Breuer, I., and D. Kreuer. 2012. "Market Spaces in a Globalising Periphery: Livestock Trade, Borders, and Liberalisation in Eastern Morocco." In *Economic Spaces of Pastoral Production and Commodity Systems: Markets and Livelihoods*, edited by J. Gertel, and R. Le Heron. Farnham: Ashgate Publishing.

Brockington, D. 2002. *Fortress Conservation: The Reservation of the Mkomazi Game Reserve, Tanzania*. Oxford: James Currey.

Browman, D. L. 1990. *High Altitude Camelid Pastoralism of the Andes*. London: Belhaven Press.

Brown, L. H. 1971. "The Biology of Pastoral Man as a Factor in Conservation." *Biological Conservation* 3 (2): 93–100.

Bruun, O., and L. Narangoa. 2011. *Mongols From Country to City: Floating Boundaries, Pastoralism And City Life In The Mongol Lands*. Copenhagen: Nias Press.

Bryceson, D. 1999. "Sub-saharan Africa Betwixt and Between: Rural Livelihoods Practices and Policies." ASC Working Paper 43/1999. Leiden: African Studies Centre.

Burnham, P. 1979. "Spatial Mobility and Political Centralization in Pastoral Societies." In *Pastoral Production and Society*, edited by L'equipe ecologie et Antropologie des societies pastorales, 349–360. Cambridge: Cambridge University Press.

Butt, B. 2016. "Ecology, Mobility and Labour: Dynamic Pastoral Herd Management in an Uncertain World." *Revue Scientifique et Technique de l'OIE* 35 (2): 461–472.

Byres, T. J. 1991. "The Agrarian Question." In *A Dictionary of Marxist Thought*, edited by T. Bottomore, 2nd ed., 9–11. Oxford: Blackwell.

Byres, T. J. 1995. "Political Economy, the Agrarian Question and the Comparative Method." *Journal of Peasant Studies* 22 (4): 561–580.

Cao, J., E. T. Yeh, N. M. Holden, Y. Yang, and G. Du. 2013. "The Effects of Enclosures and Land-use Contracts on Rangeland Degradation on the Qinghai–Tibetan Plateau." *Journal of Arid Environments* 97: 3–8.

Caravani, M. 2019. "'De-Pastoralisation' in Uganda's Northeast: From Livelihoods Diversification to Social Differentiation." *Journal of Peasant Studies* 46 (7): 1323–1346.

Catley, A., and Y. Aklilu. 2013. "Moving Up or Moving Out? Commercialization, Growth and Destitution in Pastoralist Areas." In *Pastoralism and Development in Africa*, edited by A. Catley, J. Lind, and I. Scoones, 108–120. London: Routledge.

Catley, A., J. Lind, and I. Scoones. 2013. “Development at the Margins: Pastoralism in the Horn of Africa.” Pastoralist Areas.” In *Pastoralism and Development in Africa*, edited by A. Catley, J. Lind, and I. Scoones, 27–52. London: Routledge.
Chakravarty-Kaul, M. 1997. “Transhumance – A Pastoral Response to Risk and Uncertainty in the Himalayas.” *Nomadic Peoples* 1 (1): 133–150.
Chance, N. A., and E. N. Andreeva. 1995. “Sustainability, Equity, and Natural Resource Development in Northwest Siberia and Arctic Alaska.” *Human Ecology* 23 (2): 217–240.
Chang, C., and H. Koster. 1994. *Pastoralists At The Periphery: Herders In A Capitalist World*. Tuscon: University of Arizona Press.
Chatty, D. 1986. *From Camel To Truck: The Bedouin In The Modern World*. New York: Vantage Press.
Chatty, D. 1996. *Mobile Pastoralists: Development Planning and Social Change in Oman*. New York: Columbia University Press.
Chatty, D. 2006a. “Multinational oil Exploitation and Social Investment: Mobile Pastoralists in the Sultanate of Oman.” In *Nomadic Societies in the Middle East and North Africa*, edited by D. Chatty, 496–522. Leiden: Brill.
Chatty, D. 2006b. “Nomads of the Middle East and North Africa Facing the 21st Century.” In *Nomadic Societies in the Middle East and North Africa*, edited by D. Chatty, 1–30. Leiden: Brill.
Chatty, D. 2010a. *Displacement and Dispossession in the Modern Middle East*. Cambridge: Cambridge University Press.
Chatty, D. 2010b. “The Bedouin in Contemporary Syria: the Persistence of Tribal Authority and Control.” *The Middle East Journal* 64 (1): 29–49.
Chayanov, A. V. (1925) 1966. *AV Chayanov On The Theory Of Peasant Economy*. Manchester: Manchester University Press.
Chome, N., E. Gonçalves, I. Scoones, and E. Sulle. 2020. “‘Demonstration Fields’, Anticipation, and Contestation: Agrarian Change and the Political Economy of Development Corridors in Eastern Africa.” *Journal of Eastern African Studies*, online first: 1–19.
Cleaver, F. 2012. *Development Through Bricolage: Rethinking Institutions for Natural Resource Management*. London: Routledge.
Cole, D. P. 2006. “New Homes, new Occupations, new Pastoralism: Al Murrah Bedouin, 1968-2003.” In *Nomadic Societies in the Middle East and North Africa*, edited by D. Chatty, 370–392. Leiden: Brill.
Cole, P., and B. McQuinn. 2015. *The Libyan Revolution And Its Aftermath*. Oxford: Oxford University Press.
Collantes, F. 2009. “The Demise of European Mountain Pastoralism: Spain 1500–2000.” *Nomadic Peoples* 13 (2): 124–145.
Comaroff, J., and J. L. Comaroff. 1990. “Goodly Beasts, Beastly Goods: Cattle and Commodities in a South African Context.” *American Ethnologist* 17 (2): 195–216.
Cousins, B. 1996. “Livestock Production and Common Property Struggles in South Africa’s Agrarian Reform.” *Journal of Peasant Studies* 23 (2–3): 166–208.
Cousins, B., A. Dubb, D. Hornby, and F. Mtero. 2018. “Social Reproduction of ‘Classes of Labour’in the Rural Areas of South Africa: Contradictions and Contestations.” *Journal of Peasant Studies* 45 (5–6): 1060–1085.
Cousins, B., D. Weiner, and N. Amin. 1992. “Social Differentiation in the Communal Lands of Zimbabwe.” *Review of African Political Economy* 19 (53): 5–24.
Croze, H. J., and M. D. Gwynne. 1980. “Methodology for the Inventory and Monitoring of Pastoral Ecosystem Processes.” In *Future Of Pastoral Peoples: Research Priorities For The 1980s; Proceedings Of A Conference Held In Nairobi, Kenya, 4-8 Aug. 1980*, edited by J. Galaty, D. Aronson, P. Salzman, and A. Chouinard. Ottawa: IDRC.
Cummins, B. D. 2009. *Bear Country: Predation, Politics, and the Changing Face of Pyrenean Pastoralism*. Durham: Carolina Academic Press.
Cunnison, I. 1966. *Baggara Arabs: Power and The Lineage In A Sudanese Nomad Tribe*. Oxford: Clarendon Press.
Dahl, G. 1979a. *Suffering Grass: Subsistence and Society of Waso Borana*. Stockholm: Stockholm University.

Dahl, G. 1979b. "Ecology and Equality: The Boran Case." In *Pastoral Production and Society*, edited by Équipe Écologie et Anthropologie des Sociétés Pastorales, 261–282. Cambridge: Cambridge University Press.

Dahl, G. 1980. "Production in Pastoral Societies." In *Future Of Pastoral Peoples: Research Priorities For The 1980s; Proceedings of a Conference Held In Nairobi, Kenya, 4-8 Aug. 1980*, edited by J. Galaty, D. Aronson, P. Salzman, and A. Chouinard. Ottawa: IDRC.

Dahl, G. 1987. "Women in Pastoral Production: Some Theoretical Notes on Roles and Resources." *Ethnos* 52 (1–2): 246–279.

Dahl, G., and A. Hjort. 1976. *Having Herds: Pastoral Herd Growth and Household Economy*. Stockholm: Department of Social Anthropology, University of Stockholm.

Dardel, C., L. Kergoat, P. Hiernaux, E. Mougin, M. Grippa, and C. J. Tucker. 2014. "Re-greening Sahel: 30 Years of Remote Sensing Data and Field Observations (Mali, Niger)." *Remote Sensing of Environment* 140: 350–364.

Davis, D. 1996. "Gender, Indigenous Knowledge, and Pastoral Resource use in Morocco." *Geographical Review* 86 (2): 284–288.

Davis, D. 2004. "Desert 'Wastes' of the Maghreb: Desertification Narratives in French Colonial Environmental History of North Africa." *Cultural Geographies* 11 (4): 359–387.

Davis, M. 2006. *Planet of Slums*. London: Verso.

de Alcántara, C. H. 1992. "Introduction: Markets in Principle and Practice." *The European Journal of Development Research* 4 (2): 1–16.

De Roest, K. 2000. *The Production of Parmigiano-Reggiano Cheese: The Force Of An Artisanal System In An Industrialised World*. Uitgeverij Van Gorcum.

Dong, S. 2016. "Overview: Pastoralism in the World." In *Building Resilience of Human-Natural Systems of Pastoralism in the Developing World*, edited by S. Dong et al., 1–37. Berlin: Springer.

Dupire, M. 1970. *Organisation Sociale Des Peul: Étude D'ethnographie Comparée*. Paris: Librarire Plon.

Dyson-Hudson, N. 1966. *Karimojong Politics*. Oxford: Clarendon Press.

Dyson-Hudson, R. 1980. "Toward a General Theory of Pastoralism and Social Stratification." *Nomadic Peoples*, 1–7.

Dyson-Hudson, R., and N. Dyson-Hudson. 1980. "Nomadic Pastoralism." *Annual Review of Anthropology* 9 (1): 15–61.

Edelman, M. 1995. "Rethinking the Hamburger Thesis: Deforestation and the Crisis of Central America's Beef Exports." In *The Social Causes of Environmental Destruction in Latin America*, edited by M. Painter, and W. Durham, 25–62. Ann Arbor: University of Michigan Press.

Edelman, M. 2005. "Bringing the Moral Economy Back in to the Study of 21st-Century Transnational Peasant Movements." *American Anthropologist* 107 (3): 331–345.

Ehlers, E., and H. Kreutzmann. 2000. *High Mountain Pastoralism in Northern Pakistan*. Stuttgart: Franz Steiner Verlag.

Ellis, J. E., and D. M. Swift. 1988. "Stability of African Pastoral Ecosystems: Alternate Paradigms and Implications for Development." *Rangeland Ecology and Management/Journal of Range Management Archives* 41 (6): 450–459.

Engels, F. [1894-5] 2000. . *The Peasant Question in France and Germany*. London: Electric Book Company.

Enns, C. 2018. "Mobilizing Research on Africa's Development Corridors." *Geoforum; Journal of Physical, Human, and Regional Geosciences* 88: 105–108.

Eriksen, S., and J. Lind. 2009. "Adaptation as a Political Process: Adjusting to Drought and Conflict in Kenya's Drylands." *Environmental Management* 43 (5): 817–835.

Evans-Pritchard, E. E. 1940. *The Nuer: A Description Of The Modes Of Livelihood And Political Institutions Of A Nilotic People*. Oxford: Clarendon Press.

Fairbairn, M., J. Fox, S. Isakson, M. Levien, N. Peluso, S. Razavi, I. Scoones, and K. Sivaramakrishnan. 2014. "Introduction: New Directions in Agrarian Political Economy." *Journal of Peasant Studies* 41 (5): 653–666.

Ferguson, J. 1985. "The Bovine Mystique: Power, Property and Livestock in Rural Lesotho." *Man* 20: 647–674.

Fernandez-Gimenez, M. E. 1999. “Reconsidering the Role of Absentee Herd Owners: a View From Mongolia.” *Human Ecology* 27 (1): 1–27.
Ficek, R. E. 2019. “Cattle, Capital, Colonization: Tracking Creatures of the Anthropocene in and out of Human Projects.” *Current Anthropology* 60 (S20): S260–S271.
Forbes, B. C., F. Stammler, T. Kumpula, N. Meschtyb, A. Pajunen, and E. Kaarlejärvi. 2009. “High Resilience in the Yamal-Nenets Social–Ecological System, West Siberian Arctic, Russia.” *Proceedings of the National Academy of Sciences* 106 (52): 22041–22048.
Fratkin, E. 2001. “East African Pastoralism in Transition: Maasai, Boran, and Rendille Cases.” *African Studies Review* 44 (3): 1–25.
Fratkin, E. M., E. A. Roth, and M. A. Nathan. 1999. “When Nomads Settle: the Effects of Commoditization, Nutritional Change, and Formal Education on Ariaal and Rendille Pastoralists.” *Current Anthropology* 40 (5): 729–735.
Friedberg, S. 2009. *Fresh: A Perishable History*. Cambridge, MA: Harvard University Press.
Friedman, H., and P. McMichael. 1989. “The Rise and Decline of National Agricultures, 1870 to the Present.” *Sociologia Ruralis* 29 (2): 93–117.
Galaty, J. G. 1992. “‘The Land is Yours’: Social and Economic Factors in the Privatization, sub-Division and Sale of Maasai Ranches.” *Nomadic Peoples* 30: 26–40.
Galaty, J. G. 2013a. “Land Grabbing in the Eastern African Rangelands.” In *Pastoralism and Development in Africa*, edited by A. Catley, J. Lind, and I. Scoones, 143–153. London: Routledge.
Galaty, J. G. 2013b. “The Collapsing Platform for Pastoralism: Land Sales and Land Loss in Kajiado County, Kenya.” *Nomadic Peoples* 17 (2): 20–39.
Galaty, J. G., and P. Bonte, eds. 1991. *Herders, Warriors, and Traders. Pastoralism in Africa*. Boulder, CO: Westview Press.
Galaty, J. G., and D. L. Johnson. 1990. “Introduction: Pastoral Systems in Global Perspective.” In *The World of Pastoralism: Herding Systems in Comparative Perspective*, edited by J. Galaty, and D. Johnson, 1–15. New York: Guilford.
Galvin, K. A. 2009. “Transitions: Pastoralists Living with Change.” *Annual Review of Anthropology* 38: 185–198.
Gardner, A. 2003. “The new Calculus of Bedouin Pastoralism in the Kingdom of Saudi Arabia.” *Human Organization* 62: 267–276.
Gardner, B. 2009. “Are Livestock a Troublesome Commodity?” *Geoforum; Journal of Physical, Human, and Regional Geosciences* 40 (5): 781–783.
Gardner, A., and E. Marx. 2000. “Employment and Unemployment among Bedouin.” *Nomadic Peoples* 14: 21–27.
Garnett, T., C. Godde, A. Muller, E. Röös, P. Smith, I. J. M. De Boer, E. zu Ermgassen, M. Herrero, C. E. Van Middelaar, and C. Schader. 2017. *Grazed And Confused?: Ruminating On Cattle, Grazing Systems, Methane, Nitrous Oxide, The Soil Carbon Sequestration Question-And What It All Means For Greenhouse Gas Emissions*. Oxford: FCRN.
Gertel, J., and I. Breuer, eds. 2007. *Pastoral Marocco. Globalizing Scapes of Mobility and Insecurity*. Wiesbaden: Reichert Verlag.
Giordano, C. 2003. *Rereading Corsican Pastoralism: Monographic Research on Mediterranean Societies*. Chicago: The University of Chicago Press.
Gongbuzeren, L. Huntsinger, and W. Li. 2018. “Rebuilding Pastoral Social-Ecological Resilience on the Qinghai-Tibetan Plateau in Response to Changes in Policy, Economics, and Climate.” *Ecology and Society* 23 (2).
Gonin, A., and D. Gautier. 2016. “Herders’ Territorialities and Social Differentiation in Western Burkina Faso.” *Nomadic Peoples* 20 (1): 62–87.
Goody, J. 1973. “Bridewealth and Dowry in African and Eurasia.” In *Bridewealth and Dowry*, edited by J. Goody and S. Tambiah, 1–58. Cambridge: Cambridge University Press.
Grandia, L. 2012. *Enclosed: Conservation, Cattle, And Commerce Among The Q’eqchi’maya Lowlanders*. Washington, DC: University of Washington Press.
Greiner, C., M. Alvarez, and M. Becker. 2013. “From Cattle to Corn: Attributes of Emerging Farming Systems of Former Pastoral Nomads in East Pokot, Kenya.” *Society and Natural Resources* 26 (12): 1478–1490.

Gruschke, A. 2011. "From Yak Herders to Yartsa Traders: Tibetan Nomads and New Market Options in Qinghai's Yushu Region." *China Tibetology* 3: 95–118.
Gulliver, P. H. 1955. *The Family Herds: A Study of Two Pastoral Tribes in East Africa, The Jie and T*. London: Routledge.
Gyal, H. 2015. "The Politics of Standardising and Subordinating Subjects: the Nomadic Settlement Project in Tibetan Areas of Amdo." *Nomadic Peoples* 19 (2): 241–260.
Hagmann, T., and A. Mulugeta. 2008. "Pastoral Conflicts and State-Building in the Ethiopian Lowlands." *Africa Spectrum* 43: 19–37.
Hall, D. 2012. "Rethinking Primitive Accumulation: Theoretical Tensions and Rural Southeast Asian Complexities." *Antipode* 44 (4): 1188–1208.
Hall, R., M. Edelman, S. M. Borras, Jr., I. Scoones, B. White, and W. Wolford. 2015. "Resistance, Acquiescence or Incorporation? An Introduction to Land Grabbing and Political Reactions 'From Below'." *Journal of Peasant Studies* 42 (3–4): 467–488.
Hall, D., P. Hirsch, and T. M. Li. 2011. *Powers of Exclusion: Land Dilemmas in Southeast Asia*. Honolulu: University of Hawaii Press.
Hall, R., I. Scoones, and D. Tsikata, eds. 2015. *Africa's Land Rush: Rural Livelihoods and Agrarian Change*. Oxford: James Currey.
Hardin, G. 1968. "The Tragedy of the Commons." *Science* 162 (3859): 1243–1248.
Harrison, M. 1977. "The Peasant Mode of Production in the Work of AV Chayanov." *Journal of Peasant Studies* 4 (4): 323–336.
Hart, K., and L. Sperling. 1987. "Cattle as Capital." *Ethnos* 52 (3–4): 324–338.
Harvey, D. 2003. *The New Imperialism*. Oxford: Oxford University Press.
Hecht, S. B. 1985. "Environment, Development and Politics: Capital Accumulation and the Livestock Sector in Eastern Amazonia." *World Development* 13 (6): 663–684.
Hendrickson, D., J. Armon, and R. Mearns. 1998. "The Changing Nature of Conflict and Famine Vulnerability: The Case of Livestock Raiding in Turkana District, Kenya." *Disasters* 22 (3): 185–199.
Herskovits, M. J. 1926. "The Cattle Complex in East Africa." *American Anthropologist* 28 (1): 230–272.
Hjort, A. 1980. "Herds, Trade, and Grain: Pastoralism in a Regional Perspective." In *Future of Pastoral Peoples: Research Priorities for the 1980s; Proceedings of a Conference Held in Nairobi, Kenya, 4-8 Aug. 1980*, edited by J. Galaty, D. Aronson, P. Salzman, and A. Chouinard. Ottawa: IDRC.
Hobsbawm, E. J. 1973. "Peasants and Politics." *Journal of Peasant Studies* 1 (1): 3–22.
Hodgson, D. L. 2000. *Rethinking Pastoralism in Africa*. Oxford: James Currey.
Hodgson, D. 2002. "Precarious Alliances: The Cultural Politics and Structural Predicaments of the Indigenous Rights Movement in Tanzania." *American Anthropologist* 104 (4): 1086–1097.
Hogg, R. 1986. "The new Pastoralism: Poverty and Dependency in Northern Kenya." *Africa* 56 (3): 319–333.
Homewood, K. 2008. *Ecology of African Pastoralist Societies*. Oxford: James Currey.
Homewood, K. M., and W. A. Rodgers. 1991. *Maasailand Ecology: Pastoralist Development and Wildlife Conservation in Ngorongoro, Tanzania*. Cambridge: Cambridge University Press.
Horowitz, M. M. 1981. "Research Priorities in Pastoral Studies: An Agenda for the 1980s." In *The Future of Pastoral Peoples*, edited by J. D. Galaty, D. Aronson, P. C. Salzman, and A. Chouinard, 61–88. Ottawa: International Development Research Centre.
Humphrey, C., and D. Sneath. 1999. *The End of Nomadism? Society, State, and The Environment In Inner Asia*. Durham, NC: Duke University Press.
Hutchinson, S. E. 1996. *Nuer Dilemmas: Coping With Money, War, and the State*. Berkeley: University of California Press.
Ingold, T. 1980. *Hunters, Pastoralists and Ranchers: Reindeer Economies and Their Transformations*. Cambridge: Cambridge University Press.
Irons, W. 1974. "Nomadism as a Political Adaptation: the Case of the Yomut Turkmen." *American Ethnologist* 1 (4): 635–658.
Irons, W. 1975. *The Yomut Turkmen: A Study of Social Organization Among A Central Asian Turkic-Speaking Population*. Ann Arbor: University of Michigan Press.

Johnsen, K. I. 2016. "Land-use Conflicts Between Reindeer Husbandry and Mineral Extraction in Finnmark, Norway: Contested Rationalities and the Politics of Belonging." *Polar Geography* 39 (1): 58–79.

Johnsen, K. I., and T. A. Benjaminsen. 2017. "The art of Governing and Everyday Resistance:"Rationalization" of Sámi Reindeer Husbandry in Norway Since the 1970s." *Acta Borealia* 34 (1): 1–25.

Johnsen, K. I., T. A. Benjaminsen, and I. M. G. Eira. 2015. "Seeing Like the State or Like Pastoralists? Conflicting Narratives on the Governance of Sámi Reindeer Husbandry in Finnmark, Norway." *Norsk Geografisk Tidsskrift-Norwegian Journal of Geography* 69 (4): 230–241.

Jurt, C., I. Häberli, and R. Rossier. 2015. "Transhumance Farming in Swiss Mountains: Adaptation to a Changing Environment." *Mountain Research and Development* 35 (1): 57–65.

Kassam, K. S. 2010. "Pluralism, Resilience, and the Ecology of Survival: Case Studies From the Pamir Mountains of Afghanistan." *Ecology and Society* 15 (2): 8.

Kautsky, K. (1899) 1988. *The Agrarian Question*. London: Unwin Hyman.

Kavoori, P. 1999. *Pastoralism in Expansion: The Transhuming Herders of Wwestern Rajasthan*. New Delhi; Oxford: Oxford University Press.

Kerven, C. 1992. *Customary Commerce: A Historical Reassessment Of Pastoral Livestock Marketing In Africa*. London: Overseas Development Institute.

Kerven, C. 2004. "The Influence of Cold Temperatures and Snowstorms on Rangelands and Livestock in Northern Asia." In *Rangelands at Equilibrium and non-Equilibrium. Programme for Land and Agrarian Studies*, edited by S. Vetter, 41–57. Cape Town: PLAAS, University of the Western Cape.

Kerven, C. 2005. *Prospects For Pastoralism In Kazakstan And Turkmenistan: From State Farms To Private Flocks*. London: Routledge.

Kerven, C., I. I. Alimaev, R. Behnke, G. Davidson, L. Franchois, N. Malmakov, E. Mathijs, A. Smailov, S. Temirbekov, and I. Wright. 2004. "Retraction and Expansion of Flock Mobility in Central Asia: Costs and Consequences." *African Journal of Range and Forage Science* 21 (3): 159–169.

Kerven, C., and R. Behnke, eds. 2011a. *Policies And Practices Of Pastoralism In Europe*. New York: Springer.

Kerven, C., S. Robinson, R. Behnke, K. Kushenov, and E. J. Milner-Gulland. 2016. "A Pastoral Frontier: From Chaos to Capitalism and the re-Colonisation of the Kazakh Rangelands." *Journal of Arid Environments* 127: 106–119.

Kerven, C., B. Steimann, C. Dear, and L. Ashley. 2012. "Researching the Future of Pastoralism in Central Asia's Mountains: Examining Development Orthodoxies." *Mountain Research and Development* 32 (3): 368–377.

Khalaf, S. 1999. "Camel Racing in the Gulf. Notes on the Evolution of a Traditional Cultural Sport." *Anthropos*, 85–106.

Khazanov, A. M., and G. Schlee. 2012. *Who Owns the Stock? Collective and Multiple Property Rights in Animals*. Oxford: Berghahn Books.

Khazanov, A. M., and A. Wink. 2012. *Nomads In The Sedentary World*. London: Routledge.

Kleist, N., and D. Thorsen. 2016. *Hope And Uncertainty In Contemporary African Migration*. London: Routledge.

Köhler-Rollefson, I. 1994. "Pastoralism in western India from a comparative perspective: Some comments. *Pastoral Development Network Paper* 36a. London: Overseas Development Institute.

Konczacki, Z. A. 2014. *The Economics Of Pastoralism: A Case Study Of Sub-Saharan Africa*. London: Routledge.

Korf, B., T. Hagmann, and R. Emmenegger. 2015. "Re-spacing African Drylands: Territorialization, Sedentarization and Indigenous Commodification in the Ethiopian Pastoral Frontier." *Journal of Peasant Studies* 42 (5): 881–901.

Krätli, S. 2008. "Cattle Breeding, Complexity and Mobility in a Structurally Unpredictable Environment: The WoDaaBe Herders of Niger." *Nomadic Peoples* 12 (1): 11–41.

Krätli, S. 2019. *Pastoral Development Orientation Framework: Focus on Ethiopia*. Aachen: Bischöfliches Hilfswerk MISEREOR e.

Krätli, S., B. Kaufmann, H. Roba, P. Hiernaux, W. Li, M. Easdale, and C. Hülsebusch. 2015. *A House Full Of Trap Doors: Identifying Barriers To Resilient Drylands In The Toolbox Of Pastoral Development*. London: IIED.
Krätli, S., and N. Schareika. 2010. "Living off Uncertainty: the Intelligent Animal Production of Dryland Pastoralists." *The European Journal of Development Research* 22 (5): 605–622.
Kreuer, D. 2011. "Land Use Negotiation in Eastern Morocco." *Nomadic Peoples* 15 (1): 54–69.
Kreutzmann, H. 2004. "Pastoral Practices and Their Transformation in the North-Western Karakoram." *Nomadic Peoples* 8 (2): 54–88.
Kreutzmann, H. 2011a. "Pastoralism in Central Asian Mountain Regions." In *Pastoralism and Rangeland Management in Mountain Areas in the Context of Climate and Global Change*, edited by H. Kreutzmann, K. Abdulalishoev, L. Zhaohui, and J. Richter. Bonn: GIZ/BMZ.
Kreutzmann, H. 2011b. "Pastoralism in the Pamirs: Regional Contexts, Political Boundaries, and Market Integration in Central Asia." In *Economic Spaces of Pastoral Production and Commodity Systems: Markets and Livelihoods*, edited by J. Gertel, and R. Le Heron, 174–193. Farnham: Ashgate Publishing.
Kreutzmann, H. 2013. "The Tragedy of Responsibility in High Asia: Modernizing Traditional Pastoral Practices and Preserving Modernist Worldviews." *Pastoralism: Research, Policy and Practice* 3 (1): 1–11.
Kreutzmann, H., and S. Schütte. 2011. "Contested Commons—Multiple Insecurities of Pastoralists in North-Eastern Afghanistan." *Erdkunde* 65: 99–119.
Krupnik, I. 2000. "Reindeer Pastoralism in Modern Siberia: Research and Survival During the Time of Crash." *Polar Research* 19 (1): 49–56.
Kuper, A. 1982. *Wives For Cattle: Bridewealth And Marriage In Southern Africa*. London: Routledge & Kegan Paul.
Lane, C. 1996. *Pastures Lost: Barabaig Economy, Resource Tenure, and the Alienation of Their Land in Tanzania*. Initiatives Publishers.
Lattimore, O. 1951. *Inner Asian Frontiers of China*. London: Capitol Publishing Company.
Lenin, V. I. [1899] 1964. "The Development of Capitalism in Russia (1899)." *Collected Works* 3: 177.
Lesorogol, C. K. 2003. "Transforming Institutions among Pastoralists: Inequality and Land Privatization." *American Anthropologist* 105 (3): 531–541.
Lesorogol, C. K. 2008. *Contesting The Commons: Privatizing Pastoral Lands In Kenya*. Ann ArborMichigan: University of Michigan Press.
Levien, M., M. Watts, and Yan Hairong. 2018. "Special Issue on Agrarian Marxism." *Journal of Peasant Studies* 45 (5-6).
Levine, N. 1999. "Cattle and the Cash Economy: Responses to Change among Tibetan Nomadic Pastoralists in Sichuan, China." *Human Organization* 58 (2): 161–172.
Levine, N. E. 2015. "Transforming Inequality: Eastern Tibetan Pastoralists From 1955 to the Present." *Nomadic Peoples* 19: 164–188.
Lewis, I. M. 1961. *A Pastoral Democracy: A Study of Pastoralism And Politics Among The Northern Somali Of The Horn Of Africa*. Oxford: Oxford University Press for the International Africa Institute.
Li, T. M. 2014. "What is Land? Assembling a Resource for Global Investment." *Transactions of the Institute of British Geographers* 39 (4): 589–602.
Liechti, K., and J.-P. Biber. 2016. "Pastoralism in Europe: Characteristics and Challenges of Highland–Lowland Transhumance." *Revue Scientifique et Technique de l'OIE* 35: 561–575.
Lind, J., and R. Luckham. 2017. "Introduction: Security in the Vernacular and Peacebuilding at the Margins; Rethinking Violence Reduction." *Peacebuilding* 5 (2): 89–98.
Lind, J., P. Mutahi, and M. Oosterom. 2017. "'Killing a Mosquito with a Hammer': Al-Shabaab Violence and State Security Responses in Kenya." *Peacebuilding* 5 (2): 118–135.
Lind, J., D. Okenwa, and I. Scoones, eds. 2020. *Land, Investment and Politics. Reconfiguring Eastern Africa's Drylands*. Woodbridge: James Currey.
Lipton, M. 1968. "The Theory of the Optimising Peasant." *The Journal of Development Studies* 4 (3): 327–351.
Little, P. D. 1985. "Absentee Herd Owners and Part-Time Pastoralists: The Political Economy of Resource use in Northern Kenya." *Human Ecology* 13 (2): 131–151.

Little, P. D. 1992. *The Elusive Granary: Herder, Farmer, AAnd State iIn Northern Kenya*. Cambridge: Cambridge University Press.
Little, P. D. 2003. *Somalia: Economy Without State*. Bloomington: Indiana University Press.
Little, P. D., H. Mahmoud, and D. L. Coppock. 2001a. "When Deserts Flood: Risk Management and Climatic Processes among East African Pastoralists." *Climate Research* 19 (2): 149–159.
Little, P. D., K. Smith, B. A. Cellarius, D. L. Coppock, and C. Barrett. 2001b. "Avoiding Disaster: Diversification and Risk Management among East African Herders." *Development and Change* 32 (3): 401–433.
Lund, C., and C. Boone. 2013. "Introduction: Land Politics in Africa–Constituting Authority Over Territory, Property and Persons." *Africa* 83 (1): 1–13.
Mahmoud, H. A. 2008. "Risky Trade, Resilient Traders: Trust and Livestock Marketing in Northern Kenya." *Africa* 78 (4): 561–581.
Marin, A., E. Sjaastad, T. A. Benjaminsen, M. N. M. Sara, and E. J. L. Borgenvik. 2020. "Productivity Beyond Density: A Critique of Management Models for Reindeer Pastoralism in Norway." *Pastoralism* 10: 1–18.
Markakis, J. 2011. *Ethiopia: The Last Two Frontiers*. Woodbridge: James Currey.
Marx, K. (1852) 2008. *The 18th Brumaire of Louis Bonaparte*. Wildside Press LLC.
Marx, K. (1857–8) 1973. *Grundrisse: Foundations of the Critique of Political Economy*. London: Penguin UK.
Marx, K. (1867) 1977. *Capital (Volume 1): A Critique of Political Economy*. New York: Vintage Books.
Marx, E. 1967. *Bedouin of the Negev*. Manchester: Manchester University Press.
Marx, E. 1977. "The Tribe as a Unit of Subsistence: Nomadic Pastoralism in the Middle East." *American Anthropologist* 79 (2): 343–363.
Marx, E. 2000. "Land and Work: Negev Bedouin Struggle with Israeli Bureaucracies." *Nomadic Peoples* 4: 106–121.
Marx, E. 2006. "The Political Economy of Middle Eastern and North African Pastoral Nomads." In *Nomadic Societies in the Middle East and North Africa*, edited by D. Chatty, 78–97. Leiden: Brill.
Maynard, N. G., A. Oskal, J. M. Turi, S. D. Mathiesen, I. M. G. Eira, B. Yurchak, V. Etylin, and J. Gebelein. 2010. "Impacts of Arctic Climate and Land use Changes on Reindeer Pastoralism: Indigenous Knowledge and Remote Sensing." In *Eurasian Arctic Land Cover And Land Use In A Changing Climate*, edited by G. Gutman, and A. Reissell, 177–205. Berlin: Springer.
Mazonde, I. N. 1994. *Ranching and Enterprise in Eastern Botswana: A Case Study Of Black And White Farmers*. Edinburgh: Edinburgh University Press.
Mbih, R. A. 2020. "The Politics of Farmer–Herder Conflicts and Alternative Conflict Management in Northwest Cameroon." *African Geographical Review* 1–21.
McMichael, P. 2013. *Food Regimes and Agrarian Questions*. Halifax: Fernwood Publishing.
McPeak, J. G., C. Doss, and P. D. Little. 2011. *Risk and Social Change in An African Rural Economy: Livelihoods In Pastoralist Communities*. London: Routledge.
Meadows, S. J., and J. M. White. 1979. *Structure of the Herd And Determinants Of Offtake Rates In Kajiado District In Kenya 1962-1977*. London: Agricultural Administration Unit, Overseas Development Institute.
Meerpohl, M. 2013. "Pastoralism and Trans-Saharan Trade The Transformation of a Historical Trade Route Between Eastern Chad and Libya." In *Pastoralism in Africa: Past, Present and Future*, edited by M. Bollig, M. Schnegg, and H.-P. Wotzka, 412–439. Oxford: Berghahn.
Mehta, L., and S. Srivastava. 2019. "Pastoralists Without Pasture: Water Scarcity, Marketisation and Resource Enclosures in Kutch, India." *Nomadic Peoples* 23 (2): 195–217.
Meillassoux, C. 1972. "From Reproduction to Production: A Marxist Approach to Economic Anthropology." *Economy and Society* 1 (1): 93–105.
Métailié, J.-P. 2006. "Mountain Landscape, Pastoral Management and Traditional Practices in the Northern Pyrenées (France)." In *The Conservation of Cultural Landscapes*, edited by M. Agnoletti, 108–124. Oxford: CAB International.
Mientjes, A. C. 2010. "Pastoral Communities in the Sardinian Highlands (Italy): A View on Social Mobility." *Ethnos* 75 (2): 148–170.
Mintz, S. W. 1986. *Sweetness And Power: The Place Of Sugar In Modern History*. London: Penguin.

Mirzabaev, A., M. Ahmed, J. Werner, J. Pender, and M. Louhaichi. 2016. "Rangelands of Central Asia: Challenges and Opportunities." *Journal of Arid Lands* 8 (1): 93–108.

Mkutu, K. 2008. *Guns and Governance in the Rift Valley: Pastoralist Conflict and Small Arms*. Bloomington: Indiana University Press.

Moritz, M. 2012. "Individualization of Livestock Ownership in Fulbe Family Herds: the Effects of Pastoral Intensification and Islamic Renewal." In *Who Owns the Stock? Collective and Multiple Property Rights in Animals*, edited by A. M. Khazanov, and G. Schlee, 193–214. Oxford: Berghahn Books.

Moritz, M. 2016. "Open Property Regimes." *International Journal of the Commons* 10 (2): 688.

Moritz, M., R. Behnke, C. M. Beitl, R. B. Bird, R. M. Chiaravalloti, J. K. Clark, S. A. Crabtree, S. S. Downey, I. M. Hamilton, and S. C. Phang. 2018. "Emergent Sustainability in Open Property Regimes." *Proceedings of the National Academy of Sciences* 115 (51): 12859–12867.

Moritz, M., S. Handa, Y.-J. Chen, and N. Xiao. 2015. "Herding Contracts and Pastoral Mobility in the Far North Region of Cameroon." *Human Ecology* 43 (1): 141–151.

Moritz, M., B. R. Kyle, K. C. Nolan, S. Patrick, M. F. Shaffer, and G. Thampy. 2009. "Too Many People and too few Livestock in West Africa? An Evaluation of Sandford's Thesis." *The Journal of Development Studies* 45 (7): 1113–1133.

Mortimore, M. 1989. *Adapting to Drought: Farmers, Famines and Desertification in West Africa*. Cambridge: Cambridge University Press.

Moyo, S., P. Jha, and P. Yeros. 2013. "The Classical Agrarian Question: Myth, Reality and Relevance Today." *Agrarian South: Journal of Political Economy* 2: 93–119.

Moyo, S., and P. Yeros. 2005. "Land Occupations and Land Reform in Zimbabwe: Towards the National Democratic Revolution." In *Reclaiming the Land: The Resurgence of Rural Movements in Africa, Asia and Latin America*, edited by S. Moyo, and P. Yeros, Chap. 6. London: Zed Books.

Müller-Mahn, D., S. Rettberg, and G. Getachew. 2010. "Pathways and Dead Ends of Pastoral Development among the Afar and Karrayu in Ethiopia." *The European Journal of Development Research* 22 (5): 660–677.

Mundy, M., and B. Musallam, eds. 2000. *The Transformation of Nomadic Society in the Arab East*. Cambridge: Cambridge University Press.

Murphy, D. J. 2014. "Booms and Busts: Asset Dynamics, Disaster, and the Politics of Wealth in Rural Mongolia." *Economic Anthropology* 1 (1): 104–123.

Murphy, D. J. 2015. "From Kin to Contract: Labor, Work and the Production of Authority in Rural Mongolia." *Journal of Peasant Studies* 42 (2): 397–424.

Musa, A. 2020. "The Berbera Corridor Development and Somaliland's Political Economy." In *Land, Investment and Politics: Reconfiguring Eastern Africa's Pastoral Drylands*, edited by J. Lind, D. Okenwa, and I. Scoones, 110–121. Woodbridge: James Currey.

Mwangi, E. 2007. "Subdividing the Commons: Distributional Conflict in the Transition From Collective to Individual Property Rights in Kenya's Maasailand." *World Development* 35 (5): 815–834.

Neocosmos, M. 1993. *The Agrarian Question in Southern Africa and "Accumulation From Below": Economics and Politics in the Struggle for Democracy*. Uppsala: Nordic Africa Institute.

Netting, R. M. 1981. *Balancing on an Alp: Ecological change and Continuity in a Swiss Mountain Community*. Cambridge: Cambridge University Press.

Neumann, R. P. 2002. "Toward a Critical Theorization of Conservation Enclosures." In *Liberation Ecologies: Environment, Development and Social Movements*, edited by R. Peet, and M. Watts, 179–199. London: Routledge.

Niamir-Fuller, M., ed. 1999. *Managing Mobility in African Rangelands: The Legitimization of Transhumance*. Rugby: Intermediate Technology Publications.

Nori, M. 2016. "Shifting transhumances: migration patterns in Mediterranean pastoralism." *La Lettre de Veille di CIHEAM*. https://cadmus.eui.eu/handle/1814/41565.

Nori, M. 2017. "Migrant Shepherds: Opportunities and Challenges for Mediterranean Pastoralism." *Journal of Alpine Research* 105: 4.

Nori, M. 2019. "Herding Through Uncertainties–Regional Perspectives. Exploring the interfaces of pastoralists and uncertainty. Results from a literature review." *Robert Schuman Centre for Advanced Studies Research Paper No. RSCAS*, 68. doi:10.2139/ssrn.3457235.

Nori, M., M. El Mourid, and A. Nefzaoui. 2009. *Herding in a Shifting Mediterranean: Changing Agro-Pastoral Livelihoods in the Mashreq And Maghreb Region*. Florence: Robert Schuman Centre, European University Institute.
Nori, M., and M. Gemini. 2011. "The Common Agricultural Policy vis-à-vis European Pastoralists: Principles and Practices." *Pastoralism: Research, Policy and Practice* 1 (1): 27.
Ofcansky, T. P. 1981. "The 1889-97 Rinderpest Epidemic and the Rise of British and German Colonialism in Eastern and Southern Africa." *Journal of African Studies* 8 (1): 31.
O'Laughlin, B. 2016. "Bernstein's Puzzle: Peasants, Accumulation and Class Alliances in Africa." *Journal of Agrarian Change* 16 (3): 390–409.
Olinga-Shannon, S., M. Barbesgaard, and P. Vervest. 2019. *The Belt and Road Initiative (BRI) An AEPF Framing Paper*. Amsterdam: Transnational Institute.
Ostrom, E. 1990. *Governing The Commons: The Evolution Of Institutions For Collective Action*. Cambridge: Cambridge University Press.
Paine, R. 1972. "The Herd Management of Lapp Reindeer Pastoralists." *Journal of Asian and African Studies* 7 (1): 76–87.
Palmer, R. H. and N. Parsons, eds. 1977. *The Roots of Rural Poverty in Central and Southern Africa*. Berkeley: University of California Press.
Patnaik, U., and P. Patnaik. 2016. *A Theory of Imperialism*. New York: Columbia University Press.
Peluso, N. L., and C. Lund. 2011. "New Frontiers of Land Control: Introduction." *Journal of Peasant Studies* 38 (4): 667–681.
Perramond, E. P. 2010. *Political Ecologies of Cattle Ranching In Northern Mexico: Private Revolutions*. Tuscon: University of Arizona Press.
Perreault, T., G. Bridge, and J. McCarthy, eds. 2015. *The Routledge Handbook of Political Ecology*. London: Routledge.
Popkin, S. 1980. "The Rational Peasant." *Theory and Society* 9 (3): 411–471.
Postigo, J. C., K. R. Young, and K. A. Crews. 2008. "Change and Continuity in a Pastoralist Community in the High Peruvian Andes." *Human Ecology* 36 (4): 535–551.
Preobrazhensky, E. (1926) 1965. *The New Economics*. Oxford: Clarendon Press.
Rao, A. 1995. "From Bondsmen to Middlemen. Hired Shepherds and Pastoral Politics." *Anthropos*, Bd. 90, H. 1/3: 149–167.
Rasmussen, M. B., and C. Lund. 2018. "Reconfiguring Frontier Spaces: The Territorialization of Resource Control." *World Development* 101: 388–399.
Regassa, A., Y. Hizekiel, and B. Korf. 2019. "'Civilizing' the Pastoral Frontier: Land Grabbing, Dispossession and Coercive Agrarian Development in Ethiopia." *Journal of Peasant Studies* 46 (5): 935–955.
Reid, R. S., M. E. Fernández-Giménez, and K. A. Galvin. 2014. "Dynamics and Resilience of Rangelands and Pastoral Peoples Around the Globe." *Annual Review of Environment and Resources* 39: 217–242.
Reinert, E. S. 2006. "The Economics of Reindeer Herding: Saami Entrepreneurship Between Cyclical Sustainability and the Powers of State and Oligopolies." *British Food Journal* 108 (7): 522–540.
Reinert, H., and T. A. Benjaminsen. 2015. "Conceptualising Resilience in Norwegian Sámi Reindeer Pastoralism." *Resilience* 3 (2): 95–112.
Rey, P. P. 1979. "Class Contradiction in Lineage Societies." *Critique of Anthropology* 4 (13–14): 41–60.
Rigby, P. 1980. "Theoretical Implications of Pastoral Development Strategies in East Africa." In *Future Of Pastoral Peoples: Research Priorities For The 1980s; Proceedings Of A Conference Held In Nairobi, Kenya, 4-8 Aug. 1980*, edited by J. Galaty, D. Aronson, P. Salzman, and A. Chouinard, 157–164. Ottawa: IDRC.
Rigby, P. 1988a. "Class Formation among East African Pastoralists: Maasai of Tanzania and Kenya." *Dialectical Anthropology* 13 (1): 63–81.
Rigby, P. 1988b. "Pastoralism, Egalitarianism, and the State: The Eastern African Case." *Critique of Anthropology* 7 (3): 17–32.
Rigby, P. 1992. *Cattle, Capitalism, and Class: Ilparakuyo Maasai Transformations*. Philadelphia: Temple University Press.
Robbins, P. 2004. "Pastoralists Inside-out: the Contradictory Conceptual Geography of Rajasthan's Raika." *Nomadic Peoples* 8 (2): 136–149.

Robinson, L. 2019. "Open Property and Complex Mosaics: Variants in Tenure Regimes across Pastoralist Social-Ecological Systems." *International Journal of the Commons* 13 (1): 804–826.
Robinson, S., P. Finke, and B. Hamann. 2000. "The Impacts of de-Collectivisation on Kazakh Pastoralists: Case Studies From Kazakhstan, Mongolia and the People's Republic of China." *Journal of Central Asian Studies* 4 (2): 2–34.
Roe, E. 2020. "A New Policy Narrative for Pastoralism? Pastoralists as Reliability Professionals and Pastoralist Systems as Infrastructure." *STEPS Working Paper 113*. Brighton: STEPS Centre.
Roy, S. 2001. *The Gaza Strip: The Political Economy of De-Development*. Washington: Institute of Palestine Studies.
Ruttan, L. M., M. Borgerhoff Mulder, F. Berkes, J. Colding, C. Folke, E. Fratkin, J. G. Galaty, K. Homewood, P. D. Little, and E. Ostrom. 1999. "Are East African Pastoralists Truly Conservationists?" *Current Anthropology* 40 (5): 621–652.
Rutten, M. 1992. *Selling Wealth To Buy Poverty: The Process Of The Individualization Of Landownership Among The Maasai Pastoralists Of Kajiado District, Kenya, 1890-1990*. Saarbrücken: Breitenbach.
Saberwal, V. K. 1999. *Pastoral Politics: Shepherds, Bureaucrats, and Conservation In The Western Himalaya*. Oxford: Oxford University Press.
Sabyrbekov, R. 2019. "Income Diversification Strategies among Pastoralists in Central Asia: Findings from Kyrgyzstan." *Pastoralism* 9 (1): 14.
Salih, M. 1995. "Pastoralist Migration to Small Towns in Africa." In *The Migration Experience in Africa*, edited by J. Baker, and T. Aina, 181–196. Uppsala: Scandinavian Institute of African Studies.
Salvatore, R. D. 1991. "Modes of Labor Control in Cattle-Ranching Economies: California, Southern Brazil, and Argentina, 1820–1860." *The Journal of Economic History* 51 (2): 441–451.
Salzman, P. C. 1972. "Multi-Resource Nomadism in Iranian Baluchistan." *Journal of Asian and African Studies* 7: 60–68.
Salzman, P. C. 2004. *Pastoralists: Equality, Hierarchy, and the State*. Boulder, CO: Westview Press.
Samatar, A. I. 1992. "Social Classes and Economic Restructuring in Pastoral Africa: Somali Notes." *African Studies Review* 35 (1): 101–127.
Sayre, N. F. 2017. *The Politics of Scale: A History oOf Rangeland Science*. Chicago: University of Chicago Press.
Schlee, G. 1990. "Policies and boundaries: perceptions of space and control of markets in a mobile livestock economy." *Program Working Paper*, 133. Bielefeld: Sociology of Development Research Center, Universitat Bielefeld.
Schlee, G. 2012. "Multiple Rights in Animals: An East Africa Overview." In *Who Owns the Stock?: Collective and Multiple Property Rights in Animals*, edited by A. M. Khazanov and G. Schlee, 247–294. Oxford: Berghahn Books.
Schneider, H. K. 1957. "The Subsistence Role of Cattle among the Pakot and in East Africa." *American Anthropologist* 59 (2): 278–300.
Schneider, H. K. 1980a. *Livestock and Equalityi iIn East Africa. The Economic Basis for Social Structure*. Bloomington: Indiana University Press.
Schneider, H. K. 1980b. "Livestock as Food and Money." In *Future of Pastoral Peoples: Research Priorities For The 1980s; Proceedings of a Conference Held In Nairobi, Kenya, 4-8 Aug. 1980*, edited by J. Galaty, D. Aronson, P. Salzman, and A. Chouinard, 210–223. Ottawa: IDRC.
Scoones, I. 1992. "Coping with Drought: Responses of Herders and Livestock in Contrasting Savanna Environments in Southern Zimbabwe." *Human Ecology* 20 (3): 293–314.
Scoones, I., ed. 1994. *Living With Uncertainty: New Directions in Pastoral Development in Africa*. Rugby: Intermediate Technology Publications.
Scoones, I. 1995. "Exploiting Heterogeneity: Habitat use by Cattle in Dryland Zimbabwe." *Journal of Arid Environments* 29 (2): 221–237.
Scoones, I. 1996. "Politics, Polemics and Pasture in Southern Africa." In *The Lie of the Land: Challenging Received Wisdom on the African Environment*, edited by M. Leach, and R. Mearns, 34–53. Oxford: James Currey.
Scoones, I. 2004. "Climate Change and the Challenge of non-Equilibrium Thinking." *IDS Bulletin* 35: 114–119.
Scoones, I. 2015. *Sustainable Livelihoods and Rural Development*. Rugby: Practical Action Publishing.

Scoones, I. 2019. "What is Uncertainty and Why Does it Matter?" *STEPS Working Paper*, 105. Brighton: STEPS Centre.
Scoones, I., M. Edelman, S. M. Borras Jr, R. Hall, W. Wolford, and B. White. 2018. "Emancipatory Rural Politics: Confronting Authoritarian Populism." *Journal of Peasant Studies* 45 (1): 1–20.
Scoones, I., R. Smalley, R. Hall, and D. Tsikata. 2019. "Narratives of Scarcity: Framing the Global Land Rush." *Geoforum* 101: 231–241.
Scoones, I., and A. Stirling, eds. 2020. *The Politics of Uncertainty. Challenges of Transformation*. London: Routledge.
Scoones, I., and W. Wolmer, eds. 2002. *Pathways of Change in Africa: Crops, Livestock and Livelihoods in Mali, Ethiopia and Zimbabwe*. Oxford: James Currey.
Scott, J. C. 1977. *The Moral Economy of the Peasant: Rebellion and Subsistence in Southeast Asia*. New Haven: Yale University Press.
Scott, J. C. 1990. *Domination and the Arts of Resistance: Hidden Transcripts*. New Haven: Yale University Press.
Scott, J. C. 2010. *The Art of Not Being Governed: An Anarchist History of Upland Southeast Asia*. New Haven: Yale University Press.
Scott, J. C. 2017. *Against The Grain: A Deep History of the Earliest States*. New Haven: Yale University Press.
Shanin, T. 1973. "The Nature and Logic of the Peasant Economy 1: a Generalisation." *Journal of Peasant Studies* 1 (1): 63–80.
Shanin, T., ed. 1983. *Late Marx and the Russian Road. Marx and the 'Peripheries of Capitalism'*. London: Routledge and Kegan Paul.
Shanin, T. 2009. "Chayanov's Treble Death and Tenuous Resurrection: an Essay About Understanding, About Roots of Plausibility and About Rural Russia." *Journal of Peasant Studies* 36 (1): 83–101.
Shanin, T. 2018. "Marxism and the Vernacular Revolutionary Traditions." *Journal of Peasant Studies* 45 (7): 1151–1176.
Shariff, T., M. Taye, N. Maru, P. Tsering, T. Bum, G. Simula, and D. Farinella. 2020. "COVID-19 and Pastoralism: Reflections From Three Continents." *Journal of Peasant Studies* (forthcoming).
Sharma, V. P., I. Köhler-Rollefson, and J. Morton. 2003. *Pastoralism in India: A Scoping Study*. Ahmedebad: Indian Institute of Management.
Sheehy, D. P., D. Miller, and D. Johnson. 2006. "Transformation of Traditional Pastoral Livestock Systems on the Tibetan Steppe." *Sécheresse* 17 (1–2): 142–151.
Sheinin, D. 1994. "Defying Infection: Argentine Foot-and-Mouth Disease Policy, 1900-1930." *Canadian Journal of History* 29 (3): 501–524.
Shivji, I. G. 1987. "The Roots of Agrarian Crisis in Tanzania-A Theoretical Perspective." *Eastern Africa Social Science Research Review* 3 (1): 111.
Shivji, I. G. 2017. "The Concept of 'Working People'." *Agrarian South: Journal of Political Economy* 6 (1): 1–13.
Sikana, P. M., and C. Kerven. 1991. *The Impact of Commercialisation on The Role of Labour iIn African Pastoral Societies*. London: Overseas Development Institute.
Silverman, S. 1979. "The Peasant Concept in Anthropology." *Journal of Peasant Studies* 7 (1): 49–69.
Sneath, D. 1993. "Social Relations, Networks and Social Organisation in Post-Socialist Rural Mongolia." *Nomadic Peoples* 33: 193–207.
Sneath, D. 2006. "The Rural and the Urban in Pastoral Mongolia." In *Mongols From Country to City: Floating Boundaries, Pastoralism And City Life In The Mongol Lands*, edited by O. Bruun, and L. Narangoa, 140–161. Copenhagen: NIAS Press.
Spencer, P. 1965. *The Samburu: A Study in Gerontocracy in a Nomadic Tribe*. Berkeley: University of California Press.
Spencer, P. 1973. *Nomads In Alliance: Symbiosis And Growth Among The Rendille And Samburu Of Kenya*. Oxford: Oxford University Press.
Sutter, J. W. 1987. "Cattle and Inequality: Herd Size Differences and Pastoral Production among the Fulani of Northeastern Senegal." *Africa* 57 (2): 196–218.

Swift, J. 1976. “Some Consequences for the Somali Nomad Pastoral Economy of the Development of Livestock Trading.” In *Proceedings of the International Colloquium on Nomadic Pastoralism, Paris, December 1976*. Paris: Mouton.

Swift, J. 1979. “The Development of Livestock Trading in a Nomad Pastoral Economy: the Somali Case.” In *Pastoral Production and Society*, edited by L’equipe ecologie et anthropologie des societes pastorales, 447–465. Cambridge: Cambridge University Press.

Swift, J. 1996. “Desertification: Narratives, Winners and Losers.” In *The Lie of the Land: Challenging Received Wisdom on the African Environment*, edited by M. Leach, and R. Mearns, 73–90. Oxford: James Currey.

Tache, B. 2013. “Rangeland Enclosures in Southern Oromia, Ethiopia: an Innovative Response or the Erosion of Common Property Resources?” In *Pastoralism and Development in Africa*, edited by A. Catley, J. Lind, and I. Scoones, 62–71. London: Routledge.

Takakura, H. 2015. *Arctic Pastoralist Sakha: Ethnography of Evolution And Microadaptation In Siberia*. Victoria: Trans Pacific Press.

Tasker, A.J. 2018. “Processes of Hybrid Knowledge Creation in Pastoralist Development.” PhD Thesis. University of Sussex. http://sro.sussex.ac.uk/id/eprint/80671/

Thomson, G. R., E. N. Tambi, S. K. Hargreaves, T. J. Leyland, A. P. Catley, G. G. van’t Klooster, and M. L. Penrith. 2004. “International Trade in Livestock and Livestock Products: the Need for a Commodity-Based Approach.” *The Veterinary Record* 155 (14): 429–433.

Tilly, C. 1989. “Cities and States in Europe, 1000-1800.” *Theory and Society* 18 (5): 563–584.

Toulmin, C. 1983. “Herders and farmers or farmer-herders and herder-farmers?” *ODI Pastoral Network Paper*. 15d. London: Overseas Development Institute.

Turner, M. D. 1999. “Labor Process and the Environment: The Effects of Labor Availability and Compensation on the Quality of Herding in the Sahel.” *Human Ecology* 27 (2): 267–296.

Turner, M. D. 2009. “Capital on the Move: The Changing Relation Between Livestock and Labor in Mali, West Africa.” *Geoforum* 40 (5): 746–755.

Turner, M. D., A. A. Ayantunde, K. P. Patterson, and E. D. Patterson III. 2011. “Livelihood Transitions and the Changing Nature of Farmer–Herder Conflict in Sahelian West Africa.” *The Journal of Development Studies* 47 (2): 183–206.

Turner, M. D., and P. Hiernaux. 2008. “Changing Access to Labor, Pastures, and Knowledge: The Extensification of Grazing Management in Sudano-Sahelian West Africa.” *Human Ecology* 36 (1): 59–80.

Turner, M. D., and E. Schlecht. 2019. “Livestock Mobility in Sub-Saharan Africa: A Critical Review.” *Pastoralism* 9 (1): 13.

Turner, M. D., and T. O. Williams. 2002. “Livestock Market Dynamics and Local Vulnerabilities in the Sahel.” *World Development* 30 (4): 683–705.

Upton, C. 2009. “‘Custom’ and Contestation: Land Reform in Post-Socialist Mongolia.” *World Development* 37 (8): 1400–1410.

Upton, C. 2014. “The New Politics of Pastoralism: Identity, Justice and Global Activism.” *Geoforum* 54: 207–216.

Van Ausdal, S. 2009. “Pasture, Profit, and Power: An Environmental History of Cattle Ranching in Colombia, 1850–1950.” *Geoforum* 40 (5): 707–719.

van der Ploeg, J. D. 2009. *The New Peasantries: Struggles for Autonomy and Sustainability in an Era of Empire and Globalization*. London: Routledge.

Van der Ploeg, J. D., Y. Jingzhong, and S. Schneider. 2012. “Rural Development Through the Construction of new, Nested, Markets: Comparative Perspectives From China, Brazil and the European Union.” *Journal of Peasant Studies* 39 (1): 133–173.

Visser, O., and L. Schoenmaker. 2011. “Institutional Transformation in the Agricultural Sector of the Former Soviet Bloc.” *Eastern European Countryside* 17: 21–53.

Walker, R., J. Browder, E. Arima, C. Simmons, R. Pereira, M. Caldas, R. Shirota, and S. de Zen. 2009. “Ranching and the new Global Range: Amazônia in the 21st Century.” *Geoforum* 40 (5): 732–745.

Waller, R., and N. W. Sobania. 1994. “Pastoralism in Historical Perspective.” In *African Pastoralist Systems: An Integrated Approach*, edited by E. Fratkin, K. Galvin, and E. Roth, 45–68. Colorado: Lynne Rienner.

Walsh, M. 2012. "The not-so-Great Ruaha and Hidden Histories of an Environmental Panic in Tanzania." *Journal of Eastern African Studies* 6 (2): 303–335.

White, C. 1990. "Changing Animal Ownership and Access to Land among the Wodaabe (Fulani) of Central Niger." In *Property, Poverty and People: Creating Rights in Property and Problems of Pastoral Development*, edited by P. T. Baxter, and R. Hogg, 240–254. Manchester: Dept. of Social Anthropology and International Development Centre, University of Manchester.

White, B. 2018. "Marx and Chayanov at the Margins: Understanding Agrarian Change in Java." *Journal of Peasant Studies* 45 (5–6): 1108–1126.

White, B., S. M. Borras Jr, R. Hall, I. Scoones, and W. Wolford. 2012. "The new Enclosures: Critical Perspectives on Corporate Land Deals'." *Journal of Peasant Studies* 39 (3–4): 619–647.

Whited, T. L. 2018. "Terroir Transformed: Cheese and Pastoralism in the Western French Pyrenees." *Environmental History* 23 (4): 824–846.

Williams, S. M. 2003. "Tradition and Change in the sub-Arctic: Sami Reindeer Herding in the Modern era." *Scandinavian Studies* 75 (2): 229–256.

Winter, M. 1984. "Slavery and the Pastoral Twareg of Mali." *Cambridge Anthropology* 9 (2): 4–30.

Wolf, E. R. 1966. *Peasant Wars of The Twentieth Century*. Norman: University of Oklahoma Press.

Woods, A. 2013. *A Manufactured Plague: The History of Foot-And-Mouth Disease In Britain*. London: Routledge.

Yeh, E. T. 2013. *Taming Tibet: Landscape Transformation and the Gift of Chinese Development*. Ithaca: Cornell University Press.

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