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"The impulse is cartographic":

Counter-mapping Indonesia's resource frontiers in the context of coloniality

January 2020, pre-proof version, Antipode Lisa Tilley

Abstract

Resource frontiers continue to expand globally across Indigenous lands as states and corporations enact forms of expropriation redolent of the formal colonial era for the sake of extraction. In the face of this expansion, the burden remains largely on frontline communities to defend their ecologies using the tools available to them. Across Indonesia's resource frontiers, the 'cartographic impulse' Edward Said once named to describe anticolonial struggles is apparent in the form of counter-mapping, which seeks to secure adat (customary) rights and defend Indigenous lands against extractivist expansion. This article revisits this practice and argues that the counter-map and its goals remain tenuous—mapping in its scalable form risks processing complex and multi-dimensional ways of relating to land into two-dimensional representations appropriate for a liberal property regime, while adat itself is a contingent and mutable legal goal. Ultimately, the article echoes emerging calls for the burden to be shifted away from frontline communities through the pursuit of just transitions to post-extractivism.

Pemburuan sumber daya ke wilayah-wilayah baru yang masih kaya (resource frontiers) di tanah masyarakat adat semakin meluas secara global, seiring praktek-praktek perampasan berbau kolonial yang dilakukan oleh negara dan korporasi demi tujuan ekstraksi. Berhadapan dengan ekspansi ini, masyarakat di gugus depanlah yang menanggung beban terbesar untuk mempertahankan lingkungan hidup mereka, dengan menggunakan sarana yang tersedia bagi mereka. Di wilayah-wilayah baru ekstraksi sumber daya alam di Indonesia, apa yang pernah disebut Edward Said sebagai 'cartographic impulse' untuk menggambarkan perjuangan anti-kolonial terlihat jelas dalam bentuk countermapping, yang bertujuan untuk mempertahankan tanah-tanah adat dari ekspansi ekstravistik. Artikel ini hendak meninjau kembali praktek counter-mapping ini dan berargumen bahwa counter-map dan tujuan-tujuannya masih lemah— mapping dalam bentuk yang dapat diukur mengalami masalah dengan persoalan proses dan persoalan corak multidimensioanal dari hubungan dengan tanah dalam kaitan dengan representasi duadimensi yang hanya cocok dengan rezim kepemilikan liberal; sementara adat sendiri adalah tujuan legal yang sifatnya kontingen dan terbuka terhadap perubahan. Pada akhirnya artikel ini ikut menyuarakan seruan yang banyak muncul, bahwa beban harus dialihkan dari masyarakat frontline melalui usaha untuk transisi-transisi yang adil menuju post-extractivism.

## Introduction

In the present political economic context, the global demand for resources continues to accelerate, driving resource frontiers (see Tsing 2003) to expand further across Indigenous lands. Even as some old carbon frontiers appear to recede, new frontiers for biofuels, plantation crops, and minerals – including lithium for electric vehicle batteries – are forged by state and corporate extractive activity, extending the destruction of Indigenous social ecologies, even in the name of post-carbon climate-

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<sup>&</sup>lt;sup>1</sup> Quoted from Said 1994: 272.

friendly economic shifts. Against these challenges, the burden remains largely on Indigenous and peasant communities to defend their lands, ecologies, and ways of being against state-corporate expansion. In the context of Indonesia, this article revisits counter-cartography as one tool of resistance against this continued resource frontier expansion, arguing that the complexity and contingency of this particular tool reveal the limits and pitfalls of counter-mapping in the struggle against expropriation for extraction.

Returning to Nancy Lee Peluso's (1995) insightful and optimistic summary of counter-mapping – in which she cautiously concluded that counter-maps confer some power to local people at the expense of a degree of translation into the dominant order - this article appeals for an understanding of counter-mapping two decades later in relation to the coloniality of both the counter-map and its context. Working through 'the colonial question', the argument holds that the use of counter-maps remains fraught principally because "the tools and concepts of geomatics are based on and built for Western private property regimes" (Mohamed & Ventura 2000: 224) and therefore risk socialising communities into the dominant liberal order in which land is understood as property. The article further argues for a deeper analytical consideration of 'adat' customary law, which is the ultimate legal goal of counter-mapping, and which forms a historically contingent disciplinary tool and remains the weak layer in a system of legal pluralism. However, these arguments are moderated by consideration of commodity relations which often demand more individuated land relations and precede the counter-map. Ultimately, analysis of the power relations surrounding counter-maps, their underlying technology, and calculated use, illustrates the broader complexity of life on resource frontiers, where communities navigate overt and covert forms of expropriation and engage strategically with commodity production and flawed technologies in order to hold their ground.

To explore the complexities of counter-mapping and what is at stake in its application, the article first briefly considers engagements with counter-cartography by scholars working with post- and decolonial analytics. The text then forwards a brief overview of the global historical picture of the extension of the commodity form of land-as-property, emphasising the centrality of liberal property regimes in the production of the modern subject and its contradictory 'others' – the variously communitarian, shifting cultivator, animist peoples who relate to land otherwise than as individuated property. The same section then identifies one key line of difference which coincides with some of Indonesia's resource frontiers and which serves as the basis for the exclusion of Indonesia's masyarakat terasing, or 'isolated people'.

As the strengthening of 'adat', or customary law, is the key goal of Indigenous mappers with a view to holding on to their customary lands, the following section explores the history and disciplinary function of adat in greater detail and cautions that customary law is generally subordinate in a system of legal pluralism and therefore provides weak legal protection. Examples of Indonesia's vast array of land-based ontologies at risk of transformation through expropriation or translation into the dominant order are then identified and examined in relation to dominant liberal understandings of land relations. The article then engages the testimonies of cartographers in Indonesia, as well as related literature, to make sense of counter-mapping as a mode of resistance to expropriation. A final section adds more

complexity to the analysis; firstly, by showing how commodity relations often inspire strategically individuated approaches to land before mapping technologies are even engaged; and secondly, by demonstrating that the counter-map, as a unifying method of resistance, also brings prospects for archipelago-wide solidarities against corporate tactics of expropriation. Nonetheless, frontline activists globally are increasingly going much further by calling for extractivist abolition and just transitions to post-extractivist futures (e.g. War on Want 2019; Yes to Life 2018), shifting the burden away from Indigenous communities engaging such fragile and contingent modes of defence as counter-mapping.

Map-making as a technology of power has long been implicated in the realisation of colonial projects (e.g. Akerman 2009). Nonetheless, against the geographical violence exerted through colonial state power, resistance has also been compelled by a 'cartographic impulse' – identified by Edward Said (1994: 272—273) as the impulse to "reclaim, rename, and reinhabit the land." Anticolonial resistance in this sense partly sought to reappropriate the land by redefining it – to coordinate an alternative cartographic representation in order to claim it back. However, the cartographic impulse to subvert claimant power by redefining land through changing the way it is represented is resurgent today in a more literal sense than that intended here by Said. As a form of resistance to contemporary state-corporate claimant practices, especially in resource-rich rural areas, counter-mapping movements continue to expand in Indonesia, as in many places across the globe, largely in the name of Indigenous territorial defence (see for example, Phys Org 2013; Peluso 1995; Wainwright & Bryan 2009; Roth 2006; Mollett 2013). Within these movements, counter-mapping organisations have formed with the intention of engaging the same cartographic tools as those of state and corporate claimants, but they subvert their use in order to rebalance power in favour of rural communities living under threat of eviction and expropriation (see for example Forest Carbon Asia 2013).

Geographers engaging with postcolonial theory have pointed out the complexity of such movements in terms of the methods and outcomes of representing Indigenous lands. In particular, they have analysed counter-mapping in terms of the production of 'third space' in which state tools of sovereign territorial power are repurposed in order to make Indigenous land claims which are legible to the state. Radcliffe, for example, drawing on the work of Bhabha argues that: "Indigenous cartographers find themselves bound up in coloniality, having to produce maps whose conventions and authority rest upon the erasure of indigenous geographical knowledges and the realization of colonial (and postcolonial) rule" (Radcliffe 2011: 143-144). Such concerns over hybrid forms of representation and the pitfalls of the strategic use of the tools of the state can also be brought productively into conversation with material readings of expropriation by scholars emphasising the expansion of liberal property regimes.

One of the core concerns of scholarly work around the colonial question has been to examine the continued spatial extension by expropriation of global Eurocentred capitalism across worlds of social difference (see, variously Bhandar 2018; Simpson 2017; Coulthard 2014; Wynter 2003). Such concerns often involve consideration of how liberal capitalist land relations exert eradicative pressure over more diverse ways of relating to land in relation to how such processes come to be countered. In the context of the rapid expansion of capital investment across rural frontiers in Indonesia's present context, it

becomes vital to revisit Indigenous expropriation in relation to the fraught realities of resistance by means of repurposing forms of representation. Here, the example of counter-mapping illustrates the complexities of employing the state-legible counter-map, as a technology of representation which is so amenable to a liberal property regime, in order to appeal for state legal protection from corporate advancement across rural resource frontiers. What is at stake in the widespread use of mapping against corporate expansion is starkly illustrated by one former counter-mapping practitioner and academic in the following words:

I'm worried because of the compatibility of cartographic technologies to represent the complexities of Indigenous tenurial systems. In one piece of land there can be several competing claims [...] From looking at the representation of Indigenous territorial claims, cartography cannot do that because cartography tends to homogenise the space [...] and because the basic philosophy of cartography is still within the Western notion of property, it's difficult for the technology to represent the complexities

(Hari, former counter-mapper and academic, interview in Jakarta, 2016).

Counter-mappers like Hari are fully conscious that resisting state-corporate expansion across resource frontiers risks another mode of colonisation by means of the assimilation of communities into a simplified mode of relating to land as property.

To be clear, Indigenous mapping projects across the world have engaged and developed heterogeneous cartographic techniques which do work counter to ways of understanding land which are legible to a liberal property regime. However, in the Indonesian context, scalable maps which can be produced in a uniform way across the archipelago are informed more by the tenets of liberal property than they are by Indigenous ontologies, which is the root of Hari's anxiety. To explore this in more depth, the following section briefly surveys histories of expropriation in relation to liberal property, and the relation of these to communities living otherwise to liberal property in Indonesia.

Liberal property regimes and the production of masyarakat terasing as exclusion from the Indonesian national subject

What Brenna Bhandar (2018: 6) calls the 'commodity form of real property' is still extending over remaining Indigenous land in the present, a phenomenon with global historical continuity which has long been met with vigorous Indigenous defence. Liberal private property ownership, based on the commodification of land and its ownership by individuals, corporations, or states prevails over Indigenous and alternative modalities of relating to land in most parts of the world. To consider this global historical picture as one of liberal advance across distinct and complex land-based ontologies, scholars with varying foci from Karl Marx (1867) to Glen Coulthard (2014) to Brenna Bhandar (2018) have recognised the relationships between hegemonic pressure to liberalise land relations, expropriation, and various degrees of socio-cultural translation, assimilation, or elimination.

A global historical understanding of the extension of the commodity form of real property is useful here to demonstrate the striking parallels between distant places and historical times in terms of mechanisms of dispossession. According to John Locke's original seventeenth century liberal doctrine on the labour theory of property, applying labour, in the form of settled agriculture for instance, is the most efficient and productive use of land. Land with labour applied to it could by these means become private property for individual ownership. When later cast in the form of the doctrine of *terra nullius* in the colonial context, Lockean understandings of land became the grounds for the legally framed expropriation of native, and especially nomadic and communitarian, peoples (Wolfe 2001). Fundamentally, the incommensurable nature of complex Indigenous tenurial systems with understandings of land-as-property has created dispossessory pressures on the former as land became rationalised as a commodity in various global contexts.

Much of the literature on global historical patterns of expropriation and capitalist expansion continues to centre Marx's (1867) account of primitive accumulation. In Marx's formulation, the expropriation of the land and the labourer form a dual process when the 'producer' is detached from the land they cultivate. Indigenous intellectuals have since critiqued this formulation by pointing out that Indigenous expropriation has more often been combined with colonial regime efforts towards the extermination, rather than the proletarianization of native peoples (Coulthard 2014). Further, primitive accumulation has not always been a singular, complete process in the past, but instead has often only extended to partial expropriation and transformation of land relations, combined with the maintenance and reestablishment of common forms of land relations and self-sufficiency by resisting Indigenous communities (see, especially Cabrera Pacheco 2017).

Going further in relation to the US context, Patrick Wolfe also analysed how, beyond overt and coercive land grabbing, Indigenous lands were broken up through allotment and the extension of understandings of land-as-property by means of what he referred to as "the production of the propertied individual" (2001, 891). Focusing on cognate concerns, Brenna Bhandar (2018: 3) traces how modern private property laws developed in colonial contexts in such a way that the colonial social relation is constitutive of property laws and relations themselves. Specifically:

laws of property also reflect and consolidate language, ways of seeing, and modes of subjectivity that render indigenous and colonized populations as outside history, lacking the requisite cultural practices, habits of thought, and economic organization to be considered as sovereign, rational economic subjects.

(Bhandar 2018: 3)

In other words, to be exterior to property is to be exterior to modern subjecthood within the dominant understanding of modernity, as well as to be positioned as inferior on a given hierarchy and thus rendered expropriatable. Therefore, as Bhandar argues, all histories of property are also histories of appropriation (2018: 3). Further, the development of modern property law and conceptions of private ownership have been "articulated through the attribution of value to the lives of those defined as having the capacity, technology, and will to appropriate, which in turn was contingent on prevailing

concepts of race and racial difference" (2018: 4). Ultimately, what Bhandar calls the "fully individuated citizen-subject" as the proper modern subject, is partly constituted through the 'right' kind of relation to the land as individuated property.

Bhandar also extensively details how an 'ideology of improvement', rooted in Lockean liberalism, has broadly been invoked to position 'proper subjects' in opposition with those who are 'in need of improvement.' Although Bhandar's central concern is with settler colonial contexts, the same analytics of property, improvement, and expropriation also illuminate dynamics in the post-independence former franchise colonial context. The continuation of improvement ideologies and subject exclusions in Indonesia are evident through various forms of engagement with, management of, and discursive approaches to Indigenous and other rural peoples. Indigenous communities across the archipelago are subject to ambivalent treatment and complex forms of inclusion and exclusion. They are at once broadly included within the national archipelagic imaginary – even at times against their will, as in the case of the West Papuan people – while they are often simultaneously excluded from the proper national subject not only according to their ways of relating to land but also according to their languages and practices. These engagements reproduce modes of inclusion and exclusion practiced by colonial states but are also distinct, shifting, and the lines of exclusion are not always clear and stable.

To give one example of how Indigenous communities are engaged in the present-day context, the current Minister of Education and Culture, Muhadjir Effendy, recently expressed his intention to 'simplify' some of Indonesia's regional languages (Merdeka 2018). Effendy claimed that Indonesia's approximately 744 language variations hinder national communications stating that: "there should be a choice of which local languages should be preserved." This betrays an interventionist orientation with a disciplinary and assimilationist function of the kind that Acciaoli (2001) considered through the analytic of internal imperialism. A focus on Indonesia's so-called 'isolated people' as a helpful heuristic category most clearly illustrates what Acciaoli identifies here and corresponds with Effendy's interventionist aims to 'streamline' cultural practices. Across Indonesia's world of ethnic and cultural diversity a specific categorical binary has been drawn, with the help of state ideologues and anthropologists such as Ali Moertopo and Koentjaraningrat, between those who are within the bounds of what the state views as acceptably Indonesian, despite their heterogeneity, and those who have been termed 'isolated people' (suku terasing or masyarakat terasing) whose way of life is seen to contradict the Indonesian cultural identity (Acciaoli 2001). These are groups considered not just geographically isolated but socially and culturally isolated, and thus unassimilable with national developmental dynamics without significant socio-cultural translation, such as the encouragement of sedentarism or the language 'simplification' recently recommended by Effendy.

Masyarakat terasing are variously nomadic communities, often shifting cultivators, and usually follow animist traditions rather than the state-accepted 'modern' religions. As such, there has been a kind of internal civilising mission to encourage sedentarism and monotheism, among other necessary practices, to bring these communities to an acceptable level of Indonesianness (see Chou 2010: 14—15; Acciaoli 2001). In recent years, state discourse has also shifted towards the categorisation of komunitas adat terpencil (KAT for short) 'remote adat communities' or 'remote indigenous communities',

as identified by the Ministry of Social Affairs (KEMENSOS 2010). Interventions in KAT communities are reframed in the language of *pemberdayaan* or 'empowerment'. Nonetheless, the Ministry of Social Affairs maintains a focus on the potential of intervention to assimilate and integrate adat communities politically and socio-economically, claiming that "KAT Indigenous communities are characterised by their relatively closed and isolated nature, and could be opened socially, economically, and politically" (*ibid*). Overall the epistemic distinguishing of Indigenous people remains pervasive and continues to group socioculturally diverse and geographically dispersed communities into broad administrative categories. This bureaucratic ordering has been both temporal and hierarchical, in the sense that *masyarakat terasing* and KAT communities are presented as both backward and inferior. Ultimately, this performs a temporal displacement into the past of those deemed too 'primitive' to be recognised as coexisting in the same space and time as modern Indonesian subjects.

Further, this kind of exclusion is also falsely homogenising. It separates one geographically dispersed fraction of the wider Indonesian population and creates a commonality that did not exist before, that of being in the same state classification as 'isolated'. In reality, the category of *masyarakat terasing* covers a range of linguistic, ethnic, and ontological diversity and groups together communities which have very little in common with one another. On the whole, however, 'isolated' communities do share the common condition of living partially 'outside' of global liberal capitalist space, which was spread originally through colonialism, and which continues to be advanced through independent national governments in concert with international capital. Living partially outside of this system can mean living in ways which contrast with, and are even incommensurable with, liberal capitalist ways of being centred on individual property. Yet at the same time it means living in ways constitutive of the capitalist system in the sense they are connected through, for example, trade and ecological interrelations.

Overall then, many of Indonesia's resource frontier communities live under the twin pressures exerted by the material extension of global investment in extractives on the one hand, and by government pressure to conform within the boundaries of national norms in terms of social and linguistic practices and individuated and sedentary land relations on the other. Forms of resistance to the former can render communities more susceptible to the latter, as the earlier quote by Hari on the complexities of Indigenous tenurial systems in relation to the simplicity of the counter-maps used indicates. Furthermore, the actual goal of counter-mapping is to provide representations of land which will be used in conjunction with adat law, or customary law, in legal disputes between communities and corporations or the state on resource frontiers. However, adat legal protection has its own flaws and complexities which can only be understood by tracing its historical formation and its position in the present vis-à-vis state law in a system of legal pluralism (see Benda-Beckmann & Turner 2018) the following section works towards illuminating these flaws and complexities.

The colonial constitution of adat in the present

As Bryan (2011: 40) notes with reference to the Honduran context, Indigenous mapping brings a promise to more formally codify land rights, and this promise in itself can function as a disciplinary tool. In the Indonesian context counter-mapping's legal promise, in the form of adat law, must be understood at least in some historical detail, especially from a perspective attuned to the colonial genealogies of present-day structures.

Across Indonesia, land has traditionally been regulated by customary systems referred to as *masyarakat bukum adat* (see UNORCID 2013) more commonly known simply as 'adat'. However, adat is a fairly elusive concept frequently referred to but often left nebulously defined in the scholarly literature. Drawing on various definitions (McWilliam 2006: 46, 49, 58; Henley & Davidson 2007: 3) we can consider adat to be a dynamic and evolving normative system comprised of jurisprudential, cultural, and spiritual elements which regulate, inter alia, customary practices and land tenure, and which has traditionally been community-specific and orally-related, rather than formally codified. Therefore, considering adat as referring to mainly evolving and oral traditions, the immediate problem arises of its translation into more rigid legal codifications recognised by the state. However, any changes associated with legal codification would echo a long history of transformations effected through the encounters of adat with a variety of influences.

Two main contravening forces have contributed to the erosion, transformation and even the reinvigoration of adat over the course of its history in Indonesia: these being successive states on the one hand and Islam on the other. In the sense that Islam is a similarly holistic jural, spiritual, and cultural normative system (Abou El Fadl 2012), Islam and adat are often in tension with one another at the local level, as exemplified by Birgit Bräuchler (2010) in her study of Islam and adat in the Moluccas context. However, it has been its encounters with successive states that have had the most corrosive, but also formative, effects on adat in Indonesia.

During the colonial era, the Dutch enacted agrarian laws in 1870 and 1874 which eased commodity development, in part by means of 'lawfully' enabling the territorial dispossession of thousands of swidden farming communities (McWilliam 2006; Peluso & Vandergeest 2001: 775). These reforms comprised a legal assault against all but sedentary ways of living which persists up to the present day in Indonesia in various forms. By the time of the Dutch so-called 'ethical policy' in the late colonial era, the enhancement of legal pluralism recognised adat zones of authority according to a meticulously categorised typology of racialised cultural groupings. Yet adat remained in tension with the imperatives of economic development and was, in practice, subjugated to national legal structures. Even if adat was rarely upheld in reality, the epistemic habits of Dutch colonial administrators in their attempts to codify local laws were enough to reinterpret adat sufficiently for McWilliam to argue that "the concept of adat law [became] a reified product of Dutch colonialism" (2006: 49–50).

The point here is that adat, rather than being a mystic and unchanging feature of Indigenous communities, has instead been constituted by, and developed in response to, successive state and colonial projects in parts of the archipelago. This also varies according to the specific history of the island in question. Java and Sumatra, for instance, were transformed into plantation economies and intensely cultivated over the course of the colonial and postcolonial eras so adat law in those contexts

has had more contact with state and corporate interventions. In contrast, West Papua experienced comparably less corporate intervention until its formal colonisation by Indonesia in the 1960s, which opened up the territory to the expansion of a minerals frontier, to be followed by a plantation frontier in more recent years. Therefore, across much of the West Papua context, adat law more often remains limited to the collective governance of inter-community relations and land use regulation, while having less provision for the regulation of community relations with corporations (interviews with West Papua counter-mappers, 2019).

If adat law as it stood in the mid-twentieth century had become partly a product of Dutch rule, the close of the era of Dutch colonisation saw it gradually eroded by the newly independent nationalist regimes (Eghenter 2000: 342—343). Sukarno's 'Guided Democracy' regime sought to streamline the Dutch pluralist legal system, but although its Basic Agrarian Law (BAL) of 1960 continued to recognise adat, at the same time it also effectively subordinated adat to national interests. Further, under Sukarno and then under Suharto's centralist 'New Order' regime, the same development and territorialisation imperatives redolent of the Dutch era persisted and mass rural expropriation continued.

The dramatic restructuring of authority during the post-Suharto Reformasi era has seen power shift to the local and regional level under district heads (bupati) and village heads (kepala desa). This political restructuring in itself has neither forthrightly empowered adat nor halted its erosion (McWilliam 2006: 56) as the drive for economic growth, so contingent upon resource extraction in remote rural areas, still tends to be prioritised by local authorities over customary land rights. Nonetheless, the much more dynamic civil society arena has allowed for the resuscitation of adat since the fall of the Suharto regime (see Benda-Beckmann & Benda-Beckmann 2012; Tyson 2010). Groups organising around environmental issues and the politics of indigeneity, not least the customary mapping groups themselves, have sought official recognition and protection of customary areas. Most recently, in May of 2013, an amendment to Forestry Law no. 35 (PUU-X) of 2012 was passed by the Constitutional Court in Indonesia which redefined what had been legally codified as "state customary forest" as simply "customary forest" turning these areas back over to the authority of masyarakat hukum adat (UNORCID 2013).

A number of Constitutional Court rulings leading up to this verdict had also codified the increased acknowledgement of adat in forested, island, and coastal areas, as well as recognising the need to consult local communities in the development of extractive industries in rural areas. This legal recognition is an important advance in efforts to defend customary lands against the encroachment of corporate activity. However, as UNORCID (2013) point out, a number of practical questions remain open regarding the clarification of what constitutes customary land and who bears the institutional responsibility of administering claims and disputes.

Further, we can expect the present era of adat revivalism to echo the Dutch colonial era in which adat was transformed by its renewed recognition by external powers. The difference in the contemporary era rests on the number and levels of external influences, ranging from national non-governmental organisations (NGOs) and the state to international organisations. Cristina Eghenter (2000: 348—

349) notes that the Dayak adat customary concept of *tana ulen*, which regulates complex forms of restricted land, became reinterpreted within the ideational frame of the World Wide Fund for Nature (WWF) as a timeless philosophy of environmental sustainability. In subsequent public discourse the customary chief of one locality, Hulu Bahau, engaged the terminology of the WWF in his explanation of *tana ulen*, which reframed the concept specifically in terms of ecological rejuvenation. As part of such exchanges, the complex meanings of adat terms become transmuted through reflexive translations between organisations and communities.

This in itself can cause tensions and resentments as organisations have appropriated and reinterpreted customary law for use in their own campaigns. For example, in 2018, a collective intervention from members of the Airu Hulu community in Jayapura Regency, West Papua objected to the use of adat law by Greenpeace in the local area. The Head of the Wau Tribe in the Regency was reported to have said: "This is our ancestral land. Greenpeace is too involved in managing people's rights, especially in the management of customary forests" (quoted in Liputan6 2018). In this case, the community wanted to be better connected by means of the infrastructure development Greenpeace was opposing but without losing control of their lands to the hands of corporate developers.

Overall then, if the promise of adat is the prime disciplining mechanism enacted through countermapping then it helps to understand adat as historically contingent and mutable. Most importantly though, adat should be understood as the most dispensable layer in a context of legal pluralism in which the legal protection of national development interests has tended to take precedence. This is important to bear in mind when we consider that all of the effort communities put into mapping towards the realisation of state recognition of adat land claims take place in a context in which development imperatives can cause adat claims to ultimately be ignored. The next section briefly engages with adat communities living 'otherwise' to liberal property whose ways of being are under threat from resource frontier expansion.

Complex and dynamic land-based ontologies in Indonesia

Land within liberal capitalist space in Indonesia is generally characterised by individual ownership and sedentary habitation, or else by corporate or state ownership, as in the case of plantation estates or managed political forests (see, for example, Warren & Lucas 2013). Such land is represented and communicated by modern maps in two dimensions of what Harley called 'scientific geometry' (1989). The following paragraphs are intended to point out that this way of administering and representing land is most amenable to liberal capitalist space. To demonstrate this, we can briefly sketch two alternative ways of seeing land drawn from examples of Indonesia's many diverse Indigenous communities whose dynamic and changing customary land uses are at odds with the liberal ideals of the Indonesian state.

To begin with, the Orang Suku Laut (people of the sea) dwell in and around the province of Riau but view themselves as inhabitants of a wider *Alam Melayu*, or Malay World, which stretches broadly across maritime Southeast Asia (Chou 2010: 1). They are – counter to the sedentarist outlook of successive state regimes – semi-nomadic, and dwell between the sea and the land across a network of island "living spaces" linked by familial ties (ibid: 59). At times they are more sedentary and land-based, depending upon environment, season and the health of community members, at other times they may spend months on the water in house boats, mooring at dwelling-sites of close or distant kin. Land for the Orang Laut is never individually owned, instead it is a collective possession acquired as an "inalienable gift" from ancestors. The 'ownership' of such a gift is conceived of more as "affiliation" and "custodianship" (ibid: 62), and as such it may not be bought or sold like commodified property.

The Orang Laut's own communal territories are not bordered as such, in the sense that there are no exclusions and no impediments to travelling within these zones, nor even restrictions to benefiting from their resources. However, visitors should announce their arrival to the community chief and inform of their departure. As their territories are not defined by borders, but are seen as part of the essentially borderless, dynamic and pre-state territory of *Alam Melayu*, they have a particular view of those political borders which divide Southeast Asian states and form the margin of economic zones, such as the Singapore, Johor, and Riau Islands (SIJORI) growth triangle, as being temporary and altering constraints to the socioeconomic mobility they have otherwise experienced for generations (Chou 2006: 119).

Most curious to the imagination accustomed to modern cartography, however, is that although they traverse vast areas and possess deep knowledge of travelling distances and navigational routes, movements of the air, the currents and tides of the sea, the flora and fauna of the region and so on (ibid: 113), the 'maps' of the Orang Laut are entirely cognitive and related only orally over a lengthy learning period, being as they are without paper or printed maps (ibid: 127). This means that territory is always experienced and represented in its multiple dimensions rather than abstracted and flattened to the two-dimensional polygons of the map.

To draw on another example, the Dayak communities of Kalimantan, the Indonesian bulk of the island of Borneo, have had a similarly communitarian view of territorial possession. Aside from swidden cultivation, Dayak forest-dwelling populations in East Kalimantan maintain various forms of community or family-cultivated *simpukng*, or forest gardens (see Mulyoutami et al 2009: 2054). Dayak ontologies are rooted in the concept of *lati tana*, a regulatory system through which land use is enmeshed with the spiritual, familial and social dimensions, as well as the economic sphere.

Denny, an activist in Central Kalimantan illustrates his understanding of the multiple different forms of forest found on local Dayak lands, and of their vulnerability under the corporate gaze<sup>2</sup>:

Pahewan is a protected forest area, it is spiritual, the people are aware that there is something in that forest. Kaleka forests are used for cultivation. There are settlements in

<sup>&</sup>lt;sup>2</sup> See also summaries of Dayak botanical knowledge and land use in Hujjatusnaini (2016) and Sunariyati (2018) for expanded explanations of pahewan, kaleka, and tajahan forest forms.

forest areas and kaleka can be on ex-settlement areas. Hutan keramat is like a walled forest, nothing can be taken. Tajahan is the most spiritual form of forest. Spirits are there to protect the trees – the people would be afraid to take too much – the people yes, but the companies no! The companies don't believe in spirits!

(Denny, activist, interview in Central Kalimantan, 2014)

Denny's testimony here suggests a contradiction between the disenchanted modern consciousness of the corporation and a world in which spiritual agency remains meaningful. As such, the act of translation of the forest in Kalimantan into a mapped representation which is legible to the corporation (as well as the state) necessarily involves the distortion of the enchanted into a disenchanted form.

Beyond, and overlapping with, incommensurable social concepts of land relations, certain landscape forms are fundamentally at odds with a liberal property regime. South Kalimantan, for instance, is home to extensive wetland areas of ecological importance, including peat swamp forests and freshwater swamp forests contained in zones such as the Sungai Negara wetlands (on which see MacKinnon et al., 1996). These swamplands by nature cannot be parcelled into individual plots but instead must be managed communally, as explained by Rizki, a peasant activist in South Kalimantan:

The communities depend on the swamps for their livelihoods, they use the wetlands for fishing. They have defined the zones in the swamp, there are fishing zones, a zone for wood for building, a zone for livestock, but because of the palm oil corporations, many people lost their incomes.

(Rizki, activist, interview in South Kalimantan, 2014)

Activists here expressed how the form of counter-mapping at their disposal is difficult to apply to wetland community land use and fails to address what Rizki and others claimed to be one of their primary problems, which is the alternate drainage and flooding of swamps by managed oil palm plantations. In line with the claims of Harris & Hazen (2006) regarding forms of privileged nature, activists in the area also complain that swamps attract very little support from global organisations in comparison with the forested areas of Kalimantan which draw more international attention with an environmental focus.

This section has provided a glimpse of the many complex Indigenous ontologies in Indonesia based on ways of relating to land which contradict the commodity form of land-as-property. Such diverse communal landholding arrangements, as well as ways of living in relation to certain landscape forms such as swamps, complicate the bordering and parcelling endeavour of the forms of mapping as resistance which are detailed as the central focus of this article. The following section moves on to more closely consider the complexities of mapping as one means by which rural communities with

diverse land-related ontologies, such as those mentioned above, resist the expansion of resource frontiers.

## Contesting expropriation through mapping

To return to Said's identification of the anticolonial cartographic impulse, considering the possibility of this through the technology of the counter-map requires a close examination of the theory and practice of mapping in relation to the ways of being of the communities who employ forms of mapping as resistance. Maps themselves, as in the overt colonial era, have in recent times been used to aid dispossessory processes exacted by the state and other agents of capital. True to Said's observation that the colonial eye sees a "blank place" (1994: 253), extractive corporations may present maps detailing the structure and contents of the subsoil but with much of the overground physical and habitational elements omitted from representations of rural lands, while the Indonesian government has mapped vast forested areas onto "empty charts" (Eghenter 2000: 352). Activists such as Akmal have also explained their frustration with corporate cartographic strategies:

They used maps with blank spaces – the government and corporations always use the map without any information inside, just the boundaries [...] nothing about where the village is, where the local community area is. For example, with the national park, across all of the map you can only see green colour without any information.

(Akmal, counter-mapper, interview in Central Kalimantan, 2014)

In the past, activists say their communities would mainly orally relate their complaint against the corporations by describing the detail of the conflict areas, which limited their attempts to use legal routes to contest land claims. In contrast, counter-mappers create representations of customary boundaries and populate their maps with settlements and diverse cultivated areas, resulting in the production of documents of legal value in the eyes of the state's courts of law (Warren 2005). Indonesian state acceptance of Indigenous maps covering 2.4 million hectares as part of the UKP4 and BIG-led 'One Map' project has largely been claimed as a success by mapping organisations seeking to defend communities on resource frontiers from expropriation (see Down to Earth 2012; World Resources Institute 2013; Samadhi 2013). However, in order to make sense of the counter-map and its potential for meaningful resistance to expropriation and social translation a deeper understanding of the processes and effects of mapping is necessary.

The following passages engage with the claims of counter-mappers working for one nationwide mapping organisation made during periods of research from 2013 to 2016. To begin with, the conduct of mapping organisations differs, but the group studied here maintains a specific code which regulates engagement with communities, as well as how the mapped data is used afterwards, as explained by Hardi:

These are our principles: the community sends a letter or makes an oral request to us. Why do we need the letter? This is our mandate, we can show the letter when we arrive at the community. [...] Secondly, we discuss with the people, explain the process and how to use the map, what to do with the map afterwards [...] finally we give the map to the community [our organisation] takes only a duplicate, if we want to use it, we have to ask permission from the community.

(Hardi, counter-mapper, interview in Kalimantan, 2014)

Once permission is obtained much of the subsequent mapping process remains markedly low-tech. This is notable as much of the mapping literature centres on what Harley (1989: 2) originally called the 'culture of technics' which has since evolved along with increasingly user-friendly and ever-cheaper spatial information technologies in the form of geomatics such as geographic information systems (GIS) and global positioning systems (GPS) (c.f., Mohamed & Ventura 2000; Palmer & Rundstrom 2013; Crampton 2010). As one counter-mapper explained (Aditya, interview in Jakarta, 2013), in the first stage of the process sketch maps are made with the community involved. Once these are complete, the sketch maps are taken to the field and further deliberation takes place in situ over the location of boundaries. A redrawing of the map and naming of features usually takes place at this stage. Another workshop is then organised during which the modified sketch map is transferred by a cartographer to a scale map with the addition of satellite imagery. Further, the deliberative stages in the mapping process involve in some cases 19 representatives of various communities, as well as agents of local government from the village or subdistrict levels (Aditya, interview in Jakarta, 2013).

The collaborative process of mapping is also foregrounded in some of the scholarly literature as being just as productive and 'empowering' as the end goals in terms of legal gains over territory (see especially Parker 2006; Warren 2005). Young and Gilmore (2013) also stress the affective and emotional nature of mapping, questioning the often-implicit assumption that mapping is a rational deliberative process realised among impartial participants. Indeed, all of the counter-mappers consulted for this study also place emphasis upon the significance of the process of mapping as well as upon its end goals, stressing the clarification of community rights with respect to land, to water, and to resources. They tend to present mapping as an activity which creates a consultative, democratic, and gender-egalitarian space, although many concede that these ideals are not always reached in reality:

We want to make a democratic space for the people, for spatial planning. With Indigenous leaders, consultation is the important thing. Women are invited into the consultation. We invite all of the village to synchronise with other villages, marking the boundaries between villages.

(Denny, counter-mapper, interview in Central Kalimantan, 2014)

On the whole, counter-mapping in Indonesia is a social process, rather than simply a technical process, aimed at consciousness-formation among diverse rural populations. It is undoubtedly intended to be politicising; Hardi, for instance, explains he aims at "making the community aware the problem is in the politics" (Hardi, counter-mapper, South Kalimantan, 2014). Further, the process itself is credited

with familiarising communities with the use of the counter-map as a document with state-recognised legitimacy to counter land claims by powerful corporations.

The commodity impulse and prospects for archipelago-wide solidarities

Complicating critical understandings of the extension of individuated property, the work of Tania Murray Li has highlighted the instances in which colonial and postcolonial agents of governance have instead imposed communal arrangements on Indigenous communities. Contrary to images of Indigenous landholding as always collective in its 'natural' state and subject to erasure by the always-liberalising tendencies of successive state and other governance forces, Li (2010: 387) points out occasions in which a "communal fix" has been imposed by external actors who exclude communities from property arrangements on the grounds that they are unable to inhabit the form of the proper market subject. Governance in these cases can be argued to be working to preclude market participation among communities who are told they are better off adhering to 'timeless' communal practices for their own protection. This is another form of exclusion which is enabled by an unequal power relation of coloniality, and one which causes us to reconsider our understandings of engagements with market interactions by those who are epistemically excluded in state discourses.

Market expansion cannot simply be seen as an imposition from above and the dichotomy between indigeneity and market activity has long been a false one. As noted, rural communities have often actively sought "market opportunities" even as state and global agents of governance have on occasion prescribed, in a paternalistic way, their protection from market forces (Li 2010: 385; see also Rivera Cusicanqui 2012 on Indigenous markets). Communities may then become more receptive to the processual bordering of counter-mapping if they are already compelled by the commodity towards individuated landholding. As Saiful, a former counter-mapper in Indonesia explained, communities may have ample tools to resolve disputes without introducing mapped borders, but the impulse to border is often sparked, not by the map itself, but by the commodity:

Without the map they can [resolve disputes] with negotiations through adat. After the map, adat mechanisms can still be strong. It becomes more complicated when there is an economic interest, resources within or across the boundary. The case is usually if they have gold, or certain valuable timbers like ironwood, or if the area is marked for oil palm plantations; then boundaries become contentious.

(Saiful, academic and former counter-mapper, interview in Jakarta, 2014)

Understanding how the counter-map acts, therefore, demands consideration of how it works within the contextual complexities of commodity production. Saiful adds further detail with regard to how commercial logics have already caused communities to turn towards individuated ways of relating to space in West Kalimantan:

In West Kalimantan individualisation of landed property started with rubber. And also it forced people not to migrate anymore because they have to tend the rubber, before they were more likely to move [...] but rubber forced people to settle. [With rubber] people can still ask the owner to tap the tree and they can basically share the profits. With oil palm I think it's more fixed than it used to be, because people know the value of money more than they used to, they want a secure income, so the concept of boundaries also changes with oil palm.

(Saiful, academic and former counter-mapper, interview in Jakarta, 2014)

Overall, Saiful suggests that some commodities more than others create the conditions for the cartographic impulse towards fixed bordering to emerge. However, it would be wrong to deduce from this that counter-mapping simply works to ease the deepening of capitalism in rural areas. The following paragraphs add a note of caution in this regard by detailing the productive potential of the mapping method to unite disparate rural interest groups against fairly consistent corporate strategies.

We can expand the analysis here by considering how rural interests may work against one another in Indonesia, with those of peasant groups often found to be at odds with those of Indigenous communities and with both of these contrasting at times with conservation imperatives. The country's archipelagic geography and diverse tenurial systems also divide rural organisation. Mapping as a resistance method, insofar as it can be rolled out across the archipelago in a common form, still has the potential to unite fragmented rural communities against comparably homogenous corporate power. Overall frustration with this fragmented resistance to violent rural evictions has been described by Dianto Bachriadi:

When you're talking about the evictions, appropriations, exploitation, everyone is facing the same problems [...] Take one or two big plantation companies, like Wilmar or Sinarmas, they operate in many areas of Indonesia – Kalimantan, Sumatra, Sulawesi – in those areas the same conflict occurs, so why don't the people who have conflict with Sinarmas in Sumatra communicate with people who have conflict with Sinarmas in Sulawesi? They face the same enemy with the same tactics. Okay, so the land tenure system [differs] but we're not talking about the difference in how they regulate their own tenurial systems, we're talking about dealing with similar mechanisms of eviction, similar mechanisms of expropriation, similar mechanisms of grabbing land.

(Dianto Bachriadi, interview in Jakarta, 2014)

Bachriadi alludes to the fact that across Indonesia, companies operating within nature-based industries, especially palm oil corporations, operate according to relatively homogenous corporate strategies. Techniques of land appropriation are rehearsed, refined, and repeated across the

archipelago, as well as brought in from and practiced abroad. Singapore-based oil palm giant Wilmar, for instance, had acquired close to 250,000 hectares of plantation estates by the end of 2013, 71 per cent of which was located within Indonesian territory, a further 25 per cent on Malaysian soil, and a final five per cent of its plantations were on the African continent, principally under its new operations in Ghana (Wilmar 2015). Yet, while the operations of a corporation such as Wilmar gain in national and transnational coherence by building logical interconnections and homogenising practices, resistance to corporate appropriation of land is often fragmented along the lines of rural interest politics. At the same time, political representation has become more localised in Indonesia since the implementation of decentralisation reforms over the *Reformasi* period. In other words, broad corporate strategic coherence is not met with an integrated social and political response.

As an example of this fragmentation, one fault line can be observed between the Indigenous movement and the peasant movement. The Indigenous movement is largely consolidated nationally under AMAN and around the objective of the strengthening of adat customary law. The peasant movement, in contrast, is broadly in favour of the strengthening of Indonesia's Basic Agrarian Law (BAL - on which see Lucas & Warren 2013). Peasant activists' deeply rooted belief in the social function of BAL and its compatibility with adat law is exhibited by Gunawan Wiradi:

The young generation misperceive the relation between BAL and customary law. The idea of our founding fathers was that our national agrarian policy should be based on adat law, but this is not to revive the old adat. [Instead] adat law should be modernised and we should not just imitate the land ownership concept from the West. That is why we scrapped the so-called *eigendom* – that is, absolute property – so, we have no ideas about absolute property, lands should have a social function, so that private ownership is constrained by the social function.

(Gunawan Wiradi, academic and former Chairman of the Basic Agrarian Law Committee, Interview in Bogor, 2014)

An additional fragmenting factor is that there is no single AMAN-like consolidated body for peasant activists but instead a number of national peasant organisations. Further, decentralisation has facilitated direct local politics (see, for example, Tyson 2010), but local struggles have come at the expense of logical interconnections being made nationwide. Bachriadi's comments suggest that this has happened to the extent that companies like Wilmar are treated in a sense like local actors as they are countered through localised struggles.

As Abdul, co-founder of one Indonesian mapping organisation explained in 2014, his group served to unite environmental and agrarian activists around a common project: "We all had different backgrounds, agrarian activists, environmental activists, conservation..." And, unlike other organisations which seek to counter rural exploitation, this project is organised around a methodology which does not require allegiance to a particular rural ideology.

However, the uniting potential of counter-mapping must be considered in relation to the fact that mapping is ultimately geared towards seeking recognition by the state, itself tenuous in a context of

legal pluralism. These key points relating to the state return us to a key difference between the 'cartographic impulse' identified by Said as central to anticolonial struggles against the state, and the contemporary cartographic impulse which tends to engage the state, accepting its normative authority and seeking its legal assistance. Counter-mapping, from this perspective, becomes an affirmation of state territorial sovereignty beyond its former real administrative reaches.

## Conclusion

The corporate use of undetailed maps in strategies of expropriation across resource frontiers today tells us that the colonial eye in its present form continues to see a 'blank place' to be claimed for extraction. However, activists working through the 'cartographic impulse' to produce maps to counter this corporate expansion have expressed anxiety about the liberal property-friendly format of geomatic spatial technologies and the way in which these contradict Indigenous tenurial systems. Such anxiety must be considered in the context of a global historical trend towards the extension of liberal property regimes and the production of the propertied subject, defined against its dispossessed others. In post-independence Indonesia, Indigenous communities continue to receive ambivalent treatment, finding themselves included within the national archipelagic imaginary, yet often excluded from the normalised Indonesian subject for lacking the 'proper' language and sedentarist habits, and for living otherwise to a liberal property regime. And yet, the expectation that Indigenous communities will be damaged by individuated land relations has caused external organisations to try to impose the maintenance of communally-based land relations. This performs another form of exclusion, this time from the proper market subject, by paternalistic actors intervening in Indigenous life.

It is clear that counter-mapping's associated impulse to border and parcel land risks the erasure of land extra commercium and the translation of complex land-based ontologies into a liberal property regime, facilitating the market legibility of Indigenous communities. However, at stake here is the real and catastrophic loss of land to the extension of extractive industries which must be weighed up against the actual effects of adopting a technology amenable to ownership and fixed bordering. After all, a community can make strategic use of mapping technologies to defend against expropriation while at the same time rejecting the ontology embedded within them. However, in contrast with the anticolonial cartographic impulse against the colonial state described by Said, Indigenous mapping is motivated by the protective promise of adat law, despite its historically contingent, negotiated, and ultimately vulnerable nature within a system of legal pluralism.

Overall, the use of counter-maps against corporate expansion remains fraught and beset with contradictions, so a straightforward argument of the map facilitating the global extension of liberal property relations in the Indonesia context cannot be made. Social and economic life is often already enabled through strategic commodity production for the global market, which might mean the prior adoption of more individual land relations. Most urgently, communities continue to find themselves facing overt (and often violent) modes of expropriation – a clear indication of the coloniality of the present. As such, they make strategic use of mapping technologies – in spite of their shortcomings – in the defence of rural lands. Ultimately, these complexities around counter-mapping illustrate the

knotty reality of life on resource frontiers, where both existence and resistance involve circuitous everyday navigations of expressions and formations of colonial and postcolonial power.

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