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Editorial

Entangled Environments in Asia

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For a long time, Asia attracted the European gaze and interest through its abundant and seemingly endless endowment with natural goods like timber, plants and minerals. Meanwhile, one of the most pressing issues of our time is to how reconcile the exploitation of natural and biological resources with socioecological needs. How to cultivate, appreciate and extract existing biodiversity and biomass without causing unintended social and environmental problems is a question demanding critical analysis. Among and within Asian countries, a wide range of different premises, priorities, ideas and values on the issue of development and its relationship to the natural world as well as property rights over it exists (Ribot and Peluso 2003; see Joshi this issue). National industries and policies often face resistance from society, and industrial mining, farming, forestry and fishery find themselves contested by food and environmental movements (Ye et al. 2020; see Maimunah this issue). In many Asian countries, the notion of 'bioeconomy' has already developed into a political project, with governmental strategies approaching key issues such as food security, energy supply and overall global competitiveness (Sheppard et al. 2011; see Keilbart this issue). As part of an international organic movement, activists in many Asian countries aim at food sovereignty, sustainable agriculture addressing issues of social and environmental justice. Challenging the global consumption of organic food and ethical symbols, thus deserves critical analysis informed by coloniality (Freidberg 2010; see Still this issue).

This field of tension presents political-economic, environmental and social challenges for countries in the region and their (re)production, utilisation and governance of natural and biological riches. These processes and the rapidly expanding web of relations accompanying them stimulate a variety of scientific approaches, theoretical concepts and perspectives. Beyond the management of natural resources, the conceptualisation of human–nature relations, values and connections to individual behaviour and collective action become of vital interest. This includes Asian perspectives on human alienation from nature, attempts at a reconciliation between human and nature (also in urban settings), and diversified conceptions of nature in traditional-knowledge systems across Asia. Taking account of the symbolic-material complexities in Asian conceptions of nature,

researchers progressively dissolve the nature/culture divide and the separation between political economy, social ecology and the study of symbolic forms and practice.

This special issue "Entangled Environments" is based on papers presented at the DGA conference held in Würzburg in April 2019. It aims at exploring the rapidly evolving field of interrelations of natural and social environments in Asia from a number of different perspectives. Bringing empirically informed case studies from India, Indonesia and Cambodia into conversation with one another, taking as well as a regional perspective therein, we aim to address the following questions with a comparative approach:

- How can we theorise and conceptualise the social–ecological nexus?
- What are dominant ideas about entangled environments and the inherent values and beliefs of their particular worldings?
- What concepts exist about the utilisation or governance of natural resources and products under a perspective of coloniality?
- What governmental and non-governmental strategies are implemented by different actors?

The notion of 'entanglement' lingers somewhere between the descriptive and the analytical. It points to the challenge and the recognition of the simultaneity of matter and understanding, as well as to the intimate conditionality of empirical facts and epistemological stances. This interdependency applies not only to human, non-human and more-than-human but also to the ways in which we conceptualise these entities through ontologies and how we imagine we can know about them via epistemologies, as contingent upon a historical time and place. In this special issue, entanglements between people and land are expressed in notions of property rights, between people and rivers framed around identities at the resource frontier and embedded in narratives of organic farming and bioeconomies. Though multispecies ethnographies are not at the centre of analysis, the consideration of significant others and the relational quality of gendered humans to land, water and fellow species as summarised in agriculture points to the fluid boundaries of objects. Especially farming reveals itself a rich field of close co-constitution of human and animals, humans and plants as visible in agrobiodiversity (Schöley and Padmanabhan 2016) – an outcome of close coordination and interaction between human and more-than-human.

The research stops short of the post-humanist position to 'let things speak' (Holbraad and Pedersen 2017), but takes the entanglement of elements, forces, natures, things, organic and inorganic material, peoples, places, concepts and imaginations seriously, turning them into matters of particular concern. People are forever immersed in lifeworlds larger than just that of the human. The multiplicity of inhabitants and the infinitude of their entangled futures, hopes and dreams (Ingold 2011) thus demands analytical focus and operationalisation, which is

answered by Tsing (2019) and Mol (2002) by a call to put practices centre stage. Nevertheless, the concept of 'nature' is power – and therefore politically useful as in the role of weather reports as constitutive of the modern national state, the myth of nature in environmental politics and in the idea of Planet Earth being in dire need of global action (Hastrup 2013b).

Beyond the dualism of nature/culture, Hastrup (2013b) proposes the simultaneous entanglement of analytical and empirical worlds. The deep-seated intertwinement of the natural and social, human and non-human, and of organic and non-organic forms leaves no space for science outside the world it engages in (Rossiter 2007). Instead of splitting the world into binaries, the assumed divide between nature and society comes into focus here. When the environment is seen as external to social communities this is a function of the very definition of 'natural environment', whereas local knowledge and sources of meaning make no sharp distinction between changing biophysical worlds and changing social ones (Cruikshank 2005). Environment gets created, when humans enter into a self-conscious relationship with their surroundings. 'Nature' is implicit in social and intellectual life, and complicit in the makings of it.

Though Asia is at the centre of attention here, the debates in the Americas emerging around the concept of *buen vivir* contribute to the conversation as well, as it gives epistemic significance to the integral relations between beings, knowledge and nature (Walsh 2010). With its close discursive proximity to development, *buen vivir* showcases the inherent challenge at stake: how questions of worlding, epistemology and ontology relate and lead to adaptation and hybridisation. The alternative epistemic position is prone to being co-opted and there are many obstacles for an intercultural, interepistemic and plurinational transformation. *Buen vivir* as a collective relational model stands in tension with the development idea based on individual capacities and potentials, enhanced by the state. Beyond individual responsibilities and the strong state, colonial legacies, reproductions and reconstructions in the 'modern colonial world' need to be taken into account. The inherent tension in a *buen vivir*-led development approach requires disentanglement of the colonial matrix of power; as Walsh suggests (2010, 20), however, this might lead to more complicated envelopment and entanglement.

The world of technoscience and indigenous knowledge is an entangled one, asking questions of an epistemological and ontological nature. The 'one-world doctrine' (Law 2015) privileges modern science as the authoritative means of knowing and measuring the cultural world by the standards of the Natural Sciences. Considering a world multiple (Omura et al. 2019) would embrace the complex and multidimensional realities people live in, acknowledging the entanglement of modern technoscience with other knowledges, practices, things and persons. These struggles over nature, culture and knowledge illustrate how profoundly different realities of modernity and indigeneity are interwoven with one another. How to understand this multiplicity of ontological encounters in a postcolonial sense is one

core question driving the authors featured in this special issue on entangled environments.

Going beyond the binaries of modern and traditional, but seeking the relationship between human and more-than-human, we venture away from the tight containers of the indigenous as a static cognitive framework and modern knowledge as ever progressing and therefore superior into the unchartered arena of interaction between modern, indigenous and traditional knowledges and ways to perceive life. Barad (2007) proposes to think about how the world comes into material being through entangled relationships. This creation of worlds in a material and social sense takes place within specific power relations (Otsuki et al. 2019). 'Worlding' can be understood as different stagings of the world which create a sense of what is deemed 'natural'. This resonates with the endeavour of postcolonial thinkers to consider art and literature as materially generative of worlds and not just as merely representative. For example does the narrative concept of 'haunted nature' bring to the fore non-human agency and the ways in which humans are entangled with the non-human (Blazan 2021). Worlding builds certain relationships and ignores the possibilities of others, choosing whose affects count. Which and whose entanglement and separation matters underlines the process whereby natures and values are manufactured within diverse projects (Hastrup 2013a). They are constantly made, unmade and remade. The politics embedded in the resulting sociomaterial construction of worlds are of interest in the untangling of environmental concerns, as they reveal (non-)human concerns across Asia.

Behind the entangled environments lurk the two debates on the ontological turn, alternative makings of reality and multispecies ethnography respectively, bringing the more-than-human into social analysis. With an engaging approach, Tsing (2019) sets out to show that the presumably distinct schools of thought can be actually combined in practice. On the one side of the debate the ontological scholar highlights radical difference and is interested in how practices reveal cosmologies. On the other, the multispecies researcher values touching and coordination despite radical difference and aims to understand how practical encounters work within and beyond cosmologies in a matter of call and response. The difference rests in attention to the human and non-human: The ontological materialist brings the latter to life within the frame of human affect and is criticised for refusing to acknowledge aliveness of other beings. The multispecies lens focusses on human and more-than-human coordination and the reciprocity of response, but might ignore the larger historical framings while giving voice to the non-human via questionable categories.

Tsing (2019) identifies common ground between this two schools of thought in the work of Mol (2002), who demonstrates how cosmologies arise from practice. The touching across difference – the entanglement of environments and beings – produces encounters across a set of practices (Tsing 2005). She proposes to look for the ontological specificity of particular sets of practices and then what happens

later on when these eventually rub up against each other. This leads to Tsing's (2019) own approach: she emphasises the cosmopolitanism of connections and their historical emergence, as each ontological frame is emergent, shifting and travelling. Her focus rests on touching as a 'friction' which sets off a historical trajectory, emergent from the encounter. Taking more-than-human sociality seriously requires focus on the interface between human labour and natural resources. Such attention follows the practical arrangements and dynamic interactions of other species alongside human intended and unintended endeavours (Tsing 2015). Putting everyday practices at the centre of analysis in a more or less concrete manner unites the contributions to this issue.

The modern subject is not a given, but is formed through practices of the ordinary, the everyday and the mundane (Burchell et al. 1991). In these practices we can find possibilities of the 'otherwise' and alternative knowledge. These forms of being are enacted in worlding practices, and embody and enable forms of multiplicity within and beyond the ongoing colonialist project via entanglement (Otsuki et al. 2019, 9). Maps can be read as material-semiotic objects which in the best sense translate between different worlds, but often create distinct ideas of ownership; this Joshi shows in the case of Cambodia (this volume). Changing environments are perceived differently due to experiences of colonisation, governance and economic development. What is reduced to environment is rather the *Mitwelt* of the contemporary more-than-human and their means of coordination (Otsuki et al. 2019, 10). When exploring everyday politics, a challenge rests also in the presentation of these multiple worlds through the medium of text while simultaneously keeping them entangled.

The conceptualisation of entangled environments is informed by intersecting debates on the coloniality of knowledge production and different schools of thought on human–nature relations within powerful narratives. We come across 'biosociality' (Hastrup 2014), 'technonature' (White and Wilbert 2010), 'socionature' (Nightingale 2019) as well as socioecological relations (Jahn et al 2009) via systemic approaches spanning the inter- to the transdisciplinary (Fitz et al. 2022). The idea of nature and society as compatible entities is disturbed by the notions of feminist Political Ecology (FPE) and knowledge based on scholar activism, as well as by material ontologies and co-constitution as fellow species as discussed above.

Dissecting entangled environments relates to our reflections on teaching, research and public engagement in Southeast Asian scholarship, as presented in the Minifesto (Padmanabhan et al. 2022; see also, this issue). There we explicate our understanding of 'Critical Development Studies' as a way of recognising Development Studies as a power-laden field of knowledge production which is temporally and spatially situated, further to being rooted in colonialism. From the perspective of Southeast Asian Studies, we outline core principles as an invitation to join the discussion on how to bring Area Studies into conversation with Critical

Development Studies, and address intersectional inequalities at the university and in development cooperation. To approach the complexity of entangled environments, we promote a relational approach to the social, political and the ecological. We also recognise that the scholarly output we consume, produce and teach is 'situated knowledge' – in the plural. Last but not least, we aim at an institutional level to unlearn the idea of universities – as centres in the 'colonial matrix of power' – and problematise the materiality and immateriality of colonialism therein.

We travel along the imaginary trade winds from India to Cambodia via Kalimantan and Java in Indonesia in the following contributions, which method-wise combine engaged ethnographic fieldwork with globally spanning discourses. Insights from women's organic-agriculture collectives in South India are juxtaposed with a discourse analysis of global reports on organic farming by an international federation. Experiences of land dispossession among women farmers rest on qualitative interviews conducted in villages in north-east Cambodia, brought into conversation with legal frameworks. Last but not least, insights from Indonesia rely heavily on a deep colonial perspective and the interaction during fieldwork with inhabitants of a Dayak Murung village, as well as on in-depth interviews with knowledge carriers in the field of organic farming.

Enid Still sets out to untangle ethics in the case of women's collective agriculture in Tamil Nadu, South India, and conceptualises them as 'alterbiopolitics' – thus reconfiguring care as an ethico-political practice. Alternative narratives imply an ethical relationship to food production and consumption. While a presumably universalist approach to 'certified organic' food has reproduced colonial legacies in the international food system, it has also rendered the particular struggles of collective farmers, and especially women, invisible. Their claim to agriculture is compromised by their gender, caste and marital status. The collective challenging of normalised social boundaries produces ethical alternatives, sitting awkwardly with the highly regulated global world of certified organic. This more-than-human care in collective organic agriculture in South India represents a locally articulated and relationally situated practice of ecologies, cultures and politics.

Nature–culture interdependency is emphasised against the universalist assumptions and hegemonic ethics of the productivist growth of certified organic food entering global supply chains. The ethical dilemma arises in the concealing of local struggles and lived realities, when organic is reduced to non-chemical agriculture excluding all practices outside certification. The disciplining and control of organic with global ambitions and a universalist approach rests in the trajectories of development thinking. With a convincing dialogue between discourses embedded in relevant annual reports and ethnographic insight into the struggles of collective women farmers, Still demonstrates the colonial continuities of improvement in biopolitical regimes of representation.

Venturing further east to Cambodia, Saba Joshi takes up the issue of large-scale land acquisitions amidst agrarian transformation from a gendered perspective interrogating whether titles do indeed entitle or rather dispossess. Establishing the concept of 'individual property rights' fundamentally alters the relationship between rural women and men farmers vis-à-vis their ecologies. The state introduced economic land concessions, and the respective land laws transformed customary norms governing access for the purposes of extraction and agribusiness. Here, land emerges as a resource needed as an input to solely economically perceived endeavours, thus leaving aside the life-sustaining web of relations of care existing between food production, the collection of forest products and the reproduction of soil and human well-being.

Joshi shows how the narrow conceptualisation of land relations hampers in particular women's claims to ownership, as used to counter patriarchal notions and power gradients. The governance of land – with its patchy joint titling procedure, tainted by unequal procedural access based on the implicit assumption of unproductive commons – rather opens the door for the paradox of dispossession: even if titles are secured, women smallholders struggle to keep up farming as a means of livelihood in the face of immigrating farmers and masculinised logging activities infringing on the commons. Losing access to land seems to be on the increase for women farmers, when titled and acting as collateral – which might result in landlessness in the case of (joint) indebtedness. Via nuanced fieldwork, Joshi is able to bring out the conditionality of social claims to ownership over land and the resulting relations to it.

Siti Maimunah takes us from Cambodia further across the South China Sea to Kalimantan, the Indonesian part of Borneo. She frames the entanglement of socioecological worldings in the debate on consecutive waves of capitalistic frontier-making to show how the changing ethnic identity in Central Kalimantan is intimately tied to the river. Applying an FPE lens, she put the values and beliefs enacted by Dayak Murung in their everyday resistance centre stage. Paying close attention to the contestation and subversion of the dominant powers of extractivism, she uncovers the interplay of power relations between state actors, extractive companies and local elites. Ethnic identity has long been a contested issue in Kalimantan; Maimunah traces its transformation through encounters for the purposes of resource extraction from colonial times onwards.

The 'frontier assemblages' she proposes help to uncover the different layers of governance shaping the idea of an imagined wild forest. They transform it, through consecutive attempts, into multiple landscapes of extraction, be they ones of timber, rubber or coal – each simplifying the entanglements and value within the space. Different global-market economies, colonial practices and nation-state territorialisation have impacted not only the riverine landscapes in Kalimantan but reconfigured the Dayak Murung's ethnic identity by changing their ecological practices and traditional cosmology. The political mobilisation based around ethnic

identity aims to articulate entangled worldings concerning access and control, but in the logic of political decentralisation serves the Dayak elites' consolidation of power.

Spatially Patrick Keilbart invites us to follow him across the Java Sea, but links back the conversation on entangled environments to ethical considerations of organic and alternative agriculture – as explored by Still initially. Considering multiple facets of sustainable agriculture on the Indonesian island of Java, specifically in Sundanese and Javanese areas, he links these localised practices, values and beliefs to another global concept: that of bioeconomy. Unpacking the many interpretations of bioeconomy as the production, utilisation and management of natural resources, he identifies the emerging national project in Indonesia as focussed on resource efficiency and biomass conversion for products which can then be commodified. From a government perspective, organic agriculture appears to be part of a wider strategy geared at capital-intensive agribusiness aiming for economic growth and global competitiveness.

Keilbart juxtaposes this discourse with his ethnographic fieldwork among members of the organic movement – namely, social and faith-based actors – and examines their web of relations with the more-than-human here. With its aims of local food sovereignty, sustainable agriculture as well as social and environmental justice, the values of civil society actors partly overlap and partly contradict government bioeconomy strategies. Rather, the organic movement follows nuanced strategies of alignment, partial cooperation and even disengagement. As with all the articles making up this special issue, the continuation of colonial legacies shines through in many different guises, therewith continuing to challenge local values and practices of entanglement.

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