

# Laos and the making of a 'relational' resource frontier

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*This paper was accepted for publication in December 2008*

This paper seeks to reconsider the contemporary relevance of the resource frontier, drawing on examples of nature's commodification and enclosure under way in the peripheral Southeast Asian country of Laos. Frontiers are conceived as relational zones of economy, nature and society; spaces of capitalist transition, where new forms of social property relations and systems of legality are rapidly established in response to market imperatives. Customary property rights on the resource frontier can be seized by powerful actors in crucial political moments, preparing the territorial stage for more intensive phases of resource commodity production and accumulation. Relational frontier space is understood through the work of geographers such as Doreen Massey, who views the production of space as 'constituted through the practices of engagement and the power-geometries of relations'. In Laos, a twenty-first century resource frontier is being driven by new corporate investments in natural resources, and a supporting array of land reform programmes. The paper focuses on both the material and representational aspects of the production of the resource frontier, through policy and discourse analysis, and village level research in Laos' Khammouane province. By rethinking a dualist and hierarchical-scaled imaginary of frontier places, both rural people and local ecologies are shown to be key actors, in a complex, relational reproduction of frontier zones. An emerging Lao spatial and political assemblage – a form of 'frontier-neoliberalism' – is shown as producing dramatic changes in socio-natural landscapes, as well as new patterns of marginalisation and livelihood insecurity for a vulnerable rural population.

KEY WORDS: Laos, resource frontier, relational economic geography, social nature

## Introduction

This paper is concerned with the process and the implications of the deepening incorporation of the Southeast Asian country of Lao PDR into global circuits of resource extraction and commodity production. This process is understood through the geographical metaphor of a twenty-first century 'resource frontier'. In the last decade, natural resources of all kinds have shown major increases in demand, prices and rates of new capital investment, and resource sector firms are 'hot commodities' in major financial markets. In Southeast Asia, the classical resource frontiers of Burma, Papua New Guinea, Laos and Cambodia – the last remaining forested landscapes where natural resources have not yet been enclosed, extracted, and incorporated into

circuits of production and consumption – are being reached (e.g. White *et al.* 2006). Rising demand for resources of all kinds, and the merging of agro-food with industrial bio-fuel energy markets, strongly suggests that there will only be increased challenges to forest conservation and forest-agrarian livelihoods in global South countries (Nilsson 2007). These trends are also leading to a new form of resource geopolitics, and 'locked-in' strategies of corporate resource security and wealth extraction.

In geography and political economy, the formal, integrated 'Turner–Webb' frontier thesis has been thoroughly critiqued (see e.g. Cleary 1993). However, the metaphor of frontier remains widely used, as a way of referring to agricultural–forest transition zones of various kinds (e.g. Jepson 2006), and as a way of conceptualising boom and bust cycles of

resource-based economic growth (Barbier 2005). Jepson (2006) reviews how frontiers have been conceptualised in recent social and economic theory: as cultural or political boundaries; and as sites characterised by social inequity, environmental degradation and conflict. The frontier has also served as a conceptual marker for the expansion of state power into peripheral upland areas (e.g. Hirsch 1990) and in critiques of liberal-judicial property rights regimes (e.g. Blomley 2003). In Southeast Asian political ecology research, the frontier metaphor has been widely employed in explaining patterns of forest logging, cash crop expansion, and problems of resource degradation and communal displacement (e.g. McCarthy 2006; Tsing 2005; Walker 2006). A related critical approach, adopted in this paper, is to understand the production of frontiers through the geographical extension of capitalist relations of production (De Angelis 2004).

In the Southeast Asian country of Laos, specific iterations of frontier dynamics are taking form. Laos has recently been portrayed by key development banks, private sector actors and Lao state agencies as a 'new frontier' for natural resources and business opportunities [Asian Development Bank (ADB) 2004; Fortune 2007]. Companies and state enterprises from ASEAN and East Asian countries are leading this wave of foreign direct investment into Laos, with French and Australian corporations also represented (ADB 2006). A neoliberal-inspired discourse of the Mekong as an untapped resource frontier serves as a legitimating ideology for a particular strategy of large-scale resource development and regional integration, the kind of which has been the focus for oppositional civil society and community-based social movements in Southeast Asia over the last two decades. The unevenly regulated, 'land rush' quality of many of these land investments is now leading to new and intensive patterns of ecological degradation and social marginalisation in the Lao countryside (CPI UNDP 2006; GTZ 2007b). A key question regarding the new frontier investment regime in Laos involves to what extent new forms of economic dependency and political dominance are being established, both between Laos and its neighbours, and regarding the internal periphery within territorial Laos.

In outlining this interpretation of contemporary Laos as a resource frontier, I acknowledge that representations of geographical space always proceed from a particular standpoint or set of interests (Demeritt 1994). A key question running through this paper is, therefore, what ideological work do various representations of Laos as a 'resource frontier' perform? What are the consequences of these imaginaries, and who imagines them? (cf. Massey 1999; Castree 2004).

The main section of this paper begins with a conceptual discussion of resource frontiers, capitalism, scale, and nature in political ecology and geographical research, building on the work of Tsing (2005), Li (1999), and Massey (e.g. 1999), among others. The rhetoric of 'frontiers' can be understood as a legitimating ideological device, used by state agencies, companies and development banks, in the advertising and promotion of Laos as a 'new frontier for corporate investment'. From a conceptual perspective, however, the Lao frontier can also be understood as a contested and complex empirical 'reality'. When integrated with relational approaches to economic geography and political ecology, I suggest that the frontier can be used to understand critically new forest-agrarian transformations and resource displacements. The second part of this paper shows how both the discourse and the materiality of these processes combine in the reproduction of Laos, and upland subregions within Laos, as marginal, relational frontier spaces.

In the third section, the scaled complexities of the resource frontier are drawn out through a national scale analysis of neoliberal inspired resource sector investment processes in Laos. The notion of the 'patchworked frontier' is introduced, which indicates how new global resource sector investments in Laos interact with previous spatial regimes of resource governance, producing fragmented and overlapping mosaics of resource governance and territorial control (MacLean 2008). A case study in the fourth section explores the locally contingent and unexpected outcomes of tree crop plantation and hydropower project development in a rural Lao village, further contextualising relational frontier processes, and associated livelihood changes, for a lowland Lao community in Khammouane's Hinboun River valley. Fieldwork in Laos highlights that new frontier places and landscapes are not simply the outcomes of global political-economic forces and elite state-bureaucratic discourses. Resource frontiers, as enacted in specific locations, can be understood as relational spaces, produced through scaled interactions which are simultaneously material and representational. The everyday practices of local people (Walker 2006), and the 'agency' of local natures are typically unacknowledged, but crucial actors in landscape transformations (Tsing 2005; Raffles 2002).

The conclusion revisits how a de-centred, relational approach to resource frontiers can be useful for moving beyond a simple analysis of the changing location and 'impact' of extractive industries. In relational economic geography (Massey *et al.* 1999; Massey 2005; Bathelt and Gluckler 2003; Yeung 2002 2005), analytical attention is placed upon the iterative relations between actors at various scales.

Resource frontiers and peripheries can be viewed less through exclusive, spatial and scalar hierarchies, or in Moore's phrase, 'hermetically sealed sites of autonomy', but rather as intensely 'relational spaces of connection and articulation' (Moore 1998, 347). In this understanding, locality, communities and rural ecological landscapes emerge with a significant degree of agency, articulated and constructed in relation to an assemblage of other actors and processes (see Massey 2005, 100–1). Frontier sites are thus places which are shaped through the overdetermined, emergent effects of scaled power geometries (Massey 1999). Such a relational-geographical approach may aid in locating the complex, situated and cumulative nature of local social and environmental transformations which reproduce frontier space, inequality and marginality, sometimes in unexpected ways. Relational understandings of the social–nature and centre–periphery dynamics associated with resource frontiers might also inform a more geographically complex understanding of ongoing 'structural' processes of accumulation through dispossession (De Angelis 2004; Glassman 2006; Hart 2006; MacLean 2008).

### Resource frontiers in economic geography and political ecology

The frontier has been a recurring but contested concept in political ecology and economic geography. The classical, Turnerian frontier thesis was forwarded as an interpretation of the historical experience of colonial settlement in the United States. Turner's frontier was conceived of as 'the meeting point between savagery and civilization', where the challenge of expansion across 'wilderness' acted to individualise, masculinise, and democratise a white settler American society (Kristof 1959, 274). This idea of the frontier was inflected with the paternalist, racist ideology of its time, advancing a linear narrative which acted to minimise the pre-European settlement history of the Americas. Turner's frontier thesis was subject to a sustained academic critique in geography by Carl Sauer and others, although the frontier often re-emerged as a way of conceiving of political borderlands or zones of transition of various kinds (Kristof 1959).

The emergence of political ecology as a field of research engaging with the political economy of ecological degradation, poverty, and nature–society interactions in the 1980s provided the resource frontier with a new conceptual footing. The most sustained engagement with the political ecology of frontier landscapes has arguably been in relation to the Brazilian Amazon (e.g. Schmink and Wood 1992; Hecht and Cockburn 1990). Another subset

of the political economy of Latin American resource frontiers literature focused on the link between resource frontiers and suboptimal economic patterns of overexploitation and boom and bust cycles, leading to Dutch disease cycles of low growth, and the 'resource curse' (see Barbier 2005).

Cleary (1993), among other scholars (including Schmink and Wood 1992), has critiqued frontier theory as an inadequate explanatory framework for understanding the complexity of political economic transformations in the Amazon. In particular, these authors point to problematic understandings of the frontier as a linear historical-geographical process, whereby the extension of forms of capital investment is considered as synonymous with the expansion of full *capitalism*. Cleary (1993, 332, 345) considers this as reflective of a deeper, recurring problem with the classical frontier thesis applied to the Amazon: '... theories of frontier development derived from orthodox political economy have proved an unreliable guide to economic, social and political trends in the Brazilian Amazon... The broad analytical categories which characterise it – peasantry, mode of production, class, state – become blurred when applied to the region, conflating and radically simplifying a complex social reality'.

For Cleary and other critics, the Amazon actually poses more problems than opportunities for the advancement of capitalism. Further, Cleary critiques representations of the peasantry in frontier political economic theory, as '... both omnipresent and absent, continually talked about but never actually appearing, subsumed into an ideological framework in which what a peasantry is, and the range of possibilities open to it, had already been decided' (p. 338). This critique of a linear understanding to frontier forms of cash crop expansion, and the problems with a simplified understanding of social actors, has also been applied to studies of upland and forested Southeast Asia (e.g. Li 1999).

Yet, particularly in the post-Cold War phase of global neoliberal capitalism (Harvey 2005), it would be difficult to argue that new forms of capitalist exploitation – large-scale logging, plantations, mines, hydropower dams, and other resource-based industrial projects – have not had a transformative effect in many regions of the global South. A nuanced understanding, which maintains a critical perspective on the existence of scalar configurations of power and a global capitalist political economy, but in which frontier space is also understood in a relational manner, as the product of practices, trajectories, and emergent inter-relations (Massey 1999; Bathelt and Gluckler 2003), may address some of the limitations with frontier thinking which Cleary and others identify. Indeed, for Marxist scholars, such as De Angelis, frontiers of various

kinds are viewed as an essential spatial form in the functioning of global capitalism:

Capital's identification of a frontier implies the identification of a space of social life that is still relatively uncolonised by capitalist relations of production and modes of activity.

De Angelis (2004, 72)

Frontier formations in this sense become understood as a geographical expression of primitive accumulation and enclosure, a process: '... rooted in capital's drive to continuous expansion' (De Angelis 2004, 72).

In research on the political ecology of Southeast Asia's forested and upland landscapes, the frontier concept is often deployed as a malleable heuristic device [see e.g. Tsing (2005) on Kalimantan; and McCarthy (2006) on Sumatra]. Walker (2006) forwards the frontier as '... expanding borderlands (figuratively or literally) driven by economic cycles of rapid investment with potential for disproportionate return on investment'. Along similar lines, Tsing (2005, 28, 31) has recently described current forest-agrarian dynamics in Kalimantan's interior as a deregulated zone of 'frontier capitalism'. Indonesian frontiers are presented as an 'out of control, interstitial capitalist expansion' – a dystopian 'travelling theory', marked by violent dispossession, high profits, and deep ecological degradation. Tsing's interpretation of the Kalimantan frontier situates to how local people, places and natures become actively marginalised, and how customary property regimes are erased or confused by the entrance of new actors who 'change the rules', through both legal and extra-legal means. The 'agency' of nature and landscape is of key importance in Tsing's account of how the Kalimantan frontier pushed forward in Suharto-era Indonesia.

In a manner aligned with Tsing's description of Kalimantan, I understand the Lao resource frontier as unevenly produced, through both legal and illegal means. Highly damaging and extractive timber mining operations, thinly disguised as plantation concessions and linked back to powerful political figures, can be located nearby to the projects of highly capitalised global firms, claiming accreditation through eco-social certification. The resource frontier in Laos is composed of a heterogeneous assemblage of development actors and state interests. This upland frontier is also, to a significant degree, transnational and corporate, centred upon large-scale hydropower, mining, forestry and agri-business – the export-oriented resource sectors considered by key Lao and international agencies to be the most important for the country's development future [Government of Lao PDR (GoL) 2003]<sup>1</sup>.

In this section, I have argued that a relational approach to the political ecology of resource frontiers holds analytical potential as a 'meso-scale' heuristic device for understanding the geographies of resource extraction, displacement and marginality under global capitalism. In turning to the Lao context, I show how the frontier is less being settled, as much as it is being emptied<sup>2</sup>; and resource sector investments are being accompanied by a sweeping programme of enclosure.

### Imagining, producing and governing frontier space in Laos

Oxiana Ltd. geologist Tony Manini spent seven years of the last decade exploring jungle tracks on the Ho Chi Minh Trail in Laos, searching rocky outcrops for gold. The expedition paid off with a \$4.29 billion gold and copper find, the first in Laos by an overseas mining company.

'We were leading the push into new frontiers,' said Manini, 40, who with a team of Soviet-trained Laotian colleagues drilled 440 holes between 1993 and 1999 in a jungle littered with unexploded Vietnam War-era bombs.

[http://www. Bloomberg.com](http://www.Bloomberg.com) (16 August 2004)

The idea of Laos as a resource frontier has a long, and often problematic, historical provenance. From 'colonial backwater', to 'battle state', 'buffer state', and more lately the 'cross-roads state' of the Greater Mekong Subregion, there have been numerous, external representations of Lao territorial space (see Jerndall and Rigg 1998; Pholsena and Banomyong 2006). As Ivarsson (2008, 34) highlights, the idea of Laos as an underpopulated territory, an 'unsettled frontier', extends back to the colonial period, when the Siamese and French struggled over control of the lands east of the Mekong. After the French colonial state secured the boundary between Indochina and Siam as the Mekong River, the Lao territories became the focus for attempts at road and rail infrastructure development. The aim was to 'de-link' Laos from the cultural and economic influence of Siam (Ivarsson 2008). Such spatial imaginaries of Laos as a frontier served as utilitarian tropes, linked to issues of colonial, and neo-colonial, political-economic power.

The above quote from Australia-based Oxiana Mineral's<sup>3</sup> gold and copper project in the uplands at Xepon district, in Savannakhet province, captures something of the current zeitgeist concerning the Lao resource sector, updating the colonial idea of Laos as an underpopulated frontier zone. The current iteration is a representation of Lao territorial space as an available, untapped space, which has

remained out of the reach of international capital, due to the Indochina wars and the post-conflict isolationism imposed by the Lao People's Revolutionary Party (LPRP). Oxiana's mining project, along with the World Bank and ADB's backing for the Nam Theun II hydropower megaproject, are particularly notable, as they represent highly capital-intensive transnational projects, sited in a socialist country carrying a high sovereign risk profile<sup>4</sup>. This is a clear reiteration of the idea of the frontier as a 'less explored' country that nevertheless holds the opportunity for significant risk and profit. It is also a 'smooth', non-relational perspective of territorial Laos, a free, unbounded space available for commodity extraction and production (cf. Massey 1999).

Recent imaginings of Laos' development future have become closely associated with various business-friendly representations of an untapped frontier. The ADB, for instance, dubs the Greater Mekong Subregion as a 'last frontier' for intra-regional business opportunities and for environment conservation programming (ADB 2004). The trope of the frontier is also being deployed by Lao state ministries themselves, in seeking to boost investor interest into the country. For instance, in a special advertising section of the high-profile American magazine *Fortune* (2007, S1–S2), Deputy Prime Minister and Minister of Foreign Affairs Thongloun Sisoulith pitches Laos as a 'New Frontier of Opportunity', highlighting Laos' ASEAN and upcoming WTO membership; supportive, confidence-building investment policies; and an expanding volume of intra-regional trade made possible through infrastructure upgrades. 'We have been to sign foreign direct investment memorandums of understanding worth \$2 billion,' stated the Deputy Prime Minister. This value of FDI is not insignificant when compared with Laos' 2006 GDP of US\$3.455 billion (World Bank 2008).

The idea of Laos as a resource frontier (and upland Laos, in particular, as a sub-national resource periphery) is not simply an ideological spatial imaginary forwarded by the elite. In another sense, the resource frontier also captures an important empirical 'reality' concerning the political economy of rapid and uneven development in the country. Market reforms and large-scale foreign direct investment (FDI) from China, Vietnam, Thailand<sup>5</sup>, and elsewhere, have become synonymous with the Lao path to socialism, and now represent the primary means by which the Lao state engages with questions of development and rural poverty. Peripheral, 'post-socialist' Laos has become one of the last nation-states to become functionally integrated with global capital flows and investment, a classic example of the geographical extension and deepening of capitalist relations. Natural resources are the most

crucial components of this development and regional integration project.

New announcements of large foreign direct investment deals into Laos are now regular features in the state-controlled *Vientiane Times* newspaper. In the hydropower sector, nine projects are currently in operation in Laos which together generate approximately US\$20 million per year in export revenues. The total number of hydropower project sites in Laos, holding at least a 'Memorandum of Understanding' agreement with the GoL, has reached 75 (LNCE 2008). In mining, some 96 companies are operating 156 mining concessions in Laos (Department of Geology and Mines 2007).

For commercial tree plantations, 2007 data from the Lao Committee for Planning and Investment (CPI) indicate that concessions covering a minimum of 150 000 ha have been granted to six international companies, representing a projected investment of US\$500 million as of early 2007 (CPI 2007). Included in the current list of Lao plantation investors are the world's second largest forestry and paper company (Stora-Enso), Asia's largest paper producer (Oji, from Japan), a major multinational from India (Aditya-Birla), and Vietnam's Dak Lak Rubber Company. A key governance issue in the plantation sector is that many of the external plantation investors have signed deals directly with provincial or even local administrations, without the knowledge or approval of the relevant central ministries. The reverse also holds, with central actors at times approving investment deals without the knowledge of provincial levels of government (e.g. GTZ 2006, Annex 11). The official record documenting the actual state of the plantation investment regime in Laos therefore remains incomplete (but see Dwyer 2007 for a review of available data).

Undoubtedly, there remain significant limitations in the ability for international capital to invest profitably in Laos. Laos remains near the bottom of regional good governance, transparency and 'ease of doing business' surveys. Announced FDI projects can be delayed, and then later abandoned, due to bureaucratic hurdles and rent seeking, a generally weak regulatory environment, and indeed due to the underlying, speculative objectives of particular investors (see e.g. GTZ 2006; Dwyer 2007). But the steady progression of the Lao state, and their development bank patrons, in recasting the country as a new frontier for capital intensive resource sector investment is striking. Regional integration and investment, set back significantly by the Asian financial crisis of 1997–2001 (Pholsena and Banomyong 2006, 93), is a project now firmly back on track (see also Glassman 2007). While the country's external debt load remains high, at approximately 80% of GDP, from a macroeconomic perspective

the World Bank (2006, 2) argues that '... with prudent fiscal management this [external debt] and other vulnerabilities are expected to ease alongside the increases in FDI [foreign direct investment] due to large projects'.

But there are clear omissions and simplifications involved in this imagining of rural and upland Laos as an available frontier space for transnational investment into hydropower dams, plantations and mining. The particular notion that the Lao uplands are underpopulated has been reiterated by the ADB, in recent assertions that there are abundant tracts of 'degraded land', without claimants, available for tree plantations development (ADB 2005). This is despite years of documented research – some of it sponsored by the ADB itself – on the importance of local claims and access to natural resources, including long-term rotational fallows in swidden agriculture, for livelihoods in the upland countryside (see Chamberlain 2001 2007). Similarly, the World Bank and the ADB have provided loan guarantees for the Nam Theun II project, despite the fact that the dam will undermine the livelihoods of over 120 000 downstream persons, and there are only limited plans to deal with this eventuality (see e.g. International Rivers 2008). One could argue that such omissions are not an accidental oversight – they are a crucial method of externalising the true costs of resource development mega-projects, and shifting the damages and the responsibility onto local populations.

Understandings of Laos as a resource frontier, on the one hand, serve a useful ideological function for resource capital, as this taps into popular understandings of frontiers as 'empty' or under-populated wilderness, which hold the promise for high rates of return on investment. A more critical understanding of frontiers, however, identifies a crucial truism of capitalist globalisation – that capital actively seeks out and establishes new resource peripheries, thereby reproducing uneven development and marginalisation. De Angelis writes:

It is capital that identifies a frontier, and the identification of this frontier implies the creation of a space of enclosures, a horizon within which policies and practices promoting further separation between people and means of production in new spheres of life.

De Angelis (2004, 73)

As Tsing (2005) points to in Kalimantan, the ambiguity and manipulation of legality and illegality in the Lao resource sector, and the existence of both simple extractive and governing-developmental resource project types should not be understood as an aberration from more normal or 'rational' patterns of development. Rather, rapid processes of primitive

accumulation and the continuous colonisation of new geographic spaces are inherent features of capitalist dynamics. Kelly and Kaplan, drawing on Weber, point to the 'functional' aspects of such a dynamic instability:

Markets in general, and markets in capital in particular, have great use for the calculability that comes with powerful legal regulation, not least to protect great and risk-laden investments. But nevertheless they have also an even greater use for schemes that lead to growth via exploitation, manipulation and other overcoming of legal limitations.

Kelly and Kaplan (2001, 424)

Lao state planners and their multilateral development bank backers face a crucial problem area in this sense, precisely because the uplands are most emphatically not an 'empty wilderness', or freely available for market development. The freely available frontier land of the development programmer's imagination must be created; produced where it did not exist before. Thus, in order to capitalise fully upon the revenue-generating potential of the Lao landscape, to provide investment capital with above average rates of profit (i.e. resource rents), and to provide the state with a revenue base to maintain its (often clientalist, neo-patrimonial) functions, widespread upland enclosures must be engineered.

This presents an expansive new technical problem area for state governance in Laos. Coercive enclosures are being achieved through a state apparatus that is willing and able to implement programmes of resettlement and focal site development (see Baird and Shoemaker 2007). But in Laos, as elsewhere, developments on the resource frontier are usually not simply a story of domination and expropriation. As the Lao state moves towards governing and improving, rather than simply expropriation and extraction, rural and upland resource development has also become a complex field of political negotiation, involving the promise of social development and community improvement, in exchange for relinquished communal claims to 'state' land. This exchange of land for development can be, and indeed typically is, a very unequal bargain. But the resolution of this new governmental question in Laos hinges around how 'successfully' such an upland transition can be engineered. A range of more or less sophisticated development programmes has emerged, at times involving cooperative arrangements between private sector resource firms and socio-environmental NGOs, in which the provision of development 'goods' (access to extension services, new technologies, market access, tenure security and so forth) are extended to affected communities, in an attempt to counteract negative

outcomes of resource development. These development interventions are aimed at moving rural people towards producing saleable commodities, but from a smaller space of land. In these ways, the displacement and enclosure effects from large-scale resource development projects come to be viewed as 'reasonable, if difficult decisions' by a wide number of mainstream development and conservationist actors. De Angelis (2004, 82) also points to the complex and contradictory nature of resource frontiers and the capitalism's enclosures:

The discourse of enclosures . . . must present itself not as a negative force, one that separates, brutalises, and disempowers; but, on the contrary, it also has to wear the mantle of rationality, and project a vision of the future that makes sense to a multiplicity of concrete subjects.

De Angelis (2004, 82)

It is important to recognise this productive, 'positive' side to producing and governing frontier space in Laos in accounting for the enduring power, and the political legitimacy, of what can be quite radical programmes of rural dispossession. A comprehensive analysis of the Lao frontier would also incorporate not just the technical, material development interventions, but also how poverty alleviation programmes are involved in a remaking of rural subjectivities, towards the goal of producing modern, productive, market-oriented farmers. The 'soft' power of development – outside of extreme cases of military-authoritarian coercion – lies in the extent to which these external governmentalising objectives overlap with the desires of rural people themselves for better lives and increased opportunities for their children. This can be the case even as rural people are dispossessed from their historical territories, and as entire landscapes of the Lao countryside are radically transformed.

The next section grounds this approach to the political ecology of resource frontiers in Laos, with an example of resource sector development and landscape transformation from Hinboun district in Khammouane province. I propose a conceptual approach to Laos' rural and upland zones as hybrid, relational frontier spaces, by focusing on the emergent interactions between land tenure reform, the political economy of resource sector investments, and centre-periphery and social-nature dynamics.

### **Patchworked frontiers, resource investment and land reform in Laos**

Many of the contemporary resource projects and policies under way in Laos, especially those which are linked to corporate social standards and new eco-certification regulatory mechanisms, can be

understood as closely linked to neoliberal forms of development. It bears recalling, however, that Laos continues to be the site for alternate regimes of investment, extraction and accumulation, not all of them liberal-capitalist in orientation. Actors other than multinational resource firms continue to be active on the Lao frontier, such as extractive logging interests with ties to the military or provincial governor-patrons (Anonymous 2000; Hodgdon 2008). There are thus distinct frontiers at work in Laos, associated with different, elite fractions and power configurations, and different state agencies. These competing political-economic blocs are also in tension with each other, producing a spatially 'patchworked' frontier landscape involving different and, at times, overlapping modes of resource regulation and population governance, and a hybrid state structure in Laos (see MacLean 2008).

A 'first frontier', or the programmes associated with French colonial, war-era and subsequent decentralised political structures in Laos, continues to have a deep transformative effect upon the Lao landscape. These frontier formations have resulted in localised ecological degradation, and sharp declines in forest cover and ecosystem integrity in many rural locations. Lao state policies of upland resettlement also continue to combine with the interests and outcomes of these forms of state-led resource developments. New resource towns linked to commercial extraction, such as the French tin mining town of Ban Phon Tiou in Khammouane province (subsequently taken over by North Korean and Russian investors), or the town of Lak Xao in Borikhamxai province (associated with BPKP – or the Lao Mountainous Areas Development Company), were developed through this period. In the logging sector, the first frontier was often established in association with Vietnamese, Thai and Chinese actors, through partnerships with the Lao military, provincial governors and central Party officials (Walker 1999; Anonymous 2000; Hodgdon 2008). On the ground, these extractions took the form of selective timber mining. While much of these timber resources were (and continue to be) exported and streamed into global supply chains, it would be difficult to locate this process primarily as one of capitalist exploitation. Clientalist power politics and institutional arrangements within Lao state agencies could be considered just as crucial to its functioning (Hodgdon 2006 2008).

The additional layering of a 'second' frontier in Laos, through more recent patterns of capital-intensive, neoliberal inspired resource investment, including new land reform policies, overlaps with the processes and outcomes of the first frontier, producing complex, 'striated and patchworked' landscapes. Various historical and contemporary land reform

policies, including upland resettlement and land and forest allocation, are in some areas supporting these new export-oriented, resource investment regimes through the freeing up of land and forest resources for capitalisation (Baird and Shoemaker 2007; Lestrelin and Giordano 2007).

In the past 10 years, new land tenure policies have been extended into the uplands in the form of Land and Forest Allocation (LFA), participatory land use planning and land allocation (LUPLA), upland resettlement and focal site development. Thus far, the implementation of new upland tenure policies has not typically served as a basis by which communities receive full, official recognition of customary lands (see e.g. Ducourtieux *et al.* 2005). Indeed, as field research has shown, the implementation of the Ministry of Agriculture and Forestry's Land and Forest Allocation programme has at times represented the very mechanism whereby villagers lose customary access to land and resources to plantation firms (Barney 2008). In other cases, the swidden eradication goals of the programme have undermined local livelihood practices (for a review, see Ducourtieux *et al.* 2005). The creation of the National Land Management Agency, and recent reforms to the forestry law, among other legislation and decrees, can be understood in part as a state response to recognised problems with previous programmes in land and forest allocation and land registration. The strategic focus for a number of institutions with a mandate to address land and forestry issues, both Lao state and donor, is now securing more complete recognition of customary and common property rights for upland communities through an improved approach to LFA-LUPLA; experiments with collective land titling; or through improving the understanding and recognition of the existing legal rights to customary land and property as enshrined in the Lao Constitution, and the Forestry and Land Laws (e.g. Village Focus 2005; GTZ 2007a).

The patchworked frontier can produce striking landscape transformations. In my primary fieldwork sites in central-southern Laos, the most egregious forms of elite-sponsored tropical timber mining (in the guise of plantation concessions, for example of coconut or oil palm; see GTZ 2007b, 22), can be situated not far from closely surveyed and mapped spaces of the World Bank certified-sustainable village forestry programme, or co-managed IUCN protected areas aimed at a conservationist and eco-tourist clientele. These spaces, in turn, are not far removed from surveyed land reform areas, which have excised areas of so-called 'degraded forest' from communal control for the creation of industrial plantations of eucalyptus and rubber (Shoemaker *et al.* 2001; Barney 2007). There is no singular political-economic rationality or intentionality at work in the

Lao uplands: neoliberal, clientalist, bureaucratic and extractive-accumulation logics interact with provincial and district levels of the state, and with local livelihood practices, to produce a complex and relational reworking of the upland frontier in Laos.

The contemporary Lao uplands can be understood as a hybrid authoritarian-neoliberal frontier space, established through processes of new mapping and expanded forms of state territorialisation (through land registration and LUPLA, for example), as well as through 'unmapping' or unhinged customary property rights (for example, through resettlement, or concessions development; Tsing 2005). To date, however, the major cumulative effects of state development have been to undermine local ecologies, and restrict customary claims of upland communities, and to shift livelihood practices into increasingly restricted and ecologically marginal sites. Because state agricultural extension and marketisation services typically remain weak and only partially effective, many upland communities have been forced into short-term exploitation of their remaining resource assets to maintain levels of food security (NSC ADB 2006). As examined below, another common response in upland Laos is out-migration.

### The relational frontier and livelihoods in Khammouane province

The following case further situates and explains these relational dynamics, detailing the centre-periphery and social-natural transformations in a study village in Laos' Khammouane province, affected by both hydropower and industrial plantation development. The cumulative and emergent effects of these projects and state policies are resulting in complex changes to the Hinboun watershed, and in the relationship of local communities to their surrounding natural resource base. The local environment in the village of Ban Pak Veng is itself a social landscape, the result of a complex history of human settlement and modification (see Raffles 2002). In a further relational explanation, I show how local people become closely involved in the reproduction of frontier spaces, in this case through engagements with commercialised small-holder agriculture. Between large-scale hydropower and plantations, land reforms, migrations and new farmer cropping systems, the Hinboun Valley is a pertinent example of both the planned and the unexpected trajectories of development under way in the Lao countryside.

Hinboun District is the location of two of Laos' major resource development projects: the Theun-Hinboun hydropower project (THPC) and the Oji-Laos Plantation Forestry Ltd (Oji-LPFL). The presence of North Korean and Russian mining



companies at the historic town of Ban Phon Tiou, on a tributary of the lower Hinboun River (the Nam Pathen), adds the externalities of the mining sector into the fray of the Hinboun watershed. Research was conducted between 2006 and 2007 on the political ecology of property rights and local livelihoods, through ethnographic research in the village of Ban Pak Veng. This village in the lower Hinboun valley is experiencing the overlapping and cascading effects of hydropower dam and industrial plantation development (see also Barney 2007).

Briefly, Ban Pak Veng is a central Lao village of approximately 65 households, with a total population of 270 persons. Traditionally, livelihoods in this village have been heavily reliant upon access to customary resources found within the village territory and surrounding areas. In the period prior to the 1998 initiated THPC project, people in Ban Pak Veng were primarily wet rice farmers and fishers, planting the rich alluvial soil on the Hinboun floodplain and accessing the river's aquatic resources. Access to the surrounding upland forests also provided an array of non-timber forest products and wildlife, which formed an important part of local food security. Village elders recall that in the 1960s, farmers in Ban Pak Veng were exclusively reliant upon upland swidden in the hills located to the west of the village for rice production, as at that time they had not learned how to practice lowland wet rice agriculture, and most could not afford draught livestock. Aerial photos from 1992 confirm that, by that time, wet rice had become the predominant form of agriculture. In addition, this community had a history of engagements through the 1980s with the institutions of the post-war socialist economy, particularly in terms of trading fish and other local resources for access to essential commodities. The community traded goods through the 1980s with the state-run district markets during the post-war socialist economy, exchanging fish and other local resources for access to essential commodities. After the economic reforms of the late 1980s and early 1990s, villagers began the cash sale of local resources, especially fish, livestock and bamboo shoots.

The Theun-Hinboun hydropower project, completed in 1998 with ADB support, was the third major hydropower project in the country, coming online after the 1971 Nam Ngum dam near Vientiane and the Houay Ho hydropower project in Champassak. The design of the THPC project was based upon an inter-basin transfer of water from the Theun-Kading river system into the neighbouring Hinboun watershed. The THPC project has been the focus of an intensive debate regarding the adequacy and transparency of ADB and GoL social and environmental safeguards and the rights of local communities to receive full

compensation and mitigation for economic losses due to resource development (Shoemaker 1998; International Rivers Network 1999). Given the political restrictions upon local civil society in Laos, the Berkeley-based International Rivers, along with regional and international environmental organisations such as TERRA and FIVAS, have been at the forefront in pressuring the ADB and THPC (in part via their Norwegian financial backers) to increase their commitment to compensating for the significant downstream losses resulting from the diversion project, in both the Hinboun and the Kading watersheds.

In practice, THPC project has not provided adequate compensation for downstream affected communities<sup>6</sup>. Evidence points to extended and deepened episodes of downstream flooding along the Hinboun channel, beyond what was the case previous to the inter-basin diversion project (Barney 2007; FIVAS 2007). The Nam Kading system has in turn experienced significantly reduced flows, undermining river fisheries (Shoemaker 1998; International Rivers Network 1999). In Ban Pak Veng on the Hinboun this has caused the loss of access to all of the village's riverside wet rice paddy fields, starting from approximately 2001, 3 years after the initiation of THPC. The project has also negatively affected local fisheries, as well as the riverside gardens which were an important dietary source prior to the project (Barney 2007).

As a result of these changes, the post-2001 responses by villagers in Ban Pak Veng to the new, project-induced flooding regime included shifting more fully back into planting rice in upland areas, through swidden cultivation. However, in 2001, 600 of the 1832 ha of the village's swidden space, which in fact represents diverse communal, agro-forestry production systems (see Cramb 2007, xii), providing rice and a wide range of crucial non-timber forest products, were zoned by the Lao Land and Forest Allocation (LFA) programme for commercial eucalyptus development. These 600 ha represent the majority of the upland locations in which dry, swidden rice production is possible in the village. Only minor compensation was guaranteed to the villagers by the plantation company, amounting to US\$1 per ha per year. The fact that BGA Forestry (the original concession holder, which was purchased by Oji Paper in 2005) organised and subsidised the implementation of the LFA process in Ban Pak Veng, as well as the other villages, in their 150 000 ha concession zone in Hinboun and Pakkading districts, means that a direct conflict of interest was introduced into the zoning process.

Villagers now faced a 'double displacement', from the cascading externalities of both hydro-power and industrial tree plantation development. In Ban Pak Veng, the Oji-LPFL began bulldozing

these local 'degraded' agro-forests in 2005, and by August 2007, approximately 120 ha had been planted with fast growing eucalyptus pulpwood species. Villagers are able to plant upland rice between the rows of the company's trees only for the first year, after which time the eucalyptus canopy begins to close, and these sites can no longer be intercropped. If the full extent (600 ha) of the company's plantation programme is implemented in this village, there will be repercussions for local food security. Even if only a partial enclosure is enacted, the overall availability of upland forest for rice production, and natural forests for food production, will be squeezed. The likely result will be an intensification of swidden, with corresponding declines in soil fertility and rice yields (Ducourtieux *et al.* 2005; Lestrelin and Giordano 2007), and higher swidden labour demands for weeding (a task which is borne largely by women). Such local scenarios and probable outcomes are not discussed in the plantation company's public documents or impact assessments. Indeed, the conversion of swidden land into plantations for the production of export commodities, is an explicit state target and fully consistent with the overall Lao forestry sector strategies and policies (GoL 2005). This is a strategy of socialising losses and privatising gains, which ultimately serves to increase the rate of profit for private sector and corporate investors in Laos, while exposing already vulnerable local communities to increased risks of impoverishment.

In Ban Pak Veng, the outcome to date of these transformations for villagers has been a significant undermining of livelihood stability. A primary set of responses from families in the village can be understood through an intensifying shift of young people towards internal and cross-border migration, and new wage labour opportunities. Interviews in Ban Pak Veng conducted in July 2006 and February 2007 show that 26 young women and female teenagers, and nine male teenagers, were working in Thailand or Vientiane. Out of a village of 48 households and some 260 residents, this is a major proportion of the village young people<sup>7</sup>. The migration process is a multifaceted and often personal issue for village young people, and structural descriptions of underlying ecological 'drivers' of migration can sit uneasily with the specific series of events and decisions that lead young people to leave the countryside (Bouahom *et al.* 2004). Pak Veng does, however, show significantly higher rates of outmigration than neighbouring villages, which were less affected by the externalities of THPC and Oji LPFL (Barney 2007). As the majority of these migrants from Pak Veng lack official documentation or passports, they are illegals in Thailand and are thus working under very vulnerable circumstances.

The emergent, relational interactions between historically mediated resource management practices in this village, and external programmes of land reform, hydropower and plantations development, are thus reshaping both the local environment and villager's responses. A further way of understanding relational frontier processes emerges when one includes the role of remittances in shaping new agricultural practices and a local process of commons privatisation in Ban Pak Veng. Village research showed that the remittances sent back to Pak Veng village from young people working in Thailand are being used by their parents for small-holder investments in a new agricultural boom crop – *nyang phala*, or rubber trees. 2006 represented the first year of smallholder investment in rubber for Ban Pak Veng, with five village farmers beginning experimentation with planting rubber seedlings in their upland rice fields. A foreseeable problem is that, as these seedlings mature, the former system of communal upland land management will be privatised along household lines. These new rubber gardens thus represent locally driven removals of land from the common property forest–land system, and the first farmers in the village to make this move will clearly be in an advantageous position over other Pak Veng residents who make the transition to intensive agriculture at a later date, or not at all. While shouldering a degree of risk, the early pioneers in this process have their selection of the best remaining land (i.e. land which has not already been planted by Oji-LPFL), or land situated closest to the village.

Such new agricultural investments, including perennial rubber and fruit tree plantations, are happening at the same time as the local resource base is being rapidly transformed and degraded, and the available resource base is being quickly 'squeezed' by two powerful corporate actors. The trend towards smallholder rubber, if it accelerates, may then complete the dismantling of the Ban Pak Veng upland swidden land use system based on common property ownership. This agrarian-frontier transition is occurring in an unequal fashion, where the most advanced and asset-rich villagers will be the first to benefit from agricultural commercialisation. At the same time, the process of large external agricultural investments comes at a cost, of separated families and increased vulnerabilities for young people negotiating through the migration process (Shoemaker *et al.* 2001).

Creative villager responses to, and engagements with, a fast-changing set of circumstances of landscape transformation and resource degradation highlight the specifically relational production of frontier space in Laos. To locate the various aspects and implications of community and ecological transformation

in this village, one must focus on the interactions and dynamics occurring between actors and resource sectors – hydropower dams and the river, plantations and forest land, land reform and villager practices. Villagers themselves are also becoming actively engaged in new modes of cash crop production which then feed back into further changes to land tenure and landscape dynamics.

The enclosures which are being produced through capital-intensive resource development are altering landscapes which were already the result of significant histories of human interactions. As the case of Ban Pak Veng shows, there is little which is essential or timeless about subsistence-oriented forms of livelihood in rural Laos. Indeed, the primary form of rice agriculture in this community has shifted quite dramatically, from upland swidden in the 1960s, to wet rice between the 1970s and the 1990s, and then back again towards hill rice post 2001. The full displacement effects of the Oji LPFL forestry project on upland swidden rice farming and livelihoods have become evident only in relation to the community responses to the initial set of wet rice enclosures resulting from the THPC hydro-power project. This, in turn, has resulted in changes from migrations, and subsequently, autonomous villager engagements with new cash crops, and new transformations in village property rights.

Local changes from resource sector frontier development in Laos can thus be best understood as a 'co-production of socio-nature' (Bakker and Bridge 2006) in which the agency of marginalised local people, as well as river water, soil, and trees, are crucial aspects of frontier formation. This also implies that there is no original resource-based livelihood to return to in Laos, or which can serve as an independent baseline for isolating the effects of development interventions. Relational frontier processes and actors, both central and local, produce new landscapes of commodity production and extraction, as well as unexpected transformations and displacement effects for a vulnerable upland and rural population.

### **Conclusion: rethinking the resource frontier and development futures in Laos**

This paper has presented a series of key points concerning development on the resource frontier in Laos. Drawing upon recent work on relational approaches in economic geography (Massey 1999; Bathelt and Gluckler 2003; Yeung 2002 2005), the paper first discussed how the discourse of Laos as a 'last frontier' is being deployed in an imaging of the Lao uplands as an empty, available site for transnational resource sector investment. Such

discourses can, in turn, translate into very 'material' outcomes in terms of boosting foreign direct investment into Laos. Second, drawing upon scholars such as De Angelis, I have argued that a more critical approach to the 'frontiers of capitalism' can be a useful concept for understanding the contemporary geographies of enclosure, and the continuous imperative behind accumulation by dispossession in the global economy. Third, drawing upon political ecologists such as Tsing, Raffles, and Walker, and incorporating the critiques of Cleary, I have grounded and de-centred a critical political-economic analysis of the Lao resource frontier by incorporating relational concepts of social-nature and centre-periphery. The Lao village of Ban Pak Veng in Hinboun District shows how the ecosystem changes, resulting from the externalities of development mega-projects and state land reform policies, combine and overlap in a complex reworking of frontier landscapes. The vulnerabilities introduced by these resource transformations and displacements, in turn, result in further transformations, by the actions of local people, for example, entering into cross-border wage labour markets and developing new agricultural strategies of rubber crop production. In this way, changes in property rights, landscape and livelihood on the Lao frontier through corporate investment also become tied in with the actions of local people and communities engaging with their environment.

A key argument in this paper is that a relational perspective on nature, economy and livelihood is not simply a theoretical concern. Such accounts of the inter-connectedness and historical complexity of local social-natures and local livelihoods have often been lacking in accounts of the 'impacts' of particular resource sector development interventions in Laos. This can lead to a failure to appreciate the cumulative nature of contemporary changes occurring in Laos, while leaving the environmental impact assessment process and other development interventions (including mitigation and compensation programmes from corporate investors) inadequately conceptualised overly compartmentalised and ultimately under-capitalised. Relational approaches to social-nature and political ecology hold out the possibility of more accurate perspectives regarding how Lao villagers are adapting and shifting their livelihood strategies in relation to changing environments and state policies. Relational approaches to frontier transformations recognise how Laos, and territories within Laos, are being actively 'peripheralised' in a globalised economy (Hayter *et al.* 2003). Relational understandings of economy, nature and society can thus help to inform agrarian questions. In Laos, such approaches could be used to interrogate the power politics through which resource frontiers,

displacements and marginalisations are produced, and to locate what forms of locally beneficial environmental and economic organisations are possible and feasible for Lao upland and rural communities.

### Acknowledgements

The author thanks Ian Baird, Mike Dwyer, Kevin Woods, Phil Hirsch, Niels Fold and an anonymous reviewer for helpful comments on earlier versions of this paper.

### Notes

- 1 Tourism and garments being the other key sectors of the Lao economy. Agriculture, mostly oriented around smallholder farming, still accounts for some 40% of Laos' GDP.
- 2 There are some exceptions, for example, the settlement of the coffee frontier on the southern Bolaven Plateau in the 1980s involved a coercive state programme of relocation. I thank Ian Baird for pointing out this history. Some of these smallholder coffee plots on the Bolaven Plateau are now being repossessed and cleared in favour of large-scale Vietnamese rubber concessions.
- 3 In mid 2008 Oxiana Minerals merged with another mid-tier Australian mining multinational, Zinifex, to create a new conglomerate, OZ Minerals. The OZ project at Sepon is still termed Lan Xang Minerals Limited (LXML).
- 4 Indeed a crucial role of multilateral development bank project financing is the provision of financial guarantee facilities against 'perceived political risks in Lao PDR' (ADB 2005, 33).
- 5 Although the GoL has historically sought to reduce their economic dependence upon Thailand; and China and Vietnam tend to be the favoured investor countries. See Pholsena and Banomyong (2006, 49–70) for a discussion of Laos' bilateral relations with Vietnam and Thailand.
- 6 No compensation by THPC has been provided to local communities for reduced fisheries on the Nam Kadding system.
- 7 These rates of outmigration are also not untypical for many rural villages in Laos. However, the forests, rivers and surrounding environs are also comparatively rich in natural resources in this area of Hinboun District, which could be the basis for more 'viable' rural communities in these locations.

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