Forest Futures: A Causal Layered Analysis

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Abstract

This article employs Causal Layered Analysis (CLA), a futures methodology, to deconstruct Reducing Emissions from Deforestation and Forest Degradation, or REDD; an emergent aspect of United Nations Climate Change negotiations. In light of this CLA, I question whether this global policy framework is likely to bring about transformative forest futures or simply reproduce (or even worsen) the historical conditions complicit in deforestation.

Keywords: REDD, UNFCCC, deforestation, Causal Layered Analysis, deconstruction

Causal Layered Analysis (CLA), a futures methodology developed by Sohail Inayatullah (1998, 2002 & 2004), provides a useful framework to critically analyse emerging social and environmental policy making. In this paper, I apply CLA to this end, examining an emergent global policy framework that aims to protect forests as a means of addressing climate change. The *Reducing Emissions from Deforestation and Forest Degradation*, or *REDD* initiative forms a key aspect of current negotiations under the United Nations Framework Convention on Climate Change (UNFCCC). Below I deconstruct the dominant analyses of deforestation that inform REDD policy development, considering the discourses, worldviews and myths that underpin them. This exposes the assumptions that inform these analyses and draws attention to aspects of the problem that they obscure. By deconstructing the discursive frameworks informing REDD policy initiatives, CLA questions whether a REDD mechanism is likely to bring about transformative forest futures or simply reproduce (or even worsen) the historical conditions complicit in deforestation.

The Four Conceptual Layers of CLA

CLA provides a means of ordering and analysing the various ways that an issue, such as climate change or deforestation, is framed within the policy-making context. It positions these differ-

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ent forms of analysis vertically into four layers, concerned less with whether a perspective is true or false, but rather with which aspect of an issue it focuses on. Utilising the metaphor of an iceberg, CLA thus proposes that empirical analysis tends to focus on the 'tip of the iceberg' (2004, p.2), or the 'surface level' of an issue – a level of analysis Inayatullah terms the 'litany' (level 1). CLA contends that the observable data or trends mapped at this level are underpinned by particular structural and systemic causes (level 2). Which structural/systemic causes are focused on in 'level 2' will be determined by the discourses and worldviews informing the analysis (level 3). Finally, Inayatullah proposes that these discourses and worldviews are embedded in deeper, largely unconscious myths, metaphors and non-rational ways of knowing (level 4). Analysing the dominant and contending perspectives at each of these levels adds a horizontal dimension to CLA (Inayatullah, 2004, p.13).

Contextualising REDD

Deforestation is a major contributor to climate change, accounting for approximately 17.3 percent of global greenhouse gas emissions (IPCC, 2007, p.36). While emissions from deforestation were not targeted in the Kyoto Protocol, REDD now forms a key focus of negotiations over a post-Kyoto accord, which will enter into force in 2012. The REDD policy is poised to channel tens of billions of dollars per year from developed to developing countries. In brief, such payments are intended to provide financial incentives and compensation to governments, land owners and communities in developing countries (where the bulk of deforestation presently occurs) for the opportunity costs incurred by preserving forests that would otherwise be cleared.

Over the last four years REDD has come to assume a central role in UN climate negotiations – a position articulated by Stewart Maginnis, International Union for Conservation of Nature (IUCN), during the December 2009 Copenhagen talks: "REDD is no longer some sort of optional nice little flexibility mechanism on the side. It is a fundamental mainstream mitigation strategy" (in Lang, 2009). While a final decision on REDD was postponed at Copenhagen, until a broader agreement can be reached over a post-Kyoto accord, it is expected that a REDD policy framework will be finalised over the next 18 months (Niles, in Butler, 2009). Given the critical juncture of current negotiations on REDD, CLA can provide a timely contribution to much needed debate on this emerging policy framework – extending discussions into areas that official negotiations and the bulk of academic research have largely sidestepped or overlooked.

REDD: A Causal Layered Analysis

Level one: litany

Commentary from both official delegates and the media has portrayed the drafting of a REDD text at the recent Copenhagen talks as a positive development in otherwise fraught negotiations. Chair of the REDD negotiations, Tony La Vina, described it as a "more or less agreed text except in a few places" (in Fogarty, 2009). In light of this relative consensus among delegates, REDD was hailed as "one of the few bright spots

in otherwise troubled climate talks" (Fogarty, 2009) by Reuters and a "Ray of Light for Forests" (Walsh, 2009) in Time's coverage of the recent climate negotiations. While this appraisal has injected the issue of deforestation with a new salience, it assumes that since deforestation is a serious problem and a major contributor to climate change, a proposal that claims to address it must be a positive development. This logic effectively forecloses any meaningful debate over whether the proposals appearing under the REDD policy framework will constitute an appropriate response to deforestation. The following sections subject REDD to a greater degree of scrutiny.

Level two: systemic/structural causes

In principle, actors within the UNFCCC recognise that deforestation is impacted by the complex interplay of a range of factors, which are often highly context specific (e.g. FAO, UNDP, & UNEP, 2008, p.2; UNFCCC, 2006, pp.10-11). However, this complexity is somewhat collapsed and eclipsed in REDD negotiations, such that a much more simplified and generalised framing of the structural and systemic factors driving deforestation has come to dominate official negotiations. As such, REDD policy proposals centre on two closely related explanations of deforestation.

The first predominant argument is that deforestation essentially occurs because in an economy where environmental costs are externalised, "forests are worth more dead than alive" (Mitchell, 2008; Steiner, 2008). This view was posited in the initial REDD proposal by PNG and Costa Rica in 2005, which stated, "in the absence of revenues streams from standing forests, communities and governments in many developing nations have little incentive to prevent deforestation" (United Nations, 2005, p.4). From this perspective, deforestation is understood as a "market failure" (UoCS, undated).

This argument is closely related to the second dominant analysis of the structural causes of deforestation in REDD negotiations. That is, the pursuit of economic development and poverty alleviation is understood as a key driver of forest clearing. From this perspective, profits from deforestation are assumed to play a significant role in the economic development of developing countries and their efforts to overcome poverty. This, coupled with a rising population amongst the poor, is often offered as an explanation for the increased pressure on scarce forest and land resources seen to be driving deforestation. As expressed by the Coalition for Rainforest Nations:

[i]n many forested rural areas, the only real options for economic growth often require the destruction of natural forests °V either when clearing for agricultural commodities (like soy, coffee, tea, sugar, rice, etc) or through the sale of wood products (CfRN, undated).

From this perspective, deforestation is an economic problem that can be explained in terms of market-based behaviour, profit incentives and development imperatives. Later in this article, I consider the limitations of this analysis. However, firstly I discuss the proposals emerging from this particular framing of the deforestation problematic.

Proposals emerging from this dominant analysis

The proposed solution that emerges from the above analysis is to equate forests with an economic value that provides a greater incentive to preserve them than to cut them down, through a transfer of funds from the global 'North' to the 'South'. Dominating current REDD policy-making is the argument that a global carbon market has the greatest potential to mobilise the extensive funds needed to reverse deforestation trends on a worldwide scale. Thus New Zealand states early in its REDD proposal, "Many parties consider that the most robust and reliable source of ongoing financial support will be access to carbon markets" (NZ in United Nations, 2009b, p.29). In such a market model, carbon 'credits' would be generated by forest protection and then sold to emitters in 'Annex I'l countries who have exceeded their emissions allowance — a level still to be decided upon for the post-Kyoto period.

A small number of nations are opposed to allowing Northern countries to purchase REDD credits to 'offset' their own domestic emissions, on the basis that this could serve to legitimise the purchase of "ecological space" (Humphreys, 2008, p.440) in less industrialised countries, enabling Northern industry to continue 'business as usual' without altering its own fossil fuel dependent path of economic growth. They also argue that a market-based approach would make acceptable implicit changes in land ownership and access rights to forests (Brown & Adger, in Boyd, 2006, p.110) and has thus been described as a new form of colonialism (CSE, 2000; FOE, 2008; Smith, 2007, pp.24-27; Zurayk, 2008) or "CO2lonialism" (CTW, undated; Eraker, 2000; Forsyth & Young, 2007). However, those opposing the inclusion of REDD credits in a global carbon market are a small minority, namely, Brazil, Tuvalu (FOE, 2008) and more recently, Bolivia (United Nations, 2009a).

The above framing of deforestation as an essentially market-based and 'development' problem – resolvable through a North to South transfer of funds – is both persuasive and seductive. The promises of forest protection, poverty alleviation and a redistribution of wealth are alluring. However, while not untrue, these analyses are only partial and thus warrant scrutiny. In other words, they are marked by a number of conceptual 'blindspots', or aporias, as Derrida would refer to them. As such, these limited analyses are foreclosing more critical explanations of – and solutions to – deforestation, which take into account the power dynamics of the contemporary global political economy.

Level three: discourses and worldviews

From the perspective of CLA, the above framing of deforestation and the proposals emerging from it are underpinned by a particular set of discourses and worldviews. This section deconstructs these underlying conceptual frameworks – exposing the assumptions, inconsistencies and omissions in their account of desirable policy approaches. In doing so it focuses on three central metanarratives, which act as interpretive grids through which deforestation is understood and REDD policy-making occurs – namely; neoliberalism, 'development' and a scientistic worldview.

Neoliberalism

As indicated above, the predominant analysis informing REDD negotiations views deforestation in almost exclusively economic terms. Deforestation, according to this perspective is essentially a problem of "market failure", resulting from rational decision making - based on the fact that profit revenue from forest clearing currently exceeds that generated by forests left standing. This analysis reflects a neoliberal interpretive framework, based on a revival of the ontological assumptions of classical liberal economics, which depict the subject as homo economicus – rational, utilitymaximising, self-interested and individualistic (Persky, 1995). From this perspective of human nature, the exploitation of natural resources such as forests is reflective of a 'tragedy of the commons' - that is, without individual ownership of resources, the responsibility and incentive for their preservation is diffused. As a result each economic actor is competitively driven to maximise their personal gains from the resource until it collapses (Hardin, 1968; Sandor, 2002, p.1608). From this analysis, it logically follows that through the commodification of natural resources – converting them into a product that can be traded on a market - property rights can be ascertained, the true 'value' of natural resources can be realised and they can be utilised to the greatest degree of efficiency. Viewed in these terms, a market-based REDD model emerges as a logical, 'natural' response. Thus the role of the international climate regime is not to regulate, but to determine the terms of trade so that the "market can operate freely" (Sandor, 2002, pp.1608-9).

Implications of Neoliberalism for REDD policy-making: Framing deforestation in exclusively neoclassical economic terms, that is, arguing that deforestation results from a simple profit-maximising equation serves to depoliticise the issue. In other words, this neoliberal analysis obscures the role of political factors, including the legacy of colonialism, global trade inequalities, asymmetries of power and resource consumption; and paradoxically, the role of neoliberal policies in driving forest loss.

The neoclassical explanation of deforestation veils, for instance, the links between deforestation, neoliberal trade liberalisation; and structural adjustment policies (SAPs) imposed by the World Bank and International Monetary Fund (IMF) as loan conditions in less industrialised countries (Sachs, 1999, pp.143-4). The liberalisation of transnational currency flows – hailed by neoliberal, 'free market' proponents as stimulating competition and promoting global economic growth (Curtis, 2007, p.385) – has enabled money generated from illegal logging to be easily laundered (Humphreys, 2006, p.13 & 218), undermining what remains of regulations to control deforestation. It has also resulted in huge swings in the currency value of particularly vulnerable national economies as speculators have transferred large sums of money in and out of countries, depending on the investment 'climate' (Underhill 2001; Wyplosz, 1999). When national currencies have plummeted as a result, the IMF, World Bank and domestic governments have often emphasised intensified forest clearing and the production of 'cash crops' to finance debt repayments (Bramble, 1987; Repetto, 1990; Vandermeer, 2005, pp.9-10).

Instead of considering the historical and present role of this economic rationalism in causing deforestation, the neoliberal discourse underpinning REDD policy-making serves to reframe it as a solution to the climate battle. This neoliberal discourse is closely related to the second major discursive framework informing REDD policy-making, namely, 'development'.

'Development'

Earlier it was explained that deforestation in the global South is framed within REDD negotiations as part of a necessary 'development' project and as perhaps the only means of economic salvation for the poor. This argument is embedded in a well-established discourse of 'development'. This discursive framework implicitly equates progress with industrialisation and increased productivity – given as a blueprint for the attainment of prosperity for all (Truman, 1949, in Esteva, 1992, p.6). The assumption that this mode of 'development' will by itself take care of poverty and social justice issues gives "a legitimacy to policies that appear to promote the process of industrialisation, often regardless of their political or even social consequences" (Dickson, 1974, p.42).

The framing of deforestation in terms of the 'development' problematic within REDD negotiations is centred on two key arguments. The first is that deforestation in less industrialised countries is a result of 'underdevelopment'; due to a country or region's failure to sufficiently industrialise and modernise, the poor are forced to over-exploit their forest resources to survive. From this perspective, the poor, who have no other means of generating income, drive deforestation.

The second aspect of this argument is that deforestation contributes significantly to a 'developing' country's GDP; and thus plays an important role in overcoming this condition of 'underdevelopment' and impoverishment. From this perspective, deforestation is part of a dilemma, beset by two valid but until now incompatible aspirations that must somehow be reconciled – the goal of forest protection and the 'right to development'.

In brief, REDD negotiations frame deforestation as both a result of 'underdevelopment' and as a means of climbing the development 'ladder'. Thus, it follows that the solution to deforestation lies in "altering local development paths" (FAP, UNDP and UNEP, 2008, p.11) for those poor communities who are presently dependent on forest clearing for survival, by providing them with an alternative source of income.

Implications of development discourse for REDD policy-making: By framing deforestation as fuelling 'development' and thus poverty alleviation, REDD negotiations paradoxically overlook the role deforestation and this 'development' model have played in increasing the poverty of forest dependent peoples (Vandermeer, Perfecto, & Shiva, 2005, p.4; FPP, 2008, p.8; FPP, 2005). They ignore that, while deforestation has been a significant contributor to GDP, the wealth it has generated has often been highly concentrated in the hands of a wealthy, elite (domestic) minority and foreign investors (Marchak, 1995, p.242; Westoby, 1983, pp.2-4; Robison, 1986, p.170). Rather than alleviating poverty, deforestation has undermined the natural resource base upon which the poor previously depended.

In concentrating on the poor as the primary agents of deforestation, REDD negotiations ignore historical and contemporary trends, in which forest-dependent peoples have been forced from their lands, often violently (Ghosh, 2008, p.4; Knight, 2001), to make way for industrial logging, road building, mines and a host of other 'development' projects (Dauvergne, 1994, p.511; Secrett, 1987, pp.80-83). As a result, many forest-dependent peoples have had to resettle in smaller, often already degraded areas and compete with thousands of other displaced people for resources. The resultant pressure on limited and fragile resources has led to the erosion of traditional shifting cultivation methods and their replacement with intensive agriculture. As soil has quickly become nutrient deficient, these cultivators have cleared new forest land to survive (Marchak, 1995, p.153). Thus Jack Westoby, former director of the Department of Forestry Programme Coordination and Operations in the Food and Agriculture Organisation, suggests "the problem is not with shifting cultivators, it is with *shifted* cultivators, displaced people 'obliged to penetrate the forest to clear a patch of land from which they can scratch a precarious living" (Marchak, 1995, p.153; emphasis in original). Rather than taking these complexities into account, the 'development' discourse underpinning REDD negotiations serves to reframe poverty as a decontextualised cause of deforestation rather than a result of forest industry 'development'.

A second, important implication of the 'development' discourse informing REDD negotiations is that deforestation is conveyed as a localised condition, with causes endogenous to the country or region in which it occurs. Attributing deforestation in low income countries to a failure to reach a stage of 'development' in which selling off natural resources is supplanted by a production and service economy diverts attention away from the role of transnational corporations and consumer demand in driving deforestation. As with neoliberalism, this discourse serves to depoliticise deforestation, by decontextualising it from global patterns of resource expropriation and consumption. That is, it obscures the current dependency of 'developed' countries on deforestation in less industrialised countries.

Rather than addressing this inherently contradictory 'development' model as an underlying cause of deforestation, REDD policy-making obscures this contradiction and instead threatens to further undermine the poor's control of local resources through implicit changes in ownership and access rights to forests. The obscuration of the deeply political nature of this policy framework is furthered by a scientistic worldview, which also dominates official REDD negotiations.

Scientism

In conjunction with the prevalence of neoliberal and development discourses, REDD negotiations are strongly informed by a scientistic worldview. At the heart of this discursive framework is a desire to understand natural processes in order to manage and control them (Ravindra & Murry, in Ravindra, 1990, p.36). While this sensibility is generally linked to the Enlightenment, its precursors extend to the sixteenth and seventeenth centuries – posited by Francis Bacon and Descartes (Harvey, 1996, p.121). In a famous passage from Discourse on Method, Descartes declares:

knowing the force and actions of fire, water, air, the stars, the heavens, and all the other bodies that surround us... we might be able... to... render ourselves... the masters and possessors of nature (Descartes, 2000 [1637], p.74).

Within the contemporary scientistic worldview, the remnants of this domination of nature thesis are coupled with a Cartesian subject-object dualism – according to which science can observe nature at a distance, providing objective and factual information to guide policy-making (Bäckstrand, 2004, p.697). In deconstructing this worldview and its implications for REDD, I do not wish to suggest that scientific and technological input do not provide important contributions to climate change policy-making. However, when policy-makers rely upon scientistic claims to knowledge without due acknowledgement of their assumptions and limitations – as I contend is the case in current REDD negotiations – they demand critical evaluation.

The dominance of a scientistic worldview within REDD negotiations is reflected in the preoccupation with issues of 'technical' and 'methodological' application, rather than social, political and governance issues. This has been the case since initial research related to REDD was requested in the conclusions of the COP 11 (2005), which called for information:

on issues relating to reducing emissions from deforestation in developing countries, focusing on relevant scientific, technical and methodological issues, and the exchange of relevant information and experiences, including policy approaches and positive incentives (United Nations, 2005a, 1; emphasis added).

By framing deforestation almost exclusively in terms of the natural (rather than social) sciences – the problem of deforestation is removed from its social context, thus obscuring the role of human agency. Deforestation is instead reduced to a set of physical processes. Under this rubric, complications related to REDD implementation, such as 'leakage'² and 'additionality'³ – which are of particular importance for a REDD market mechanism – are framed as technical issues, to be resolved with the development of more sophisticated and standardised accounting methods and monitoring technologies. This framing is problematic since these uncertainties arise out of the limitations of science to predict and control complex social phenomena. When methodologies are sought to determine scientifically unverifiable 'data' – and it is assumed that these can be "robust", "transparent" and "rigorous", (Australia in United Nations, 2009, p.9) to use some of the terminology appearing in the Australian submission on REDD and echoed throughout the policy-making process – this exaggeration of scientific capacity unduly influences policy-making and serves to "neutralise... politically charged decisions" (Lövbrand, 2004, p.451).

Analysing the discourses informing REDD policy-making suggests that the causal analyses of deforestation and the responses emerging from them are convincing because they fit comfortably within current hegemonic discourses and worldviews; namely neoliberalism, development and scientism. In the following section – the fourth layer of CLA - I concur that these discourses and worldviews do not form out of 'thin air', nor can they be said to have arisen solely from material conditions. Rather, they draw their sustenance and potency like a set of ideological taproots from an underlying civilisational myth of autonomy from nature.

Level four: mythologies and nature

Underpinning the 'domination of nature' thesis central to the contemporary scientistic worldview is a myth of human autonomy from 'the natural world'. This mythology positions humans and nature in a binary opposition, in which the 'environment' is viewed as entirely external and separated from the subjective human entity. This sensibility is quite unique to the post-sixteenth century Western tradition.

However, from a poststructural perspective, this myth can only come about through the repression of that which it is not. In other words, inherent in this nature-society binary opposition is a repression of a felt dependence on and constraint by nature's imposed limitations. This non-present remainder has surfaced in Malthusian (1986 [1978]) and neo-Malthusian dystopian imaginaries of ecological collapse (Harvey, 1996, pp.139-144). With lived experience providing supporting evidence for conceptions of natural constraints, aspirations to surmount these limitations have become implicit in dominant notions of human progress (Cowen & Shenton, 1995, p.30). That is, underlying Western concepts of human advancement is a utopian mythology of ever-greater independence from nature.

While an implicit faith in the human capacity to sever its dependency on nature has been the dominant of these two contesting sensibilities since the Enlightenment, dystopian mythologies of scarcity and natural limits have nevertheless been a persistent influence carried into the present (Harvey, 1996, p.139). The result is a tendency in contemporary social thought to oscillate between a pessimistic neo-Malthusian anxiety about scarce resources and a sanguine belief that technology will overcome all limitations of nature and material productivity will continue to expand indefinitely.

The implication of these binary mythologies is a colonising effect on the contemporary social imaginary. That is, the prevailing cultural stories of the future are limited to either a 'business as usual' trajectory culminating in a market/science triumphalism; or a deeply pessimistic, apocalyptic scenario of ecological collapse. Given that the only other culturally visible option to 'business as usual' is one of planetary demise, it is no wonder that current policy-making is unwaveringly committed to maintaining the status quo.

The effect of these contradictory social mythologies on REDD policy-making is reflected in anxiety over diminishing forest resources in 'developing' countries and an "unwavering commitment to capital accumulation" (Coates, 2005, p.28) in already affluent societies. The result is, on the one hand, a set of REDD policies that frame deforestation in neo-Malthusian terms; as mounting pressure from a poor population on limited resources. On the other hand, the governments of affluent countries urged their citizens to go on a consuming frenzy to keep economic growth afloat through the recent financial crisis.

Discussion

With an international agreement on a REDD policy framework currently under negotiation, critical debate on REDD at this time is crucial. However, the above CLA suggests that the terms of debate are being unduly limited. At the litany level, deforestation is understood as a major source of emissions; and since REDD claims to

address this, it is simplistically conveyed as a positive development in global policy-making. At the level of systemic and structural causes (level 2 of CLA), deforestation is reduced to a problem of market failure and 'underdevelopment'; and – until now – a necessary source of economic growth. Employing the third layer of CLA to deconstruct the central discourses underpinning these framings of deforestation; namely neoliberalism, 'development' and a scientistic worldview, it becomes clear that each discourse plays a role in depoliticising deforestation. Further, it does this by obscuring its own complicity in the problem of forest loss. In the case of neoliberalism, deforestation is framed in terms of a revived neoclassical homo economicus, that is, as the result of individualised, mechanistic, profit optimising rational choice. This discursive framing occludes the role this assumption about human nature has played in deforestation by legitimising increased corporate access to forests, deregulation of forest protection laws, increased transnational capital flows and economic instability – all in the name of removing constraints to the ultimate goal of optimum economic efficiency.

Similarly, by attributing deforestation to both a lack of development and to efforts to bolster GDP to overcome this 'development deficit', the development discourse informing REDD proposals obscures its own complicity in vindicating a host of logging, mining and agribusiness projects that have often contributed to forest clearing both directly; and indirectly through displacement of forest-dependent peoples. Moreover, by focusing on the poor as the culprits of deforestation, the development discourse veils the dependency of 'developed' countries on the expropriation of forest resources from the global South.

Lastly, in reducing deforestation to a set of physical processes, amenable to human management and control through the deployment of technical solutions, the scientistic worldview dominating REDD discussions hides human agency as a driver of deforestation. It also conceals its own limitations in predicting and controlling complex socio-ecological phenomena.

Supporting each of these discourses is a civilisational mythology that places its faith in the possibility of an ever-increasing independence from nature – achieved through scientific and economic progress. This mythology naturalises the discourse of development and the sense that affluence can and does exist in an 'economy' cordoned off from the 'environment'. This mythology, perpetuated by globalisation, conceals the impact of Northern consumerism on Southern forests, such that attention is focused on forest-dependent peoples, where the 'feedback loops' are most immediate.

By revealing the causative role of each of the above discursive and mythological constructs in the problem of deforestation, it becomes apparent that REDD proposals are simply reproducing the same dominant frameworks of meaning that are complicit in the problem itself. In other words, REDD proposals seek to resolve the issue of forest loss with the same thinking that has caused it. Further, the above causal layered analysis positions the framings of deforestation dominating REDD negotiations – and the solutions they posit – in the first two layers of CLA. That is, these framings of the deforestation problematic do not identify processes and agencies of socio-ecological change at the discursive and mythical levels. In this sense, REDD appears less a novel, promising policy framework than a continuation of the UN climate negotiations as a whole. Both REDD and the UNFCCC more broadly fail to acknowledge the

depth and breadth of the problems they face; and the level of change necessary to conserve our life support systems.

Conclusion

As Einstein famously stated, "No problem can be solved from the same level of consciousness that created it". It has been my intention in this article to demonstrate how CLA can be applied to ascertain whether a particular policy transcends or simply reproduces the level of consciousness that created the problem it aims to resolve. By deconstructing the frameworks of meaning informing REDD policy development, CLA offers insight that in turn provides foresight into the future scenarios such a policy is likely to generate. In the case of REDD, CLA suggests this policy framework is likely to perpetuate rather than mitigate current deforestation trends, since it reproduces rather than transcends the thinking complicit in the deforestation problematic.

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Notes

- "Annex I parties include the industrialized countries that were members of the OECD (Organisation for Economic Co-operation and Development) in 1992, plus countries with economies in transition (the EIT parties), including the Russian Federation, the Baltic States, and several Central and Eastern European States" (United Nations, Undated b). The emissions allowance for Annex I countries under the Kyoto Protocol is an average of 5.2 percent below their 1990 emissions levels. However, few if any countries appear well positioned to meet this target.
- 2. 'Leakage': where deforestation reduced in one geographical area is simply displaced to another.
- 3. 'Additionality': when avoided deforestation is additional to a scenario *without* REDD that is, a reduction in deforestation was *not* likely to have occurred without REDD interventions.

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