Against the local trap: scale and the study of environment and development

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Abstract: This paper argues against what we call 'the local trap', in which development researchers and practitioners falsely assume that localized decision-making is inherently more socially just or ecologically sustainable. The local trap constrains research on a range of topics in development research, including productive conservation networks, agro-forestry, communitybased natural resource management, common property regimes and community-based collaboration. We use recent research on scale in political and economic geography to argue that scales and scalar arrangements are socially constructed through political struggle; they are never ontologically given. In other words, there is nothing inherent about any scale or scalar arrangement. Therefore, an arrangement in which resources or decisions are controlled locally is no more likely to lead to ecologically sustainable or socially just outcomes than an arrangement in which the regional, national or global scale predominates. Because scales are produced through socio-political struggle, the outcomes of a given scalar arrangement are dependent on the political agenda(s) of those empowered by the arrangement. When we start from the assumption that there is nothing inherent about scale, we cannot assume the political and ecological dynamics of a particular scalar configuration. We must instead make those dynamics the object of critical inquiry. The paper uses a case study of beekeeping in the Brazilian Amazon to illustrate the range of both positive and negative outcomes that can result when decision-making is localized.

Key words: Amazon, Brazil, decentralization, environment, scale, sustainable development.

I Introduction

In 1992, the Report of the United Nations Conference on Environment and Development included a call for a substantial rescaling of decision-making control over development programmes. It made a case that a substantial measure of authority must be transferred to the local scale in order to ensure sustainable development. Principle 22 of that document argues

indigenous people and their communities and other local communities have a vital role in environmental management and development because of their knowledge and traditional practices. States should recognize and duly support their identity, culture, and interests and enable their effective participation in the achievement of sustainable development. (United Nations Department of Economic and Social Affairs, 1992; emphasis added)

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This was certainly not the first call for localization in development decision-making. Nor did it argue only for local-scale decisions. It also affirmed in Article 2 that national-scale 'states have ... the sovereign right to exploit their own resources pursuant to their own environmental and developmental policies' (United Nations Department of Economic and Social Affairs, 1992). Even when it stressed localization, as in the quote above, it was clear that national states would be the ones enabling local and indigenous people in their effective participation. Nevertheless, this document both aroused and reflected a keen interest in localization among scholars and policymakers concerned with environment and development. Throughout the 1990s and into the new century, researchers working on a range of development issues have increasingly argued that one key to achieving social justice and ecological sustainability is a localization of decision-making (Peluso, 1992; Fairhead and Leach, 1996; Sundberg, 1998; Tsing et al., 1999; Perz, 2001). If we are to move beyond the development disasters of the past, this work maintains, local people must take a greater role in determining the course of development.

We term this line of thinking the 'local trap', in which researchers assume that localscale decision-making is inherently more likely to yield outcomes that are socially just or ecologically sustainable than decision-making at other scales. We argue against the local trap. We propose instead a theoretical perspective that maintains there is nothing inherent about any scale. In this view, local-scale control over development is no guarantee that a just or sustainable outcomes will result (just as control at other scales does not guarantee an unjust or unsustainable outcome). Scales should be seen not as things in themselves with inherent qualities, but rather as strategies that are pursued by and benefit social groups with particular social and environmental agendas. For example, localization, which is a rescaling of decision-making control over development, should be seen as a strategy that will empower specific interests at the expense of others. There is no reason to believe that it will necessarily empower groups who favour justice and sustainability. It could also empower those who benefit from oppression and environmental exploitation. It is the agenda(s) of those who are empowered, rather than the inherent qualities of the scale itself, that will determine social and environmental outcomes. In each local context, the specific combination of empowered groups and agendas will vary, depending on the specific way localization unfolds in that instance. Localization will therefore lead to a range of different social and environmental outcomes, depending on the specifics of each case.

Moreover, localization is almost never absolute. Rather it involves a measure of localization such that decision-making at the local scale still must articulate, again in undetermined ways, with decision-making framed at other scales, common examples of which are the national-scale state, international NGOs. or multilateral development banks. When we reject the local trap and eliminate the assumption that there is something inherently just or sustainable about the local scale, we are faced with a new imperative for research on environment and development. We are forced to critically examine in each case the particular dynamics of localization. We must determine through careful analysis if localizing decision-making will lead to social justice and ecological sustainability, or if other strategies, such as regionalizing, nationalizing, or globalizing decision-making, will achieve those goals more effectively.

To develop our argument against the local trap, we begin by briefly setting out a theoretical perspective on scale that stresses that scale is socially produced. We then present a review of the literature on environment and development where we more fully articulate the nature of the local trap, and how our approach to scale helps eliminate it. Our goal is not to invalidate this body of excellent research but to argue that it can benefit from

a more careful treatment of scale. The remainder of the paper is a case study of a particular instance of the localization of development decision-making in the Brazilian Amazon. We offer the case as an illustration of our argument: that localization leads to a complex set of social and environmental outcomes, all of which are the result not of localization itself, but of the diverse and undetermined agendas of those empowered by localization.

II The politics of scale

Our contention that there is nothing inherent about scale draws on a developing literature in critical geography on the nature of scale and contemporary rescaling. A central argument of this work is that scale is socially constructed; a particular scale has no objective, pregiven character (Smith, 1992; Delaney and Leitner, 1997; Howitt, 1998; Marston, 2000). Neil Smith (Smith, 1992; Marston, 2000) argues that 'there is nothing ontologically given about the traditional division between home and locality, urban and regional, national and global scales'. Instead, he contends, the qualities of each scale and the relationships among them are determined through social and political struggle. While this principle of social construction is almost cliché in the social sciences, what flows from it is, we argue, significantly destabilizing for current thinking about scale. If we take this principle seriously, we cannot assume a priori anything about the extent, characteristics and functions of a particular scale or scalar arrangement. Rather, we are forced to critically examine how scales and their interrelationships are produced by social actors through political struggle in order to advance their particular agenda (Jonas, 1994). In this conception, scale is not an external entity to which actors respond; it is rather a strategy that they mobilize to realize their interests. This shift toward examining the political genesis of scale is why the phrase 'the politics of scale' has become the catchphrase of the literature (Swyngedouw, 1997a, b, c).

A specific application of this argument is the work by political and economic geographers on the nation-state (Peck and Jones, 1995; Behnke, 1997; Jones, 1997; Leitner, 1997; Brenner, 1999; MacLeod, 1999; Purcell, 2003). For example, John Agnew (Agnew, 1994) shows that although state sovereignty has recently been organized at the national scale, the national-scale character of state sovereignty is not pregiven and eternal. Rather, during the contemporary era particular political interests have worked to make state sovereignty predominantly national. In the past state sovereignty has been fixed at smaller scales (the urban, the regional) and at larger scales (the imperial). It seems to be currently emerging at a continental scale (the EU) and perhaps even a global scale (Falk, 1994; Sassen, 1996; Morris, 1997; Holston, 1999 a, b; Holston and Appadurai, 1999; Wallace, 1999; Falk, 2000; Hardt and Negri, 2000). Agnew thus demonstrates that it is wrong to assume an inherent and eternal link between the national scale and state sovereignty. Instead, research on the state must focus on the motivations and strategies of those who construct state sovereignty as national, and of those who work to reproduce state sovereignty at new scales such as the city, the continent or the globe. Moreover, since each scalar manifestation of the state is the product of political struggle, we cannot assume that some state scales are more desirable than others. A transfer of sovereignty to a local-scale state might provide its citizens a means to resist the tyranny of an oppressive national-scale state (as we might hope for in contemporary Russia), but it could just as well allow the local-scale state to enact repressive policies and terrorize its people. It is worth remembering, for example, that the Confederate States of America fought the Civil War in the name of localization and local control.

Clearly this brief recounting of a large literature cannot 'prove' that scale is socially produced rather than given. We refer readers seeking a complete exposition of the argument to the work cited above. We draw on the scale literature as a source of a particular set of well-developed theoretical principles that we argue can help overcome the local trap and re-direct research in environment and development. We intend that the drawbacks to the local trap, and the importance of avoiding it, are made clear in the following section.

III Environment, development and the local trap

Following these principles, we argue that the local trap is wrong to assume the local scale is inherently more socially just or ecologically sustainable. However, to be fair, the precise nature of the local trap is somewhat more complex than we have suggested so far. Embedded in the local trap's assumptions about localization is a set of assumptions about democracy and popular sovereignty. The assumption being made in much development literature is not simply that localization leads to justice/sustainability, but that localization leads to democratization, which then tends toward justice and sustainability. This logical string opens up a whole raft of assumptions that are extremely common in the literature on environment and development. First, localization is regularly conflated with democratization, even though localization can just as easily lead to tyranny and oppression. Secondly, 'local people' are conflated with 'the people' of democracy's popular sovereignty, even though 'the people' can be (and has been) defined at a range of scales. Thirdly, 'community' is commonly conflated with 'local-scale community', even though communities exist at all scales. Fourthly, and following from the mis-steps above, local 'community-based development' is then conflated with 'participatory development' even though local-scale community control does not necessarily lead toward greater popular participation. And fifthly, the modifier 'local' is regularly used to stand for more specific ideas such as 'indigenous', 'poor', 'rural', 'weak' or 'traditional', even though there is nothing essentially local about any of these categories.¹

We contend that these flawed assumptions stem from the same source: the assumption that there is something inherently desirable about the local scale. The assumptions lead to unsound conclusions and misguided policy recommendations. It is dangerous to think and say 'localization' when we mean 'democratization', because such imprecision will lead to policy recommendations that champion localization, and these may or may not lead to greater democracy. It is important to be clear that we agree strongly with the argument that in the long term more democratic control over development will lead to greater social justice and ecological sustainability. However, we reject the assumption that localization has any necessary ties to democratization, and that localization is always the best way to bring about greater popular control over development. Scholarship and policy in environment and development must reject the local trap and its conflation of localization with democracy. It must remain clear that while the true goals of development reform may be democracy, justice and sustainability, such goals must not be conflated with devolution or localization. A successful democracy can be local. regional, national or global. Its 'people' can similarly exist at all scales. A global 'community' is just as conceivable and desirable as a local one. We must aspire to global ecological sustainability just as much as to local sustainability. Development goals may be, in short, to empower weak people, poor people or indigenous people not to empower local people. To most effectively reject the local trap and avoid its problematic assumptions, we adopt the theoretical starting point that there is nothing inherent about scale. We start off by assuming that empowering local people may or may not lead to the outcomes desired by scholars and policymakers. When we reject the local trap, we are forced to critically examine the social and environmental agendas of those empowered by a particular

development programme. It is these agendas, and not the inherent qualities of a particular scale, that will determine the programme's social and environmental outcomes.

1 The roots of the local trap

We contend that the local trap has its intellectual and political roots in several key trends, both in development studies and beyond. The broadest trend, one that involves much more than just environment and development, is the increasing salience of the struggle between neoliberal globalization and its opponents. Over the past 30 years, neoliberal capitalism has become increasingly hegemonic by pursuing a strategy of globalization. Many assume that the best resistance to neoliberalism is therefore counter-strategies of localization. We can see this error in many places: in manifestos for localization as a way to resist the increasing power of corporations (Mander and Goldsmith, 1996; Hines, 2000), in calls for re-establishing local places as bases for subaltern resistance to globalization (Escobar, 2001) and in the pervasive labelling of ongoing demonstrations against organizations such as the World Trade Organization (WTO), International Monetary Fund (IMF), World Bank, and G-8 as 'anti-globalization' protests rather than anti-corporate, anticapitalist or anti-neoliberal protests. We also see, if more rarely, the opposite argument that global neoliberalism can only be countered by a similarly global-scale strategy of resistance (Hardt and Negri, 2000). All of these arguments conflate the thing to be resisted (neoliberalism) with its scalar strategy (globalization). The error is in assuming that there is both a necessary tie between neoliberalism and globalization and that a particular scale is ideally suited to resistance. Of course, strategies of globalization and localization can both be used to resist neoliberalization. Given that neoliberalization itself plays out at a range of scales, it is fairly clear that resistance must be similarly multiscalar, rather than limited to one 'ideal' scale. This larger debate is, of course, relevant to

environment and development through debates about the so-called 'Washington Consensus', which sees neoliberalization as the key to development in the global South (Comeliau, 2000; Gore, 2000; Arrighi, 2002). As with the resistance to neoliberalism more generally, those in development circles who advocate resistance to the Washington Consensus tend to champion localization as the key to resisting neoliberalization and democratizing the development process.

The preference for the local scale in the development literature has also been reinforced by the growing popularity of poststructural post-colonial, and post-modern perspectives (Shiva, 1989, 2002; Escobar, 1995, 2001; Sundberg, 1998). Despite their manifest diversity, nearly all of these approaches share a commitment to antiessentialism, difference and particularity. They therefore favour local-scale strategies of resistance. because the local scale allows each particular movement, group or place to resist neoliberal development in their own particular way. Anti-essentialist approaches are much less inclined to larger-scale approaches that, they fear, might require particular groups to conform to a generalized agenda that emphasizes their common concerns as 'peasants', 'rural poor' or 'indigenous people'. Although upscaling resistance does not, in fact, require a levelling of difference and an exclusive emphasis on commonality, nevertheless anti-essentialist perspectives are reacting largely to the legacy of internationalist labour politics, which did indeed argue for levelling difference and emphasizing a shared identity as workers in the service of the struggle against capitalism. The intellectual and political instinct of post-structuralism, therefore, is that 'strategies of localization' are inherently better suited to resisting what they see (ironically) as an essentially global capitalism (Jonas, 1994; Escobar, 2001).

Probably even more important than the anti-essentialist inclination toward the local has been the well-known and spectacular failure of top-down, expert-driven

mega-development projects managed mostly at the national and international scale by nationstates and multilateral development banks. These projects were mostly antidemocratic, socially unjust and ecologically destructive. The campaign against mega-development worked to counter these flaws, and one of its principle strategies was to rescale the national-international character of mega-development by calling for a localization of decision-making control. The goal was to replace large-scale, anti-democratic, unjust and destructive mega-development with more localized, democratic, just and sustainable development. As this pitched battle came increasingly to define the politics of development, it became common to conflate the local scale with democracy, justice and sustainability, and larger scales with authoritarianism, inequality and ecological destruction. The anti-mega-development campaign, despite its important achievements, thus helped entrench the local trap as a common assumption in the development literature.

2 The local trap in research and practice The outcome of these several trends has been scholarship and policy making on environment and development that is deeply marked by the local trap. For example, the currently popular emphasis on 'participatory development' is concerned in part to open development decision-making to a greater number of people. But frequently the idea of participation is equated with localization of decision-making (Platteau and Abraham, 2002). Greater popular participation is often equated with greater participation for 'local people' (Peluso, 1996). Increased participation is therefore assumed to be synonymous with localization of decision making. Adams and Rietbergen-McCracken (1994), for example, argue that

there is a growing body of evidence to suggest that development efforts have a greater chance of being successful in the long run if the key players – governments, donors, and *most important*, *local people* – feel they have a

genuine stake in the outcome. This involves enabling them to influence and share control over the development initiatives, decisions, and resources that affect them. (Adams and Rietbergen McCracken, 1994: 36; emphasis added)

After the mega-development flascos, it has become clear that governments and donors have had plenty of control over development, so a part of Adams and Rietbergen-McCracken's solution to improve development outcomes is to ensure that 'local people' have a greater share of influence and control over development. Horowitz (1998) stresses 'the need for local people to be given strong incentives to participate in co-management' of protected areas. James Scott (1998) concludes that there must be a greater role for local people in shaping development programs. Costa et al. (1997) write that "participation" and "participatory development" have become mantras in contemporary development discourse. But certain cultural settings are better suited to local participation and collective action than others'. Costa and his colleagues slip easily from 'participation' in the first sentence to 'local participation' in the second, assuming they are synonymous. Kleemeier (2000), similarly, freely assumes that local control is synonymous with greater participation. The mistake of equating more participation with the participation of local people is guite common in the academic and policy literature on participatory development (Wright, 1994; Fairhead and Leach, 1994; Clark, 1995; Warner, 1997; Michener, 1998; Biggs and Smith, 1998). It is a mistake to equate 'the people' of democratic popular sovereignty with 'local people', since the people can and should exist at a range of scales. The most democratic outcomes are frequently not the most local ones.

Another tradition marked by the local trap is the work on 'community' and 'community-based' development, of which the concept of community-based natural resources management (CBNRM) is perhaps the most well-known. CBNRM, as Tsing *et al.* (1999)

tell us, is based on the premise that local populations have a more immediate interest in sustainable use of resources than are the national state or distant corporations. Here the idea of 'community' is frequently conflated with 'local community'. 'Communitybased management' really means more control for local-scale groups, and becomes bound up closely with the localization of decisionmaking. Brand's work on Jordan is a particularly illustrative example. After citing James Scott's conclusion that local people must take a greater role in development decisions, she contends (Brand, 2001) that Scott's 'call parallels the wisdom that gradually emerged in the international development and aid communities regarding the need for community participation. ... As a result, most projects now insist ... upon consultation with local communities'. Within a paragraph, she moves easily from 'community participation' to 'consultation with local communities'. She sees these as self-evidently equivalent, because she assumes 'community' to be synonymous with 'local community'. Of course, communities can exist at all scales, as Brand herself confirms by referring to 'the international development and aid communities'. But when the 'international development community' writes about 'community-based' management and 'greater community control', it nearly always means local-scale communities. The main thrust of community-based management, therefore, is to call for a localization of decision making. It assumes that this localization will inherently produce more democratic and sustainable development. This elision is common throughout the CBNRM and other 'community-based' literature (Colchester, 1993; Western and Wright, 1994; McDaniel, 1997; Smith-Nonini, 1997; Wainwright and Wehrmeter, 1998; Agarwal and Gibson, 1999; Twyman, 2000; Blanchet, 2001; Veron, 2001).

The local trap affects a range of other approaches as well. The work on productive conservation networks (PCNs) contains a strong tendency to assume that local control

over the networks will result in just and sustainable practices (Hall, 1997, 2000; Perz, 2001). PCN researchers are well aware that local-scale arrangements are not always just and sustainable. However, this fact does not prompt scepticism about the assumption that localization is inherently desirable. Researchers continue to be influenced by the idea that local-scale programmes should have worked because they ensured local control. Considerable effort, therefore, is expended needlessly to explain why a given local-scale arrangement failed to produce justice or sustainability. Similarly, research on common property regimes (CPRs) regularly assumes that local-scale CPRs should be more successful than larger-scale ones (Baland and Platteau, 1999; Ostrom et al., 1999; Thorburn, 2000; Boelens and Doornbos, 2001). Campbell et al. (2001) conclude their detailed study of CPRs in Zimbabwe with the contention that the 'choice of how resources can be used should lie with local communities. rather than with Acts [made by national-state lawmakers]'. In the same way, those working on sustainable and social forestry commonly assume localization will lead to the outcomes they desire (Fairhead and Leach, 1994, 1996; Peluso, 1996; Heermans and Otto, 1999). As Peluso (1992) argues, 'ideally, social forestry programs and philosophies are intended to involve local people in the management and distribution of forest resources'. As with the PCN work, even when Peluso's ideal is realized in practice, it can fail to produce the desired outcomes. Where social forestry fails, she argues, it fails because the ideal of localization was insufficiently realized. For her the answer is a more perfect localization. while failing to see that there is nothing inherently desirable about the local scale.

3 Developing concern

Recently a growing literature has begun to critique the uncritical acceptance of the local in development studies, and especially in the participatory development tradition (Long, 2001; Manor, 2004; Hickey and

Mohan, 2005).2 For example, Mohan and Stokke (2000: 249), contend it is 'crucial to pay attention to issues of scale'. They write, 'the issue of scale ... has been especially central in recent discussions about ... globalization' (2000: 261). And they argue 'the linkages between scale and politics have become more complex, but more crucial, in these global times' (2000: 262). Nevertheless, they do not engage scale theorists or offer their own theorization about scale that could help avoid the 'dangers of localism' they fear. They do refer, in the conclusion, to Massey's notion of a 'global sense of place' as a way to avoid the dangers. This concept might be a viable alternative, but Mohan and Stokke do not develop theoretically how the place literature might help.

As with Mohan and Stokke, the concerns about the local that have emerged so far have not offered a theoretical way to avoid the local trap. Bebbington *et al.* (2004: 201), speak of the 'important issues regarding the links between culture, power and scale', but they do not develop a theoretical way to think about scale. Williams *et al.* (2003: 174) argue that 'it is important to ensure that there is careful consideration of appropriate scales of action', but they, too, do not offer a systematic way to think about scale in this context.

Generally, concerns are based on empirical findings that contradict the local trap's assumptions (Schroeder, 1999a, b; Zimmerer, 2000). But this empirical strategy has only mildly tempered the tendency to assume a link between local scales and desirable outcomes. Without a well-developed theory of scale, the default position of development studies - its intellectual and political instinct - is likely to remain the idea that local-scale arrangements, while not always perfect, at least tend to be more emancipatory and environmentally sensitive. Empirical counter-examples will likely not changes this instinct. We contend that what is needed is not more empirical red flags, but rather a theoretical starting point that clearly rejects the assumptions of the local trap.

We therefore begin from the a priori assumption that there is nothing inherent about scale. We strongly support calls for greater democracy, sustainability and justice in development practice. However, we maintain that localization has no inherent connection to these goals. More local control can lead to greater democracy, but it can also lead to a more authoritarian, patriarchal or ecologically destructive outcomes, depending on who is empowered by localization. Similarly, while control at larger scales can lead to the mega-development tragedies of the 1970s, it could also help put in place a set of democratic and sustainable principles to guide development, and these could serve to challenge repressive or destructive local regimes. It is critical to resist the misleading tendency, so common in the literature reviewed above. to conflate the local scale and localization with any of these three main goals. Instead, in each case localization (or any process of rescaling) must be approached critically. We cannot support localization before the fact, and we must avoid assuming that it is equivalent to democratization, justice or sustainability. We must instead examine without preconception what outcome localization will have on democracy, justice and sustainability.

In the remainder of the paper, we present a case study of development in the Brazilian Amazon to illustrate our points. We examine a development programme that emphasized localized decision-making control as a way to encourage sustainable agricultural practices and stem deforestation. We find that localization itself was inherently neither desirable nor undesirable. Rather it was contingent. Localization did not itself produce outcomes. It functioned only to empower particular groups. It was not the inherent properties of the local scale or local people that determined the social and ecological outcomes of the programme; rather it was the agendas of the groups who were empowered. Moreover, these agendas were not fixed and pregiven, the natural outgrowth of the groups' local character. Rather the agendas were forged

over time through the development process as actors created and reacted to an evolving milieu of ecological conditions and social relationships.

IV The localization of development in the Brazilian Amazon³

As in other places, recent development politics in the Brazilian Amazon have been shaped by the notion that localization leads to social justice and sustainability. In arguing for more power for local Brazilian communities in development decision making, activists have pointed to the disastrous social and environmental outcomes of megadevelopment projects in Amazonia. One of the programmes often referred to in the antimega-development bank (MDB) campaign was Polonoroeste, the now infamous project of the early 1980s in the state of Rondonia. Brazil. Like other mega-development projects of the 1980s, it was conceived, organized and implemented primarily by national-scale (Brazilian government) and internationalscale (World Bank) organizations. The goal of the project was to bring greater order and sustainability to agricultural colonization of the rainforest (Schwartzman, 1986 a,b; Rich, 1989, 1990, 1994; Brown, 1992). Over half of Polonoroeste's US\$1.6 billion funds went to large-scale infrastructure development, namely the paving of the BR-364 highway, a route that bisected the state and provided the only overland route connecting Rondonia's capital city, Porto Velho on the Madeira River, with the more developed and populated regions of Brazil to the south (World Bank, 1981). Thousands of peasant families and would-be urban entrepreneurs rushed up the highway in numbers that overwhelmed government services for land titling, agricultural extension, health and education. By most measures, the project brought accelerated deforestation rates and human suffering. Colonist farmers failed at high rates, abandoning their plots and either moving further into forested environments to establish new agricultural plots, or filling urban areas

unprepared to provide adequate social services. Cattle ranching, which exacerbated deforestation, continued to be the most prominent land use on rural properties. Indigenous groups were exposed to disease and violence as the modern agricultural frontier advanced upon their traditional lands, and together with rubber tappers, the 'forest peoples' found their environments and culture in peril (Davis, 1977; Food and Agriculture Organization Cooperative Program (FAO-CP), 1987; Fearnside, 1989; Hecht and Cockburn, 1990; Browder, 1994). By 1985, 11.37% of Rondonia's forests had fallen (Fearnside, 1989). The period became known as the 'Decade of Destruction' (Cowell, 1990).

Grassroots organizations from Rondonia joined the wider campaign to organize against the destructive nature of mega-development (Schwartzman, 1986a; Keck, 1998; Keck and Sikkink, 1998). Polonoroeste was discussed by name in numerous US Congressional Committee Hearings in the mid-to late-1980s. The hearings were designed to examine the question of how MDB practices were leading to wanton environmental destruction and human rights abuses. The then-president of the World Bank, Barber Conable, referred specifically to Polonoroeste's failures, and the World Bank's role in it, when announcing the need for reform in the World Bank (Rich. 1994). New Bank documents declared intentions to work together with groups representing civil society to address the social and environmental problems of development (World Bank, 1988, 1990).

As part of this reform effort, in the 1990s the World Bank launched Planafloro, a new development project for Rondonia in which the Bank would demonstrate to its critics that it was serious about funding projects that addressed the abuses of the past. World Bank reports cited centralized decision-making by national- and international-scale organizations as a major factor in the human and environmental failures of Polonoroeste, and so Planafloro's goal was to localize

decision making and increase the participation of local civil society groups (Dixon et al., 1992). Planafloro created a Rondonian state-level council that would review the progress of the project on a monthly basis and establish local commissions to oversee various aspects of the project. Rondonia's NGOs and small-scale grassroots organizations (the development literature's 'local people') would be represented on the council.

In addition to these changes, activists pressed for still more localization. Not long after disbursements for Planafloro began, the newly organized oversight groups filed a petition for the project to be reviewed by the World Bank's Independent Inspection Panel. Critics alleged serious irregularities in project implementation (Millikan, 1995). Although the Inspection Panel's request to review the project was denied, pressure by Rondonian civil society led to negotiations with the Rondonia state government about how to implement a more meaningful localization of the project (Leroy and Menezes, 1996). To do this, the government and NGOs created a new programme within Planafloro, worth US\$22 million, that would allow grassroots groups organized at the local scale to apply for grants for development projects in their respective communities. The programme, called PAICs (Community Initiative Support Projects), built on already existing, but much less funded, localization programmes within Planafloro. Project funds up to US\$150 000 per group were granted to associations and cooperatives of colonist farmers, rubber tappers and indigenous groups throughout the state. The grants were used to carry out small infrastructure projects, construct health, school and other community meeting facilities, and develop resource extraction activities considered socially and ecologically sustainable (Rondonia).

The local trap leads us to assume that localization should result in greater social justice and environmental sustainability in Rondonia. It would argue that localization would enable organized groups throughout Rondonia to

implement projects that they need for their community. After all, they are best positioned to determine their development needs, and they are best equipped to ensure that development does not harm their surrounding environments. Localization would empower local people to adopt agricultural production strategies that lead to conservation of forest resources, since that is in their best interest. Moreover, such a localization of development would be seen as a result of, and a further contribution to, democratization in Brazil (da Rocha, 1995). However, if we reject the local trap, we are forced to examine the specifics of the case. We must interrogate the contingent political struggles and ecological dynamics that produced actual development outcomes. We must resist the trend of thinking that localization will lead to socially and ecologically sustainable development in Planafloro just because Polonoroeste's large-scale, centralized development created such awful destruction.

We continue our case study by examining a particular kind of development activity, beekeeping. Within Planafloro, apiculture was promoted among grassroots organizations as socially and ecologically sustainable. The case illustrates that localization itself does not lead necessarily to particular development outcomes. Instead, localization transforms the power relations that shape development. In Rondonia as elsewhere, it was the agendas of the actors empowered by localization that led to particular development outcomes. Moreover, those agendas were neither fixed nor self-evident. They changed in complex and unpredictable ways as actors reacted to and helped shape the evolving context of Planafloro. The case therefore demonstrates clearly that the particular outcomes of a given scalar reorganization (such as localization) are contingent: they cannot be divined a priori but must be analysed as the result of a complex and changing politics of development.

1 Beekeeping and 'the local'

Throughout the world in the 1980s, international promoters of beekeeping were very

much on the localization bandwagon. Notions about the socially and ecologically desirable characteristics of 'the local' are spread throughout a large promotional literature on beekeeping, including Brazilian beekeeping trade journals and proceedings from the International Bee Research Association. one of the major beekeeping booster organizations in the world. Those notions include the following. Beekeepers can start operations with little capital and labour investment, meaning they can rely on family labour and locally available materials to construct beehive boxes, protective clothing and equipment needed to work with bees, eventually leading to agglomeration and growth of cottage industries related to beekeeping. Beekeepers benefit strongly from cooperative arrangements with other beekeepers. Therefore, beekeeping helps develop and strengthen social capital and civil society. Honey is a valuable commodity and, because it is harvested from the local natural environment, beekeepers have a strong economic incentive to preserve the local vegetation cover. In the 1980s beekeeping promoters thus argued for the localization of decisionmaking power with respect to how beekeeping development is planned and implemented. The logic was that local beekeeping organizations, not national-scale agricultural ministries as in the 1950s-1970s, should be the ones to decide how beekeeping should be developed in their communities because they work with the technology most appropriate for their local ecological conditions and culture (Anonymous, 1985, 1989; International Bee Research Association (IBRA), 1985, 1989, 1994; Aguino, 1989a,b).

Such rhetoric about the local human and ecological system in beekeeping was appropriated successfully by Rondonian beekeepers in their project proposals to the Planafloro community initiative programme. In 1996–1997 alone, the Planafloro programme allocated US\$1.1 million to community projects in which beekeeping was one of the major components. The money was

deposited directly into the bank accounts of grassroots organizations for them to use and account for as they proposed. The programme thus gave grassroots organizations an unprecedented amount of control over their own development. But, as we see, this shift in control by itself tells us little about development outcomes. The actual results were determined by complex and shifting political, economic and ecological factors that a priori assumptions about 'the local' hide from view.

2 Beekeeping and the social relations of localized development

Our case study focuses on the political, economic and ecological dynamics of beekeeping in the municipality of Campo Alto, Rondonia (a pseudonym). Beekeeping in Campo Alto emerged as an important development strategy through a very particular politics having to do with the activities of the municipality's Rural Workers Union. The union first organized itself toward the end of Brazil's military dictatorship in the early 1980s. Leaders of the union were affiliated with Brazil's leftist Worker's Party, or PT, and the union organized farmers to pressure what were typically right-wing local, state and federal agencies to provide better roads, schools, health care and other government benefits to the poor, rural population of the municipality. As part of this agenda, in the mid-to late-1980s some of the union's leaders were experimenting with beekeeping as one way to ensure the livelihood of rural people. The project was successful enough that others in the area began to join it, and by the early 1990s a group of beekeepers affiliated with the union began to pool their honey production and purchase of production inputs to make their operations more efficient.

As the beekeeping operation gained momentum, an NGO working with funds originating in Europe began funding the union to expand its beekeeping programme. The NGO saw the beekeepers as precisely the sort of local group that should have greater

control over their own development, control they believed would lead to justice and sustainability. The NGO's assistance helped the union expand honey production greatly. Their success in securing independent funding encouraged the beekeepers in the Rural Workers Union to break away. They reasoned that being independent allowed them to form an official cooperative that would be better able to attract funds specific to the cooperative's mission to process, package, store and sell members' honey. Planafloro funds, when they became available, reinforced this split. Operating mostly independently, both the remaining union and the cooperative applied for and received funds to carry out their own localized community development projects. For their part, the remaining union continued to focus on projects to help rural workers ensure their livelihood. As a general rule, they tried to do so without acquiescing to the increasingly prevalent neoliberal development model, in which rural workers were encouraged to become fully incorporated into and dependent upon global markets. They instead pursued projects that could help farmers be more self-sufficient, so they could better protect themselves from the often volatile markets for their crops.

The beekeeping cooperative, on the other hand, began to move in a much more market-oriented direction. They pursued both Planafloro funding and grants from wellknown international environmental NGOs and multilateral development institutions. The president of the cooperative was a skillful political entrepreneur who by the 1990s understood that international donors were actively seeking out local grassroots organizations fighting to improve the livelihoods of small farmers and protect rainforest environments. He began to promote the cooperative as just such an organization to the regional. national and international sustainable development community. Unlike the union, which pursued more radical and oppositional political goals, the cooperative presented itself to the development community as a group that

would integrate itself into global commodities markets, but do so in a way that ensured social justice and environmental sustainability in the local area. The idea, which resonated strongly with the productive conservation literature, was that it is possible to produce marketable commodities by means of alternative production strategies that preserve local ecologies. The cooperative attracted increasing international attention with this strategy, and through the mid-1990s it received numerous unsolicited contacts from donors eagerly searching for such organizations. Their success in securing grants solidified the power of cooperative leaders within the organization, because they were skilled at speaking to the donor agencies in a way that ensured the flow of funds.

One faction of cooperative leaders, headed by the president, came to see the grant money as an opportunity to develop a clientelist arrangement. This faction used the funds to distribute favours (personal use of vehicles, meals in the city, loans and outright graft), in return for continued political support from cooperative members receiving such goods. While some funds were spent to maintain the cooperative infrastructure (staff salaries, rent, etc.), little was used to develop the beekeeping production system or to enlarge the cooperative by recruiting new members in the countryside. As of 1997, the number of beekeepers involved in the cooperative had not risen in proportion to the amount of funds designated to involve new beekeepers. Moreover, interviews with every beekeeper in the cooperative indicated no effort on the part of cooperative leadership to educate members on improving the efficiency of their production systems by employing even the most basic honey bee management techniques.

Another faction, led by a relative of the cooperative president, opposed the clientelist arrangement and advocated a more democratic governance structure for the cooperative. They supported more spending on development of the honey production system,

and advocated stronger oversight of accounting to ensure that as much money as possible went toward improving honey production and marketing. Unlike the president's faction, the opposition saw great danger in relying on grant money to keep the organization afloat. In the minds of opposition leaders, the eventual end of grant money flow would mean the end of the organization. They wanted to develop the production system so that the cooperative could eventually sustain itself by selling honey on the national and global markets. Unlike the original Rural Workers Union, this faction was much more amenable to integrating the cooperative into commodities markets. They felt the union's opposition politics alone could not ensure the livelihoods of rural people. They believed it was important for small farmers to supplement their income by producing alternative commodities such as honev.

After an intense struggle, the clientelist faction of the cooperative prevailed. The clientelists were able to offer more immediate and tangible benefits, and they were skillful in pressing this advantage to sway the opinions of most cooperative members. The cooperative has thus moved away from active honey production and has come to rely increasingly on securing continual development grants. Rather than building their project around the actual production and sale of honey, cooperative leaders have found it much easier simply to attract new, successive donations from the development community to keep operations going. In securing their grants, they focus their rhetoric on a pure market solution to farmers' problems, even if their spending patterns do not bear out that rhetoric. Moreover. the leaders have increasingly distanced themselves from the leftist project of the Rural Workers Union. The widening political rift was illustrated clearly when a cooperative leader ordered removal of a union poster from the entrance of the cooperative, because he feared the poster's prominent display of socialist ideology would offend potential customers and donors. In fact, leaders have gone so far as to develop friendly relations with the right-wing government of the local municipality.

So in the case of the beekeeping cooperative localization of development decisionmaking created an opportunity for political entrepreneurs to develop a clientelist system that led to neither social justice nor sustainable honey production. Had the defeated faction prevailed, it would have likely produced a more democratic, transparent organization and greater social justice within the coopertive. However, the more democratic faction is unlikely to have created an ecologically sustainable honey production system that encouraged farmers to protect natural forest environments. Despite the rhetoric of beekeeping promoters discussed above, the sustainability of honey production systems is not a given. Rather it depends greatly on the particular features of local ecologies. In the case of the cooperative, the species used for honey production is the Africanized or 'killer' bee (Apis mellifera scutellata). These bees do not thrive in heavily forested areas but in patchy environments where floral resources are available from a great variety of sources: agricultural fields forests and, most importantly, abandoned fields in early successional stages with a high presence of weedy flowers such as iron-weed (Vernonia polyanthes, Asteraceae) (Condé, 1989; Condé and Rezende 1990; Marquez-Souza et al., 1993). An apicultural calendar generated by Rondonian state agricultural researchers establishes when bee colonies gain weight on average during the year. The calendar indicates the times for preparing the colony for the harvest season and, by correlating the weight gain with what flowers are blooming in the area, researches have determined what environments are most responsible for honey production. In this case, the importance of iron-weed during the honey harvest dryseason months of August and September is clearly indicated (Condé et al., 1990). Therefore, in order for the cooperative to have been most successful in producing honey

for sale, its preferred ecology would have been deforested areas where successional plants such as ironweed were prevalent. In the end, if the anti-clientelist faction had prevailed and the cooperative had pursued honey production as its primary source of income, success would have depended on the local availability of *deforested* environments.

Today, the original Rural Workers Union and the beekeeping cooperative continue to pursue very different agendas (see Figure I). They reject each other's methods of attaining development goals, and their split has weakened what had been a growing labour union movement in the municipality. What this case illustrates is that the outcomes associated with localization are highly unstable, unpredictable and variegated. They depend greatly on who is empowered by localization, and on what their agendas are. Moreover, they depend on how those agendas evolve over time. In Rondonia, localization did not *cause*

outcomes; it simply shifted power to actors organized at the local scale. As those actors both reacted to and helped shape the politics of development, the original agenda of the Rural Workers Union splintered into numerous agendas. The cooperative split from the original union and pursued a less activist, more market-oriented strategy. The cooperative branch spawned two possible outcomes: a clientelism that was undemocratic and ecologically neutral, and a plan truer to the grant rhetoric that would likely have been more democratic but ecologically questionable.

The original workers union, for its part, was not immune to further splits. A more radical faction felt the leadership was too willing to compromise with the neoliberal vision of the national and international development community. The radicals were especially opposed to the union's efforts to obtain better agricultural credit terms from the state and

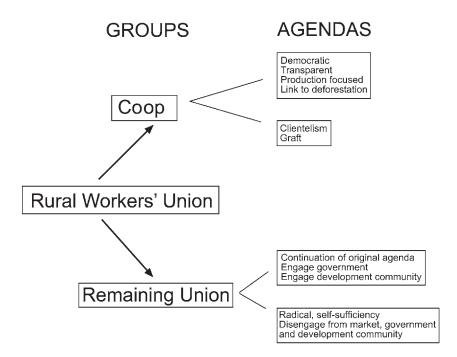


Figure 1 Evolving agendas emerging from localization of development in Campo Alto, Rondonia

federal government. In the long term, they argued, such measures would never liberate the rural working class from capitalist oppression. The answer for the radicals was to form their own organization that worked to disengage farmers from all forms of government and international NGO-sponsored credit and development programmes in order to establish greater local self-reliance among rural people.

In sum, localization did not lead unproblematically toward greater social justice and ecological sustainability. Rather, it led to a range of unpredictable and shifting outcomes, each dependent on political struggles that played out in highly contingent ways.

V Conclusions

When we reject the local trap and start from the assumption that there is nothing inherent about scale, a whole series of debilitating preconceptions fall away. The trap assumes that localization leads to greater ecological sustainability. In the Rondonian case, localization empowered a number of actors whose evolving agendas resulted in a range of outcomes (see Figure 1). Some were ecologically sustainable, some were not. Rejecting the trap forces us to carefully analyse the politics and ecologies of each case. It requires us to critically examine whether localization will enable sustainability. In the case of the particular ecology of Rondonia's Africanized beekeeping, it does not. However, in another case where bees actually do thrive on undisturbed, natural vegetation cover, empowering an agenda of locally organized honey production would likely have a material link to positive environmental outcomes.

Another assumption of the local trap is that 'local people' tend to pursue an inherent political and ecological agenda that is fixed and knowable. In fact, as the Rondonian case demonstrates, people's agendas evolve, often as a *response* to the dynamics of localization. Agendas can be so transformed as to contradict entirely previous goals and ideals. The clientelist leaders of the cooperative,

once leftist activists in the workers union, ultimately became new rural patrons, closely allied with the right-wing municipal government. Political agendas are in constant historical motion, and so it is misleading to assume something inherent and stable about the agenda of locally organized actors. This misstep is tied to a similar error, the idea that 'local' groups share a common agenda. As the Rondonian case shows vividly, local-scale communities are composed of myriad competing political interests that struggle to establish their agenda as the dominant agenda. Even within the beekeeping cooperative, two very different political and ecological agendas emerged and struggled for control. Against the local trap, the Rondonian case suggests that what motivates the actions of locally organized groups is not necessarily social justice and conservation of tropical forest.

To be clear, rejecting the local trap does not mean rejecting localization - just the opposite. Rejecting the local trap means rejecting all preconceptions about all scales. Rejecting the local trap necessitates a new set of intellectual and political imperatives for the international development community. We must reject a priori assumptions about any rescaling strategy. Instead we must always engage in a critical historical-geographical analysis of strategies that rescale decisionmaking control. Each rescaling will unfold differently and in complex ways. It will depend not only on the pre-existing political and ecological characteristics of a place, but also on how those characteristics evolve in the context of rescaling. Rejecting the local trap means we can no longer assume anvthing about scale. We must instead set about the careful work of critically analysing the complex and dynamic particularities of each situation.

Notes

1. We develop the literature's specific manifestations of the local trap in Section III, 2, 'The local trap in research and practice'.

- The wider tradition of participatory democracy is partly to blame here. It exhibits a strong favouritism toward the local for practical reasons: many assume that participatory democracy can only work in very small groups and is therefore best suited to the local scale. Since the tradition equates active participation with democracy, the local scale is assumed to be more democratic than larger scales.
- 3. This case study draws on over two years of field work in Rondonia, Brazil. Data was collected using a range of methods, including interviews, participant observation, and archival analysis. The beekeeping cooperative was the primary focus of the field work.

References

- Adams, J. and Rietbergen-McCracken, J. 1994: Participatory development: getting the key players involved. Finance and Development 3, 36-37.
- Agarwal, A. and Gibson, C. 1999: Enchantment and disenchantment: the role of community in natural resource conservation. World Development 27, 629-31.
- Agnew, J. 1994: The territorial trap: the geographical assumptions of international relations theory. Review of International Political Economy 1, 53-80.
- Anonymous 1985: Nova Mentalidade. Apicultura no Brasil Março/Abril, 13.
- 1989 Apicultura e Ecologia. Apicultura e Polinização Agosto/Setembro, 10.
- Aquino, M.C. 1989a: Desenvolvimento Sustentado, uma Nova Solução para um Velho Problema. Apicultura e Polinização Agosto/Setembro, 8.
- 1989b: Vale Tudo: Quem Matou Chico Mendes? Apicultura no Brasil Janeiro/Fevereiro, 6.
- Arrighi, G. 2002: The African crisis. New Left Review May-June, 5-37.
- Baland, J. and Platteau, J. 1999: The ambiguous impact of inequality on local resource management. World Development 27, 773-88.
- Bebbington, A., Dharmawan, L., Fahmi, E. and Guggenheim, S. 2004: Village politics, culture and community-driven development: insights from Indonesia. Progress in Development Studies 4, 187–205.
- Behnke, A. 1997: Citizenship, nationhood and the production of political space. Citizenship Studies 1, 243-65.
- Biggs, S. and Smith, G. 1998: Building methodologies: coalition-building for participatory technology development. World Development 26, 239-48.
- Blanchet, K. 2001: Participatory development: between hopes and reality. International Social Science Journal December, 637-41.

- Boelens, R. and Doornbos, B. 2001: The battlefield of water rights: rule making amidst conflicting normative frameworks in the Ecuadorian highlands. Human Organization 60, 343-55.
- Brand, L. 2001: Displacement for development? The impact of changing state-society relations. World Development 29, 961–76.
- Brenner, N. 1999: Beyond state-centrism? Space, territoriality, and geographical scale in globalization studies. Theory and Society 28, 39-78.
- Browder, J.O. 1994: Surviving in Rondonia the dynamics of colonist farming strategies in Brazil's northwest frontier. Studies in Comparative International Development 29, 45-69.
- Brown, J.C. 1992: Development in Rondônia, Brazil 1980-1990: POLONOROESTE, nongovernmental organizations (NGOs) and the World Bank. Latin American Studies. Lawrence KS: University of
- Campbell, B., Mandondo, A., Nemarunde, N., Sithole, B., Dejongi, W., Luckest, M. and Matos, F. 2001: Challenges to proponents of common property resource systems: despairing voices from the social forests of Zimbabwe. World Development 29, 589-600.
- Clark, J. 1995: The state, popular participation, and the voluntary sector. World Development 23, 593-601.
- Colchester, M. 1993: Slave and enclave: towards a political ecology of Equatorial Africa. The Ecologist
- Comeliau, C. 2000: The limitless growth assumption. International Social Science Journal December, 436–37.
- Condé, P.A.A. 1989: Levantamento preliminar da flora apícola dos municípios de Ji-Paraná e Porto Velho, Rondônia. Porto Velho: Secretaria de Est. de Indústria, Comércio, Ciência e Tecnologia.
- Condé, P.A.A. and Rezende, H.U. 1990: Fluxo de néctar e pólen em onze colônias de Apis mellifera no município de Ji-Paraná, Rondônia. Ciência e Cultura 42, 978-83.
- Costa, A., Kottak, C. and Prado, R. 1997: The sociopolitical context of participatory development in Northeastern Brazil. Human Organization 56,
- **Cowell, A.** 1990: The decade of destruction: the crusade to save the Amazon rain forest. New York: Henry
- da Rocha, O., Jr 1995: Democracia e construção da cidadania: subsídios para processos de negociação no âmbito do PLANAFLORO. Porto Velho, Brazil: SEPLAN/PNUD-PLANAFLORO.
- Davis, S. 1977: Victims of the miracle: development and the Indians of Brazil. Cambridge: Cambridge University Press.
- Delaney, D. and Leitner, H. 1997: The political construction of scale. Political Geography 16, 93-97.

- Dixon, J.A., Aiyer, S. and Kilgow, A. 1992: Meio Ambiente e Desenvolvimento na América Latina e no Caribe: O Papel do Banco Mundial. Washington DC: Região da América Latina e do Caribe. Banco Mundial.
- **Escobar, A.** 1995: Encountering development: the making and unmaking of the third world. Princeton NJ: Princeton University Press.
- 2001: Culture sits in places: reflections on globalism and subaltern strategies of localization. *Political Geography* 20, 139–74.
- **Fairhead, J.** and **Leach, M.** 1994: Contested forests: modern conservation and historical land use in Guinea's Ziama reserve. *African Affairs* 93, 481–512.
- 1996: Enriching the landscape: social history and the management of transition ecology in the forestsavanna mosaic of the Republic of Guinea. Africa 66, 14–37.
- Falk, R. 1994: The making of global citizenship. In Van Steenbergen, B., editor, *The condition of citizenship*. Thousand Oaks CA: Sage.
- 2000: The decline of citizenship in an era of globalization. Citizenship Studies 4, 5–18.
- Fearnside, P.M. 1989: A Ocupação Humana de Rondônia: Impactos, Limites, e Planejamento. Programa do Trópico Úmido POLONOROESTE Relatório de Pesquisa. Brasília: CNPq.
- Food and Agriculture Organization Cooperative Program (1987) Brazil: Northwest I, II, and III technical review: final report. Rome: FAO-CP.
- **Gore, C.** 2000: The rise and fall of the Washington Consensus as a paradigm for developing countries. *World Development* 28, 789–806.
- Hall, A. 1997: Sustaining Amazonia: grassroots action for productive conservation. Manchester: Manchester University Press.
- 2000: Amazonia at the crossroads: the challenge of sustainable development. London: Institute of Latin American Studies, University of London.
- Hardt, M. and Negri, A. 2000: Empire. Cambridge MA: Harvard University Press.
- **Hecht, S.B.** and **Cockburn, A.** 1990: Fate of the forest: developers, destroyers, and defenders of the Amazon. New York: HarperCollins.
- Heermans, J. and Otto, J. 1999: Whose woods these are: community-based forest management in Africa. Washington DC: USAID/Africa Bureau, Sustainable Development Office.
- **Hickey, S.** and **Mohan, G.**, editors 2005: Participation—from tyranny to transformation?: exploring new approaches to participation in development. New York: Zed Books.
- **Hines, C.** 2000: *Localization: a global manifesto*. Sterling VA: Earthscan Publications.
- Holston, J. 1999: Spaces of insurgent citizenship. In Holston, J. and Appadurai, A., editor, *Cities and citizenship*. Durham: Duke University Press, 155–73.

- Holston, J. and Appadurai, A., editors 1999a: Cities and citizenship. Durham: Duke University Press.
- 1999b: Introduction: cities and citizenship. In Holston, J. and Appadurai, A., editors, *Cities and citizenship*. Durham: Duke University Press, 1–20.
- Horowitz, L. 1998: Integrating indiginous resource management with wildlife conservation: a case study of Batang Ai National Park, Sarawak, Malaysia. *Human Ecology* 26, 371–403.
- **Howitt, R.** 1998: Scale as relation: musical metaphors of geographical scale. *Area* 30, 49–58.
- International Bee Research Association (IBRA) 1985: Proceedings of the third international conference on apiculture in tropical climates. Nairobi, Kenya, 5–9 November 1984. London: IBRA.
- 1989: Proceedings of the fourth international conference on apiculture in tropical climates. (4th, 1988, Cairo, Egypt). London: IBRA.
- 1994: Fifth international conference on apiculture in tropical climates. Trinidad and Tobago, 7–12 September, 1992. Cardiff: IBRA.
- **Jonas, A.** 1994: The scale politics of speciality. *Environment and Planning D: Society and Space* 12, 257–64.
- **Jones, M.** 1997: Spatial selectivity of the state? The regulationist enigma and local struggles over economic governance. *Environment and Planning A* 29, 831–64.
- **Keck, M.E.** 1998: Planafloro in Rondônia: the limits of leverage. In Fox, J. and Brown, D.L., editors, *The struggle for accountability: the World Bank, NGOs, and grassroots movements*. Cambridge MA: MIT Press.
- Keck, M.E. and Sikkink, K. 1998: Activists beyond borders: advocacy networks in international politics. Ithaca NY: Cornell University Press, 181–218.
- **Kleemeier, E.** 2000: The impact of participation on sustainability: an analysis of the Malawi rural piped scheme program. *World Development* 28, 929–44.
- **Leitner, H.** 1997: Reconfiguring the spatiality of power: the construction of a supernational migration framework for the European Union. *Political Geography* 16, 123–44.
- Leroy, J.P. and Menezes, M.A. 1996: Seminário sobre Gestão Participativa do Planafloro, Relatório Final. Porto Velho, Brazil: Programa das Nações Unidas para o Desenvolviment Cooperação Técnica ao Planafloro, Projeto BRA/94/007.
- **Long, C.** 2001: Participation of the poor in development initiatives: taking their rightful place. New York: Earthscan.
- **MacLeod, G.** 1999: Entrepreneurial spaces, hegemony, and state strategy: the political shaping of privatism in lowland Scotland. *Environment and Planning A* 31, 345–75.
- Mander, J. and Goldsmith, E., editors 1996: The case against the global economy: and for a turn toward the local. San Francisco CA: Sierra Club Books.
- Manor, J. 2004: User committees: a potentially damaging second wave of decentralisation? The European Journal of Development Research 16, 192–213.

- Marquez-Souza, A.C., Absy, M.L., Conè, P.A.A. and Coelho, H.A. 1993: Dados da obtenção do pólen por operárias de Apis mellifera no município de Ji-Paraná (RO), Brasil. Acta Amazonica 23, 59–76.
- Marston, S. 2000: The social construction of scale. Progress in Human Geography 24, 219-42.
- McDaniel, J. 1997: Communal fisheries management in the Peruvian Amazon. Human Organization 56,
- Michener, V. 1998: The participatory approach: contradiction and co-option in Burkina Faso. World Development 26, 2105–18.
- Millikan, B. 1995: Pedido de investigação apresentado ao Painel de Inspeção do Banco Mundial sobre o PLANAFLORO. Porto Velho, Brazil: Fórum das ONGs e Movimentos Sociais Que Atuam em Rondônia, Friends of the Earth.
- Mohan, G. and Stokke, K. 2000: Participatory development and empowerment: the dangers of localism. Third World Quarterly 21, 247-68.
- Morris, L. 1997: Globalization, migration and the nation-state: the path to a post-national Europe? The British Journal of Sociology 48, 192-93.
- Ostrom, E., Burger, J., Field, L.B., Norgaard, R.B. and Policansk, D. 1999: Revisiting the commons: local lessons, global challenges. Science 284, 278-87.
- Peck, J. and Jones, M. 1995: Training and enterprise councils: Schumpterian workfare state, or what? Environment & Planning A 27, 1361–96.
- Peluso, N. (1992) 'Traditions' of forest control in Java: implications for social forestry and sustainability. Natural Resources Journal 32, 883–918.
- 1996: Fruit trees and family trees in an anthropogenic forest: ethics of access, property zones and environmental change in Indonesia. Comparative Studies in Society and History 38, 510–49.
- Perz, S. 2001: From sustainable development to 'productive conservation': forest conservation options and agricultural income and assests in the Brazilian Amazon. Rural Sociology 66, 93–112.
- Platteau, J. and Abraham, A. 2002: Participatory development in the presence of endogenous community imperfections. Journal of Development Studies 39, 104-36.
- Purcell, M. 2003: Citizenship and the right to the global city: reimagining the capitalist world order. International Journal of Urban and Regional Research 27, 564-90.
- Rich, B. 1989: Funding deforestation: conservation woes at the World Bank. The Nation 248, 73-77.
- 1990: The emperor's new clothes: the World Bank and environmental reform. World Policy Journal 7, 305-29.
- 1994: Mortgaging the Earth: the world bank, environmental impoverishment, and the crisis of development. Boston MA: Beacon Press.
- Rondonia, 2003: S. G. o. PLANAFLORO Plano agropecuário florestal de rondônia PAIC-programa

- de ação a iniciativa comunitária. Retrieved 30 May 2005 from http://www.pesquisa.rondonia.ro.gou.br.
- Sassen, S. 1996: Losing control? Sovereignty in an age of globalization. New York: Columbia University
- Schroeder, R. 1999a: Community, forestry and conditionality in the Gambia. Africa 69, 1-21.
- 1999b: Geographies of environmental intervention in Africa. Progress in Human Geography 23, 359-78.
- Schwartzman, S. 1986a: Bankrolling disasters: a citizens' environmental guide to the World Bank and the regional Multilateral Development Banks. San Francisco CA: Sierra Club.
- 1986b: World Bank holds funds for development project in Brazil. Cultural Survival Quarterly 10, 25-27.
- Scott, J. 1998: Seeing like a state: how certain schemes to improve the human condition have failed. New Haven CT: Yale University Press.
- Shiva, V. 1989: Staying alive: women, ecology, and development. London: Zed Books.
- 2002: Violence of globalization. Canadian Woman Studies 21, 15-17.
- Smith, N. 1992: Contours of a spatialized politics: homeless vehicles and the production of geographical scale. Social Text 33, 55-81.
- Smith-Nonini, S. 1997: Primary health care and its unfulfilled promise of community participation: lessons from a Salvadoran war zone. Human Organization 56, 364-74.
- Sundberg, J. 1998: NGO Inadscapes in the Maya biosphere reserve, Guatemala. The Geographical Review 88, 388-403.
- Swyngedouw, E. 1997a: Excluding the other: the production of scale and scaled politics. In Lee, R. and Wills, J., editors, Geographies of economies. London: Arnold, 167-76.
- 1997b: Neither global nor local: 'glocalization' and the politics of scale. In Cox, K., editor, Spaces of globalization. New York: Guilford Press. 137-66.
- 1997c: Power, nature, and the city: the conquest of water and the political ecology or urbanization in Guayaguil, Ecuador: 1880-1990. Environment and Planning A 29, 311–32.
- Thorburn, C. 2000: Changing customary marine resource management practice and institutions: the case of Sasi Lola in the Kei Islands, Indonesia. World Development 28, 1461-79.
- Tsing, A., Brosius, J. and Zerner, C. 1999: Assessing community-based natural-resource management. Ambio 28, 197-99.
- Twyman, C. 2000: Participatory conservation? Community-based natural resource management in Botswana. The Geographical Journal 166, 323-35.
- United Nations Department of Economic and Social Affairs 1992: Report of the United Nations conference on environment and development. Rio: United Nations.

- Veron, R. 2001: The 'new' Kerala model: lessons for sustainable development. World Development 29, 601–17.
- Wainwright, C. and Wehrmeter, W. 1998: Success in integrating conservation and development? A study from Zambia. *World Development* 26, 933–45.
- **Wallace, W.** 1999: The sharing of sovereignty: the European paradox. *Political Studies* 47, 503–504.
- **Warner, G.** 1997: Participatory management, popular knowledge, and community empowerment: the case of sea urchin harvesting in the Vieux-Fort area of St. Lucia. *Human Ecology* 25, 29–46.
- Western, D. and Wright, M. 1994: Natural connections: perspectives in community based conservation. Washington DC: Island Press.
- Williams, G., Srivastava, M., Corbridge, S. and Véron, R. 2003: Enhancing pro-poor governance in

- Eastern India: participation, politics and action research. *Progress in Development Studies* 3, 159–78.
- World Bank 1981: Brazil: integrated development of the northwest frontier. Washington DC: Latin American and Caribbean Regional Office, World Bank.
- 1988: Environment and development: implementing the World Bank's new policies. Washington DC: World Bank.
- 1990: How the World Bank works with nongovernmental organizations. Washington DC: World Bank.
- **Wright, R.** 1994: Sharing the wealth: the needs of the world's rural poor, who live surrounded by biological riches, must be included in plans for preservation. *National Parks* 68, 24–26.
- **Zimmerer, K.** 2000: Rescaling irrigation in Latin America: the cultural images and political ecology of water resources. *Ecumene* 7, 150–75.