

TRANSNATIONAL LIVELIHOODS AND LANDSCAPES: POLITICAL ECOLOGIES OF GLOBALIZATION

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This paper introduces a collection of articles on 'Transnational livelihoods and landscapes'. We outline the analytical value of grounding political ecologies of globalization in notions of livelihood, scale, place and network. This requires an understanding of the linkages between rural people to global processes. We argue that the exploitation of these linkages can, under certain circumstances, result in new options and markets for rural people in marginal regions, even though many rural societies also confront serious political, environmental and economic challenges that likewise derive from globalization.

In just a generation of cultural and political-ecological research on rural people in the Third World, the nature of their livelihoods has changed profoundly. These changes in turn have important implications for analytical debates and constructs. Once-popular cultural ecological notions of 'adapted' peasant production systems today have little purchase when talking about contemporary rural societies.1 Likewise, if two or three decades ago much blood was being spilt in peasant studies in the effort to understand and define a peasant mode of production² – blood which certainly fertilized early work in political ecology - more recent debates have struggled with the very idea of the peasant. Today, some insist that analysts have no choice but to reconceptualize the peasantry in the light of globalization processes and the emergence of transnational spaces such as Oaxacalifornia.³ Others suggest more bluntly that peasantries are simply 'disappearing' under the influence of structural adjustment policies and market liberalization.⁴ While some would argue that the peasant economy has merely diversified and is now less tied to land-based resources, processes of agrarian change that reduce rural reliance upon land and local natural resources are a huge challenge to the very core of the way in which political (and cultural) ecologists think and write about one of their most favoured

topics, the rural Third World. Indeed, it can be reasonably argued that scholars who write about rural livelihoods and landscapes in most parts of the Third World have little choice but to engage with discussions of globalization and transnationalism.

In one way or another the papers in this issue grapple with the implications of these new and important trends, although they do so in somewhat different ways. While each author would agree that the 'non-local' must be part of any attempt to understand the full contours of recent transformations in rural livelihoods and landscape, they differ in the extent to which they emphasize the political economy of globalization in their explanations. This difference reflects the authors' theoretical predispositions (though all would think of themselves as some hue of political ecologist) and the themes that interest them, but also, importantly, the material differences among the places in which they work. We each need to recognize the extent to which our own constructions influence the ways in which we represent places and people. Our theoretical constructions need to remain relatively close to the material cases we are discussing, even as we engage phenomena such as globalization. While this does not imply that our theorizations ought be prisoners of place, it does suggest the virtue of theorizing outward from cases; as Glaser and Strauss argue, concepts can emerge from 'a relevant theoretical abstraction about what is going on in the area studied'.⁵

In this regard a comparative reading of the convergences and divergences among the four papers in this issue is helpful. On the one hand, such a reading can highlight conceptual differences among political ecologists, while also suggesting potential for further hybridization of theory and interpretation.⁶ On the other hand it can highlight genuine differences in the forms that 'glocalization'7 is taking in the rural Third World, a comparison of which can help enrich and nuance our understandings of the intersections between globalization and contemporary rural life. In this paper we lay out elements of such a comparative reading. After a brief introduction of the four papers, we first suggest that, when taken together, they suggest the analytical value of grounding political ecologies of globalization in notions of livelihood, scale, place and network. We also suggest their implications for how we think of globalization – suggesting that, far from being linear, it is a process that ebbs and flows. The extent to which, and ways in which, we invoke globalization to interpret rural livelihoods is therefore likely to vary not only across space but also across time. Finally, we recognize that the papers in no way resolve the thorny issue of the role that ecology should play in political ecology, but that by the same token, individually and as a whole, they suggest the virtue of the conceptual eclecticism that has come to characterize political ecology.⁸ Such eclecticism can make the field an important meeting point for work in development studies, cultural ecology, environmental politics and cultural geography, opening doors for genuinely exciting and stimulating analysis.

The papers in brief

The papers in this issue come from work conducted in Ecuador, Niger, the Dominican Republic and Bolivia. While each is concerned with similar issues, they take different points of entry to ask questions about the links between rural livelihoods and globalization. Perhaps reflecting the rich modern history of social organization among rural and indigenous people in the Andean countries, the papers on Ecuador and Bolivia take organizations as their entry point for analysing these links. Perreault's paper provides a fine-grained discussion of the emergence of indigenous organization in one province of the Ecuadorian Amazon. He illuminates the ways in which organization mediates access to resources and livelihood, pointing out that organizational strategy and identity politics each need to be part of any attempt to understand how resources are accessed by households and communities. By the same token such analysis has to work at several scales, not only because the Amazon has been the object of extractive, international capital investment for centuries but also because (and more importantly in his case) indigenous organizations are caught up in flows of international development resources, ideas and discourses (including those on indigeneity).

Perreault's analytical link from livelihoods to the global and transnational is thus through an analysis of such flows. In a comparative account of four economically oriented peasant organizations in Bolivia, Peru and Ecuador, Bebbington's paper also emphasizes the ways in which the global development networks of which these organizations are a part mediate livelihood and land-scape change. He also insists that these networks be understood in terms of their relationships to others – some of which (such as those linked to the church and solidarity groups) underlie development networks, others of which (such as those related to international economic and geopolitical relationships) interact with these networks. The comparative analysis of the four cases – caught up in quite different networks – then helps illuminate conditions under which rural populations and organizations in the Andes are able to expand their control over livelihood and landscape change and so negotiate globalization processes.

If Perreault's and Bebbington's papers reflect that strand of political ecology interested in linking development, environment and social movements,⁹ the papers by Batterbury and Rocheleau *et al.* are at least as inspired by the argument that political ecology needs to recover its ecological dimension.¹⁰ Batterbury's paper on agrarian change and livelihoods in the Nigérien Sahel thus combines careful work on field-scale soil quality dynamics¹¹ with an analysis of income generation and international migration practices among household members working these fields. His concern is to document that there is a dialectic between ecological dynamics and livelihood decisions and possibilities, and that any analysis that understates this (even in these contemporary times) runs the risk of being at the very best partial. Indeed, of the four papers his is the most cautious in invoking notions of globalization to explain place-based change. Yet even here, the livelihood impacts of neoliberal policies and international migration remain quite clear in the analysis.

Like Batterbury, Rocheleau et al. emphasize the intersection between ecology and livelihood in their comparison of ten years of socio-ecological and vegetational change in Zambrana-Chacuey, a hilly frontier region at the edge of the central rice-growing region in the Dominican Republic. They demonstrate the ways in which the changing political economy of livelihoods in the Dominican Republic, and the changing (i.e. more entrepreneurial) political positions of peasant organizations, affect vegetation and landscape change. The 'transnational' enters their analysis of landscape dynamics both through the effects of global discourses on sustainability and via the land use preferences of communities of Dominicans with relatives living and working in Zona Franca (Free Trade Zone) factories as well as in the USA. These diversified livelihoods continue to structure land use in the Dominican Republic through the changing demands for residential security, continuing (and gender- and class-differentiated) concerns over food security, external and local demands for greater sustainability, and a growing demand for longer term investment opportunities. At the same time, Rocheleau et al. – like Batterbury – insist that land cover changes also structure livelihood possibilities and other social practices. Perhaps more than any other of the papers, this one apportions important explanatory significance to ecological agency under contexts of landscape transnationalization.

Why political ecologies of globalization?

So what is distinctive – if anything – in these papers? The concern with the world system is nothing new. Between invasion, colonialism, Coca-Cola®, and popular radio, these rural areas have long been part of a global system of flows, exchanges and extractions. Indeed, some of the first political ecological critiques emerged to make just these points. This writing drew attention to the ways in which marginality, environmental degradation, poverty and hunger had been produced in the process of the progressive, and often violent, incorporation of peasantries into capitalist systems of production and exchange. Indeed, some have called for yet greater attention to these themes in order to ground recent discursive turns in a material analysis of the dynamics of capitalist transformation. In

In a similar vein, the initiative from which this collection of papers emerged was predicated on the notion that rural livelihoods and environments in the Third World were being profoundly reworked in the contemporary period, and that this reworking had much to do with new forms of market institution and engagement and, more generally, a progressively deeper integration of people into the market economy. However, we also believed that this reworking was an effect of many more factors than those typically emphasized in much political ecology of the rural Third World – factors that had to do *inter alia* with a variety of transnational flows related to migrations, transnational development networks, alternative trade networks and the circulation of ideas. We also suspected that the effects of this reworking on livelihoods and landscapes were more complex, contingent and sometimes surprising than previous writing has suggested. In this sense, while it was clear to us that rural livelihoods could not be thought

of independently of contemporary and historical processes of globalization, it was also the case that the degree, nature and forces underlying rural transformations varied significantly among the cases discussed, as did the experiences of globalization and indeed transnationalism.

The call to study these transnational networks – and in particular to study them ethnographically – is one that has been made with increasing frequency in recent years. The Arturo Escobar in particular has suggested that we know very little about the nature of the diverse networks of relationships through which places are constituted, and through which particular constructions, and intersections, of nature and culture are worked out. The papers in this collection offer insights into these connections: landscape changes in Amazonian Ecuador are discussed in terms of the transnational circulation of ideas on indigeneity and related flows of resources (Perreault); Nigérien land use is understood (in part) in terms of intersections with labour markets in other West African countries (Batterbury); and livelihood transitions in highland Ecuador and Bolivia are understood in terms of the links between families, peasant organizations and transnational corporate, non-governmental and solidarity trade networks (Bebbington).

Understanding transformations in particular places and livelihoods through such an analytical tack, of course, raises serious methodological challenges especially as regards the collection of empirical information – and the papers resolve this challenge in different ways. Two of them (Batterbury and Perreault) are intensive place-based studies, tracing some of their intellectual heritage to classic cultural ecology and cultural anthropology. These studies allow far more inquiry into the nuances and details of local political ecologies, and the complex ways in which the global and local become enmeshed in each other in particular places. 16 The other two offer a more comparative take – one across sites between households and within households in a region (Rocheleau et al.) and the other across sites in three countries (Bebbington). This latter approach has advantages and disadvantages. Inevitably the ethnography becomes thinner, as does any landscape and livelihood analysis. On the other hand, the comparison allows more robust conclusions about the factors that appear to influence patterns in the relationships between livelihoods and globalization processes. There are always different methodological options for political ecologists, and the final choice will depend on a mixture of research purpose, resource availability and logistics. Perhaps what is most important is that the results from the different options continue to inform each other.

Questions of scale and livelihood

Each of the papers in this collection takes as its starting point a central and long-standing claim in political ecology: that any explanation of the relationships between people, environment and landscape has to operate at multiple scales. This is an idea with many origins: Blaikie's now famous notion of a chain of explanation stretching from the field to the globe; Vayda's call for progressive contextualization; Wallerstein's world system; and Watts's critique of theory

that does not work across such scales.¹⁷ However the papers also elaborate this framework, and in this regard the way they deploy notions of livelihood, and of transnationality, are important. While the tendency in much political ecology has been to understand 'the local' in the context of political economic and other forces at 'higher' levels that ultimately home in on the local, these papers – while recognizing that 'wider' forces do impinge and impose on localities (on people in places) – are also concerned to show that some actors (or perhaps better, 'actors in networks') make use of these different scales, and of relationships among them, in order to further their own objectives. These objectives may include placed-based development, livelihood enhancement, public advocacy in the North and so on. In other words, scale becomes (at least sometimes) a resource and not just a hierarchy down which forces cascade and ultimately affect people in particular places.

For instance, the papers by Batterbury and Rocheleau *et al.* are at pains to show how ostensible peasants in fact have livelihoods that themselves work across scales – indeed, livelihood emerges as a key concept for thinking about the ways in which people 'work' and 'jump' scales.¹⁸ Here the emphasis is on the role of national and transnational migrations and remittances, and the ways in which people access quite distant labour markets in ways that have material impacts on household wellbeing, landscape management and environmental processes. In the same way that Brad Jokisch¹⁹ outlines the material effects on landscapes in central southern Ecuador of migrant practices in New York City, so these papers trace links between fields in the Dominican Republic and migrants in Cotui, Santiago, Santo Domingo and the US, and between the labour markets of Côte d'Ivoire and the soils of Niger. At the same time, they remind us just how socially differentiated these effects are.

A livelihood focus - perhaps reflecting its deep roots in development studies²⁰ – also emphasizes the importance of institutions and organizations in mediating access to resources and the overall quality of livelihoods. This is another theme that helps each author think about links among scales. Thus the papers talk of indigenous organizations, peasant movements, non-governmental organizations, government development programmes, fair-trade networks and the like - and they suggest that rural livelihoods cannot be understood independently of these networks and organizations.²¹ In many cases these organizations are likewise parts of transnational structures and networks through which resources, ideas, information and commodities flow. So once again the analytical challenge is to explain livelihoods in terms of their relationships with these other transnational social spaces. ²² Analytically this is not straightforward. While it is less difficult (not straightforward) to describe the nature and structure of these social spaces, and even the ways in which people engage with them, it is far more difficult to go the next step and trace their material, political and discursive effects on these livelihoods through illustrating 'the ways in which connections across a social field can be used to extend, block or cultivate access to strategic material resources, identities, and ideological resources'. 23 Yet this is precisely what is needed to ground otherwise vague discussions of networks. While case study work can initiate this task, careful comparative work (across

families and places) is essential to tease out these effects. In some regard, this challenge still lies ahead.

Networks, place and landscape

Through such varied networks, people, organizations and places become hooked into transnational relationships that become deeply implicated in the future trajectories of those places - of what they look like, of how people get by when they live in them, and of what they mean to people. This theme has been recently elaborated in the work of Jokisch, who has begun to illuminate the ways in which rural people from Cañar (in the southern highlands of Ecuador) have migrated to New York and in the process have effectively used space, and transnational networks reaching across space, to re-produce and transform places in Cañar.²⁴ In this process family networks have been stretched transnationally, but resources accessed in New York, and news and people from Cañar, continue to circulate through them (in ways facilitated by the Internet, Western Union and Ecuadorian businesses in New York). Many of these resources are then invested in landscape transformations in Cañar (in the form of agriculture and housing). In the process Cañar becomes for some people mainly a place where one demonstrates one's success in migrating, in the form of conspicuous housing and contemporary forms of consumption. For others, it becomes a place in which to rest and ultimately retire on the basis of earnings in the USA. For still others, Cañar remains a place of production, of peasant agriculture and traditional practices - though even for these people, this may be agriculture that is practised more for reasons of meaning-making than subsistence, as other family members send back dollars from the US. For all that, the 'experience' of Cañar has changed during this process of transformation.²⁵

It has become increasingly clear in recent years that transformations such as those in Cañar are not isolated phenomena, and that furthermore the case of place constitution through transnational migrant networks is but a specific instance of the more general case of place reconstitution through various forms of transnational network. The papers here demonstrate a number of important shifts in the ways in which rural places have been reconstituted through their relationships to global flows and exchanges. Thus it becomes clear that: to understand landscapes in parts of the Dominican Republic (Rocheleau *et al.*) you have to go to the history of the Catholic Church in Latin America in the 1970s as well as the streets of New York or the Republic's own rapidly growing towns; to understand many Andean and Amazonian landscapes, one needs to unpick the workings of global civil society, development discourses and international development agencies in Europe and the USA (Perreault, Bebbington); and to understand economic decisions taken by rural households in Niger, one must also look to the villages and towns of Côte d'Ivoire (Batterbury).

Furthermore, as these rural places have been transformed, so their meanings and significance have changed too, making for complicated intersections between these meanings and the practices of different actors that produce the landscapes. This leads to complex local politics that cannot easily be read off

from ethnic, class or other positions. Perreault's paper, for instance, shows the varying interpretations of landscapes and political economic change that can be found within an ethnic group: Quichua communities have somewhat different visions of the changes occurring in that region from the views of the Quichua federations of which the communities are ostensibly a part. Such interpretations also change over time: in the Dominican Republic, an offshoot of a peasant federation that once struggled for agricultural land under the banner of radical politics now manages a monocrop timber production and sawmill business that essentially operates as a self-governing and self-regulating contract farming enterprise (Rocheleau *et al.*).

Of course, rural society and rural people's development aspirations have always been differentiated. Under conditions of increasing but uneven engagement with transnational networks of various types this continues to be the case. But this difference takes novel forms as new ideas, resources and desires get worked into the landscape and the ways in which people think about its future. All of which has many more implications for how we think of mainstream and alternative development than can be addressed here. At the very least, it means that empirical understanding of these different ideas, aspirations and engagements with the global becomes critical for any effort to conceptualize a notion of alternative development, or of resistance to development.

Ecology in political ecologies of globalization

Finally, just as place is being reconstituted as livelihoods become increasingly transnationalized, so too are local ecologies. How far the papers deal with this theme varies, however, raising questions about the place of ecology-less analysis in political ecology. This has, of course, been a contentious issue in recent times, with one scathing review suggesting that much work done as political ecology really doesn't merit the name, as it contains little or no ecological analysis and often treats the environment as a backdrop to power dynamics and politics.²⁷

Indeed, the criticism that political ecology all too easily slips into a form of political economy, or perhaps environmental politics – and that in the process any ecological analysis slips out – can be aimed at studies that self-consciously aim to engage the global and transnational. It is thus perhaps not surprising that the two papers which talk more about global and transnational networks say least about ecological processes (Bebbington, Perreault), and that the two which say more about ecology say far less about those global and transnational relations in which local ecologies are enmeshed (Batterbury, Rocheleau *et al.*).

There can be no easy resolution to this dilemma, and in some regards it constitutes the principal tension among the papers in this collection. Rather than adjudicate among approaches (not least because our own two approaches differ), we would suggest that it is inappropriate to insist too strongly that political ecology ought to have a particular form or degree of ecological analysis, just as it is inappropriate to insist that it has a particular type or intensity of political economic and discursive analysis. Perhaps what is more important is that there are at least elements of each, the balance between them being determined

by the question being asked, and the proclivities (and abilities) of the researcher. Either way, as O'Riordan notes, an interdisciplinary form of investigation should avoid active dismissiveness towards the importance of processes lying outside the researcher's interest (or abilities). Once we start suggesting what is and is not acceptable, the broader project of a political ecology will be lost in internecine turf wars – flying in the face of the final spirit of this collection, namely that of ecumenism in analysis.

From bridges to ecumenism

In his 1996 Ecumene lecture, B.L. Turner II reflected on the problems of 'bridging' across intellectual genres within the broad field of human-environment studies.²⁹ While noting the various obstacles to such 'bridging' – especially ones related to the style of debate – Turner urged those working within the traditions of nature–society work and interpretive and critical cultural geography to find points of engagement in order to develop a broader understanding of landscapes and the human environment.³⁰

The papers in this issue each reflect – in their own ways – such engagements. Indeed, they may even suggest the virtue of getting beyond the metaphor of bridging. For while 'bridges' imply the existence of different camps that need to be linked, these papers suggest that it may be more helpful to think of a broader enterprise in which political ecology, cultural geography, development studies and environmental politics are all involved, even if they have differing entry points. This broader enterprise is one that struggles to understand the ways in which peoples, places and environments are related and mutually constituted, and the ways in which these constitutions are affected by processes of globalization. Such an enterprise is one in which the lingering 'schisms' between the society/space and environment/society traditions in geography also have little value – and is one in which such schisms may begin to break down.³¹

Indeed, it may well be that an engagement with the themes of globalization, global change and transnationalism is one that helps break down these schisms. It makes our analytical problems more complex, and in so doing favours research that is more ecumenical in its approach to theory and method and in its attempt to understand 'hybrid' or mutated landscapes.³² Such ecumenical approaches – drawing on diverse research traditions – are also likely to deliver more interesting scholarship. In this sense the increasing variety of theoretical approaches within 'political ecology' may be less something to bemoan than a sign of willingness to go beyond paradigmatic borders. We hope – and believe – that the papers in this issue reflect this same willingness.

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Notes

- ¹ R. A. Rappaport, 'Ritual regulation of environmental relations among a New Guinea people', Ethnology **6** (1967), pp. 17–30; B. Nietschmann, Between land and water; the subsistence ecology of the Miskito Indians (New York, Academic Press, 1973); W. M. Denevan, 'Adaptation, variation, and cultural geography', Professional geographer **35** (1983), pp. 399–407. Of course, the demise of concepts of adaptation has as much to with theoretical problems with the concept as it does with changes in rural society; G. Knapp, Andean ecology (Boulder, CO, Westview Press, 1991).
- ² H. Bernstein and T. J. Byres, 'From peasant studies to agrarian change', *Journal of agrarian change* 1 (2001), pp. 1–56.
- M. Kearney, 'Transnational Oaxacan indigenous identity: the case of the Mixtecs and Zapotecs', *Identities* **7** (2000), pp. 173–95; M. Kearney, *Reconceptualizing the peasantry: anthropology in global perspective* (Boulder, CO, Westview Press, 1996).
- ⁴ D. F. Bryceson, 'Peasant theories and smallholder policies: past and present', in D. F. Bryceson, C. Kay and J. Mooij, eds, *Disappearing peasantries? rural labour in Africa, Asia and Latin America* (London, Intermediate Technology Publications, 2000).
- ⁵ B. G. Glaser and A. L. Strauss, *The discovery of grounded theory: strategies for qualitative research* (Hawthorne, NY, Aldine de Gruyter, 1967), p. 23.
- ⁶ On calls (from authors of different theoretical predilections) for hybrid theory in political ecology, see S. P. J. Batterbury, T. J. Forsyth and K. Thomson, 'Environmental transformations in developing countries: hybrid research and democratic policy', *Geographical journal* **163** (1997), pp. 126–32; A. Escobar, 'After nature: steps to an antiessentialist political ecology', *Current anthropology* **40** (1999), pp. 1–30. For recent and related calls for such approaches to theorizing development and modernity, see A. Arce and N. Long, *Anthropology, development, and modernities: exploring discourses, countertendencies, and violence* (London, Routledge, 2000); A. J. Bebbington, 'Re-encountering development: livelihood transitions and place transformations in the Andes', *Annals of the Association of American Geographers* **90** (2000), pp. 495–520.
- ⁷ On glocalization, see E. Swyngedouw, 'Neither global nor local: glocalization and the politics of scale', in K. Cox, ed., *Spaces of globalization: reasserting the power of the local* (New York, Guilford Press, 1997), pp. 137–66; A. Escobar, 'Culture sits in places: reflections on globalism and subaltern strategies of localization', *Political geography* **20** (2000), pp. 139–74.
- ⁸ Others have been more inclined to criticize such eclecticism as implying that political ecology is inchoate: see P. Blaikie, 'A review of political ecology: issues, epistemology and analytical narratives', *Zeitschrift für Wirtschaftsgeographie* **43** (1999), pp. 131–47.
- ⁹ See R. Peet and M. J. Watts, eds, Liberation ecologies: environment, development, social move-

- ments (London, Routledge, 1996) for the classic statement; also Escobar, 'After nature' and 'Culture sits in places'.
- ¹⁰ A point most forcefully made in A. Vayda and B. Walters, 'Against political ecology', *Human ecology* **27** (1999), pp. 167–79.
- ¹¹ Cf. I. Scoones, 'The dynamics of soil fertility change: historical perspectives on environmental transformation from Zimbabwe', *Geographical journal* 163 (1997), pp. 161–70.
- A point eloquently made by Doreen Massey in 'A global sense of place', *Marxism today* (June 1991), pp. 24–9. As satellite telephones and internet cafés make their incursion into rural areas, this integration becomes yet more apparent.
- Again, the literature is wide and rich here. Classic statements include M. J. Watts, Silent violence: food, famine and peasantry in Northern Nigeria (Berkeley, University of California Press, 1983); B. Wisner, 'The human ecology of drought in eastern Kenya' (PhD, Graduate School of Geography, Clark University, 1978); B. Wisner, D. Weiner and P. O'Keefe, 'Hunger: a polemical review', Antipode 14 (1983), pp. 1–16; P. Blaikie, The political economy of soil erosion in developing countries (Harlow, Longman, 1985); S. Hecht, 'Environment, development, and politics: capital accumulation and the livestock sector in eastern Amazonia', World development 13 (1985), pp. 663–84
- See e.g. M. J. Watts and J. McCarthy, 'Nature as artifice, nature as artifact: development, environment and modernity in the late twentieth century', in R. Lee and J. Wills, eds, *Geographies of economies* (London, Arnold, 1997), pp. 71–86.
- A. Gupta and J. Ferguson, eds, Anthropological locations: boundaries and locations of a field science (Berkeley, University of California Press, 1997).
- ¹⁶ Cf. Escobar 'Culture sits in places'.
- P. Blaikie, *The politicial economy of soil erosion;* P. Blaikie, 'Understanding environmental issues', in M. Stocking and S. Morse, eds, *People and environment* (London, UCL Press, 1995), pp. 1–30; A. Vayda, 'Progressive contextualization: methods and research in human ecology', *Human ecology* 11 (1983), pp. 265–81; M. J. Watts, 'On the poverty of theory: natural hazards research in context', in K. Hewitt, ed, *Interpretations of calamity* (Boston, Allen and Unwin, 1983), pp. 231–62; I. Wallerstein, *The modern world system* (New York, Academic Press, 1974).
- ¹⁸ E. Swyngedouw 'Neither global nor local'.
- ¹⁹ B. Jokisch, 'Transnational landscapes: Ecuadorian migration and landscape transformation', paper presented at Annual Meeting of the Association of American Geographers in Honolulu, 23–7 Mar. 1999.
- R. Chambers and G. Conway, Sustainable rural livelihoods: practical concepts for the 21st century (Brighton, Institute of Development Studies, 1992); I. Scoones, Sustainable rural livelihoods: a framework for analysis (Brighton, Institute for Development Studies, 1998); A. J. Bebbington, 'Capitals and capabilities: a framework for analyzing peasant viability, rural livelihoods and poverty', World development 27 (1999), pp. 2021–44.
- ²¹ Cf. A. Escobar, 'Notes on networks and anti-globalization social movements', prepared for session on 'Actors, networks, meanings: environmental social movements and the anthropology of activism,' Association of American Anthropologists Annual Meeting, San Francisco, 15–19 Nov. 2000 (http://www.unc.edu/depts/anthro/escobarpaper.html)
- ²² On transnational social spaces, see U. Beck, *What is globalization?* (Cambridge, Polity, 2000).
- ²³ S. A. Radcliffe, 'Development, the state and transnational political connections: state

- and subject formations in Latin America', Global networks: a journal of transnational affairs 1 (2001), pp. 19–36, citation from p. 31.
- ²⁴ B. Jokisch, 'Transnational landscapes'.
- ²⁵ There are parallels here between the migrant streams from the high Andes and the Sahel of West Africa.
- 26 See e.g. Kearney's work on the networks linking Oaxaca and California: 'Transnational Oaxacan indigenous identity'.
- ²⁷ Vayda and Walters, 'Against political ecology'.
- ²⁸ T. O'Riordan, 'Environmental science on the move', in O'Riordan, ed, *Environmental science for environmental management* (Harlow, Pearson Education, 2000), pp. 1–27.
- ²⁹ B. L. Turner II, 'Spirals, bridges and tunnels: engaging human–environment perspectives in geography', *Ecumene* 4 (1997), pp. 196–217.
- ³⁰ See also K. Matthewson, 'Cultural landscapes and ecology, 1995-96: of oecumenics and nature(s)', *Progress in human geography* **22** (1998), pp. 115–28. Speaking more from the society–space focus within the discipline, Susan Hanson has argued that it is vital that geographers find and develop these bridges: see 'Isms and schisms: healing the rift between nature–society and space–society traditions in human geography', *Annals of the Association of American Geographers* **89** (1999), pp. 133–43.
- 31 Ibid.
- ³² Arce and Long, Anthropology, development and modernities.