



Editorial: Globalisation and the local landscape

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This volume of *Geografisk Tidsskrift-Danish Journal of Geography* consists of a selection of papers which came out of a lecture and seminar series arranged as a cross-faculty, cross-disciplinary initiative. The overarching title of this effort was ‘Globalisation and the local landscape: Multi-disciplinary reflections on contemporary challenges’, and it addressed a wide range of disciplinary perspectives of the globalisation-landscape interactions. The lecture series brought together leading researchers from the University of Copenhagen across faculties and disciplines, and the international seminar as well as an international summer school provided further room for discussion of multidisciplinary approaches and perspectives on globalisation and the local landscape. Only a few of the perspectives discussed at this occasion are covered here, whereas others will be presented elsewhere, e.g. as book chapters in Primdahl & Swaffield (2010), including Reenberg et al. (2010) and Primdahl (2010).

Globalisation – a driver of landscape change

The contemporary world is increasingly characterized by ‘globalisation’, in the sense that time and space is more and more compressed with regards to flows of information, goods, capital, services and people – or with Giddens’ (1990) definition: “.. *the intensification of worldwide social relations which link distant realities in such a way that local happenings are shaped by events occurring many miles away and vice versa*”. Globalisation, in its various forms, and land use dynamics are closely interlinked. Environmental changes caused by human use of the terrestrial surface are welded together with economic, cultural and institutional processes which are increasingly ‘global’ in reach (Young et al., 2006). Both markets and governments can cause decisions made in one place to affect peoples and environment far away (Berkes et al., 2006; Liu et al., 2007). This implies, on the one hand, that we cannot fully understand the dynamics of landscapes unless we are able

to understand the dynamics of globalisation and how global driving forces cuts across local to global scales. On the other hand, the way in which a landscape is shaped and functions depends also on autonomous decisions taken by local agents and by local adaptations and responses to decisions and events from ‘outside’. The specific balance of such events, decisions and actions is a key to the understanding of differences between places and likewise a key to understanding of differences and similarities in the way local areas change, urban as well as rural ones. Hence, the interaction and balance between external and internal driving forces are crucial for the opportunities and threats to sustainable development of any local place. External driving forces are increasingly affecting the local landscape, either through overall shifts in the dynamics of globalisation such as financial deregulation, technological innovations, the information revolution, and reductions in the cost and time of moving commodities and people – or the consequences of these changes including changes in production, increased migratory movements and hyper-urbanization (Harvey, 1996).

These dimensions are widely accepted within the body of literature related to global change and sustainable development. External driving forces are generally acknowledged as increasingly affecting the local landscape, through the various shifts in the societal dynamics. In spite of the fact that significant progress has been made in deepening the understanding of the human-environment interaction associated with changes in the land system over the last few decades (e.g. NRC, 1997; Liverman, 1999; Gibson et al., 2000; Moss, 2000; Bastian, 2001; Field et al., 2003; Skole, 2004; GLP, 2005; Turner, 2005; Lambin & Geist, 2006; Turner et al., 2007), much remains in terms of developing suitable research approaches to investigating land use consequences of globalisation. There are, for example, few examples of projects which have been dealing with detailed, empirical studies of local consequences and implications of the global processes. In other words, more insight is still needed on the ways in which the socio-economic

forces of globalisation are tied to specific suites of land use practices, and the role of institutions in mediating their outcome (GLP, 2005).

Globalisation – a broad concept

The question of how best to approach the challenge of researching how the forces of globalisation influence local land uses and landscapes has no straight forward answer. Already the issue of encircling which definitions of ‘globalisation’ that may be of particular relevance land use and environment issues needs consideration.

There are several possibilities of defining globalisation. Najam et al. (2007), for example, proposes roughly distinguish between three different ways in which globalisation manifests itself. The first is globalisation of the *economy*. The world economy is increasingly integrated, and local land use changes are increasingly driven by demands for products that are parts of commodity chains of a large spatial reach. Hence, local human needs and local capital input are not necessarily an important determinant for land use decisions as it was the case in many land use systems before the global acceleration of the economy. The second is globalisation of *knowledge*. The increasing interaction between humans and societies that follows the increasing integration of the global economies and the rapid development of communication technologies has significantly increased to transfer of knowledge. Flow of information, culture, technology and ideology has increased, and this has lead to changes to other land uses, driven by e.g. change of technologies, new ideas promoted by extension or development assistance, and adoption of new food habits. The third is globalisation of *governance*. Institutional regulations pay an increasing role in modern societies. Local, national and even international regulations enable and constrain land use options, e.g. in connection with nature management or regulations of agriculture

A challenging research object

Generally speaking, only a partial understanding of the interaction between different manifestations of globalisation and local land-use has been gained today and even less has been achieved in terms of proposing ways in which these interactions can be dealt with in an analytical or modelling context. International research agendas (GLP, 2005) stress that a global synthesis is needed to understand the spatial

patterns of globalisation and their land use consequences, including the role of cities as focal points of globalisation that cause rural-urban restructuring. The few articles related to landscape and globalisation in this volume do not in any way constitute a coherent set of possible perspectives and methods relevant for this research area. Yet, they will hopefully each in their specific manner contribute inspiration as regards possible perspectives that might be worth considering in future research.

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References

- Bastian, O. (2001): Landscape ecology – towards a unified discipline? *Landscape Ecology* 16: 757-66.
- Berkes, F., Hughes, T.P., Steneck, R.S., Wilson, J.A., Bellwood, D.R., Crona, B., Folke, C., Gunderson, L.H., Leslie, H.M., Norberg, J., Nyström, M., Olsson, P., Österblom, H., Scheffer, M. & Worm, B. (2006): Globalisation, roving bandits and marine resources. *Science* 17: 1557-1558.
- Field, D.R., Voss, P.R., Kuczenski, T.K., Hammer, R.B. & Radeloff, V.C., (2003): Reaffirming Social Landscape Analysis in Landscape Ecology: A Conceptual Framework. *Society & Natural Resources* 16: 349-361.
- Gibson, C.C., Ostrom, E. & Ahn, T.K. (2000): The concept of scale and the human dimensions of global change: a survey. *Ecological Economics* 32: 217-239.
- Giddens, A. (1990): *The Consequences of Modernity*. Cambridge, Polity Press.
- GLP (2005): *Science Plan and Implementation Strategy*. IGBP Report No. 53/IHDP Report No. 19. Stockholm, IGBP Secretariat.

- Harvey, D. (1996): *Justice, Nature & the Geography of Difference*. Oxford, Blackwell Publishers.
- Lambin, E. & Geist, H.J. (eds.) (2006): *Land-Use and Land-Cover Change. Local Processes and Global Impacts*. Berlin, Springer Verlag.
- Liverman, D.M. (1999): Geography and the global environment. *Annals of Association of American Geographers* 89: 107-120.
- Liu, J., Dietz, T., Carpenter, S.R., Alberti, M., Folke, C., Moran, E., Pell, A.N., Deadman, P., Kratz, T., Lubchenco, J., Ostrom, E., Ouyang, Z., Provencher, W., Redman, C.L., Schneider, S.H. & Taylor, W.W. (2007): Complexity of coupled human and natural systems. *Science* 317: 1513-1516.
- Moss, M.R. (2000): Interdisciplinarity, landscape ecology and the 'transformation of agricultural landscapes'. *Landscape Ecology* 15: 303-311.
- Najam, A., Runnalls, D. & Halle, M. (2007): *Environment and Globalisation. Five propositions*. Winnipeg, IISD.
- Primdahl, J. (2010): Globalisation and the local agricultural landscape: current change patterns and public policy interventions. In: Primdahl, J. & Swaffield, S. (eds.): *Globalisation and Agricultural Landscapes. Change Patterns and Policy Trends in Developed Countries*. Cambridge Studies in Landscape Ecology. Cambridge, Cambridge University Press. [Will be available from February 2010]
- Primdahl, J. & Swaffield, S. (eds.) (2010): *Globalisation and Agricultural Landscapes Change Patterns and Policy Trends in Developed Countries*. Cambridge Studies in Landscape Ecology. Cambridge, Cambridge University Press. [Will be available from February 2010]
- Reenberg, A., Langanke, T., Kristensen, S.B.P. & Colding, T.S. (2010). Globalisation of agricultural landscapes: a land systems approach. In: Primdahl, J. & Swaffield, S. (eds.): *Globalisation and Agricultural Landscapes. Change Patterns and Policy Trends in Developed Countries*. Cambridge Studies in Landscape Ecology. Cambridge, Cambridge University Press. [Will be available from February 2010]
- Skole, D.L. (2004): Geography as a great intellectual melting pot and the preeminent interdisciplinary environmental discipline. *Annals of the Association of American Geographers* 94: 739-743.
- Turner II, B.L., Lambin, E.F. & Reenberg, A. (2007): The Emergence of Land Change Science for Global Environmental Change and Sustainability. *PNAS* 104(52): 20666-20671.
- Turner, M.G. (2005): Landscape Ecology: What is the state of the science? *Annual Review of Ecology, Evolution and Systematics* 36: 319-344.
- Young, O.R., Berkhout, F., Gallopin, G.C., Janssen, M.A., Ostrom, E. & Van der Leeuw, S. (2006): The globalisation of socio-ecological systems: An agenda for scientific research. *Global Environmental Change* 16: 304-316.

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