

Actually, there is in principle nothing wrong in rethinking the Angkorean past, or sheltering behind one's own culture in order to move forwards. The problem remains that of how to translate the idea of *jiet* (nation) into a real nation-community in the twenty-first century; and whether that task should be carried out only by a political elite, or through the active participation of the Cambodian people.

J. Stephen Lansing, *Perfect order; Recognizing complexity in Bali*. Princeton, New Jersey: Princeton University Press, 2006, xii + 225 pp. ISBN 9780691027272. Price: USD 39.95 (hardback).

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Undoubtedly the most contested issue in the ethnographic literature on Bali is the interpretation of the hierarchic and egalitarian features of this indisputably complex society. Stephen Lansing's *Perfect order; Recognizing complexity in Bali* is a multi-disciplinary and ethnographically rich exploration of this theme. It is an important study, not only for its effort to grasp the dynamics of Balinese society in its ecological context, but more generally for providing insight into the variety of ways that vertical and horizontal relationships articulate in practical adaptation to the vicissitudes of the environment and of community life.

The product of several decades of research on Balinese irrigation systems, this book sets out to provide a comprehensive account of what makes one of the world's most efficient, productive, and (in its traditional form) sustainable agricultural regimes work.

Lansing promises from the outset to 'complicate' the conventional binaries – traditional/modern, East/West, hierarchy/equality, top-down/bottom-up, theoretical/practical – that pervade much of the debate on political models of the state and of economic development. He draws on a number of disciplines to make the case. Beginning with systems ecology, then working through archaeological and early textual evidence, and culminating in thick descriptive accounts of contemporary *subak* (irrigation association) decision-making, with close attention to personal rivalries, local power plays, and cooperative accommodations, the study gives a real feeling for the complexities that shape Balinese organizational arrangements.

The first question explored in the early chapters of the book is the role of cooperation in the creation and maintenance of the elaborate infrastruc-

ture required for wet-rice cultivation. Lansing uses evidence from his long-term collaboration with a systems ecologist and the members of several adjoining *subak* irrigation associations to argue that Balinese farmers have self-organized to create an effective decentralized and flexible system: The rhizome-like *subak* network is close enough to the ground to respond to local ecological and social signals, yet sufficiently well integrated with the wider system through the cosmic symbology of sacred water mountains to produce the micro-engineered transformation of Bali's rugged volcanic terrain and its iconic terraced landscapes.

Game-theory models of decision-making revolving around the two most important ecological concerns to upstream and downstream farmers – water shortage and pest management respectively – show how local information exchange and adaptive learning enable an optimum level of cooperation that over time both maximizes and equalizes harvest yields. The core thesis is that through trial and error rather than grand design, Balinese farmers have managed to negotiate the balance between water sharing and the risks of pest outbreak through the semi-autonomous decision-making processes of these *subak* associations, sustained by the ritual connections of the parallel water temple network.

Lansing argues that Bali was physically and structurally different from most of the heartland areas where divine kingship arose in tandem with intensive wet-rice cultivation. Early state formation in Java and other parts of Southeast Asia took place in geographic areas of broad plains and large rivers, neither of which are found in Bali. In these lowland kingdoms royal powers were used to deploy corvée labour for the massive earthworks needed for irrigation, water storage, and flood control, without the necessity for autonomous inter-community cooperation.

Bali's alternative organizational arrangements evolved in a different ecological context, and adopted a different religio-social solution to the problem of trans-local cooperation in its irrigation network system. Here Indic hierarchy, focused on centres of power, combined with decentred Austronesian ancestral principles to forge the institutional framework for cooperative management of irrigation within a dualistic model of governance. The autonomous place of the Rice Goddess at the apex of the water temple system at Batur indicates the parallel cultural significance of local egalitarian structure and ethos, alongside the counterpoint state temple system centred at Besakih, where caste and hierarchy are celebrated.

According to Lansing, the water temple complexes, independent of the state-centred temple system, came to represent nodes in a socio-ecological network, whose flexible and dynamic intersections facilitated information exchange and cooperation among farmers. Royal authority was not an essential component of the expansion of the Balinese irrigation system in this

interpretation. 'The water temples derive all the authority they need from their practical success in managing the ecology of the rice terraces and their symbolic association with the gods' (p. 87). The Balinese alternative model links natural, social and supernatural worlds of the local sphere in relationships of ritual reciprocity and social interdependence. This parallel cultural domain stands in a relation both complementary and counterpoint to the hierarchic state model with which it articulates at other levels and in other dimensions of Balinese political-religious life. This latter aspect of complexity in Bali receives much less attention in *Perfect order*, with its focus on local cultural dynamics.

Lansing argues that there was no need for centralized authority to create and maintain the Balinese irrigation system in the past, and that for similar reasons centralized management policies are no more appropriate to local ecological adaptations in the present. Computer simulation models and survey data are deployed to demonstrate how the complexity of these systems makes top-down management suboptimal for Balinese agriculture.

With respect to the applicability of concepts of equality and democracy to local institutions, Lansing is unequivocal: '[T]he average Balinese farmer undoubtedly has more experience of direct democratic assemblies than the average Frenchman' (p. 5). But the extent to which the ideal is reflected in local practice nonetheless varies considerably over time and space.

What is most interesting, and of significance beyond the Balinese case, are the conditions under which local concepts of good leadership, accountability, and collective decision-making succeed or fail to realize these cooperative ideals in day-to-day deliberations among the neighbouring *subak* Lansing studied. Detailed case studies of leadership and decision-making show how constant reinterpretation and efforts to balance finely judged and ultimately ambivalent principles lead to a surprisingly great variation in outcomes despite the shared cultural grounding of local Balinese institutions.

Lansing's argument regarding the self-organizing capacity and degree of autonomy of Balinese *subak* is a contested one (see, for example, Hauser-Schäublin 2003). It implicates fundamental questions in the ethnographic literature of the integrity and socio-political character of village communities, sources of innovation, processes of state formation, and the nature of power itself. *Perfect order* will certainly stimulate more debate on these questions that remain of importance for understanding the mechanisms of resource distribution and governance in the present as much as the past. It provides insights that resonate, too, beyond the apparently unique and esoteric aspects of the Balinese case.

In *Perfect order*, the author and editors have opted for a writing and presentation style that has the virtue of making a difficult and potentially dry subject interesting to a wider audience. Specialists, however, may wish for

the more liberal use of referencing, content footnotes, and local terminology of academic convention.

Reference

Hauser-Schäublin, Brigitta

2003 'The precolonial Balinese state reconsidered; A critical evaluation of theory construction on the relationship between irrigation, the state and ritual', *Current Anthropology* 44-2:153-82.

Roxana Waterson (ed.), *Southeast Asian lives; Personal narratives and historical experience*. Singapore: Singapore University Press, 2007, x + 317 pp. ISBN 109971693445. Price: USD 27.00 (paperback).

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Since Paul Radin's work, *Crashing Thunder* (1926) anthropologists have come a long way in their understanding of the use and value of life-histories, and we all now know that the elicitation of the life-history, through prompts and interrogation, not to mention the ultimate framing of the narrative in a published prose form, inevitably filters the memory and the interpretation of the past in a particularly mediated way. The contributors to *Southeast Asian Lives* acknowledge, and sensitively work through, these theoretical issues of representativeness, but rightly insist that life-histories are invaluable for an understanding of aspects of social change otherwise difficult to describe and define. Most notably for Southeast Asia, as they show, these aspects include: the significance of the passing of time for individuals; the linkage of local developments to national events; the material effects of modernization and change in traditionally ascribed occupational and gender roles within communities. The contributors are all keenly aware, however, that the benefit of the approach through life-histories is matched by the difficulty of actually eliciting the history. In some cases the problem of obtaining the relevant information then to be made up into a chronological account is difficult but possible, in other cases where an informant is a reluctant narrator the difficulties seem insurmountable.

Waterson's useful introduction comprehensively covers the theoretical