

*Review:* CLIVE GAMBLE  
UNIVERSITY OF SOUTHAMPTON

Boats are something I am content to let other people steer. All that necessary knowledge about tides, currents, winds, stars, and lee shores, not to mention the robust jargon of ships and shipping, just fills me with admiration for those who have it. Of course I could learn it, like acquiring another foreign language, but thanks to Irwin's book I can now stick with the translation.

But why should I let my ignorance of things nautical lead to my approval of this book? I can think of two reasons that have nothing to do with the sea. First, there is the intellectual economy in the uniformitarian principle that underpins the navigational theory of colonization. Even a landlubber like me can understand the principle of against and across the wind (p. 132). Here is a demonstration of one of those simple bridging arguments that allows us to explore the data of the past as the outcome of human decisions. These decisions were determined but not dominated by the environment that surrounded prehistoric people. The same principle applies to Irwin's studies of inter-visibility, accessibility, and remoteness.

But uniformitarian principles always need testing with independent data. They cannot be assumed to act as explanations. This was Heyerdahl's mistake. He followed a uniformitarian principle--the direction of the currents--to its deterministic but wrong conclusion for human colonization (1950:230). Common sense may be cheaper than archaeological fieldwork, but it invariably leads to an impoverished history of past events and a downgrading of human action to natural causes.

Understanding the present requires a historical perspective that involves taking into account human intervention. For example, island biogeographers used diversity as a measure of the constancy of the relationship between time and distance in determining community composition. Consequently they have either ignored or downplayed human impact on island faunas, particularly in the Pacific, as Flannery and White have shown (1991). The problem displayed by biogeographers arises when history is only conceived in the narrow sense of elapsed rather than constructed time (for a full discussion, see Gell 1992; Gosden 1994). Irwin shows instead that knowing the history, or in this case the prehistory as revealed by archaeology, is essential if we are to learn something about Pacific islands. The perspective supplied by Irwin is a human prehistory where choice and contingency played a dominant part in exploration and colonization although tempered by the forces of the environment.

The second reason concerns his insights into human colonization generally. His elegant analysis finally dismisses the idea that humans are random colonizers; rather, they have intention and rationality. I particularly liked his

demonstration of their concern for safety rather than speed (p. 210). The remote Pacific was systematically colonized and although, as he notes, the motives may have been various and remain unknowable (p. 211), the intention can be traced from the outcome. I am in complete agreement with this assessment, having concluded elsewhere that the singular fact of global colonization by modern humans was due to the fact that they had purpose (Gamble 1993). I have discovered however that such a conclusion makes reviewers gibe. For some of them purpose, like walking, is an assumed property of modern humans. Therefore, they say, to claim purpose is to assert nothing. Instead they are happier with human colonization being driven by chance, hunger, population pressure, the wind, or that lucky technological breakthrough. The result is that our prehistoric ancestors are presented as demiurges, driven and determined by external forces. They stand outside history with its contingency and human choices.

An example of this approach is provided by Terrell's *Prehistory in the Pacific Islands* (1986). The complexity of the region apparently requires a complex answer and one moreover that only scientific methods can uncover. The message seems to be that if only we could strip away the complexity of Polynesian society, then we might find a complex scientific truth beneath. But first we have to batter the problem into submission. Hence Terrell produces "one possible model of the peopling of the Pacific islands based on . . . five observations, four descriptive variables, two causal variables, and five operating rules" (1986:59). He might have added a partridge-in-a-pear-tree for good measure, but continues, "This is only one of many possible models that could be built with only minor changes in the variables, rules, and assumptions used" (Terrell 1986: caption to fig. 19). The result is a ghastly confusion of possibilities that here, and in the past, has steered the study of human colonization onto the rocks. The contrast with Irwin's navigational theory of colonization could not be greater. The simplicity, but strength, of Irwin's approach establishes exploration and colonization as processes rather than events, and from this baseline any subsequent complexity can be investigated. This is the way to tackle the question of physical, linguistic, and cultural diversity of the region--not by reference to some preferred causal variable. I was therefore pleased to see that population pressure, a favorite causal explanation of colonization, does not even figure in Irwin's index. People don't need babies to give them a reason to colonize. People have other purposes and intentions, and it is those I want to now comment on.

### **Social Life and Colonization**

Purpose is derived from social life. As Irwin comments, colonization was not forced but was, rather, part of the colonizers' structure of ideas (p. 212). It is

this human ability to construct social life that deserves more attention since it returns agency, the act of doing (Giddens 1984:10), to the study of prehistoric societies. It is a necessary step in returning a sense of history to prehistory, where generally scientific explanations involving ecology, laws of thermodynamics, and natural selection dominate to the exclusion of all else. Bradley summed this up in a celebrated aside that archaeologists still stress how "successful farmers have social relations with one another, while hunter-gatherers have ecological relations with hazelnuts" (Bradley 1984:11). The earliest Pacific colonizers may have related more to rats and island size, but the principle is the same. On the contrary, agency implies knowledgeable actors who, rather than entering existing social structures, are instead responsible for their creation and interpretation. Social structure is therefore contained in action. Obviously there are constraints to individual action, but these are not all negative or preordained in establishing the patterns of social life.

Archaeologists still tend to see society as somehow external to the actions of individuals (Johnson and Earle 1987). Societies such as bands or chiefdoms are analogous to the natural environment, exerting selective forces and existing independently of the individual. Although this view is rapidly changing, it still exerts a hold over archaeological approaches to issues such as colonization, where it is more common to dwell on the mechanics rather than the character of the social process (Keegan and Diamond 1987). An interesting comparison is with current approaches to the study of primate societies (Dunbar 1988; Hinde 1987; Strum and Mitchell 1986; Strum and Latour 1987; Waal 1982). The emphasis in these studies is on the relationships defined and maintained by interaction between individuals. Hence society is literally performed into existence through the actions of individuals. This is in contrast to the view that primate society is somehow hard-wired. Instead it is flexible and variable due to the actions of individuals operating within a wide array of constraints.

The link to colonization comes when considering two further aspects of agency, social and system integration (Giddens 1984:142). Social integration is what people do together. It covers the many and varied interactions that take place, face-to-face. System integration is concerned with how the patterns of social integration are extended in absentia. It is this extension, what primatologists Quiatt and Reynolds refer to as the ability "to go beyond" (1993:141), that really marks out human social systems and has particular importance in the context of long Pacific voyages. Colonization therefore provides an opportunity for us to examine how the limitations of performing society face-to-face were overcome in the course of human evolution to allow the stretching of relationships across time and space (Giddens 1984:35). We

know *when* this happened with the late arrival, in terms of human prehistory, of people on Australia and soon after in the islands of western Melanesia. Here is very tangible evidence for a major change in the way society was performed and structured. The question *why* is more difficult but Irwin's account suggests a direction.

The Pacific focuses attention on navigation as a human skill. The question is to what extent is this a transferable skill or one that had to be learned in the context of colonization. The latter implies strong selection pressure for such a long apprenticeship and the development of appropriate means for cultural transmission. The former suggests that these skills were fundamentally social since they were incorporated in the act of doing, of living in the world (Ingold 1993a, 1993b). I would draw the analogy between navigation and negotiation and where "sailing in a sea mapped in the mind" (p. 1) was comparable to that stretching of social relationships in absentia, that going beyond, with all the implications this held for remembering, using, and reviving knowledge about people and places.

Accordingly, exploration may well have been an unintended consequence of new negotiating skills. These were the dominant factors in the process of going beyond. The direction and pattern of such exploration were then influenced by the principles contained in Irwin's navigational theory of colonization. As an example of this relationship we can see with hindsight what happened when system integration was elaborated: the Pacific was colonized. But as the emerging prehistory of the Pacific islands shows, this was not a steady, relentless colonization. Just as Irwin uses the mystery islands to calibrate the decline of voyaging in parts of the Pacific (p. 194), so the different times at which it started speak to the complexity of the historical tradition that led to the inception of voyaging. Oceanic society, as Irwin concludes (p. 213), was truly wider than its islands.

### **The Ocean as Landscape**

This brings me to my final landlubberly point. For me the ocean is an inconvenience to be crossed. Away from land it is as anonymous as the Channel Tunnel but much more dangerous. It is a wet, featureless space between solid landscapes with only the boat to remember it by. I could learn its jargon and acquire the skills of navigation but I cannot know it in the way I can know a mountain or a city.

Reading Irwin's book I get a different impression. The Pacific becomes a surface inscribed with the tracks of voyages. These paths are themselves features that incorporate the ocean landscape into human action rather than leave it to be treated as a separate, foreign environment to be simply con-

quered or traversed. The concept of landscape (Gamble 1995; Gosden 1994; Ingold 1993a) is increasingly used in archaeology to reunite the multifarious strands of human action that for too long have been chopped up for independent analysis. The study of global colonization, across a conceptually united landscape of land and sea, provides a powerful means by which the future potential of a social archaeology based on interaction and agency can be explored. This may seem ironic in the Pacific, whose island laboratories provided so many of the models for an earlier social archaeology (e.g., Renfrew 1973) but now seem to have little general relevance outside the history of the region.

### BIBLIOGRAPHY

- Bradley, R. J.  
1984 *The Social Foundations of Prehistoric Britain*. London: Longmans.
- Dunbar, R. I. M.  
1988 *Primate Social Systems*. London: Croom Helm.
- Flannery, T. F., and J. P. White  
1991 Animal Translocation. *National Geographic Research and Exploration* 7:96-113.
- Gamble, C. S.  
1993 *Timewalkers: The Prehistory of Global Colonisation*. Stroud: Alan Sutton.  
1995 Making Tracks: Hominid Networks and the Evolution of the Social Landscape. In *The Archaeology of Human Ancestry: Power, Sex, and Tradition*, ed. J. Steele and S. J. Shennan, 253-277. London: Routledge.
- Gell, A.  
1992 *The Anthropology of Time*. Oxford: Berg.
- Giddens, A.  
1984 *The Constitution of Society*. Berkeley: University of California Press.
- Gosden, C.  
1994 *Social Being and Time*. Oxford: Blackwell.
- Heyerdahl, T.  
1950 *Kon-Tiki: Across the Pacific by Raft*. Chicago: Rand McNally.
- Hinde, R. A.  
1987 *Individuals, Relationships, and Culture*. Cambridge: Cambridge University Press.
- Ingold, T.  
1993a The Temporality of the Landscape. *World Archaeology* 25:152-173.

1993b Tool-Use, Sociality and Intelligence. In *Tools, Language, and Cognition in Human Evolution*, ed. K. Gibson and T. Ingold, 429-445. Cambridge: Cambridge University Press.

Johnson, A. W., and T. Earle

1987 *The Evolution of Human Societies*. Stanford: Stanford University Press.

Keegan, W., and J. Diamond

1987 Colonization of Islands by Humans: A Biogeographic Perspective. *Advances in Archaeological Method and Theory* 10:49-92.

Quiatt, D., and V. Reynolds

1993 *Primate Behaviour: Information, Social Knowledge, and the Evolution of Culture*. Cambridge: Cambridge University Press.

Renfrew, C.

1973 *Before Civilisation*. London: Johnathon Cape.

Strum, S. S., and B. Latour

1987 Redefining the Social Link: From Baboons to Humans. *Social Science Information* 26:783-802.

Strum, S. S., and W. Mitchell

1986 Baboon Models and Muddles. In *The Evolution of Human Behaviour: Primate Models*, ed. W. G. Kinzey, 87-104. Albany: State University of New York Press.

Terrell, J.

1986 *Prehistory in the Pacific Islands*. Cambridge: Cambridge University Press.

Waal, F. de

1982 *Chimpanzee Politics*. London: Johnathon Cape.