Economies and Cultures

Economic Anthropology. STUART PLATTNER, Ed. Stanford University Press, Stanford, CA, 1989. xiv, 487 pp., illus. $49.50; paper, $16.95.

Anthropologists have perceived a need to broaden the science of economics beyond the rational choice focus of classical and neoclassical economists. This concern traces its origins to the ethnography of such phenomena as the potlatch of northwestern North America, the Melanesian Kula ring, and East African spheres of exchange. As economic anthropology coalesced as a subdiscipline in the 1950s and early '60s, it was dominated by two major issues. First, what is the relation of "economic behavior," such as production and exchange, to behavior usually regarded as "non-economic," such as family life and rituals? Anthropologists, studying societies without markets and where the allocation of resources and the exchange of goods and services were embedded in other social institutions, found it difficult to accept the assumptions of neoclassical economists about individual propensity to maximize utility or to optimize the use of scarce resources. Substantivists argued that economic behavior could not be extracted or disentangled from the rest of social life and could be better understood as part of the larger whole. Formalists, alternatively, argued that people in all societies make decisions to allocate scarce resources (land, labor, protein), even though this is not done through markets. Second, as social and economic systems evolve or change through time, how do the economic institutions change? Three general modes of exchange were identified, pertaining to different levels of social complexity: reciprocity (band-level societies), redistribution (tribal societies), and market (state-level societies).

This volume is the first comprehensive text in the field in over 20 years, and it evidences both continuity and significant change. The most obvious continuity is the importance attached to social evolution as the framework for understanding economic behavior. Five chapters survey research on different types of society, arranged according to level of social complexity: hunters and gatherers, horticulturalists, precapitalist states, and peasants. These chapters are generally the strongest in the book, partly because they call upon the longest intellectual tradition in the field. Another continuity is reliance on the ethnographic case-study method, which emphasizes the connections among culture, social organization, and economic behavior. As for changes, the substantivist-formalist debate has disappeared as a central issue dividing the field. Anthropologists have become far more eclectic in theory and subject as they have begun to work in industrialized societies, as evidenced by chapters on urban markets, industrial agriculture, the informal economy, women and economic institutions, the management of common-property resources, and Marxism.

Plattner's introduction surveys the subdiscipline's relation to anthropology as a whole and to economics, emphasizing the relevance of ethnographic perspective and method to the understanding of economic phenomena. He observes that the normative approach of neoclassical economics has been largely rejected by anthropologists because of its unrealistic assumptions about the relation of economic behavior to other social factors. The ascendancy of the substantivist position, that all economies are "embedded," appears to follow from the descriptive holism of ethnographic method rather than from conclusive tests. Societies that anthropologists have studied are often innumerate, and the qualitative methods preferred by ethnographers discourage the testing of normative propositions. Though such tests are conceivable in all societies, neither anthropologists nor economists have invested sufficient time to quantify behavior to carry out this research. Within anthropology, the increased presence of Marxist theory diverted interest elsewhere.

Chapters on foraging, horticultural, precapitalist, and peasant societies chronicle the major questions and the rich body of ethnographic research that have emerged in the last 20 years. Though great diversity exists within each of these general types of society, anthropologists still find this overall framework of cultural evolution useful. Expectedly, definitional problems are common, but a well-developed set of questions is specified for each type. How hard do people in foraging societies work, and how do foragers exploit a patchy resource base? Johnson's contribution on horticulturalists contrasts an Amazonian group, the Machiguenga, characterized by low population density and low-intensity agriculture, with the Central Enga of the New Guinea highlands, characterized by relatively high population densities and intensive, monocrop horticulture. The prevalence of frequent, endemic warfare and organization around prestige economies are explored and linked. The nature of precapitalist states is examined in an extended case study of the Aztec Empire, but other archeological research is mustered to dispel the notion that markets are a relatively recent institution or one only associated with capitalist economies.

In two chapters on peasant societies, the "world systems" perspective that focuses on relations between village life and larger political-economic systems is contrasted with research on the internal dynamics of peasant economies. The relative flaccidity of the former approach is striking. In contrast, Cancian's chapter on economic behavior in peasant communities uses the questions of when and why closed corporate communities appear to illustrate three theoretical strands that have organized anthropological research: the homogeneity, heterogeneity, and political economy (Leninist) approaches. Understanding of the cyclical opening and closing of peasant communities has eluded both modernization (neoclassical) and Marxist theorists, perhaps because both have a centrist bias in assigning the primary dynamic of peasant life to external agents.

Once the book leaves peasant villages, it enters territory where anthropologists are relative newcomers, where they are less authoritative, and where ethnographic methods will be weighed against others. The results are mixed. The contributions are strongest where there is a continuity with the earlier focus on localized economies and analysis. This strength is illustrated by Plattner's study of itinerant peddling and his review of the ethnography on Chinese and Guatemalan market systems that tests formal models and shows the relevance of cultural factors such as ethnic identity.

The studies of urban markets, industrial agriculture, the informal economy, and women and economic institutions are generally not as definitive or as authoritative as the preceding chapters. They rely less on extended ethnographic examples, and they are best when conventional anthropological concerns, for instance how ethnic variation influences farm organization, are primary. They show the ability of anthropology to specify problems unlikely to arise in conventional economics, such as the impact of changing farm structure on rural communities, the under-recording of women's work, and the importance of the sexual division of

labor in economic development. However, the use of traditional ethnographic research for generalizing across broad economic sectors is problematic, and the field would benefit from more definitive hypotheses and empirical methods as it moves into this new territory. Yet the value of economic anthropology is revealed, for instance in Acheson's chapter on the management of common-property resources. Drawing on ethnographic work in both developed and underdeveloped societies, he shows how understanding local-level management systems can help us out of the theoretical impasse of the tragedy of the commons.

The two concluding chapters of the book are theoretical in character. In discussing Marxism, Plattner (who is not of Marxist persuasion) observes that anthropology's attraction to Marxism stems from common orientations (especially to holism and history) and from the pervasiveness of Marxism outside the United States. Marxism holds more value for broad generalizations than for fine-grained research, and it has not persuaded anthropologists to abandon the cultural evolution framework. Its generalizations seem rather distant from the rich variety of economic behavior described elsewhere in the book. Gladwin's chapter relating anthropology and economics brings the book full circle back to the debate between substantivists and formalists, although it is not cast in this framework. As theory, this is the book's most important and original chapter. It disputes conventional distinctions between economics and anthropology, such as that based on the scale at which the respective disciplines set their sights. Gladwin's conclusion that much is shared is somewhat belied by previous chapters. Though her hierarchical decision model is a theoretically elegant vehicle to connect culture and rational choice, its inability to deal with behavioral gradients, its inattention to interhousehold variation, and its potentially extreme data requirements may limit its use by other anthropologists.

This is a useful book, especially as one of the infrequent benchmarks in one of anthropology's major subfields. Perhaps the most striking disclosure of the book is the relative weakness of the political economy approach that has been ascendant in the field since 1965. In weighing the Marxist paradigm against the behavioral paradigm of culturally constrained rational choice, this book demonstrates the latter's success in dealing more cogently with a wider array of phenomena. Anthropologists are being drawn into new research arenas, as they were in the formative phase of economic anthropology. The strength of more conventional research topics is based on a well-established social typology, but this typology is not very applicable to the new areas of research. The discipline has not completed the needed theoretical and methodological transition, but this book shows a great deal of excitement as ethnographers probe new territory.

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Evolution and Adaptation

Complex Organismal Functions. Integration and Evolution in Vertebrates. D. B. WAKE and G. ROTH, Eds. Wiley-Interscience, New York, 1989. xiv, 451 pp., illus. $122. Life Sciences Research Reports, vol. 45. From a workshop, Berlin, F.R.G., Aug.–Sept. 1988.

The first problem with this book is its title. Complex organismal functions? Integration? What does it mean? It is clear from the introduction that contributors struggled with these and many other definitional questions.

Dahlem workshops are, after all, strangely structured conferences, which bring together a small number of distinguished scientists from disparate disciplines. Participants are expected to produce background papers beforehand. At the workshop they divide up into groups to contemplate those papers. Each group's mission is to produce a position paper, chronicling the insights gained from its discussions and culminating in suggestions for future research. Needless to say, these collective efforts often get bogged down just because the participants approach the topics from such different angles.

Here, then, is what I think the book's title means. "Complex organismal functions" are those features of organisms that most folks call "adaptations." "Integration" refers to the linkage between a function or activity of one part of an organism and a function or activity of another part of the same organism. This linkage could be an obligatory mechanical coupling, like the synchronization of respiration with footfall pattern during locomotion in cursorial mammals, to use an example discussed at length in the book. Or, to use another, it could be the relationship of mastication to middle-ear structure in the evolutionary transition from reptile to mammal. It also refers to linkages that result from developmental constraints.

The "evolution" in the title refers predominately to historical evolution, the diversity of life as studied retrospectively, rather than to the consequences of genetic perturbations explored at the molecular level. Genetics gets mentioned here and there, but evolution at the molecular level is discussed only in passing and in a rather hypothetical way by but a few of the contributors.

It may be worth pointing out that there are two divisions within the contemporary study of historical evolution. One school studies evolutionary trees, the patterns of diversification—that is, phylogeny. They are the systematists. The other school studies the specific designs of organisms, sometimes explicitly (more so in recent years than in the past) and usually implicitly relating observed variation to fitness. This school encompasses those evolutionists who call themselves functional morphologists and comparative physiologists.

It is surprising how separate the two schools can be. There are many productive systematic evolutionists who don't give a damn about the function of organisms. Similarly there are some whiz-bang functional morphologists and physiologists elucidating the grandeur of life with only the foggiest idea how the organisms they study are related to each other.

This is where this book comes in. The contributors were assigned the task of exploring the relationship between the designs of organisms and their subsequent evolution. To what extent do specific features of organisms—because of their complexity and integration with other functions—constrain further evolution? What constitutes evolutionary constraint in the first place? On the other hand, to what extent does the appearance of a new feature subsequently promote high rates of speciation in a clade? And how does one identify such "key innovations"? These issues require concurrent consideration by both schools within evolutionary biology. Developmental biology has a role here as well.

Although that was what this Dahlem conference was principally about, a wealth of other topics are covered in the book. The four working groups concentrated on, respectively, feeding systems, locomotion and respiration, viviparity, and a grab bag of the more controversial issues in evolutionary biology today, ranging from ontogeny recapitulating phylogeny to species selection. In each section there are chapters contributed by scientists in fields as diverse as neurobiology, endocrinology, ecological physiology, and paleontology.

In reading the book I think I profited most from the efforts of the authors to define their terms and justify their approaches. Some of the currently popular (and not so popular) jargon in evolutionary biology that gets scrutinized includes hierarchies, key innovation, ontogenetic repatterning, heterochrony, structuralism/functionalism, internalist/externalist, symmorphosis, the replicative autogenetic model, correlational