Native American architecture—such problems are relatively rare.

I do not think *Native American Architecture* was intended to be a scholarly publication, which may explain why people are quoted without citations and ideas are presented without references. The bibliography is rather unusual in that it consists of an essay on various books that are available, rather than a list of references.

I generally enjoyed the book, particularly the photographs. While this book is probably not one you would want for your academic library, nor for use as an authoritative reference, it is an excellent "coffee-table" book and would make a great gift to a friend or relative.

Ethnobiological Classification: Principles of Categorization of Plants and Animals in Traditional Societies. **BRENT BERLIN. Princeton, NJ: Princeton University Press, 1992. xvii + 335 pp., figures, tables, references, indexes.**

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In this comprehensive synthesis of two decades of deep research, Brent Berlin presents a perspective that has revolutionized what anthropologists take ethnobiology to be. The issues that this volume implicitly engage, however, go beyond the concerns of ethnoscientists. At a time when the cultural construction of social forms is the focus of most anthropology, Berlin raises an ethnographically rich voice for placing anthropology squarely within the natural and behavioral sciences. In laying out an agenda and methodology for finding substantive cultural universals, Berlin's program of research provides a framework for linking anthropological data and methods to those of other sciences (in a relationship as deep and promising as the one that ties anthropology as a humanistic venture to other interpretive disciplines).

The specific topical foci of Berlin's work are the processes underlying the human categorization and naming of living things. Berlin poses three questions that any theory of ethnobiology must answer: (1) What living things will a culture recognize and name, and what living things will a culture ignore? (2) How closely does such a folk system accord with the classifications of Western science? (3) What explains the convergence of Western and traditional systems, and what explains their divergences? As with his earlier landmark work (with Paul Kay) on color naming, Berlin begins by specifying the relevant empirical universe. There are innumerable ways to categorize living things and seemingly limitless variation in the cultural significance living things may have within a system of shared belief. Still, one strategy, Berlin argues, "stands out from all the rest" (p. 9), in that members of widely different cultural traditions conceptualize this aspect of the world in much the same way. This shared quality of "natural systems" for classifying and naming living things, Berlin argues, follows directly from nature's very nature:

> In contrast, social organization, ritual, religious beliefs, notions of beauty—perhaps most of the aspects of social and cultural reality that anthropologists have devoted their lives to studying—are *constructed* by human societies. . . . When human beings function as ethnobiologists, however, they do not construct order, they discern it. . . . Groups of plants and animals present themselves to the human observer . . . in essentially the same ways, [as] perceptual givens that are largely immune from the variable cultural determinants found in other areas of human experience. [pp. 8–9]

Ethnobiological systems, of course, do manifest differences in the plants and animals they recognize and name. Folk systems (unlike scientific ones) range over specific natural environments and are, therefore, sensitive to localized variation in the distribution of living organisms. But also, given that the use and value placed on plants and animals differ across cultures, we would expect systems of folk classification to reflect this. Organisms deemed culturally significant are likely to be the object of greater scrutiny and attention. Berlin convincingly argues that this increased cultural attention translates into relatively constrained variations in folk taxonomies. Organisms considered culturally important are distinguished at lower levels of taxonomic contrast, that is, at the specific and varietal levels. In contrast, at the generic level and above, ethnobotanists (be they preliterate folk or scientists) working in the same natural environments "see" the same discontinuities in plants and animals regardless of their cultural or scientific backgrounds. Systems of biological classification (including formal systematics) converge the world over because the "readily definable chunks" on which all systems rest are essentially the same.

The extensive empirical work that Berlin brings to bear in support of these claims will provide the basis for much further speculation. Although Berlin's focus is on enthnobiology conceived as an anthropological subdiscipline, the research has substantial potential for influencing future conjecture in allied disciplines. The empirical scope of these studies accounts for part of this—Berlin and his colleagues have done virtually all the exhaustive surveys of systems of folk biology available. But the theoretical promise of this work may be as great or greater.

For instance, there is considerable controversy in scientific systematics over how to best group living organisms. By considering the way folk systems converge and diverge from this *range* of alternative accounts in scientific systematics, others may be able to clarify processes underlying both folk and formal taxonomic systems. Another example is the complex notion of perceptual similarity, which plays a central and crucial role in Berlin's account. His claims (which rely almost exclusively on an intuitive construal of similarity) can be strengthened and extended by linking his research to work in cognitive psychology that seeks to specify formal conditions on the mental representations of physical similarity.

Berlin pays much attention to the ways humans recognize and name living things and relatively less attention to the ways they *reason* about them. Yet of

late, reasoning about living things has held an extraordinary level of interest among other comparative scientists, particularly developmental psychologists. In the past decade, an extensive body of work has explored the singular way in which young children conceptualize living things. Interestingly, this work suggests that even very young children expect members of (even novel) biological categories to have distinct properties and potentials that nonliving things do not share. One of the most striking conclusions supported by this work is that unlike the ethnobiologist of Berlin's account (who discerns rather than constructs nature's distinct types), young children readily *ignore* similarity in appearances when reasoning about living things. Certainly, patterns of morphological difference play a crucial role in triggering children's understanding of living organisms. Still, it seems likely that children are bringing much more to the task of conceptualizing living things than a recognition of such differences. Such substantive ontogenetic universals, rather than challenging Berlin's conclusions, powerfully strengthen them by suggesting that their scope is at once much greater and more specific than he implies. They also suggest that a mature science of ethnobiology will not only be informative in regard to the scope of cultural variation, but also with respect to general questions about the nature of human cognition itself.

***Magic, Science, Religion, and the Scope of Rationality.* STANLEY J. TAMBIAH. Cambridge and New York: Cambridge University Press, 1990. vii + 187 pp., illustrations, photographs, notes, index.**

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In this work Tambiah moves, cumulatively, through three broad foci. The first focus is the ways in which central anthropological concepts—those connected with magic, science, and religion—were shaped by their socially/culturally situated moments of origin. The second focus is the use of these concepts by the classic anthropological figures, especially Tylor, Frazer, and Malinowski. The third focus is Tambiah's own perspective on these concepts; his synthesis incorporates the best of the classic figures and a plethora of more recent voices. The first and third foci are especially captivating—as though the book were a triptych in which the side panels outshine the center.

The first focus is developed through a series of wide-ranging "historical backdrops," each of which revolves around a summary and discussion of the arguments of a recent major scholar. We have discussions of, for example, G. E. R. Lloyd on the development of Greek science, Robert Merton on the relation of Protestantism and the scientific revolution, and Keith Thomas on the demarcation of magic and religion. These historical backdrops are not likely to impress those who are looking for minutely detailed primary research, yet they do suggest the possibilities inherent in juxtaposing anthropological concepts with historians' researches into the sociocultural conditions of the origins of such concepts. Through Tambiah's explorations runs the question, "can these same categories (embedded in and stemming from an historical context) fruitfully serve as universal, analytical categories and illuminate the texture of other cultures and societies?" (p. 21).

Though the second focus—Tylor, Frazer, and Malinowski—is handled intelligently, the most intriguing insights are by way of continuation from previous, or prelude to the following, chapters. This may reflect the fact that some of this material is already well-trodden ground for anthropologists.

In the final and most fascinating focus, Tambiah sketches out his own perspective. He picks up on the cognitive dualism of Lévy-Bruhl's contrast between "logical" and "prelogical" or "mystical" mentalities. Incorporating insights from several more recent figures (notably Ludwig Wittgenstein and Karl-Otto Apel), Tambiah presents a formulation analogous to Lévy-Bruhl's, summarized in a series of opposed phrases (for example, "atomistic individualism" versus "sociocentrism," "instrumental action" versus "expressive action," "fragmentation" versus "totalization" [p. 109]). Tambiah regards this dualism as a universal of potential:

> [I]t is possible to separate analytically at least two orientations to our cosmos, two orderings of reality that woman and man everywhere are capable of experiencing, though the specific mix, weighting, and complementarity between the two may vary between individuals and between groups within a culture, and between cultures taken as collective entities. [p. 105]

That Tambiah links his ideas to Lévy-Bruhl is intriguing, especially given the present reluctance of anthropologists to acknowledge intellectual debts to our evil past. But it is also a bit troubling in light of the issue of fairness to the other figures who do not fare so well in this treatment. Is there really a higher proportion of wheat-to-chaff in Lévy-Bruhl than in Tylor, Frazer, or, more recently, Robin Horton? Or is it that the dovetailing of certain of his own concerns with Lévy-Bruhl's leads Tambiah to hold up the more fortunate passages in Lévy-Bruhl? Lévy-Bruhl has often been cited for the same potential moral villainies that Tambiah is concerned about in Horton's perspective, including, for example, the lack of "fine-grained linguistic analyses of intellectual constructs" (p. 90).

Chapter 6 presents an insightful contribution to the rationality and relativism debate. Tambiah avoids the polemical fireworks that usually attend the extremes on this issue and presents, instead, a subtle and balanced exploration punctuated by thoughtful ethnographic illustrations. He gives a place to both universalism and relativism and calls attention to the potential moral pitfalls of either when held as an exclusive doctrine.

A final minor point regarding anthropology's quirky numerology might be in order. Tambiah's title projects a heady tetrad of terms that contains within it the old evolutionary triad. But the real operative principle of Tambiah's book is dualism: in both his cognitive schematization and his position in the universalism/relativism debate, the essential argument is the irreducibility of duality; moreover,