Review: Interpretation of Intellectual Diversity
Author(s): Richard A. Shweder
Reviewed work(s):
Culture and Thought. A Psychological Introduction by Michael Cole ; Sylvia Scribner
Modes of Thought. Essays on Thinking in Western and Non-Western Societies by Robin
Horton ; Ruth Finnegan
Published by: American Association for the Advancement of Science
Stable URL: http://www.jstor.org/stable/1740624
Accessed: 01/03/2010 14:11

Your use of the JSTOR archive indicates your acceptance of JSTOR's Terms and Conditions of Use, available at
http://www.jstor.org/page/info/about/policies/terms.jsp. JSTOR's Terms and Conditions of Use provides, in part, that unless
you have obtained prior permission, you may not download an entire issue of a journal or multiple copies of articles, and you
may use content in the JSTOR archive only for your personal, non-commercial use.

Please contact the publisher regarding any further use of this work. Publisher contact information may be obtained at
http://www.jstor.org/action/showPublisher?publisherCode=aaas.

Each copy of any part of a JSTOR transmission must contain the same copyright notice that appears on the screen or printed
page of such transmission.

JSTOR is a not-for-profit service that helps scholars, researchers, and students discover, use, and build upon a wide range of
content in a trusted digital archive. We use information technology and tools to increase productivity and facilitate new forms
of scholarship. For more information about JSTOR, please contact support@jstor.org.
result of their monopolization of internal trade, rather than long-distance trade, is similar in outline to the one by Renfrew. Briad does not attempt a socioeconomic explanation for the subsequent Urnfield expansion as others have (see D. Collins et al., Background to Archaeology, Cambridge University Press, 1973), but he does relate the Hallstatt incursions to the economic collapse of the cultures dependent on bronze metallurgy following the introduction of iron. Also, the development of three main 6th century B.C. cultural foci with overlapping zones of influence (one of which was the Greek colony at Massalia) is explained by F. R. Hodson and R. M. Rowlett as the result of economic ties between the Mediterranean and interior European peoples for the flow of prestige items associated with wine drinking to the north and, perhaps, tin and salt to the south.

The book fulfills in splendid detail the requisites of a major reference, the synthesis of literature and description of material culture. But the lack of adequate reconstructions and explanations, together with its high price, will likely restrict its wider use as a text.

Gary W. Hume
Department of Anthropology, American University, Washington, D.C.

Interpretation of Intellectual Diversity


Most cultures think more highly of themselves than of their neighbors. They have a sense of the superiority of their own values and customs. More often than not most cultures agree that the thought processes and beliefs of the other, the outsider, are confused, deficient, childlike, or at least erroneous.

Modern cultures and their intellectual spokesmen fully participate in this reciprocal denigration. William James told an Oxford audience in 1909 that the “German mind” lacked an affinity for “truth’s natural probabilities” (1). Only a few years later, before a Parisian audience, Emile Durkheim described William James’s pragmatism as a national threat, a foreign intellectual product of the “Anglo-Saxon milieu” (2). Contemporary German audiences heard a different message. The French and Anglo-Saxon mind, they were told, was bound by fact not reality. It was superficial not deep, artificially manufactured not organically grown (3). Today a global audience hears from some psychologists of the deficient “cerebral endowment” of whole ethnic groups.

The two volumes under review are attempts to assess such intertribal characterizations and repudiations against standards of empirical and conceptual adequacy. What role should we grant to terms like “mind,” “mentality,” “cerebral endowment,” and “milieu” when we go about describing and explaining another people’s thought processes and beliefs, and ultimately our own?

Cole and Scribner’s Culture and Thought is a review of the experimental psychological literature on thinking in various cultures. The review is animated by a single question: Are there differences in the intellectual processes of people reared in different cultures? By means of a format organized according to such categories as perception, learning, memory, classification, problem solving, and reasoning, Cole and Scribner prepare the way for a final, climactic chapter in which they (i) admonish those who would infer that “poor performance on a particular test is reflective of a deficiency in or lack of ‘the’ [intellectual] process that the test is said to measure” (p. 173); (ii) argue that “experiments are unlikely to allow us to rank different people in terms of the ‘existence’ or ‘amount’ of any particular cognitive process” (p. 176); and (iii) try to persuade us that the investigation of how people think in relation to what they think about is a more fruitful topic than the study of individual or cultural “mentality” differences. Thus Cole and Scribner suggest (pp. 176, 193–194) that experiments will allow us to consistently rank situational features (for example, the experimental task) in terms of the cognitive processes they elicit. Cole and Scribner’s answer to their guiding question is clearly no. The same intellectual processes are available to members of all cultures.

Culture and Thought is an excellent introduction to many of the theoretical issues and much of the pertinent empirical literature that help define the field of cross-cultural psychology. Numerous hypotheses concerning the relationship of cognition, language, and culture are weighed against the available evidence, often to be rejected. These include Whorf’s hypothesis that the language we speak is decisive for how “we cut up nature, organize it into concepts, and ascribe significances as we do,” a series of claims concerning the influence of cultural experience on visual perception, and a number of propositions about the superior memory and inferior abstract reasoning abilities of people in nonliterate cultures. Suggestions for future research are interspersed throughout the volume.

Intellectual diversity is an undeniable fact. Its interpretation is rarely unequivocal. People differ in the precision of the concepts they use, in their memory of certain events, in the speed with which they acquire certain skills, and so on. Yet, a decisive explanation of these intellectual differences may be forthcoming from (i) theories concerned with what was thought about, or the content of thought (for example, familiar or unfamiliar materials, matters pertaining to oneself or to others); or (ii) theories concerned with who did the
thinking, or the agent of thought; (iii) theories concerned with what was thought with, or the instruments of thought (conceptual strategies); (iv) theories concerned with the purpose of thought (for example, to evoke, to justify, to describe, to solve a problem). (4)

In the light of such explanatory possibilities Cole and Scribner caution us against facile interpretations of why a subject performs as he does on a psychological test. They point out, for example, that failure to recall test items, or to reason logically, may just as well be due to the nature of the things thought about (the content of thought) as to deficiencies in the thinkers (the agent of thought). This is the main message of Culture and Thought, and it is communicated through a plentiful exhibit of "ways of presenting materials which enhance performance." Slight alterations in test materials or the purpose of a task elicit previously undemonstrated abilities whose prior absence may have been erroneously interpreted as indicating a capacity deficiency in the test taker. Zambian children who fail to consistently sort out pictures of toy objects (vehicles and animals) can consistently sort out the objects themselves (pp. 115–116). Senegalese bush youngsters who fail to "conserve" volume when observing a Piagetian water-pouring test do conserve when they pour the water themselves (p. 150). Zambian workers who fail to display an ability for depth perception when asked questions about one set of drawings display it when asked to construct a spatial model of another set of drawings (pp. 68–70). Liberian informants who perform poorly on a recall task because they overlook the latent category structure of a randomly presented list of items (tools, articles of clothing, utensils, and food) utilize a taxonomic mnemonic strategy when the items are embedded in a story context (p. 134). Preliterate Liberian children who prefer color to form when matching objects that differ only in color and form, prefer form to color when matching objects that also differ in size (p. 93). Abilities displayed by a child in a classification test (a sorting task) are not displayed when the child is asked to describe sortings he has already accomplished (p. 116).

How one learns may also matter. Culture and Thought contains a fair amount of evidence on effects of schooling and explicit instruction which are worthy of further investigation. Schooled children come to treat language as a topic. They separate its functions and, as Geliner (whose outstanding essay in Modes of Thought inspires this observation) might put it, they become sensitive to the boundaries between the different things they can demand of concepts. In certain areas, at least, they also seem to explore that logical space of alternatives that is implicit in any assertion. Thus, schooled children deliberately "search for and impose structure on verbal tasks" (p. 139), they come to treat non-factual statements hypothetically, "as if" they were true, for the purpose of a logical examination of the relations among premises and deductions (p. 161), and they become aware that alternative approaches and rules of classification are possible (p. 122). They think about what isn't.

Cole and Scribner, however, go far beyond the claim that careless inferences have often been made about the capacity or mentality deficiencies of test subjects. They also doubt that even properly controlled experiments will reveal consistent differences in the thinking of test subjects. They further assert that consistent differences in thinking are related to consistent differences in test materials and content domains. For reasons that have to do with more than just their deliberate omission of population studies of intelligence, their case for these two claims is unconvincing.

One problem is that data on individual differences over comparable test materials or situations are rarely presented in the book. We learn that embedding "items-to-be-recalled" in stories increases recall rates for Kpelle informants over unembodied lists, but we don't learn whether the rank order of Kpelle informants remains relatively consistent over the different kinds of recall tasks. An individual or cultural mentality approach to intellectual diversity may be inappropriate, as Cole and Scribner suggest. But if they are correct they have not displayed their good reasons in this work; they have not shown us that there are no consistencies in the way a set of persons differ from each other, either within or between cultures, from one comparable task to another.

Another difficulty is that the evidence Cole and Scribner use to dramatize their caveat against "poor test performance-deficient mentality inferences," though appropriate, is misleading for two reasons.

First, data appear throughout the volume on experimental conditions that radically alter performance over whole samples. No subjects display depth perception on one task and over 50 percent of the same subjects do display it on a second task. Here the implication of consistency in the cognitive processes elicited by the experimental materials is excess baggage with regard to the point being made. The caution about inferences could be made even if there were a 50 percent absence of depth perception on both tasks as long as there were reversals in those subjects who did or did not perceive depth over the two tasks.

Second, Cole and Scribner have selected examples where differences in things thought about, the materials, task, and the like, appear to make for consistent differences in intellectual performance regardless of thinker. They use them to promote the notion that a situational approach to intellectual diversity is likely to be more fruitful than an agent-mentality approach. But one could as easily find instances where experimental material-task effects are highly inconsistent, or for that matter where agent-mentality differences are highly consistent.

Consider, for example, the following syllogistic reasoning problem, where situational effects are inconsistent. All my friends are anthropologists; all your friends are my friends; therefore all anthropologists are your friends. There is evidence (5) to suggest that perhaps only 1 percent of a college population in the United States would endorse this fallacious deduction on a reasoning problem stated in this way. However, an alteration of the content of the task from meaningful to abstract form (all B are C; all A are B; therefore all C are A) could easily produce error rates of nearly 40 percent from the same population. But is this support for the situational approach? The error rates for the deduction from the same premises that "therefore some anthropologists are not your friends" and its abstract equivalent (some C are not A) are typically reversed (for example, 32 percent and 12 percent). For this deduction meaningful materials elicit errors much more than abstract materials.

Finally, one would have liked the authors to address themselves to the specificities of "doing an experiment." Do experiments of whatever kind have contextual and purposive features so special that those concerned with how people think and what they think in nonexperimental situations have little to learn from them? Most anthropologists are not interested in writing an ethnography of the experiment. Should they be?

Horton and Finnegan's Modes of Thought is also animated by a guiding question: Are there basic differences in the manner of thought of different societies? The authors who contribute to the volume spend much of their effort in analysis of this question's possible meanings.

Many of the essays in Modes of Thought raise philosophical and theoretical issues concerning what is involved in describing a belief system. Perhaps the most persistent is In what terms should belief systems be compared? More specifically, is rational adequacy (truthfulness, precision of reference, logicality, effect-
tiveness, openness to criticism, and so on) a feature of beliefs that is relevant for their comparison, and, if it is, under what circumstances? The answers to this question are diverse, according special privilege to one or another parameter for describing why people think as they do.

Tambiah champions the point or purpose of thought. Inspired by Austin’s distinction between constative and performative utterances, he distinguishes beliefs in terms of their goals. Some assertions, factual claims, may appropriately be evaluated in terms of truth and falsity. However, to evaluate other types of assertions (for example, “I dub thee Sir Stanley”) in this manner is to miss the point (which in this example is to bring about a change of status). For Tambiah the purpose of Zande curing ceremonies is the evocative transfer of attitudes. They are meant to facilitate a return to health by stimulating in the ill a proper attitude of mind. Thus a creeper vine is selected as a “cure” for leprosy. The fact that its extremities fall off as a stage in the plant’s growth cycle makes it appropriate for use in the analogical persuasive ceremonial communications aimed at countering decay in the leper. To translate Zande assertions about illness and its cure as instances of defective explanatory or propositional thinking, to ask why the Azande don’t stop believing their “magic,” to ask how they preserve their belief in the face of disconfirming evidence, to invoke notions like “illusory validity,” all this for Tambiah would be to miss the Zande’s point. Questions presupposing the appropriateness of truth claims are simply irrelevant.

Horton champions the means or instruments of thought. He believes that an arrogant ethnocentrism of an earlier century and a romanticist quest for a lost paradise in our own have conspired to deceptively portray the relation of traditional and modern thought as a difference in kind, as one of contrast and inversion (for example, prelogical vs. logical). Horton would rather view the relation as a difference in degree, as one of continuity and evolution (for example, explanatory theories that lead to better or worse predictions, observational techniques that are more methodical or less methodical). In many areas, not all, Horton believes Western thought is simply superior in explanation and prediction. Of course cross-cultural comparisons of the adequacy of theories and procedures are going to lead to unfavorable conclusions about the theories and procedures of one group or another. Erroneous theories are erroneous theories and should be identified for what they are. Horton is inspired by his own interpretation of Durkheim, Colby and Cole in this volume also distinguish cultures in terms of the conceptual tools available for doing the intellectual tasks required.

Barnes champions what is thought about or the content of thought. Inspired by Kuhn he argues that the formal criteria by which people actually practice their “sciences” (or should it be “ethnosciences?”) are essentially the same in all cultures, including our own. Each, he suggests, proceeds by attempting to assimilate the unknown to a familiar metaphor (light is like a wave, or society is like an organism), and each has its own ways of accounting for anomalies, that is, events that are “out of keeping” with its theoretical expectations. Barnes suggests that to compare belief systems on the basis of their truth or falsity is to disguise an arbitrary and prejudiced judgment in favor of one’s own beliefs which could just as well have been made (also without justification) from within any belief system about any other. He holds out variations in reactions to anomalous occurrences as a potential yardstick for comparing belief systems. What is the reaction when theoretical expectations are violated? A change in theory? A nod to measurement error? Fear? Anxiety? Taboo? Barnes believes such variations may relate to variations in what is thought about. For example, Newtonian physics can be abandoned with less personal and social disruption than the concept of human responsibility.

Even the agent of thought has its occasional champion. Gellner and Barnes point out that a theory about persons is not necessarily a theory about institutions or systems. Thus, for example, openness to alternative perspectives may be a property of the scientific community and its institutions without being a property of individual scientists. What one scientist dismisses as error another (for whatever reason) may display as an anomaly. Individual dogmatism and closed-mindedness can conceivably be organized to produce controversy and a communal awareness of alternative perspectives. Gellner discusses a “system of thought” as an agent.

Must we choose among the various approaches to the description of belief systems advanced in Modes of Thought? I think not. I think we will find, as William James might have put it, that each of them is good for so much and not good for everything. What we must do is specify the conditions under which different interpretations of diversity are appropriate. For example, Zande curing techniques can just as well be understood as a case of scientific thinking. That the nonliterate Azande lack is a good way to “keep records” about recovery rates in relationship to curing techniques. That they differentially recall techniques of curing which are analogically related to the disease cured is entirely consistent with everything we know about the effects of theories of conceptual similarity on judgments of co-occurrence (6). Things that are alike are remembered as if they in fact went together. We need to work out rules for distinguishing a faulty science from a nonscience, and procedures to help us recognize when our distinctions, as, for example, among the symbolic, descriptive, persuasive, and evaluative goals of thought, have no point for the people we study. Until we do we cannot get on with even the job of good ethnographic description.

Some of the essays in Modes of Thought should become basic resource material for anyone interested in a comparative or historical investigation of belief systems. There are also other themes in the book, of which I shall mention only one, relativism.

Lukes disputes various relativist claims that “the rules specifying what counts as true and/or what counts as valid reasoning” have authority only in relationship to the norms of particular cultures or communities. Lukes views these claims as “different ways of taking seriously Pascal’s observation that what is true on one side of the Pyrenees is error on the other” (p. 231).

Lukes argues that all intelligible discourse, any instance of what one would call conceptual behavior, requires (presupposes, cannot do without?) at least some notion of an independently existent reality about which claims can be made. It also requires some notion of negation and consistency, and related ideas such as the law of the excluded middle (an object cannot be both itself and not itself) and the law of noncontradiction (any statement excludes its contradictory). Any variant (what Lukes calls context-dependent) standard for what counts as truth or as valid reasoning is in fact a criterion of truth only to the extent it presupposes universal (what Lukes also calls context-independent) criteria of this sort.

Lukes presents us with an old philosophical dilemma. Either all variety in the universe resolves into higher-order identities or it dissolves into unconnected points. Either there are higher and higher attributes which make it possible to speak of diverse events as various forms of the same thing—Lukes’s universal criteria of truth which simply are—or else we are lost in a universe of unique, unrelated, and non-comparable atoms about which nothing intelligible can be said. I am not at all sure we need to accept the alternatives.

Taxonomists recognize that there typically are no necessary or sufficient criteria for class definitions “no single uniform property is required for the definition of a given group nor will any combination of
given characteristics define it... it is extremely difficult to define class attributes for such taxa as cows or chairs" (7). Once the notion of a class "essence" is abandoned it becomes unclear whether we are obliged to search for presupposed or indispensible universal criteria for defining the class "standards of truth" or the class "standards of valid reasoning." Truth may be viewed as no more than a name for all possible ways of judging a statement to be factual or logical, and those properties themselves are not definable in terms of universally shared criteria.

It is also not apparent to me that "universal" and "context-independent" can be used synonymously or that Lukes's critique is directed at the heart of relativist claims. It is a big step from the assumption of a stable world of objects and events, independent of the perceiver, to the "discovery" of those objects and events. It seems to me that it is around that discovery, not around the distinction between subject and object, that the issue of relativism revolves. In any case, Lukes's paper is challenging and provocative and should certainly be read and debated by all variety of relativists.

"In trying to define the relation between traditional and modern thought patterns, twentieth century social scientists can hardly be said to have made a notable advance on their nineteenth century predecessors." Horton concludes his essay in *Modes of Thought* with this sobering remark (p. 300). Taken together *Culture and Thought and Modes of Thought* cannot be described as an exhaustive coverage of major issues in the field. Yet taken together these two books are probably as good as any for encouraging the dedicated to construct that framework for the interpretation of intellectual diversity which will one day mark the coming of age of cognitive anthropology.

**Richard A. Shweder**

Committee on Human Development,
University of Chicago,
Chicago, Illinois

**Books Received**


