

## Recensions — Book Reviews

*East is a Big Bird: Navigation and Logic on Puluwat Atoll.* THOMAS GLADWIN. Cambridge, Harvard University Press, 1970. 232 pp., bibliography, index, 5 maps, 64 plates, 4 diagrams.

"The types of achievement and intelligence tests which are most often used can have only limited value in describing the cognitive functioning of children. In almost all instances, we are concerned with scratchings on an answer sheet, not with the ways in which a student arrived at a conclusion. No matter how much we may think we know by looking at scores on such psychometric procedures, unless tests are constructed deliberately to reveal reasoning processes, these processes will not be identified." (Stodolsky and Lesser 1967:555)

The above quote is essentially the pivotal thesis Professor Gladwin employs to advance a connection between a particular group of tropical Micronesian islanders to the "ghetto" and "shack" dwellers of America. The analytic connecting links are styles of thinking and problem solving in the two diverse social settings. From research discoveries in the Puluwat navigational system, Western educational technology is constructively provided with an alternate methodology of apparent utility in the much neglected areas of human reasoning processes. Handicaps that have persistently faced Western educators in their efforts to remedy the intellectual deficits — handicaps resulting from concentration upon quantitative differences generated from test scores which are still abundantly used in school systems — continue to penalize the poor. Attention must be directed toward how the quality of thinking differs between people. In spite of the "formidable amount of research, psychology has thus far failed to create any real strategic breakthroughs in educational technology for deprived populations." (216)

As a cognitive system, Puluwat navigation rests on a discoverable body of theory as well as on specific operational techniques. Plans and decisions are dependent upon a predetermined corpus of information which a navigator must possess. Puluwat navigation is pervaded by the active necessity to exercise concrete thinking. However, the accomplished navigator simultaneously employs fairly high orders of abstraction. What here must be emphasized is the relationship of these discoveries to the commonly held distinction between lower and middle class thinking in America; lower class thinking is concrete whereas middle class is abstract. The system of ocean navigation provides a setting for more than a descriptive ethnographic report; information processing and manipulation are qualitatively considered by the author. The psychological processes which govern the application of sailing and navigational technologies are presented and understood as a part of the total life style of these Micronesian islanders.

The author's purpose is indicated in a brief preface. Analogically, if Western intelligence tests are inadequate in accurately measuring "capabili-

ties not distinctive of Puluwat cultural experience," the same tests are probably inappropriate for testing the undereducated poor in America. Gladwin's argument is well taken. Criticisms of current psychometric procedures and proposals for more relevant application in cognitive issues are fully developed in the final chapter.

Five chapters of this volume are devoted to the cultural setting in this small group of cluster islands. The first chapter (A Sail in the Sun) deals with the general history, geography, daily and religious life, methods of child rearing and fishing techniques on Puluwat Atoll. Chapter 2 (The Way of the Voyager) focuses upon Puluwat as a member of a larger island world of social, economic and political ties. Canoe ownership groups, canoe provisioning, turtle hunting and deep sea fishing prefates an account of an interisland voyage. Canoe construction, design and sailing principles and the master builder-apprentice relationship are covered in the third chapter; a detailed account of the status, skill and knowledge acquired by formal training preparatory to joining the small group of island elite — the navigators — is discussed in the fourth.

In the ethnographic account, the fifth chapter (Navigation Under the Big Bird) is most important, although extremely complex. In spite of this reviewers extensive personal experiences in ocean navigation, some concepts of the Puluwat navigational system were not easily or immediately fathomable. That I encountered difficulty in comprehension should add support to Gladwin's thesis. I was trained in Western navigational techniques — precise, sophisticated, and scientific. The dead reckoning navigational practices of the Puluwat navigators is, in a non-Western sense, itself quite sophisticated — as complex and skillful as the system employed by the "seat of the pants" New England fishermen. The dead reckoning methods of navigation are dependent upon the features of the sea and sky. The entire system is viewed as one that does not generate new information. The system provides the framework into which navigation, time, geography, and astronomy can be integrated to "provide a conveniently expressed and comprehended statement of distance traveled." The Puluwat name for the dead reckoning concept of estimating distance traveled or proportion of the voyage completed is *etak*. To understand the *etak* system of Puluwat navigation is to understand a way of organizing and synthesizing observational phenomena... to understand the logic of the system.

Personal or academic criticisms of portions of this volume would, in the long run, be insignificant. Communication with neighboring Satawal over the past two years has disclosed that the visiting Puluwat navigators are not well received. Among the sailing communities there exists competition between both Micronesian islands. Recently, the Satawalese completed a 1,300 mile round trip to Saipan to establish their own supremacy as Micronesian sailing experts.

Any evaluation of accomplishments which this work represents must be measured in terms of the influence of future research priorities in education, anthropology, and psychology. Gladwin's commendable efforts may well set the stage for an anthropological rebirth which might lead to new and more

relevant directions in culture and personality studies. The author's proposal for investigative studies that relate to the processes of thinking may establish trends in distinguishing between the aspects of personality which are culturally determined and those which are individual or accidental in origin. Further, the current ethnoscientific studies which emphasize cognitive mapping and categorization are regarded as comparatively insignificant in that studies of this type are not addressed to discovering mental processes.

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#### REFERENCE

Stodolsky, Susan Silverman, and Gerald S. Lesser 1967 "*Learning patterns in the disadvantaged*", *Harvard Educational Review*, 37: 546-593.

*Eskimo Administration: III. Labrador*. DIAMOND JENNESS. Montreal, Arctic Institute of North America (Technical Paper No. 16). 1965. 94 pp. Map.

Diamond Jenness has here concentrated more upon history than upon the biting critique of government policy that characterises his earlier volume on Canada (Technical Paper No. 14). Partly this reflects the fact that there has been less to criticise in government policy in Labrador; partly it indicates that Labrador history is somewhat more interesting than Canadian arctic history. "For the century and a half preceeding (the second world) war northern Labrador has been a benevolent theocracy, a North American Tibet in miniature" (p. 20). This bit of history of a bit of Canada is fascinating.

To a student of the Canadian Arctic, the most interesting point to emerge from Jenness' study is the totally different pattern of acculturation that has taken place in Labrador. Unlike the Arctic, where the Eskimo is only now learning English and where in every settlement a caste system prohibits assimilation, the Labrador settlements were entirely integrated, absorbing Eskimo and white into one community speaking English.

Part of the explanation for this difference may lie in the isolated nature of the entire coast. However, the Canadian Arctic is also isolated, and just as it produced settlements like Great Whale River and Chimo where caste patterns developed inexorably, so Labrador has its Goose Bay.

The basic difference must be found in the presence of the Moravian missionaries, for whom Jenness indicates great respect, and in their unchallenged domination of the area for a hundred and fifty years. Although there are not many cases on record of mistreatment of Eskimos by RCMP or the Hudson's Bay Company, nevertheless these agencies were responsible for the image of the Eskimo as fundamentally different from the whiteman in the North. Furthermore, their presence along with missionaries provided a "white community" in each settlement. In Labrador, on the other hand, a single missionary family was stationed at each settlement — not enough to produce a caste if they wanted to. Unlike their counterparts elsewhere in Canada, the Moravians arrived in Labrador already speaking the Eskimo language. They