

SECTION 5

Studies mainly of Interest to Theoretical Psychologists

45. Early in this century during an expedition to the Torres Straits, W.H.R. Rivers did some experimental work on the perception of geometric illusions among the Todas people of that region. Since that time other workers have investigated the extent to which geometric illusions are universally perceived. Most extensive of these studies is the work carried out by Segall, Campbell and Herskovits over a period of six years administering tests to 1878 people in widely dispersed groups - in different parts of Africa, one group in the Philippines, an American undergraduate group and some adults in Illinois. Analysis of the data shows strong cultural differences. They put forward the view that the Müller-Lyer illusion is a function of rectangularity in the environment and that the Vertical-Horizontal one depends on openness of terrain. Yahoda tested this in Ghana in 1966, confirming the findings on the Müller-Lyer illusion but not on the Vertical-Horizontal. On the other hand, Morgan tried the Herskovits materials on illiterates from different tribal African groups and on a European group in South Africa and did not find consistent differences. She considers that more research is necessary before an hypothesis can be put forward to account for the differences which have been shown to exist.

46. Bowden and Schwitzgebel both investigated perceptual discrimination and both suggest compensatory educational measures are necessary, with the latter emphasizing that if these measures are applied later rather than earlier some perceptual skills may not be re-acquired even after extensive education.

47. Some studies of phenomenal regression are reported by Beveridge who considered that Africans were less affected by visual cues than Europeans and that their tendency towards phenomenal regression is reflected in their art but his work has been overtaken by later studies which suggest that many of these phenomena are not isolated bits of behaviour. Rosslyn Suchman suggests that cross cultural studies of perceptual preference could throw light on thinking processes and lead to better understanding of cultural differences in cognitive processes.

48. Hector and Hudson in 1959, followed by Morgan and by Bradley in the same year, and Hector, Diodlo and du Plessis all studied the ability of literate and illiterate groups to construct recognisable representations by means of the 7-Squares Test material. Their work is reported in the Journal of the National Institute for Personnel Research, Vol.7 and Vol.8. Mental endowment and educational level have some effect, but maturation seems to be the most important factor. These studies, though of especial interest to theoretical psychologists, seem to have little immediate bearing on the practical problems of designing learning materials for school children and adults. Yet this type of fundamental research is important because each experiment throws light on aspects of perception and cognition which are culture bound and therefore susceptible of modification through the changes that will be wrought in society as technological advances are made manifest in people's daily lives.