

whose Huxley Lecture, as I understand it, cannot bear the interpretation placed on it.

Prof. Radcliffe-Brown says that Prof. Bartlett "would give no place in anthropology to archaeology, to linguistics, . . . to ethnology . . . or to social anthropology". He must, I think, have misunderstood what Prof. Bartlett said. What Prof. Bartlett did was to advocate a more intensive empirical and, so far as possible, controlled study of the behaviour of contemporary social groups. He stated very clearly in the fourth paragraph of his lecture, as printed in *Nature* (Dec. 18, 1943), that there were many other concerns of anthropology which he hoped would "continue to be studied vigorously". He excluded archaeology from anthropology only to the extent of treating it as an aspect of that study which had not "kept close to empirical fact", and he stated specifically that it could be adopted as a line of approach to the four main branches of anthropology which did rely on such "empirical fact". Linguistics I do not think Prof. Bartlett mentioned at all by name, but one must in reason assume them to be one of those unspecified branches of anthropology which he wished to have vigorously pursued; as for ethnology and social anthropology, as defined by Prof. Radcliffe-Brown, I can infer nothing from Prof. Bartlett's lecture except that he regards their study with the greatest approval and appreciation, and is anxious only to "forge a link closer than ever before" between the work of the anthropologist and the psychologist in their pursuit.

Prof. Bartlett is a psychologist and his whole lecture was, naturally, given specifically from a psychologist's point of view, though I doubt if he would endorse the views expressed by Prof. Radcliffe-Brown as to the nature of psychology and 'psychologies'.

J. H. HUTTON.
(President.)

Royal Anthropological Institute.

Origin of Semitic Languages

THE mouth gesture theory of the origin of human speech as it is put forward by Sir Richard Paget and by Prof. Alexander Jóhannesson¹ is certainly a valuable contribution to research on the origin of human speech, although it is not favourably regarded by comparative linguists to-day. It seems that they want to leave the matter to the anthropologists, who are beginning to show considerable interest in it.

A predecessor of Sir Richard Paget and Prof. Jóhannesson was the philosopher Schopenhauer. In his "Psychological Observations" he writes²:

" . . . Natural gesticulation such as commonly accompanies any lively talk, is a language of its own, more widespread even than the language of words—as far, I mean, as it is independent of words and alike in all nations."

" . . . As I have said, the most interesting and amusing part of the matter is the complete identity and solidarity of the gestures used to denote the same set of circumstances even though by people of different temperament, so that the gestures become exactly like words of a language alike for every one. . . . And yet there can be no doubt but that these standing gestures which everyone uses are the result of no convention or collusion. They are original and innate—a true language of nature. . . ."

Schopenhauer, however, makes a proviso:

" . . . Strictly speaking, what I get from gesticulation alone is an abstract notion of the essential drift of what is being said. . . . It is the quintessence, the true substance of the conversation and it remains identical no matter what may have given rise to the conversation or what it may be about."

I have tried, in a work as yet unpublished, to reconstruct in another way the origin of human speech and to demonstrate the identity of the Indo-germanic and Semitic languages. I do it with the help of the facts of physiology, of 'animal languages', the 'language' of the suckling and the psychology of primitive men. It was possible to deduce most of the words of the Indogermanic and Semitic languages from this reconstructed first language.

A combination of the two theories may perhaps help to further progress and to shed more light on the origin of the most human faculty of human beings.

ARNOLD HAHN.

16 Turl Street,
Oxford.

¹ *Nature*, 154, 466 (1944).

² Translation by T. Bailey Saunders in "Studies in Pessimism".

First Use of Current-Bedding to Determine Orientation of Strata

IN a recent letter¹, Dr. Archie Lamont directed attention to John Kelly's account, published in 1864, of the use of current-bedding to decide which way up strata were lying. Kelly gave the credit for the discovery of the method to Patrick Ganly. Ganly had given a description of it to the Geological Society of Dublin in 1856², but he had been using it much earlier.

Recently, three volumes of letters on geological subjects written by Patrick Ganly to John Kelly and Richard Griffith between 1838 and 1848 have come to light among the records in the Valuation Office in Dublin. These are at present deposited in the library of the Royal Irish Academy, through the courtesy of the Commissioner of Valuation. In one of the letters, dated June 18, 1838, from Dingle, and in another, dated July 16, 1838, from Glengarriff, he uses the method to work out the local structures. Both letters are accompanied by sketches of current-bedding. In the first case he deduces an inversion in the Dingle Beds at Fahan, and in the second shows that in passing from the Red Slate Series to the Black Slate Series (from the Old Red Sandstone to the Carboniferous Slate) south-east of Glengarriff, "the natural order of the succession of the strata accords with their present order of superposition".

Ganly was one of the boundary surveyors engaged on the Griffith Valuation of Ireland. He was employed by Griffith on geological work, and his surveys seem to have been the basis of much of the revision of the later editions of Griffith's geological map of Ireland, first published in 1838.

A. FARRINGTON.

Royal Irish Academy,
19 Dawson Street,
Dublin.

¹ *Nature*, 145, 1016 (1940).

² "Observations on the Structure of Strata", *J. Geol. Soc. Dublin*, 7, 164 (1856).