
In its arresting title, Professor Granit's new book proclaims his philosophy that teleological explanations, far from being disparaged, should be encouraged in biological research, for observations only become integrated when their purpose is apparent or supposed. Writing for the reader with some knowledge of biology but without specialised knowledge of neurophysiology, the author draws on his life's work on the physiology of vision and the control of motor activity to illustrate the general principles of the input and output systems of the brain, with the marvellous ability of response made possible by the encephalisation of functions done more peripherally in primitive animals, but unless the output be "goal-directed" the greater adaptability is of little significance. Granit's philosophy is emphasized in three statements: (1) from simultaneously available information the purposive brain selects what it finds biologically useful; (2) in this way it employs its billions of neurones to create unique cellular organs of high specificity combining information from various sources with action; (3) such organs are mobilised by injecting into them components that we describe in such psychological terms as motivation, interest, anger, demand, or accomplishment—in short, relevance for some biological purpose.

The general reader may find some of the factual material more difficult than the author appreciates (and misuse of "cue" where "clue" is intended causes temporary confusion) but the general message comes over clearly, and follows Sherrington and Eccles into the realms of higher cerebral functions and consciousness. Pity it is that the experimental insights of great physiologists are not applied to these problems at the height of their powers.

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Cerebral Vascular Disease Edited by J. S. Meyer, H. Lechner, and M. Reivich. (Pp. 28; illustrated; $54.50, Dfl. 133.00.) Excerpta Medica: Amsterdam. 1977.

The appearance of the Proceedings of the Eighth Salzburg Conference is proof either of continuing interest in cerebrovascular disease or of eternal optimism on the part of the publishing business. The organizers of the 1976 conference have turned aside from the previous preoccupation with the pathogenesis of cerebrovascular disease and have boldly embarked on a new course of the role of the cerebral circulation in dementia. It is unfortunate, though perhaps inevitable, that the care and precision expended by numerous investigators on measurement of cerebral blood flow (CBF) has seldom been matched in the clinical examination of patients. Other recurring faults concern the selection of "normal controls" either for blood flow or intellectual function, and the comparability of repeated measurements in the same patient. It seems that the present CBF techniques may not be appropriate for detecting the rapid functional changes which occur during neurophysiological testing.

Nevertheless the distinction which emerges on both circulatory and pathological grounds between primary neuronal and secondary arteriopathic dementia (now curiously renamed "multi-infarct dementia") is of great importance when considering both the management of patients and the direction of future research.

The remainder of the conference deals with a great variety of cerebrovascular topics, some clinical and some methodological. The great European tradition of neuropathology appears to be in abeyance. The proceedings of the conference have been produced by a