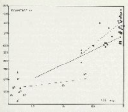
my intention has been to expose our ignorance rather than to present some means and ways of approaching these exciting problems.

4
Encephalization, Cortical Maps, and Redundancy

If we refuse to admit that discrimination is in some way based on different anatomical constituents differently located in the brain, we may as well give up altogether. (Author, in his Silliman Lectures, published as *Receptors and Sensory Perception*, by Yale University Press, 1955.)

Encephalization

The highly developed adaptability of man, as studied in Chapter 3, suggests that perfection of this talent could be ascribed to the existence of a cerebral cortex greater than that of other mammals. [illegible]



4.1 [illegible]

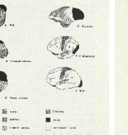
[illegible]

[illegible]

[illegible]

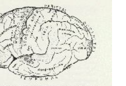
Maps and Mapping

[illegible]

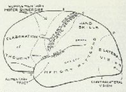


4.2 [illegible]

[illegible]



4.3 [illegible]



4.4 [illegible]

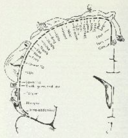
[illegible]

[illegible]

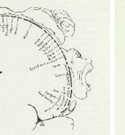
General Significance of Cell Number

[illegible]

[illegible]



4.5 [illegible]



4.6 [illegible]

Redundancy

[illegible]

[illegible]

[illegible]

Expansion, Encephalization, and Localization

[illegible]

[illegible]

principle of differentiation by localization may seem insignificant as an attempt at classifying brain activity. Nevertheless it serves as the backbone on which the rest of our body of knowledge hinges. Another matter is then how to proceed to the next step in classification and decide to what class of phenomena a living nervous system belongs. It is a unique phenomenon in this world, unique also in ultimately trying to understand itself.

5
Some Approaches to Conscious Awareness

Any science that deals with living organisms must needs cover the phenomenon of consciousness, because consciousness, too, is part of reality. (Niels Bohr in a discussion recorded by Heisenberg in *Physics and Beyond*, London: Allen and Unwin, 1971, p. 114.)