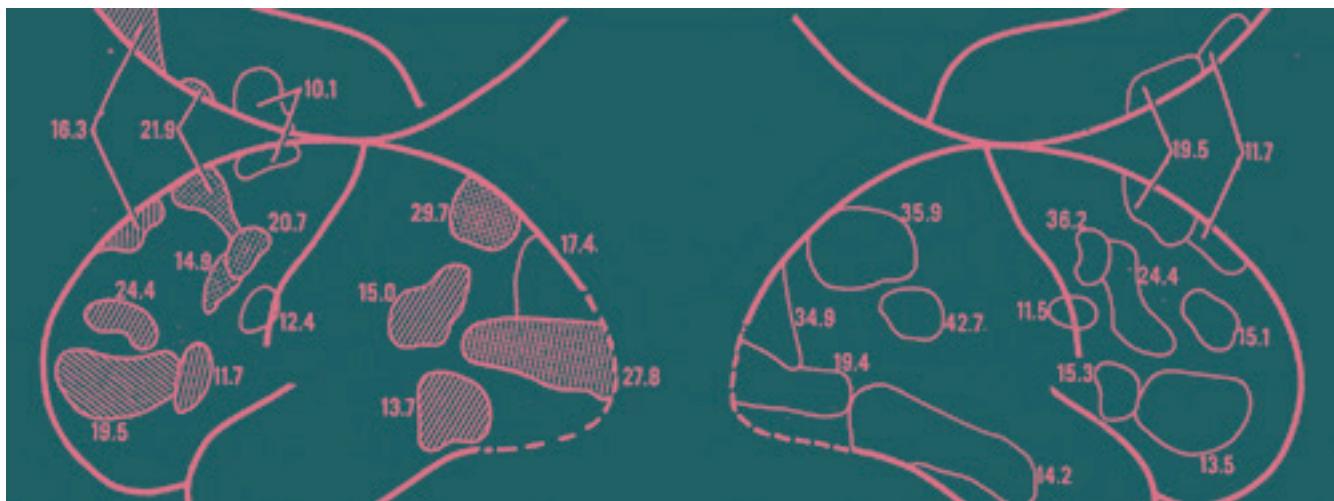




Pattern Recognition Mechanisms



The Meeting held at the Pontifical Academy of Sciences on *Pattern Recognition Mechanisms* originated from a talk between PAS President Carlos Chagas with Dr. Charles Gross and colleagues of the Instituto de Biofisica in Rio de Janeiro.

Form recognition by some neurons of the optical patterns was the subject discussed in at least one seminar during Dr. Gross' stay in Rio. From the data presented emerged the idea of a Study Week in which the subject of how information gained by the optical system is received and can be treated. The idea was an ambitious one, but the invited scientific experts were able to advance knowledge on the subject, thus opening new perspectives for research.

The knowledge of how our brain performs actions that other animals are not capable of is a constant subject of reports, meetings and discussions. It has been a subject of three of our workshops already.

Sir John C. Eccles, an Academician of the Pontifical Academy of Sciences since 1961, was one of the scientists who played a major role in the criticism of many of the theories presented in this area. He also made a strong point with his own ideas. His contribution to neurobiology is admired both by those who follow his ideas and by those who diverge from them. His participation in the Academy's work has been extremely fruitful. It was Eccles who organized our first meeting on Brain Sciences in 1964. The Proceedings of the Study Week on Neurobiology were then published under the title of *Brain and Conscious Experience* (Scripta Varia No. 30).