



Brain and Conscious Experience



The Study Week on “Brain and Conscious Experience” pursued rigorously scientific goals. It was attended by world-renowned and highly qualified scientists in the fields of anatomy, physiology, and biophysics of the nervous system, and on the functioning of the nervous system as an instrument to control a living organism’s adaptive capacity.

This vast and arduous field of scientific research examines the objectifiable phenomenology of the processes through which information is received, codified and transmitted by the basic units of the nervous system. It also concerns the subjective reality of the experience of consciousness closely linked to the superior processes of mnemonic accumulation, integration and elaboration of information which take place in the most complex cerebral structures.

The main purpose of the Study Week was to bring together universally recognised top scholars in the field to discuss the relationship between the brain and consciousness on the basis of experimental data, and define the problems that this extremely important sector of scientific research poses to the human mind.

After an introductory report on the structure of neural circuits in the cerebral cortex and the transmission of signals through them, we addressed the question of the transmission of information from the outside world to the brain and its circulation through the neural circuits, which produces the integrated and sophisticated experiences of perception.

In this same part of the program, we also dealt with the nature of perceptual experience and the disorders caused by brain injuries insofar as they pertain to consciousness.

In the second part, we dealt more specifically with the relationships between the experience of consciousness and the development of cerebral activities.

In particular, attention was focused on the problems of unity of consciousness, cerebral

mechanisms of sleep and memory, and how we should represent consciousness in relation to the physical world.

The influence of drugs on the correlation between brain activity and consciousness was also examined.

The final part of the program dealt with the issue of control exerted by our brain over our actions. By scientifically interpreting the activity of the brain, we examined issues such as the manifest conscious control of movement and psychosomatic reactions.

With regard to the meaning of the term “consciousness”, the experts invited to the Study Week were concerned exclusively with the psychophysiological concept of the capacity to perceive, to be aware of the perception, and to act and react accordingly.

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