

## The physiologist meets the philosopher Kant. How subjects build and construct space. Analysis of psychophysiological process on the relation among spatial experience, time organization and emotion

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Researches about visual decodification examined how stimuli placed in space are perceived presupponing that "space" be a physical phenomenon absolutely independent from the perceiving subject. Many researches studied the perception of depth and tridimensionality, but all consider space only as an objective external situation. On the contrary, the philosophical discussion about space, in particular in the previous centuries, examined space in relation to the subject and his mental activity. Starting from a new psycho-physiological point of view we think that the so called "real space" exists in the framework of the subjective experience of space. This conception requests an active processing from the perceiving subject. In other words, subject, in real perception, would actively build "the space". We hypothesize two levels of activity in organizing perception. The first, the central nervous system, like the hardware of a computer, organizes and creates the space through a particular form of elaboration of the stimuli. The first process is realized through a mechanism of abstraction that we have re-written, in physiological term starting from the research on perception of Hubel and Wiesel. In this way the physiologist meets the philosopher Kant. Then in organizing experience of space the subject synthesizes the flux of bodily information (proprioceptive stimuli etc.). So the experience of space is a product of synesthetic activity of the subject. It is a special form of elaborating stimuli. When the space is actively formed, subjects decodify stimuli placed in space. This activity represents the second level of visual perception, like the software of a computer. The temporal organization of so called visual stimuli plays a central role in this process. In this symposium we will discuss this thematic examining also the relationship between experience of space and individual psychological differences and development.