

## Consciousness as a Brain Monitoring

A possible way to frame consciousness within an evolutionary perspective, consists in considering it as a sort of monitor that the organism uses to better represent to itself, in a global perspective, all the relevant factors for a possible action to be taken in the environment. One can imagine that both the stimuli coming from outside and the internal solicitations, in the form of sensations, needs, desires, aspirations, etc., converge on this monitor. According to this model, consciousness would favour the adaptation of the organism by centralizing in a single virtual place the different solicitations to which the organism is subjected instant by instant, the information related to the environment, as well as the modalities of choice and control of the actions to be carried out.

One of the most significant versions this conception of consciousness is undoubtedly the one proposed by the neuroscientist Antonio Damasio. He, setting himself the objective of defining, broad speaking, the function performed by consciousness, adopts as a starting point questions such as: "Why do we need a "mental level" of brain operations, and can't we just go with the simple "level of neural maps" currently described by the instruments of neuroscience?" and "Why should the level of neural maps, with its activities neither mental nor conscious, be less efficient than the one of the conscious mind for the management of the vital process? (1)

The hypothesis put forward by Damasio to explain the role of consciousness in the management of behaviour is that representation in the form of lived experience facilitates the integration between information collected in different ways, for example visual and auditory or tactile. Moreover, this form would allow the integration of images that can be generically derived from different types of sensory modalities with other images, recalled from memory, that can be associated to them. In this perspective, the contribution to the process of adaptation by the conscious self, for Damasio, can only be a sort of monitoring aimed at increasing the unitary component of the system: "The sense of self introduces, at the level of mental processing, the following idea, namely that all current activities represented in the brain and mind are relevant to a single organism whose needs for self-preservation are the fundamental cause of most of the events being represented. [...] Without mental images, the organism would not be able to perform a timely and large-scale integration of the information essential for its survival. (2)

A similar way of representing the function of consciousness has several similarities with the situation of a human operator placed in front of a control panel of a complex equipment, where both the indicators (lights, dials) that report real-time information on the internal status of the equipment and the outcome of actions carried out outside, and the controls (levers, buttons, knobs, pedals) to intervene on the machine operation instant by instant. There is no doubt that the operator can greatly benefit from having the relevant information and controls in a limited and easily accessible space. [...]

Such a image, although endowed with a certain charm, is nevertheless deceptive, since the condition of consciousness in Damasio's model and the one of an operator a machine controls, at first sight similar, are in fact deeply different. In the second case, in fact, the two entities are clearly distinct, each having its own specific internal organization and its own behavioural logic. They can therefore interact causally with each other, even if only through the control panel.

In the case theorized by Damasio, instead, the contents of consciousness are nothing but "creations of the brain". Consequently, they cannot be considered independent from the underlying activity of the different nervous areas. This makes their presence completely irrelevant from the point of view of system functionality.

In other words, since mental images, in Damasio's perspective, constitute a mere product of the nervous processes that take place, instant by instant, at the brain level, not only they are not able to interact causally with the nervous processes themselves, but, under no circumstances, can they be provided with properties or information that are not already in the system.

In conclusion, the image of a consciousness that performs a monitoring function, centralizing in a single virtual place all incoming stimuli (in addition to the information stored in memory), as well as the control of motor activity directed to the outside, is incompatible with the conception that considers subjective experiences as a result of the phenomena that occur in the brain: the same phenomena that process at the nervous level the different stimuli coming from the environment and direct the body's behavior.

This image would acquire a sense (i.e. it could be put in relation with a role of adaptive valence) only if it could be recognized to consciousness a certain amount of autonomy with respect to the underlying nervous processes; however, since this is not the case, because in Damasio's model brain activity and conscious experience are to be considered coincident (one is the product of the other), the perspective of consciousness as a monitor must be rejected as a useless complication that doesn't offer any contribution to the understanding of the consciousness-brain relationship.

## NOTES

(Pages numbers refer to the Italian edition of the work quoted)

(1) Antonio Damasio, *Alla ricerca di Spinoza*, Adelphi, Milano, p. 248.

(2) *Op. cit.*, pp. 249-50.

[from Astro Calisi, *Oltre gli orizzonti del conosciuto...*, pp. 47-50 – English translation by the author]