Nervous System Array Like Organization

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Abstract
Treating a certain organism like a system means, firstly, to consider the characteristics that systematically repeat in the behavior and structure of the respective organism. One of the main features of an evolved organism is the complexity of its nervous system. The nervous system controls, from the inside, the behavior of the organism. A control from the outside of the organism means mainly the control of its nervous system. To be able to control a system means, firstly, to have a model of that system as close to reality as possible. A mathematical approach in the modeling process is a beneficial way. From the mathematical point of view, it can be observed that there are a lot of features of the nervous system that can be modeled by arrays. To make an array-like mathematical model of a system means to give a mathematical representation to its components, considering them organized like arrays and considering the interactions of that system like array operations. Every mathematical representation must be certified first by theoretical experiments and then by practice. Having a correct model will permit an estimation of future behavior in certain situations. Considering the complexity of the nervous system, even assuming the interactions between its components, as array operations, could be an audacious step. Every assumption could be and will be sustained with arguments.

Keywords: System; Neurons; Array; Operations; Structure.