It is shown that the regularities of the categorization of stimuli by human subjects and matching law found in animal experiments can be explained by means of the same formal model that was originally introduced for the representation of human moral choice. The hypothesis is advanced that the phenomena referred to above are manifestations of a cognitive mechanism common to both animals and human beings. A formal neural network is devised in correspondence with this hypothetical mechanism. The detailed analysis is given of a method for a construction of a formal model using not only empirical data but also knowledge having a non-operational character.