

Adaptation to of particular problem solving and “global” goals in animal behavior

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Abstract. Animal behavior is adaptive: animals are able to vary their behavior according to variation of their environment. This ability allows for successful solving of various problems an animal faces, e. g. a search for food. However, the animal behavior has a goal which exists permanently and independently of these particular problems. The goal is to reach a balance between searching for a new, unpredictable stimulation, and striving for predictable results of its own behavior. This goal makes animal behavior autonomous; it allows an animal to choose autonomously problems to solve. On the other hand, this “global” goal may hinder an adaptive solving of particular problems.

Key words: animals, artificial agents, adaptive behavior, autonomous behavior