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"*Intentional Systems*" – Daniel Dennett

Task: What is, and what is not, according to Dennett, involved in treating a system as an intentional system?

In the following I will point out, according to Daniel Dennett, what is involved and what is not involved by treating a system as an intentional system. First of all it is necessary to know what an intentional system is. An intentional system is a system which behaviour may be predicted by adding beliefs and desires to it. It is not important if the system realy has this beliefs and desires, but to assume that it has, in order to predict its behaviour in certain situations. Furthermore it is absolutely necessary to assume that the system acts rational, ratiolality means in this case that the system has an optimal construction regarding to its goals.

Dennett examines three differt approaches which can be used to predict behaviours of systems and objects. These approaches are the functional stance, the physical stance and the intentional stance, which I will explain below.

The first stance is the functional stance, which predicts the behavior of a system by asuming that it works exactly as intended by the constructor. Thereby it is not neseccary to know exacty how the system is constructed, but what will happen if a particular action is performed. That means that you expect the light to glow if you push the light switch. But you do not have to be familiar with the physical processes which take place in that situation.

The second stance is called the physical stance. According to it, predictions about objects and systems can be made by refer to physical laws applied to the situation. For instance: If we throw down an apple off a building, we can predict that it will fall down to the ground according to the law of gravitation. Besides, the physical stance is the only one which can be used to argue about malfunctions of systems. Referring to very complex systems like e.g. a chess computer, the physical stance seems useless since it would be even for the constructor practically impossible to regard and calculate all physical aspects and happenings which influence the output.

The last stance is the intentional stance. It is often used because the first two stances seem not efficient by dealing with very complex systems like chess computers or even humans. To use this stance it is essential to assume the attibute of rationality to the researched system. That means to guess that the system is optimal constructed and will perform the most rational activity in order to gain its goals. It does not matter if the system realy has the wish to reach a certain goal, but to predict its behaviour it is the best to assume that. By treating the system as perfect rational acting and accredit certain whishes and information, it is possible to predict its actions, which should be the most

rational possible ones to be performed to reach the goal. Therefore it is the best to assume that e.g. a chess computer is not a machine that simply processes information but a consciously acting beeing which understands the given information like the position of all chess pieces and acts like a real human opponent.

Naturally, no system is a perfect rational system and it is possible that it does not act in the best rational way to reach its goals or subgoals, but anyway, it is the best tactic to suppose that at first. Afterwards it is helpful to rearrange the predictions in dependency of circumstances which may be differ from the assumed ones. Maybe the system got wrong information and therefore acts in a way that seems irrational, but is rational according to these information. This could be the case if the intentional stance is used on insane or sick people who have diseases in their sensory imput or processing. In such situations we assume that they act rationaly, relating to their goals and information.

The basic intention of treating an object or a being as an intentional system by accredit rationality as well as beliefs and whishes to it, is to be able to make predictions about its behaviour. Thereby it is not necessary for the system to have real whishes or beliefs. We only assume that to be able to predict its behaviour as accurate as possible.