Daniel Dennett - (1979)

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

In the text “Intentional Systems”, which is the first chapter of his book “Brainstorms - Philosophical Essays on Mind and Psychology”, Daniel Dennett introduces his concept of intentional systems. He defines this concept as a useful tool for explaining and predicting behavior in a normative way. Moreover, he compares it to other theories of behavior and ascribes it a basic role in the philosophies of the mind. In the end, he uses the concept to talk about beliefs. I will give a short outlineof his essay and then regard what is involves when a system is treated as an intentional system.

The intentional stance and rationality

Dennett describes how an explanator of behavior has different stances he can choose to consider his subjected system. The design stance is useful when the design of the system is well-known, so predictions about the behavior can be made on grounds of the tactics implemented in the system. The physical stance, in contrast, deals with actual physical states of the system. It is especially useful to talk about malfunctions. But many systems are too complex to predict their behavior from one of those stances (Dennetts example is a chess computer). That's where the intentional stance comes in: By assuming close-to-optimal design of the system, one can just ascribe it rational behavior. By taking the goals of the system into account, as well as the information it posesses, chances are good to be able to predict the behavior of a complex system. Whereever we describe intentional systems, may they be aliens, there is no need to assume they should have beliefs just as ours. Only basic beliefs in logical truth are needed.

The intentional theory versus other theories of behavior

Dennett goes on with a discussion how his “theory of behavior” for a system relates to other theories. First, he mentions how our “common-sense” explanations (by which he could mean Folk Psychology) always deal with intentional vocabulary and question rational behavior only when all other explanations failed. This also holds for our explanations of animal behavior. In the conclusion, he later states that the concept of intentionality could connect this “common-sense” explanations to the physical, “non-intentional” sciences.

Dennett then reveals why we should suppose animals to (at least) follow basic rules of logic. Following this line of thought, he mentions that no intentional system will be perfect, and by ongoing discoveries of the absence of logical truths, the intentional stance has to be abandoned in favor of the design stance.

Dennett now theorizes about theories. He describes how a theory gives an “intelligence loan” everytime it proposes some content of the system for the content has to be used by something that still needs to be analyzed. In the following, he goes into detail how behaviorists (Skinner in particular) tried to get around this loan, designing experiments that use intentional predictions but mask this fact. In this light of loaning unevident content, Dennett admits, the intentional theory is just as empty as Psychology, because intelligence is presupposed. But still, from other, more formal points of view, it is rather useful. Dennett mentions the game theory and economics. In those pragmatic fields the intentional theory “permits a mode of prediction not totally vacuous”.

the concept of intentional systems within the sciences, here: beliefs

In the following, Dennett places his concept of intentional systems within the sciences of the mental. Because this concept is useful for ordering many fuzzy philosophical issues, he expects a

“considerable unification of science”. Still, It would be interesting to discuss what it means for the intentional stance when important discoveries are made in scientific fields on the design stance, like in the emerging field of behavioral economics. The intentional stance would not just function as a basis, but maybe, in a kind of feedback, be reorganized itself.
As an example, he then discusses what questions and what answers arise when when intentional systems are analyzed for the concept of belief. He makes clear how (under the light of optimal design) having beliefs is of no value for the system unless it is able to believe truths. According to this, he formulates the normative element of belief, saying that (1) truths are more often believed than falsehoods and (2), generally, avowals indicate beliefs. Dennett then discusses pragmatic implications of this normative assumption like the breaking of the cycle of beliefs and desire as well as the problem of incorrigibility.

What is involved?
When treating a system as intentional, according to Dennett, the first thing involved is the view of an explanator on a very complex system. The explanator starts with the ascription of goals and specific information to the system, with which it accomplishes the given tasks. The explanator proceeds with the assumption that the system works according to the principle of rationality as well as to basic logical truth. Furthermore, to connect the environment, the concepts of perception and action should, in any way, be performed. If the explanator wishes to give good predictions on the system's behavior, he assumes optimal design. From indicators like the selective environment he can ground his work on no more than the simple things mentioned here.

What is not involved?
One could say that a concept relying on simplicity doesn't need to define what is not involved in it. Nevertheless, Dennett makes some important points. In the concept of intentionality, there are no human concepts involved, therefore no model of the mind is offered. If the explanator talks about desires and beliefs, all he really means are goals and information. Furthermore, this concept does not help with design questions, because it presupposes intelligence and rationality (a big “intelligence loan”). And this concept is also of no big help when actual empirical data needs to be explained, for it plays its role on grounds of the normative only (which Dennett showed in his thoughts about beliefs).