

Introduction

Daniell C. Dennett, American philosopher, is Distinguished Arts and Sciences Professor, Professor of Philosophy, and Director of the Center for Cognitive Studies at Tufts University (USA). His main concern is the philosophy of mind. He intends to give a mechanical explanation of the functioning of consciousness, harmonizing ideas from Wittgenstein, Ryle, Quine, and current results from experimental Psychology. For this reason, he may be described as a thinker who advocates a certain type of Behaviorism by means of: i) a skeptical attitude towards traditional philosophical discourse; ii) a thoroughgoing nominalism which rejects essences and ultimate truths; iii) an optimistic scientism which includes the belief that the best explanation of the functioning of consciousness will be provided by an account of human beings *qua* biological organisms under evolutionary constraints. Dennett's approach is not only naturalistic, but also functionalist, in the sense that human organisms are biological machines whose behavior is controlled by their brains. Such a functionalism is connected with a prevailing interest in relations rather than in properties. This means that the "properties" of objects tend to be treated as relations, and that objects are viewed not in themselves, but holistically, that is, in their connections with other objects. In many ways, Dennett's thinking is close to Rorty's, Nietzsche's and Derrida's thinking. Dennett's style is very much fascinating. He is strikingly able to offer new ideas in a way which is accessible not only to professional philosophers, but also to the great public in general. This is usually done through his method of telling very imaginative elucidative stories, which he calls 'intuition pumps', in order to make his ideas clear.

Dennett was born in 1942 in Boston. In 1963 he got his B.A. in philosophy from the University of Harvard. He got his PhD in 1965, having worked under the supervision of Gilbert Ryle (University of Oxford - UK). From 1965 to 1971, he taught at U.C. Irvine. Since then he is teaching at Tufts University.

His main books are: *Content and Consciousness* (1969), *Brainstorms: Philosophical Essays on Mind and Psychology* (1978), *The Mind's I: Fantasies and Reflections on Self and Soul* (co-edited with D. Hofstadter, 1981), *Elbow Room: The Varieties of Free Will Worth Wanting* (1984), *The Intentional Stance* (1987), *Consciousness Explained* (1991), *Darwin's Dangerous Idea* (1995), *Kinds of Minds: Towards an Understanding of Consciousness* (1996), and *Brainchildren: Essays on Designing Minds* (1998).

Dennett's philosophy is full of theoretical innovations, of which Bo Dahlbom, in his Editor's Introduction to the book *Dennett and his Critics - Desmystifying Mind* (1995), makes the following list: the taxonomy of stances, the intentional systems theory, the consciousness of time, elbow room, hoping for hieroglyphics, free-floating rationales, abstracta and illata,

centers of narrative gravity, virtual machines, real patterns, multiple drafts, heterophenomenology, the Baldwin effect etc. For reasons of space, only some of these aspects will be treated here. In order to make a more comprehensive although brief exposition of Dennett's Philosophy, we shall develop in a more detailed way the main ideas in his method of heterophenomenology, his characterization of the 'intentional stance', his Multiple Drafts model to explain consciousness, and his Darwinian perspective in philosophy.

Heterophenomenology

In Dennett's sense, 'phenomenology' involves the description of anything that belongs to our conscious experience. The usual perspective adopted by traditional phenomenologists is Descartes' *first-person perspective*, in which I describe my internal experience in a monologue which I let other people overhear, counting on everybody to agree. This is based on what Dennett calls 'the first-person-plural presumption': we (another person and I) may speak comfortably together about the things we both find in our streams of consciousness. But the first-person perspective is misleading and generates errors. In fact, we know that most reports made under such conditions are subject to controversy. We may be mistaken either about the extent to which we persons are all basically alike or about the reliability of introspection (instead of merely observing internal phenomena, we might be theorizing about them). Dennett appeals to an interesting "visit to the phenomenological garden", in order to show that we do have some privileged access to our conscious experience, but that we also do tend to think that we are much immune to error in this field than we really are. For this reason, he suggests that we should use the Behaviorists' *third-person perspective*, according to which only facts gathered "from the outside" will count as *data*. Now mental events do not seem to be among the *data* of science. But this does not mean we cannot study them in a scientific way. The challenge is to construct a theory of mental events, using only the *data* allowed by scientific method.

For accomplishing this task, Dennett offers the method he calls 'heterophenomenology'. The method is neutral for investigating and describing the phenomena belonging to our conscious experience. It involves a cluster of experiments and observations in order to extract and purify texts from speaking subjects. Such texts are further used to generate a theoretical hypothesis, the subject's *heterophenomenological world*, which is populated with all the images, sensations, events, and feelings that the subject apparently believes sincerely to exist in his or her stream of consciousness. This world is a neutral portrayal, in the subject's own terms, of what it is like to be that subject. The *data* collected in this way correspond to 'intentional objects' which must be seen from the 'intentional stance'.

The Intentional Stance

Inspired by Ryle's methods, Dennett attempts to dissolve the traditional approach to 'intentionality'. This concept involves the idea that consciousness is always consciousness of *something*. Thus, the main feature of our mental states is the fact that they have a special type of "content". In this sense, whenever we think, we think about such a "content", which may be expressed by our beliefs and desires. And we govern the choice of our actions by considering such beliefs and desires. This is what makes our thinking rational. For this reason, intentionality is conceived as an essential property of the consciousness in human beings.

In a Rylean spirit, Dennett suggests that intentionality is not such a thing, but only a way to look at human beings. Whenever we look at them this way, we are taking what he calls the 'intentional stance'. The latter may be defined as the strategy of interpreting the behavior of an entity as *if* it were a rational agent whose "choice" of a "line of action" is determined by the "consideration" of its "beliefs" and "desires". The 'entity' in question may be either a person, or an animal, or a machine, etc. So, if we say that a certain moving robot chose to alter the course of its trajectory in order to avoid being shocked against an obstacle and being damaged, we are taking the intentional stance concerning the robot.

According to Dennett, there are three different ways by which we can look at an entity in order to understand its behavior. First, there is the *physical stance*, which consists in considering the behavior of the entity on the basis of the principles of physics. In this case, the entity is treated as an object that reacts in accordance with its physical properties (for example, when we predict that a stone released from someone's hand will fall to the ground). Second, there is the *design stance*, which consists in considering the behavior of the entity on the basis of its general design. In this case, the entity is treated as an object that reacts in accordance with the way it was designed to react. We don't need to be acquainted with the physical laws involved (for example, we know that a certain alarm clock of which the buttons have been pressed in a determinate way will make a noise after some hours, although we don't need to know the physical laws involved by the clock in order to perform this action). Third, there is the *intentional stance*, which consists in considering the behavior of the entity on the basis of its rational choices. In this case, the entity is treated as an *intentional system* that chooses a particular line of action in function of its goals (for example, we might consider the alarm clock as our servant that has been given the command to wake us up at a certain time; we would then rely on its ability to understand our command and recognize the precise time of awakening). We may predict the behavior of the alarm as if it were a rational agent. The intentional stance is a useful linguistic shortcut in such case and reveals all its usefulness when the entity involved is more complex than an alarm clock, say, a computer or a person. If this is true, then 'intentionality' is not to be taken too much seriously. It should be treated as a useful fiction and not as a real property of consciousness.

The Multiple Drafts Model for Consciousness

According to Dennett, although materialism is now an opinion approaching unanimity, even the most sophisticated materialists often forget that discarding the Cartesian *res cogitans* involves rejecting the need for a functional center to the brain. Thus, some materialists discard Descartes' dualism while preserving the idea of a central Theater where everything is somehow put together and the stream of consciousness occurs. This approach, which is still based on the idea that the brain has a centered locus, may be called 'Cartesian Theater model'. This is a very useful metaphor and seems the natural way to explain, for example, the sequence in which events may be observed when macroscopic time intervals are involved. But when it comes to microscopic time intervals, the model faces so many difficulties that it should be abandoned.

As a matter of fact, suppose the study made by Kolers and Grünau on the phi phenomenon (1976). This phenomenon was first studied by Wertheimer (1912) and consisted of two small spots separated by a small visual angle which were briefly lit in rapid succession and which were perceived as a single spot moving back and forth. In an analogous experiment, Kolers and Grünau used two spots differing in color and unexpectedly observed that the first spot seemed to begin moving and then changed its color abruptly in the middle of its passage toward the second location. Suppose the first spot is red and the second is green. In this case, our consciousness would have the following order of experiences: first red, then red-turning-to-green, and finally green. Now this raises a problem: how is the brain able to fill in the spot red-turning-to-green before the green spot is seen? The illusory content, red-turning-to-green, can only be created after some identification of the green spot occurs in the brain. So, we must conclude that our consciousness of the whole event must be delayed until after the green spot is perceived. But Dennett argues that this explanation is still based on the Cartesian Theater.

In order to explain this, he appeals to a thought experiment. Suppose someone watches a woman walking with no glasses, but he or she remembers her as wearing glasses. The Cartesian Theater offers two competing explanations for this: i) the Orwellian revision, according to which the subject actually saw the woman with no glasses, but an instant later his or her memory is revised and then he or she firmly believes that she wore glasses; ii) Stalinesque revision, according to which the subject actually hallucinated that the woman was wearing glasses from the moment he or she saw her. The expressions 'Orwellian' and 'Stalinesque' were used under the inspiration respectively of George Orwell's novel 1984, in which the past was revised in conformity with political interests, and Joseph Stalin's dictatorship, in which the present was revised by means of show trials, involving false testimonies and bogus confessions. At this point, Dennett argues that these are not distinct

possibilities no matter how finely we divide up time. When the intervals of time are sufficiently tiny, the distinction between memory revisions (Orwellian) and perceptual revisions (Stalinesque) fades away. We cannot decide what really happened on the basis of the subjects own testimony. Now if the Cartesian Theatre model were true, this question would have an answer at any point. For the model requires that there must be a content that reaches consciousness first: either *walking woman* or *walking woman with glasses*. We must realize here that the experiment implies that there is no privileged “reaching consciousness”. Thus, the question about which explanation, Orwellian or Stalinesque, is the correct one is mistaken and has no answer, since the onset of consciousness does not occur at a precise point located in time.

The alternative Dennett offers is the Multiple Drafts model, according to which all varieties of mental activity are accomplished in the brain by parallel, multitrack processes of interpretation and elaboration of sensorial *data*. All information that enters the nervous system is under continuous “editorial revision”. Dennett illustrates this by recalling that our eyes movements consist of quick fixations, about five a second. This means that they move much more than our heads. So, the images in our retinas should be trembling all the time, just like the images in some home movies taken by inexperienced people. But this is not what we see. The motions of our heads and of our eyes are edited before they reach consciousness. The editorial processes occur over large fractions of a second, in different orders, and during this time several additions, emendations, and overwritings can occur. We experience directly the results of our brains’ editing out our sensory inputs, and not what happens at the edges of our sensory windows (retinas, tympanic membranes, skin surfaces etc.). And a particular editorial process is made only once by a specialized portion of the brain. There is no need of further edition which would be made by a “master” editor (the Cartesian Theater). Besides, it is an open question whether any edited content will eventually appear as a constitutive element of our conscious experience. It would be a mistake to ask *when* such a content becomes conscious, because the functioning of the brain involves many sequences of edited contents which are simultaneously distributed around in different portions of the brain. All these sequences are subject to continual editing processes and they yield, over the course of time, something *rather like* a narrative stream: “at any point in time there are multiple “drafts” of narrative fragments at various stages of editing in various places in the brain” (Consciousness Explained, p. 113). Some of the contents in these drafts will make no contribution at all, some will make only a brief contribution and fade out, some will persist to play a variety of roles in the further modulation of internal states and behavior, and some will even persist to the point of revealing their presence through verbal behavior. The Multiple Drafts model unveils the mistake of supposing that there is a “final” narrative or “published draft”, which would correspond to the actual stream of consciousness within the subject. But how is it that we seem to be singular conscious agents to ourselves and to other

people? Dennett argues that the idea of a “self” results from our fundamental tactic of self-protection, self-control, and self-definition, which consists in telling stories about who we are. We do not consciously and deliberately figure out what narratives to tell and how to tell them. But we do not spin our stories: rather, they spin us. Our human consciousness is their product, not their source. These narratives appear as if they came from a single source, encouraging the audience to posit a unified agent as such a source. In doing this, the audience is positing a *center of narrative gravity*. Physicists take great advantage in positing a center of gravity for an object, a single point relative to which all gravitational forces may be calculated. In the same way, heterophenomenologists take great advantage in positing a center of narrative gravity for a narrative-spinning human body. In this way, human consciousness is explained in terms of the operations of a “virtual machine”, a kind of evolved and evolving software that shapes the activities of the brain. According to Dennett’s model, the role of an inner center is played by the brain’s networks. For a mental content to become conscious it has to win a battle against other mental contents. And that is all there is to consciousness.

The Theory of Evolution and its Consequences

The Theory of Evolution through constant change and selection is another tool Dennett uses for explaining the emergence of complex phenomena, such as consciousness. As a matter of fact, he thinks we descend from self-replicating macromolecules of which the “impersonal, unreflective, robotic, mindless little scraps of molecular machinery are the ultimate basis of all the agency, and hence meaning, and hence consciousness, in the world” (Kinds of Minds, p. 22). In this perspective, each cell is as mindless as a virus, but whenever we put together a sufficient amount of cells, we obtain a conscious person, with a genuine mind.

The book *Darwin’s Dangerous Idea* evaluates the consequences of the Theory of Evolution in biology, cognitive science, and linguistics, locating all the previous aspects of Dennett’s philosophy within a more general framework. According to Dennett, Darwin’s theory implies that the various processes of natural selection, although basically irrational, are powerful enough to have made manifest the whole planning work in our world. Darwin’s dangerous idea lies in the fact that all things resulting from evolution may be explained as by-products of an algorithmic process. There is a single unified Design Space in which all creative processes, biological and human, follow their tracks, using similar methods. In this perspective, biology and engineering are the same thing. Both study functional mechanisms, their design, their construction, and their operation. Once we adopt the perspective of engineering, we are able to explain and unite the central biological concept of ‘function’ with the basic philosophical concept of ‘meaning’. Human species differs from all other species in

virtue of our confidence in the cultural transmission of information, therefore in cultural evolution. Dawkins' meme, the unit of cultural evolution, plays a powerful role in Dennett's analysis of the human sphere. Memes are units of cultural transmission, or of imitation, such as tunes, ideas, catch-phrases, clothes fashions, etc. Genes propagate themselves by leaping from body to body via sperms or eggs, and memes propagate themselves by leaping from brain to brain via imitation (Dawkins, R. *The Selfish Gene*, p. 206). Dennett thinks that human brains are invaded by culture, under the form of memes. This has created human minds. It is the moulding of our minds by memes which gives us the power to transcend our selfish genes. One of the memes, the process of generate-and-test, which is much more refined than the mere trial-and-error process, leads to more powerful kinds of minds, culminating in intentional generating-and-testing of theories by human beings. In this process, the role played by language is fundamental. The meanings of our words result from originally irrational processes, that is, the algorithmic processes which created the whole biosphere. In this perspective, Dennett thinks that even ethics may be redesigned in a Darwinian sense, steering successfully between the traps of Utilitarianism and Kantianism.

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