Below is information about Daniel Dennett's views on mind and language.

1. **The Intentional Stance**

   A. This is appropriately applied to systems whose behavior is goal-directed and information-modulated. That is, it is appropriately applied to systems that have states which are *about* something, i.e., states that have the property of *intentionality*. Here is an argument for this way of thinking about intentional systems, found in Ch. 4, pp. 101-114.

   P1. If system $S$ is goal-directed, it must behave in ways that conduce to achievement of its goal.

   P2. If its goal changes its character over time, then $S$ must be able to track the goal through its changes, reidentifying it at different times.

   P3. If $S$ is to track a changing goal, it must behave in ways that are sensitive to these changes.

   P4. If $S$ is to behave in ways that are sensitive to these changes, it must be able to perceive these changes and have its states be modified as a result of them.

   P5. If $S$ perceives its environment and modifies its states in accordance with its perceptions, then it is an information-modulated system.

   P6. If system $S$ is information-modulated, then it can be credited with states that are *about* the states in the world that it tracks.

   C. Therefore, if $S$ is a goal-directed, information-modulated system, then it is a system that has intentionality; that is, it is an *intentional system*.

   B. There are a number of different types of intentional systems, and to each of these we must ascribe intentionality, "mental states", and some grade of sentience. (See Dennett, Ch. 2 and Ch. 4, pp. 93-98. See also Burwood, et al., on interpretationalism, Ch. 5, pp. 94-102.) Each of these systems is a system with a mind.

   C. **Question #1**: What kinds of minds are there?
II. **Kinds of Minds**

A. **Darwinian Creatures** (pp. 83-84): these organisms are on the lowest level of the "Tower of Generate-and-Test", which mentally endowed organisms. These are "blindly generated, by more or less arbitrary processes of recombination and mutation of genes. These organisms were field-tested, and only the best designs survived."

B. **Skinnerian Creatures** (pp. 85-88): these organisms are Darwinian creatures that can be "adjusted by events that occurred in the field tests." That is, these are creatures that can be trained and conditioned, using ABC learning, to select behaviors from an initial random set that have been reinforced.

C. **Popperian Creatures** (pp. 88-93): these are Skinnerian creatures that can preselect among possible behaviors so that "the truly stupid moves are weeded out before they're hazarded in 'real life'." As Popper put it, "this design enhancement 'permits our hypotheses to die in our stead'." These creatures have an inner selective environment that pre-screens options and selects what it "deems" the best.

D. **Gregorian Creatures** (pp. 99-101): these are Popperian creatures that have inner environments which are "informed by the designed portions of the outer environment." These designed elements can include tools, tags, and words. These enable the creatures to have an influence on the nature of the options that they might select.

E. **Question #2**: Whence come our minds?

III. **Thinking Like Humans**

A. **Unthinking Natural Psychologists** (pp. 119-126)

1. Darwinian creatures can internalize, via selection, a broad range of behaviors that look from the outside to be quite intelligent. As you move up the tower, these become more flexible and more intelligent. Even so, it might be the case that a very intelligent behavior (e.g., the hare's actions vis-a-vis the fox, p. 123) involves only a low grade of sentience and really doesn't evince any thinking at all.

2. In particular, it might be that nature has hard-wired a simple conditional list, or even a complex generalization, into the organism, so that the organism behaves in certain ways as a consequence of the realization of certain environmental conditions. Thus, the behavior might be explicable in terms of a free-floating rationale that is not anchored in any actual thinking in the organism.

3. But when and where does thinking come in?
B. Mind and Language

1. Thinking, Dennett argues, comes in when we begin to use symbols to communicate. But this must happen as a result of environmental pressures. Dennett advances the following argument for this conclusion:

P1. If an agent $A$ can think, then $A$ must be able to represent one's reasons as one's own (p. 131).

P2. If $A$ is to represent one's reasons as one's own, then one must use symbols to represent explicitly one's behavior and states of mind (pp. 132-133).

P3. If one can use symbols in this way, there must be a reason why one has this ability (*tacit*).

P4. The reason is given by the need to communicate something about one's other behavior (p. 127).

P5. If one can communicate about one's other behavior, then there must be a reason to do so (*tacit*).

P6. The reason is given by the need to keep secrets and exploit an information gradient for a competitive advantage (pp. 126-130).

C. Thinking requires language use, which requires a complexification of one's behavioral environment that makes secrets possible.

2. Thus, thinking requires talking.

C. The Nature of Thinking

1. We can think without room-sized brains because we offload our minds into the world, availing ourselves of labels, landmarks, re-representation, and the use of indices (pp. 134-147).

2. We learn to talk (and so put ourselves in a position to think like humans) by talking to ourselves (pp. 147-152).

D. To have minds like ours, complete with consciousness, you need to be able to talk. (See Ch. 6, Section 1.)

1. *The Development of Thinking* (pp. 154-155)

   a. Stage 1: organisms contain unthinking devices that track and discriminate and so have intentionality.
b. **Stage 2**: over time and much change, the designs of these devices track the "free-floating rationales of their own functions." The designs of these devices changed to keep pace with changing circumstances, giving their organism-hosts the *know how* to get by in the world, even though they weren't able to represent their knowledge to themselves (i.e., they lacked *know that*).

c. **Stage 3**: creatures then began to "off-load" some of the work of keeping pace with the environment into the environment itself, trafficking in representations of their world. These representations enabled them become even more flexible, but not necessarily self-reflective.

d. **Stage 4**: creatures develop languages, which enable us to "review, recall, rehearse, redesign our own activities, turning our brains into echo chambers of sorts, in which otherwise evanescent processes can hang around and become objects in their own right." The thoughts that persist the longest and become encoded in memory are our *conscious* thoughts.

2. **The Self**: "The acts and events you can tell us about, and the reasons for them, are yours because you made them--and because they made you. What you are is that agent whose life you can tell about" (p. 156).

3. **Mind Power**: "What makes a mind powerful--indeed, what makes a mind conscious--is not what it is made of, or how big it is, but what it can do" (p. 158).

E. **The Moral Upshot**: What matters from the moral point of view is not where you are in the Tower, but whether you are capable of suffering. He argues that pain and suffering are not identical concepts, focusing on the fact that you can have pain without suffering. If you are an organism that is capable of suffering, then you are surely a member of the moral community; otherwise, it is not clear. The upshot of this line of argument is that most members of the moral community will be human-like. Dennett's argument runs as follows:

P1. If a creature is to have moral standing, then it must be capable of suffering.

P2. If a creature is capable of suffering, then it must have a complex internal organization that supports memory, etc.

P3. If it has such an internal organization, then it is mentally human-like.

C. Creatures with moral standing are mentally human-like.

Thus, both pain and a human-like internal organization are necessary but not sufficient for suffering; if suffering is truly what matters, then we will find the
moral community at the top of the Tower. (See Ch. 6, pp. 161-168.)