

The Nature of Consciousness

Handout [10]

Daniel Dennett and Marcel Kinsbourne:

Time and the Observer: The Where and When of Consciousness in the Brain

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§ The Goal:

We show how uncontroversial facts about the spatial and temporal properties of information-bearing events in the brain require us to abandon a family of entrenched intuitions about "the stream of consciousness" and its relation to events occurring in the brain: There is no stream of consciousness and there is no single personal perspective in the brain.

§ 1. Two Models of Consciousness

A. Cartesian Materialism

* (i) The assumption of a point of view

___ Wherever there is a conscious mind, there is a point of view. A conscious mind is an observer who takes in the information that is available at a particular continuous sequence of times and places in the universe. A mind is thus a locus of subjectivity, a thing it is like something to be.

[Criticisms]

(i) There is no single point in the brain where all information funnels in.

(ii) If the "point" of view of the observer is spread over a rather large volume in the observer's brain, the observer's own subjective sense of sequence and simultaneity must be determined by something other than a unique "order of arrival."

* (ii) The assumption of a single locale for consciousness.

___ It is tempting to suppose that there must be some place in the brain where "it all comes together" in a multimodal representation or display that is definitive of the content of conscious experience.

[Criticisms]

(i) Where does it all come together? Nowhere.

(ii) The brain must be able to "bind" or "correlate" and "compare" various separately discriminated contents, but the processes that accomplish these unifications are themselves distributed throughout the whole brain.

*** (iii) The assumption of objective temporal order**

___ The temporal properties of the events that occur in that particular locus of representation determine the temporal properties -- of sequence, simultaneity, and real-time onset, for instance -- of the subjective "stream of consciousness."

[Criticisms]

(i) We need other principles to explain the ways *subjective temporal order* is composed, especially in cases in which the brain must cope with rapid sequences occurring at the limits of its powers of temporal resolution.

*** [Summary]**

___ **"Cartesian Materialism": the view that there is a centered locus in the brain. [The view one arrives at when one discards Descartes' dualism but fails to discard the associated imagery of a central (but material) theater where "it all comes together."**

[Criticism]

(i) **The brain itself is the Headquarters, the place where the ultimate observer is, but it is a mistake to believe that the brain has any deeper headquarters.**

(ii) infinite regress of homunculi:

___ **If all the tasks Descartes assigned to the immaterial mind have to be taken over by a "conscious" subsystem, its own activity will either by systematically mysterious or decomposed into the activity of further subsystems that begin to duplicate the tasks of the "nonconscious" parts of the whole brain.**

B. [the Multiple Draft Model]

*** 1. multiplicity of orders**

___ **At any point in time there are multiple "drafts" of narrative fragments at various stages of "editing" in various places in the brain.**

___ **It is always an open question whether any particular content thus discriminated will eventually appear as an element in conscious experience.**

___ **Probing this stream at different intervals produces different effects, elicits different narrative accounts from the subject.**

___ **The Multiple Drafts model avoids the tempting mistake of supposing that there must be a single narrative (the "final" or "published" draft) that is canonical -- that represents the actual stream of consciousness of the subject, whether or not the experimenter (or even the subject) can gain access to it.**

*** 2. no representation**

___ Once a localized, specialized "observation" has been made, the information content thus fixed does not have to be sent somewhere else to be re-discriminated by some "master" discriminator.

[Question: If Dennett thinks there is no higher-level viewing of lower-level mental events, how would he explain away our experience of "introspection"?)

*** 3. interaction with the whole system**

___ How a localized discrimination contributes to, and what effect it has on the prevailing brain state (and thus awareness) can change from moment to moment, depending on what else is going on in the brain.

*** 4. constant revision**

___ The "stream of consciousness" is not a single, definitive narrative. It is a parallel stream of conflicting and continuously revised contents, no one narrative thread of which can be singled out as canonical -- as the true version of conscious experience.

*** 5. temporal order**

___ The objective temporal properties of discriminatory states may be determined, but they do not determine temporal properties of subjective experience.

§ Dennett's Observation of the Troubling Cases Concerning "Temporal Anomalies" of Consciousness:

[1] In general, we must distinguish features of representings from the features of representeds.

[2] The representation of temporal properties \neq the temporal properties of representations

___ That is why fixing the exact time of onset of some representing element in some place in the brain does not provide a temporal landmark relative to which other elements *in the subjective sequence* can -- or must -- be placed.

[3] The brain decides the temporal order of events not by *when* individual representing events happen in various parts of the brain, but their *temporal content*.

[Question: *Who* in the brain is making all these decisions about temporal ordering?]

[4] A second constraint on timing:

___ It does not matter in what order representations occur so long as they occur in time to contribute to the control of the appropriate behavior.

What would be truly anomalous would be in the time that elapsed between the dog-stimulus and the "dog"-utterance were less than the time physically required for this content to be established and moved through the system. No such anomalies have been uncovered, however.

§ Orwellian and Stalinesque Revisions: The Illusion of a Distinction

Orwellian (recalling George Orwell's chilling vision of the Ministry of Truth in 1984, which busily rewrote history and thus denied access to the (real) past to all who followed).

___ **post-experiential contaminations or revisions of memory.**

Stalinesque

___ **to stage show trials, carefully scripted presentations of false testimony and bogus confessions, complete with simulated evidence.**

*** Dennett's claim:**

___ **This distinction works unproblematically in the everyday world, at macroscopic time scales. But in the subject's recollected experience, the distinction between perceptual revisions and memory revisions that works so crisply at other scales is not guaranteed application.**

___ **One can always "draw a line" in the stream of processing in the brain, but there are no functional differences that could motivate declaring all prior stages and revisions unconscious or preconscious adjustments and all subsequent emendations to the content to be post-experiential memory-contamination. The distinction lapses at close quarters.**

***** The experiments we selected for discussion are concerned with events that were constricted by unusually narrow time-frames of a few hundred milliseconds. At this scale, we have argued, the standard presumption breaks down.**

§ Conclusion

1. The representation of sequence in the stream of consciousness is a product of the brain's interpretative processes, not a direct reflection of the sequence of events making up those processes.

2. The representation of space in the brain does not always use space-in-the-brain to represent space, and the representation of time in the brain does not always use time-in-the-brain.

[Final Question: How could one use Dennett's Multiple Drafts model theory to explain *self-consciousness*; the awareness of the "I"?)