

James's Solution to the Measurement Problem: Automatism Case Study

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- Measurement Criteria: third-person observable structures or functions that are reliable indicators that a creature is conscious
- Measurement Problem: the challenge of finding independently acceptable justification for measurement criteria
- Measurement Criterion Schema **M**: *if* a creature shows some third-person observable property **O** (such as executing choosing behavior), *then* that creature has the property **C**, being conscious.

$M = \forall x (O_x \rightarrow C_x)$

O = a third-person observable property
(such as means-ends choosing)

C = the property of being conscious

- Peirce on abductive inference:
The surprising fact, *C*, is observed;
But if *A* were true, *C* would be a matter of course.
Hence, there is reason to suspect that *A* is true. (Peirce 1931 – 1958, 5.189)
- Plugging James's "hypothetical statement" (1879, 14) into Peirce's abduction schema, the argument looks like this:
Surprising fact: the hemispheres have been experimentally associated with the capacity for regulated ("prudent") behaviors.
But if a *hypothesis* were true (that consciousness is seated in the hemispheres and regulates behavior by enabling evaluation), then (1) would be a matter of course.
Hence there's reason to suspect that the hypothesis in (2) is true.
- James's abductive argument, slightly more formally:
 $O_x = x$ has the observable property of regulated behavior
 $C_x = x$ has evaluative conscious states
The surprising fact, O_x , is observed;
But if C_x were true, O_x would be a matter of course.
Hence, there is reason to suspect that C_x is true.

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