Twitter Thread by Carlos E. Perez
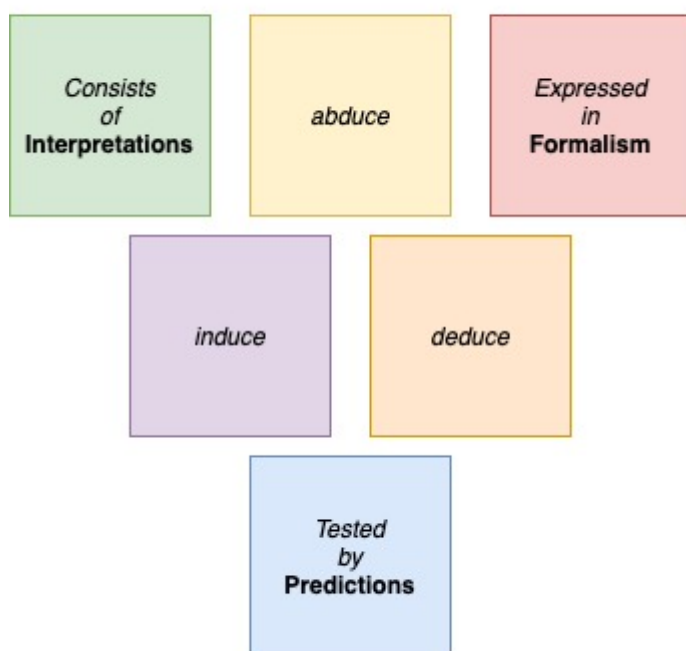
Carlos E. Perez
@IntuitMachine

A good theory of consciousness is one that predicts behavior that is unexplained by other current theories of consciousness. Einstein's General Theory was given credence because it predicted the bending of light.

What do current theories of consciousness predict that is outside common intuition about the nature of consciousness?

Many theories of consciousness are elegant, but do they predict anything out of the ordinary?

A theory of consciousness must be expressed in a formulation, consists of interpretations that are valid and predict something unexpected.
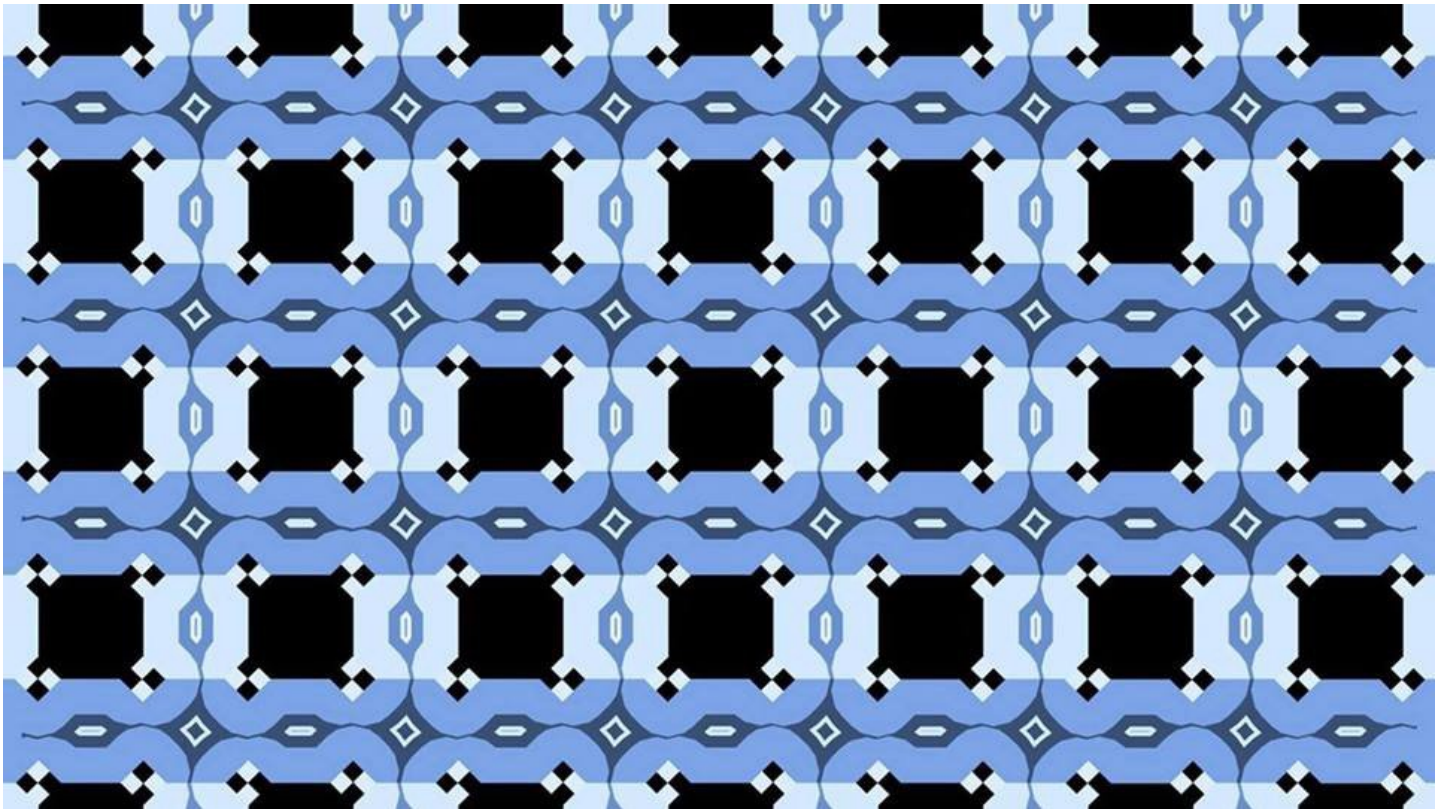
A bad theory of consciousness has ambiguous interpretations and predicts nothing out of the ordinary.

What is missing in theories of consciousness, (see: global neural workspace and higher-order theory) is an explanation of the mechanism of inference. Missing is HOW a subconscious thought leads to conscious thought.

Dennet in his inversion of reasoning alludes to the idea that it thought itself is an emergent phenomena analogous to evolution also being an emergent phenomena. Of course there are a lot of details that goes into an emergent phenomena.

We do know from Deep Learning how to create intuition. Which is commonly thought of as a System 1 (hence unconscious) process. However, you still have to tie the reflective cognition (System 2) with System 1. A lot of this is glossed over in consciousness theories.

So, going with the same analogy of General Relativity of the bending of light due to gravity, a theory of consciousness must explain why these lines appear to bend when they do not:

Because a theory of consciousness must also be a theory of perception.