Setting the Stage

Are Humans Rational?
Selmer Bringsjord
September 7 (mods Sept 11) 2017
Seating all set?
http://kryten.mm.rpi.edu/COURSES/AHR/ahr.html

New ver of syll up.

Any questions/comments re syll & course mechanics?
Humans, at least neurobiologically normal ones, are fundamentally rational, where rationality is constituted by certain logico-mathematically based reasoning and decision-making in response to real-world stimuli, including stimuli given in the form of focused tests; but mere animals are not fundamentally rational, since, contra Darwin, their minds are fundamentally qualitatively inferior to the human mind. As to whether computing machines/robots are fundamentally rational, the answer is also “No.” For starters, if $x$ can’t read, write, and create, $x$ can’t be rational; neither computing machines/robots nor non-human animals can read nor write nor create; ergo, they aren’t fundamentally rational for this reason alone. But news for non-human animals and computing machines/robots gets much worse, for they have not the slightest chance when they are measured against $\mathcal{H}$. 
Humans have the ability to gain knowledge by reasoning (e.g., deductively) quantificationally and recursively over abstract concepts, including abstract concepts of a highly expressive, including infinitary, nature, expressed in arbitrarily complex natural language.
Problem!
Or test. For an overview of Psychometric AI, see:
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(the pair represented in mind of $h$)

$\langle \chi, \pi \rangle$

$\chi$ (context)

$\pi$ (problem)
\( \langle \chi, \pi \rangle \)
Formalism 1
Formalism 2
Formalism 3
...

$h$

$\langle \chi, \pi \rangle$
\[ \langle \chi, \pi \rangle \rightsquigarrow \langle \alpha, \text{argument/proof} \rangle \]
Today’s machine-learning systems are fundamentally incapable of providing the argument/proof.

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Contrarian view on animal minds in Nat. Geo.:

http://ngm.nationalgeographic.com/2008/03/animal-minds/virginia-morell-text
Main Claim

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2. “Why are reading and writing so important? Hearing and speaking, why isn’t that sufficient?”
   ✦ Well, the limitations of working memory, for one, means that reading and writing are tremendously powerful, cognitively speaking. Perhaps I once had Hamlet’s famous soliloquy praising the human mind memorized, but I don’t now — yet I can just look it up!
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