Artificial Intelligence Overtakes Human Intelligence: *Reality, Possibility, or Fantasy?*

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What is Intelligent

- The general mental ability of living creatures for understanding, planning, solving, abstraction, expression, language, learning, etc.

- The three types of intelligent (triarchic theory, Robert Sternberg)

  - Componential intelligent: analytical subtheory

  - Experimental intelligent: creative subtheory

  - Contexture intelligent: contextual (practical) subtheory

What is Artificial (machine) Intelligent

- Man made intelligent, mostly means intelligent generated by computing systems (cyber capacity)
- Mimic "cognitive" functions that humans associate with other human minds, such as "learning" and "problem solving"

Artificial Intelligent: current approach

- *Symbolism*: all methods in AI that are based on high-level "symbolic" (human-readable) representations (expert system)

- *Connectionism*: or neuronlike computing: attempt to understand how the human brain works at the neural level (deep learning)

- Behaviorism: the theory that human behavior can be explained in terms of conditioning, without appeal to thoughts or feelings,

Artificial Intelligent: current approach

Problems

- *Symbolism does not work well (have done what it can do)*

- *Connectionism works (with the availability of big data and computing power and in limited areas of experimental intelligent), but deep learning*
  - *lacks of a theoretical foundation*
  - does not learn, but trained (curve fitting)
  - where are the killer applications?
  - for how long?

Artificial versus Human Intelligent

- Artificial intelligent (current)
  - Non-human, intimidating
- Brain-inspirited intelligent (next step)
  - Restart to improve, new machine? but …
- Bran-like intelligent (what we want)
  - No clue
- Human's intelligent
  - logical, linguistic, spatial, musical, kinesthetic, intra-personal, inter-personal, naturalist, graphics

Conclusion

- *Symbolism*: have theory but does not work well
- *Connectionism*: works but no theory, most importantly, it does not have intelligent
- *Brian-inspirited*: how much it can improve current state-of-the art
- Brain-like: when we can understand how human brain works?

Conclusion: Will AI Overtakes Human

- Reality

    No

- Possibility

    Not until it has (human-like) intelligent

- Fantasy

    Look like