



Disintegrated intelligence

Description

One of the impediments to convincingly intelligent systems is that their functions are *specific*. A smart chess playing program may be able to win against a chess master, but it can't author a blog about AI, or make an omelette.

Nor can it play other games, such as Pictionary – that is, unless it's programmed to perform those tasks, and with the necessary interfaces. Most consumer-oriented smart systems are mono-functional: smartphone face recognition, the [Shazam app](#) that identifies a piece of music in seconds, translation apps, etc.

These can be combined into a single system or device (e.g. a smartphone). But we might expect a smart system to do more than combine an array of clever programs. It needs to *integrate* these functional components, i.e.

- incorporate some mechanism for activating each AI system as it is required: – this is a chess-playing situation so it's time to activate the chess algorithm
- bring several systems to bear on a particular problem-solving task: to navigate through the city the mobile robot needs to recognise visual features, pick up sonic cues and interpret spoken instructions
- manage conflicting information and logics delivered through its sensors and rule sets: it sounds like I'm being told to turn right, but it looks (visually) like a dead end.
- learn across its various functional components, and develop new functionalities.

None of these integrative tasks is/are trivial.

The audio attached to this post is a one-sided conversation about AI integration and some of its problems, introduced via a class Q&A activity about AI. We set up a notional pyramid, with a human at the apex supported by a series of chat bots, fed by hand-written questions from radiating tables of human interrogators.

I'm over-dramatising, but it looked like this.



https://richardcoyne.com/wp-content/uploads/2018/11/ai_2-10112018-12-50.mp3

To listen as a podcast on a smartphone or other podcast app see [Podcast instructions](#)



Notes

- There was some discussion about Mechanical Turk. See <https://www.mturk.com>.
- On the flipped classroom model see [Flipped classroom 101](#).
- On AI see [The hermeneutical intractability of Asimov's three laws of robotics](#).
- Chatbots used:
<http://www.mitsuku.com/>, <https://www.eclecticenergies.com/ego/eliza>, <http://www.cleverbot.com/>,
[Rose](#), Siri, Alexa, etc.
- Denitsa Petrova took the overhead photograph.



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2. Podcast

Tags

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