

Towards an anthropology of the artificially intelligent

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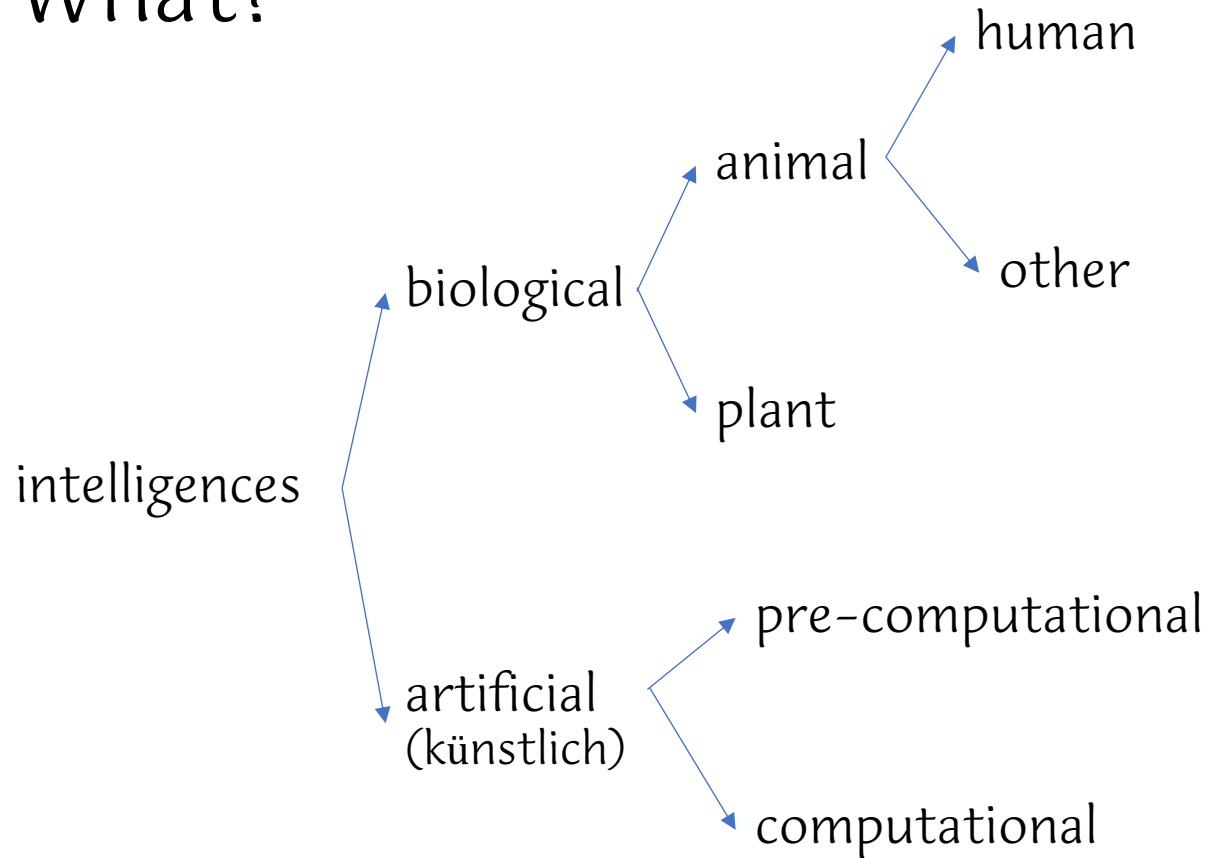
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Combinatorial genesis. “A free play of innumerable factors, a play neither directed at any goal nor predetermined by any cosmic teleology, a play in which nothing is determined except the rules of the game has, on the molecular level, led to the origin of life. It has caused evolution and moved phylogenetic development in the direction from lower to higher organisms. ... It would seem that this free play is the prerequisite for all truly creative processes, for those of human culture just as for those of evolution.” [Konrad Lorenz, *The Foundations of Ethology*]

Brain in the root. “It has always pleased me to exalt plants in the scale of organised beings... [Charles Darwin, *Autobiography*] It is hardly an exaggeration to say that the tip of the radicle... acts like the brain of one of the lower animals...” [The Power of Movement in Plants]

Intelligence across *Animalia*. Cognitive ripples spread from apes to monkeys to dolphins, elephants, and dogs, followed by birds, reptiles, fish, and sometimes invertebrates.... [D]iscoveries of mental life ripple across the animal kingdom... [hence] my cognitive ripple rule: *Every cognitive capacity that we discover is going to be older and more widespread than initially thought.* This is rapidly becoming one of the best-supported tenets of evolutionary cognition. [Frans de Waal, *Are We Smart Enough to Know How Smart Animals Are?*]

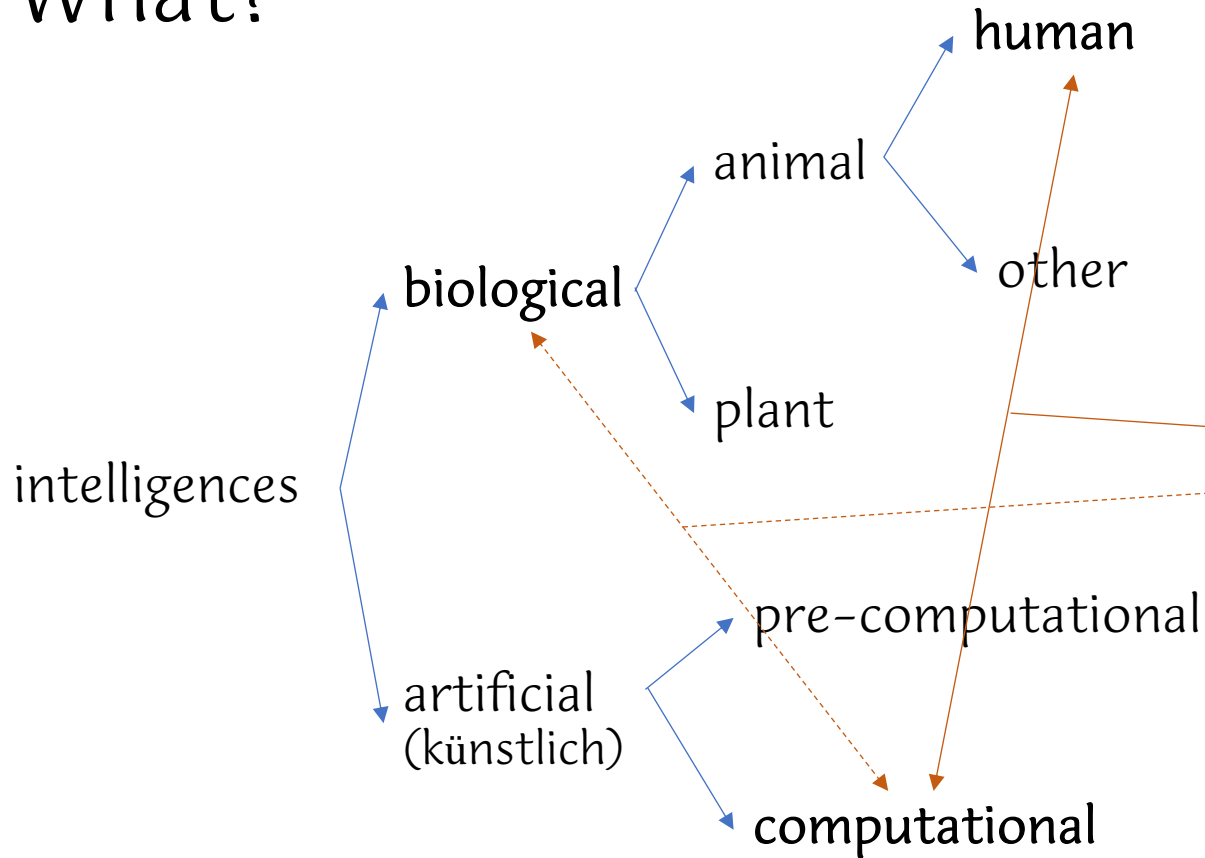
What?



Where?

1. In the brain
2. Beyond the skull & skin
3. Somewhere in-between

What?



Where?

1. In the brain
2. Beyond the skull & skin
3. *Somewhere in-between*

? history of experimental science; cognitive psychology; ethnomathematics; combinatorics; Lucretian physics; anthropology of symmetry and of divination...

A few starting points

A. Multiple kinds of (human) intelligence

2011/1983. Gardner, Howard. *Frames of Mind: The Theory of Multiple Intelligences*.

B. Extended mind

2015/1979. Gibson, James J. "The Theory of Affordances". In *The Ecological Approach to Visual Perception*.

2008. Clark, Andy. *Supersizing the Mind: Embodiment, Action, and Cognitive Extension*.

2014. Anderson, Michael L. *After Phrenology: Neural Reuse and the Interactive Brain*.

C. Psychology of intelligence

1979. Neisser, Ulrich. "The Concept of Intelligence".

1994. Khalfa, Jean, ed. *What is Intelligence?*

2011. Sternberg, Robert J. and Scott Barry Kaufman, eds. *The Cambridge Handbook of Intelligence*.

D. Ethology

2016. de Waal, Frans. *Are We Smart Enough to Know How Smart Animals Are?*

2016. Godfrey-Smith, Peter. *Other Minds: The Octopus and the Evolution of Intelligent Life*.

E. Botany

2006. František Baluška, Stefano Mancuso and Dieter Volkman, eds. *Communication in Plants: Neuronal Aspects of Plant Life*.

2014. Trewavas, A.J. *Plant behaviour and intelligence*.

F. Automata & artificial life

1966/1949. von Neumann, John. "Re-evaluation of the Problems of Complicated Automata—Problems of Hierarchy and Evolution". *Theory of Self-Reproducing Automata*. Ed. Burks. P. 77.

1989. Pattee, H. H. "Simulations, Realizations, and Theories of Life". In *Artificial Life VI*. Ed. Langton.

G. Interaction design

2007. Suchman, Lucy. *Human-Machine Reconfigurations: Plans and Situated Actions, 2nd Edition*.

2012. Duguid, Paul. "On Rereading. Suchman and Situated Action". *Le Libello d'AEgis* 8.2: 3-9.

H. Epistemic things

2004. Baird, Davis. *Thing Knowledge: A Philosophy of Scientific Instruments*.

2004. Daston, Lorraine, ed. *Things That Talk: Object Lessons from Art and Science*.

I. Biology and computing

2002. Keller, Evelyn Fox. *Making Sense of Life: Explaining Biological Development with Models, Metaphors, and Machines*.

J. Anthropology

2018. McCarty, Willard. "Modelling What There Is: Ontologising in a Multidimensional World". *Historical Social Research*, Supp. 31: 33-45. <https://www.jstor.org/stable/26533625>

K. First contact

1966. Milic, Louis T. "The Next Step". *Computers and the Humanities* 1.1: 3-6.