

Abstract, Aristotle and Artificial Intelligence

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There is considerable confusion, both in the popular mind and the scientific community, regarding the nature of “artificial intelligence”. John McCarthy, co-author of the paper in which the term AI was first introduced, expressed the hope that computers would become “as intelligent as humans”. I suggest that, strictly speaking, the term “artificial intelligence” is a misnomer. As in many other matters, Aristotle’s common-sense approach, as exemplified in the *Categories* and *De Anima*, can help clarify the language and concepts involved. We may ask: Where do the terms “artificial” and “intelligence” fit in the scheme of Aristotle’s categories of being? Intelligence is not a self-standing entity, but rather a verbal substantification of the quality “intelligent”. It is more accurate to speak of an intelligent individual. Alternatively intelligent may refer to the act of intellect exercised by an individual. We speak of artificial intelligence, but not of an artificial intellect – as we speak of an artificial limb, such as an arm or a leg. To speak of “artificial” intelligence is to describe analogously and by approximation a mechanistic calculation that feebly mimics human thought. Art imitates nature. Artificial intelligence simulates the natural activity of intellectual insight, but can never replicate or replace it, far less supersede it. The greatest sign of genius, according to Aristotle, is the invention of metaphor. Computers are equipped to translate lengthy passages of prose – more or less satisfactorily – but they could never create poetry. They cannot conceive new metaphors nor, any more than animals, initiate or recognize symbolic behaviour. It is imaginable that a computer, encoded with complicated algorithms, might produce a formulaic “poetry”, but the result would derive ultimately from the human programmer. A computer could never recognize the seventy odd tropes that add nuance to human language. It could never distinguish between irony and litotes, much less detect if the use of litotes is itself ironic. Aristotle defines nature as that which has within itself an intrinsic principle of rest and motion. A computer has no intrinsic interiority: it does not grow organically from within but is assembled from without from pre-existing parts. Unlike a computer which can be dismantled and reconstructed to function perfectly again, a plant cannot be taken apart and reassembled. That is the fundamental difference between nature and an artificial construct, of which “artificial intelligence” is a byproduct.