Minds, brains and programs: analysis

“ Searle is arguing that a computer couldn’t understand Chinese”. Is this the right way to describe the view that Searle is arguing for in “ Minds, Brains, and Programs”? If not, why not? In his Chinese Room argument, Searle observes that if manipulating Chinese symbols according to formal rules is insufficient for the person to understand Chinese, it is also insufficient for a computer to understand Chinese-both are engaging in “ mindless” symbol manipulation. However, he isn’t arguing that a computer couldn’t understand Chinese, but rather that their programs themselves can’t understand Chinese-symbol manipulation isn’t constitutive of or sufficient for minds.

Searle is not arguing that computers/machines can’t think. In fact, he believes that only a machine can think (namely brains and machines that have the same causal powers as brains); he says that brains are machines, and brains think. However, according to Searle, whether something thinks depends not only on the program that it is running but also its hardware-the nature of the thing running the program. Simply implementing a program that is formally isomorphic to human thought processes, as in the Chinese Room example, is insufficient for intentionality and consequently thought (in this case, understanding Chinese) since a program can be instantiated without mental states-essentially, Searle’s argument is that formal computations on symbols cannot themselves produce thought.

What is the systems response to the Chinese Room argument? Is Searle correct to think that the response begs the question because it assumes that the system understands Chinese?

The systems response to the Chinese Room argument acknowledges that the man running the program does not understand Chinese. However, he is a part of a larger system that is comprised of the complete set of components that is necessary for answering the Chinese questions, and which as a whole does understand Chinese.

Simply asserting that although the man wouldn’t understand Chinese the whole system would, does beg the question. However, Searle is incorrect to think that the complete systems response begs the question-it counters Searle’s argument by observing that the Chinese room argument is logically invalid, being as its conclusion does not follow logically from its premise. Inferring that the system of which the man is a component does not understand Chinese from the premise that the man himself does not understand Chinese is invalid, because there is no logical connection between the premise and the conclusion.

What is the point of Searle’s “ Chinese Gym” example? What do you think the right response to it is?

In his “ Chinese Gym” example, Searle illustrates a hypothetical Chinese gym, populated by monolingual English speakers that follow instructions in English to collectively produce output indistinguishable from that of native Chinese speakers. It is analogous to the Chinese Room example but with more people and involves parallel processing-it can perform many computations at a time. Its purpose is to oppose Strong AI. Searle’s main argument is that it is self-evident that the only things occurring in the Chinese gym are meaningless syntactic manipulations from which

intentionality and subsequently thought could not conceivably arise, both individually and collectively.

Using the same method in which Copeland used the systems response to defend Strong AI and respond to the Chinese Room argument, we can respond logically to the “ Chinese Gym” example. In other words, it is invalid to infer that a system (the gym) which consists of entities that don’t understand Chinese doesn’t understand Chinese, from the simple premise that the entities that comprise the system don’t understand Chinese. There is no logical connection between the premise and the conclusion.

Question 3

“ No amount of knowledge of the neural basis of taste experiences (or any other physical information) will enable you to know what Marmite tastes like. Only tasting Marmite can tell you what Marmite tastes like.” Why is this an objection to physicalism?

Physicalism holds that everything is comprised solely of its physical properties; that is, only physical things exist and everything is explicable in terms of the physical. The Physicalist would argue, for instance, that what it is like for someone to taste Marmite is one and the same as some physical quality-knowing the pertinent physical facts of the taste of Marmite are sufficient for knowing the actual taste of Marmite itself.

Therefore the statement in question is an objection to physicalism being as it implies that there aren’t only physical properties since only tasting Marmite can really tell you what Marmite tastes like-for every experience there exist

subjective, phenomenal qualities that one could not know of solely via knowledge, but only through experience. In other words, one will have experiences for which one has no corresponding concept; experiences extend beyond simple, learnable physical qualities. This is an objection to the physicalist’s argument that for everything in the universe there exist only objective, physical bases for everything in the universe.

How would Lewis respond to the argument in (a)? Is this a good response?

The argument in (a) is analogous to the Knowledge Argument, which Lewis would respond to with the Ability Argument. His position on (a) is in the middle. He agrees that there are aspects of ability that do not consist simply of information possession, and that we do call knowledge. However, he contrasts possessing a new fact with possessing a new ability-having a new experience does not imbue an individual with any new propositional knowledge, but only a bundle of abilities (to imagine, remember and recognize: know-how). These are abilities you cannot gain except by tasting Marmite, and learning what an experience is like means gaining certain abilities-he is fine with the argument in (a), but simply distinguishes that abilities rather than special phenomenal facts are acquired via experiences. This is a good response because learning what an experience is like means gaining certain abilities but it’s up for grabs what, if anything, the causal basis for those abilities may represent. There is no proof that tasting Marmite is the only way to know what it tastes like as the experience allows one to acquire special phenomenal facts which cannot be represented in any other way nor taught, other forms of tasting Marmite that lead to the same brain state may exist.

What is the “ hard problem” associated with the taste of Marmite, and how does it contrast with “ easy” problems associated with explaining taste experiences?

The hard problem questions how and why neural processes lead to certain subjective experiences. In the context of tasting Marmite, it is associated with the subjective experience of the taste of Marmite-facts about conscious experience that cannot be deduced from physical facts about the functioning of the brain. The problem of explaining the subjective taste of Marmite, or why the experience even exists in the way it does, is hard. In other words the “ hard problem” is the problem of explaining why a brain state necessary and sufficient for having the experience of tasting Marmite is correlated with the experience of tasting Marmite and not with some other experience. Here we have no conceptions of how physical goings-on give rise to experiences.

This contrasts with the easy problem of experiences, which concerns the objective mechanisms of the cognitive system-everything can be ‘ solved’ or explained in terms of neurological or physical goings-on that stimulate certain responses. In the context of taste experiences, the easy question would state that the experiences come into existence simply when neurotransmitters activate taste buds.