According to john searle essay

Prompt: According to John Searle, strong analytical devices that have Artificial Intelligence can, at most, have a strong sense of syntax and as such can interpret information by syntactic means. If given the opportunity, would a digital computing device (using syntactical device as a means for interpretation) be able to choose between different means of social/political/economic way of life? What means of life would the digital device choose? Give an analysis of how this decision would come about.

Give John Searle's reply to these remarks. John Searle worries that the contemporary interpretation of a computing devices' " thought process" might be misconstrued as actual thought. His main focus shines on the notion of a computing device that has strong Artificial Intelligence (AI) and is capable of arriving at seeming judgments in a fashion that is in accordance with our thought process. His first three chapters of Minds, Brains, and Science is devoted to a series of thought experiments to entertain as well as evaluate such a situation where a computer would be given the hypothetical opportunity to " think.

" The main thrust of these thought experiments were to show that no matter how well a computer was able to manipulate a series of symbols, these manipulations or classical interpretation wouldn't not be enough to actually extrapolate any sort of meaning out of the symbols/words/sentences in question. The topographical interpretations of these symbols vis-ï¿½-vis meaningful interpretation of these symbols were accounted for as syntax versus semantics. In short, syntactic manipulation of formal symbols does not by itself constitute semantics. However, an interesting notion comes about as to whether or not such a computational device would be able to

signal one set of social/economic/political ideals over another with nothing more than a syntactical interpretation.

Seemingly, to choose one set of values over another would take no more interpretation other than to evaluate pure benefits from each. This conception of beneficiary power brings about a set of circumstances that were not addressed; it is my contention that through a careful analysis of the ways and means that a device exhibiting strong AI would examine such situations, we will be able to see the merits of one system versus another in a purely syntactical and analytical approach. John Searle gives a strong analysis towards the notion of whether or not digital computing devices are capable of thought in the way humans are. The general notion that has been given is that computers are given to have abilities to symbolic interpretation, or information processing. This processing of symbols is what Searle argues as nothing more than a syntactical interpretation of information because we really do not have any sort of meaning that can be extrapolated from these symbols other than the way they may fit together. This problem is cited in the “ Chinese room” argument that John Searle brings forth.

In this particular argument, the setup of the debate on whether a computer may have a distinguishable argument based in semantics versus pure syntax is as follows: Searle asks you to imagine yourself a monolingual English speaker ” second batch of Chinese script” and “ a set of rules” in English “ for correlating the second batch with the first batch.” The rules “ correlate one set of formal symbols with another set of formal symbols”; “ formal” (or “ syntactic”) meaning you “ can identify the symbols entirely by their shapes.” A third batch of Chinese symbols and more instructions in English

enable you “ to correlate elements of this third batch with elements of the first two batches” and instruct you, thereby, “ to give back certain sorts of Chinese symbols with certain sorts of shapes in response.” Those giving you the symbols “ call the first batch ‘ a script’ [a data structure with natural language processing applications], “ they call the second batch ‘ a story’, and they call the third batch ‘ questions’; the symbols you give back “ they call .

. . ‘ answers to the questions'”; “ the set of rules in English . . .

they call ‘ the program'”: you yourself know none of this. Nevertheless, you “ get so good at following the instructions” that “ from the point of view of someone outside the room” your responses are “ absolutely indistinguishable from those of Chinese speakers.” Just by looking at your answers, nobody can tell you “ don’t speak a word of Chinese.” Producing answers “ by manipulating uninterrupted formal symbols,” it seems “ as far as the Chinese is concerned,” you “ simply behave like a computer”; specifically, like a computer running Schank and Abelson’s “ Script Applier Mechanism” story understanding program (SAM), which Searle’s takes for his example. But in imagining himself to be the person in the room, Searle thinks it’s “ quite obvious .

. . I do not understand a word of the Chinese stories. I have inputs and outputs that are indistinguishable from those of the native Chinese speaker, and I can have any formal program you like, but I still understand nothing.” “ For the same reasons,” Searle concludes, “ Schank’s computer understands nothing of any stories” since “ the computer has nothing more than I have in

the case where I understand nothing". Furthermore, since in the thought experiment " nothing .

. . depends on the details of Schank's programs," the same " would apply to any computer simulation" of any " human mental phenomenon"; that's all it would be, simulation. Contrary to " strong AI", then, no matter how intelligent-seeming a computer behaves and no matter what programming makes it behave that way, since the symbols it processes are meaningless (lack semantics) to it, it's not really intelligent. It's not actually thinking. Its internal states and processes, being purely syntactic, lack semantics (meaning); so, it doesn't really have intentional (i.

e., meaningful) mental states. 1The implications for this sort of syntactic interpretation and strong AI were held to be the following: first, syntactic interpretation fails because the formal syntax of a computer program has been shown not to be intrinsically semantic, and second, strong AI fails because a system's behaving as if it had mental states is insufficient to establish that it does in fact have these states. This worry transcends into his argument of how computing devices aren't truly able to think in the conventional sense that you and I take.

The further implications of thought goes into John Searle's conception of what it means to have choice, and it is this conception of choice in tandem with a computing device's full capacity to process information that I will focus on later. It is accepted that computers exhibiting strong AI will not be able to illicit a semantic interpretation out of a situation; I postulate that in a situation that warrants a judgment based on informational facts (not needing

meaningful informational interpretation), a computing device may be able to evaluate one type of social/political/economic situation over another. I base this argument on the fact that a good part of truth value judgments that we observe day to day only needs an interpretation that allows us to say “ yes” or “ no” to them, thus bearing analogous semblance to a response a digital device would give in a situation that required an answer to complete or not complete a function. When we are faced with the decisions of whether or not a “ lifestyle” (meaning: the food that we eat, the place that we live, the people that we talk to, the type of work/education we engage in) is a proper choice for us, rarely do we use many symbolic operators in our head above and beyond that of yes and no.

It almost seems as if our complex thoughts are above the two simplistic operation modifiers I’ve cited, yet in reality those complex thoughts are many point situations put together that serve to mould an ultimate situation that we can say yes or no to. An example of this is: Suppose that we are given the situation of being on the beach. Our decision at this point would be to perhaps go into the water or not to go into the water for a swim. In actuality the decision to go into the water is contingent on, among hundreds of other choices: whether or not we can swim, have bathing suits on, whether there is a rip tide just beyond the shore, whether we are even allowed to go into the water, etc.

It is obvious from this that we must ask many tiny questions that lead us to the question of whether we want to swim, and since we can make the decision to swim based on all of these smaller questions, thus we can conclude that most decisions can be formulated and answered in this

fashion. Notice from this instantiated circumstance that I have not given a wink toward the actual meaning of the “ thoughts” being conveyed. I have only focused on the truth value assigned to the judgments that one would make in a given situation. This is crucial for this argument; it has been shown by John Searle that digitized devices are not capable of meaningful thought like we are and then their only means of “ thought” would be through a systematic informational interpretation that is analogous to our system of decision making (minus the actual meaningful interpretation that we exhibit processing this information). If a strong AI can make a “ decision” where it can choose one set of circumstances over another, then it can be shown that a strong AI may choose a certain political/social/economic affiliation based on the events and experiences that it may encounter. When we are discussing what type of political/social/economic (PSE) affiliation we are going to be a part of, rarely does it actually cross our mind the benefits of one system versus another unless there is some duress in our current situation.

The most noted of such situations was that of Karl Marx when he released his Communist Manifesto in tandem with Friedrich Engels. Marx’s fervent claim was that 1. History has always provided for class struggles within each society and 2. The working man was being oppressed world wide as he saw it and he wanted to provide an avenue to relieve this oppression in both senses.

His solution was stated as a very broad spectrum of general solutions, yet it provided many questions that allowed one to form truth judgments as reading progressed. Since the very nature of this manifesto was to ask

questions based on one’s situation, it falls very well in line with my contention that the truth value of decisions made toward choosing a socialist/communist way of life is similar to choosing any other way of life; namely, one can choose one way of life versus another with yes and no statements that any strong AI computing device can make. If we were to pick and choose a sequential set of questions that would directly inquire as to what kind of life we wanted to lead, then we would definitely be able to come to a conclusion based on those answers. Such a questionnaire of sorts has already been made for an obvious human audience by the name of http://www.

politicalcompass. org. Visiting this site, we are given the opportunity to answer certain questions pertaining to our daily life with the added knowledge of how our life has been thus far. The only difference in answering this questionnaire between any kind of quasi-contemporary computer counterpart and ourselves would be that we would’ve had the opportunity to grow up in a society from birth to current age with the fads, fashions, ideals, and active propaganda to mold the thoughts that we have. The only true way to hoist a strong AI device to our level of decision making would be to treat it as an extremely intelligent and naï¿½ve adolescent that’s ready to make opinions on everything based on seemingly nothing; however, the “ nothing” could very well be rectified by a set of situations based on the basic premises of self-preservation (i. e.

what will make “ me” survive the longest). With this in mind, it would be easy to take in choice elemental questions such as: “ Should I hate a certain demographic population? Will hating this demographic population jeopardize

my own welfare? Based on the mass consensus opinion on this topic, does my answer agree? If I agree with the masses on this subject, will the demographic population be: 1. accepted, 2. rejected, 3. ignored by the masses? From these series of questions, although it may take a damn long time, it can be assumed that a series of “ answers” to these “ societal questions” can be formulated and as such, a conventional contemporary PSE affiliation will be born.

The question at the heart of this discussion is that if a strong AI is able to even empirically “ choose” a PSE affiliation, then what sort of PSE system would it choose? The answer to this situation is simply that it truly depends on the development of the strong AI education wise. The meaning of this is that the AI device would have to have an equilibrated source of information that allows it to gauge opposing sets of information simultaneously and as a result would be able to choose a certain set of situational living elements based on the environment that it is in. The important factor in this development is that the strong AI would simply be taking in factual information about its environment and would be utilizing a “ judgment” or sorts against its own knowledge base. The judgments would be very closely tied, presumably, to its own sense of “ self-preservation” since that is the notion that the AI started on and is basing its answers off of. With the concept of self-preservation at hand, the very logical choice for any entity would be a more autonomous set of PSE ideologies where the key to success would lie in the individual’s ability to advance himself to his maximal potential. The reason I say this is because more social welfare based systems that would require one to not just work for one’s self rather, to work

for the good of the whole, would not fit the original criterion that the strong AI would be following.

The strong AI would definitely be interested in following the line of questioning of “ Will I be able to receive more benefits by investing my money into a financial system that will seek the best value for my currency?” rather than “ How would I be able to help the general welfare of the state even if that means that I may be putting more time to complete my tasks while getting paid the same as the less skilled inhabitants down the street?” There wouldn’t be any true reason for an AI, given the choice, to put in the work to feed him and his country men. It could be said that it would be possible for all of the AI to work exactly the same and thus have no problem of certain AI working harder than the next, but I offer refutation in the concept that the AI would not be working towards its own notion of self-preservation if this happened. The idea of self-preservation should take the form of the immediate welfare of the AI in question as well as the possibility of preserving if not advancing future “ generations.” With this in mind, it wouldn’t make sense to follow any PSE ideals in the socialist or communist direction because those PSE systems are heavily involved in the duress attained by class struggles. Those systems came about because of the abuse of the capitalist system and while effective, the capitalist way had become corrupt and was further deteriorating the working class of the societies in question. The AI wouldn’t get to this point of duress mainly because the whole notion of “ meaning” in thought would never come about.

Since finding meaning to a thought involves understanding the thought, there would be certain advantages (or disadvantages) that one could see to

a capitalist system. These (dis)advantages would come about where one could find ways to “ cheat” the system and allow for more fruitful gain in all PSE senses. Since these possible methods to “ cheat” the system would again involve a meaningful interpretation of the system, an AI would not engage in such “ behavior” and would still be interested in its own welfare in a very kosher sense. The reason I hold this claim insistently is because the notion of self-preservation would lend certain questions to be answered and certain actions to be thrown away for ever in the early goings mainly because following ill-natured actions could lead to a potential problem for the AI. These problems could very well be consistent with the idea that the AI will not be allowed participation in the “ society” if it carries through what would be criminal if not “ unethical” activity to us.

This is a very heavy notion because it recognizes the fact that if we were to look at a situation that would potentially place us in a higher PSE status than before (i. e. give us more wealth) while putting others in a situation that would depreciate their PSE status, we may be the subject of hatred if not heated sentiments. The AI could very well allow for its own advancement while not inhibiting the advancement of other AI devices based on the capitalist notion mainly because the capitalist notion operates on the assumption that n economic system in which the means of production and distribution are privately or corporately owned and development are proportionate to the accumulation and reinvestment of profits gained in a free market. This would coincide perfectly with the preservation of an AI and thus this would be the best system for an AI.

The AI would choose a capitalistic PSE system for its own preservation. John Searle would have a host of complaints if not reservation about what I have said. He would begin by saying that the characteristic mistake in the study of consciousness is to ignore its essential subjectivity and to try to treat it as if it were an objective third person phenomenon. Instead of recognizing that consciousness is essentially a subjective, qualitative phenomenon, he would point out that many people mistakenly suppose that its essence is that of a control mechanism or a certain kind of set of dispositions to behavior or a computer program.

2 The two most common mistakes about consciousness are to suppose that it can be analyzed behavioristically or computationally. He would contend that the Turing test leads us to make precisely the mistake of behaviorism and the mistake of computationalism. It leads us to suppose that for a system to be conscious, it is both necessary and sufficient that it has the right computer program or set of programs with the right inputs and outputs. 3 His objection to behaviorism is that behaviorism is not right because a system may behave as if it were conscious without actually being conscious. 4 There is no logical connection, no necessary connection between inner, subjective, qualitative mental states and external, publicly observable behavior. Of course, in actual fact, conscious states characteristically cause behavior.

The behavior that they cause has to be distinguished from the states themselves. The same mistake is repeated by computational accounts of consciousness. Just as behavior by itself is not sufficient for consciousness, so computational models of consciousness are not sufficient by themselves

for consciousness. The computational model of consciousness stands to consciousness in the same way the computational model of anything stands to the domain being modeled. Nobody supposes that the computational model of rainstorms in London will leave us all wet.

But they make the mistake of supposing that the computational model of consciousness is somehow conscious. 5In essence, Searle would say that the same mistake is made in both cases. Searle offers proof showing that the computational model of consciousness is not sufficient for consciousness. He in fact goes so far as to say that: I have given it many times before so I will not dwell on it here.

Its point is simply this: Computation is defined syntactically. 6He defines computation in terms of manipulation of symbols. Syntax by itself can never be sufficient for the sort of contents that characteristically go with conscious thoughts because having zeros and ones by themselves is insufficient to guarantee mental content, conscious or unconscious. This argument is sometimes called “ the Chinese room argument” because He originally illustrated the point with the example of the person who goes through the computational steps for answering questions in Chinese but does not thereby acquire any understanding of Chinese.

7. This allegory is clear but I seem to neglect this point in my arguments. Syntax by itself is not sufficient for semantic content. Searle plainly does not think that syntax is sufficient for semantic content. On the same note, it seems that Searle recants some of his prior stances by saying that: I was conceding that the computational theory of the mind was at least false. But

it now seems to me that it does not reach the level of falsity because it does not have a clear sense.

Here is why. The natural sciences describe features of reality that are intrinsic to the world, as it exists independently of any observers. 8He then says that gravitational attraction, photosynthesis, and electromagnetism are all subjects of the natural sciences because they describe intrinsic features of reality. 9 Such features as being a bathtub, being a nice day for a picnic, being a five-dollar bill or being a chair are not subjects of the natural sciences because they are not intrinsic features of reality. All the phenomena Searle names are physical objects and as physical objects have features that are intrinsic to reality.

But the feature of being a bathtub or a five-dollar bill exists only relative to observers and users. 10To understand the nature of the natural sciences, for Searle, is to understand the distinction between those features of reality that are intrinsic and those that are observer-relative. Gravitational attraction is intrinsic. Being a five-dollar bill is observer-relative. Now, the really deep objection to computational theories of the mind can be stated quite clearly.

Computation does not name an intrinsic feature of reality but is observer-relative and this is because computation is defined in terms of symbol manipulation. The notion of a “ symbol” is not a notion of physics or chemistry. Something is a symbol only if it is used, treated or regarded as a symbol. The Chinese room argument showed that semantics is not intrinsic to syntax. What this argument shows is that syntax is not intrinsic to physics.

There are no purely physical properties that zeros and ones or symbols in general have that determine that they are symbols. 11 Something is a symbol only relative to some observer, user or agent who assigns a symbolic interpretation to it. Thus, for Searle, the question, “ Is consciousness a computer program?” lacks a clear sense. He further articulates that if one asks, “ Can you assign a computational interpretation to those brain processes which are characteristic of consciousness?” the answer remains that one may assign a computational interpretation to anything; if the question asks, “ Is consciousness intrinsically computational?” the answer is: nothing is intrinsically computational. Computation exists only relative to some agent or observer who imposes a computational interpretation on some phenomenon.

12A critical assessment has been made here that follows the assumptions that a digital device can at most be capable of syntactical communication and nothing more. From this very simple notion, it has been posited and shown that through simple yes and no analysis, one can definitely come to a conclusion based on a large number yet finite number of questions. These questions would enable the AI to follow a set of circumstances that would serve to be nothing more than instantiated stipulations worthy of truth judgment and hence a decision on further actions. Because of the way that the capitalistic PSE system is run, it would follow very easily from its ideologies that a naï¿½ve entity learning to answer questions based on its surroundings would take to this system in a heartbeat and be able to flourish as such. The only reason that we would not necessarily agree in full with the statements preceding would be because we would definitely see the world in

a different more meaningful context than the computer would. The AI would see the world as only empirical questions and answers that would mould the next set of questions that would eventually analytically shape the way the AI would answer future questions.

It may be of some benefit to view the world in this manner where there are only empirical questions and as a result empirical answers. However, we are not that naï¿½ve at all and our conception of our own welfare can conceivably take the avenue of discontent or malice towards the PSE system that we are involved in. The very notion that a computer may not have the same emotional or thoughtful ties to a PSE system makes it look like the computer has it better off than we do.