INTRODUCING SEARLE'S BIOLOGICAL NATURALISM

Reena Cheruvalath “Nature and Structure of Consciousness - The Biological Naturalist's Views”, Department of Philosophy, University of Calicut, 2003
CHAPTER - 1

INTRODUCING SEARLE'S BIOLOGICAL NATURALISM

1.1 Searle's Multi-Pronged Project:

Searle's perspective in philosophy of mind is called as Biological Naturalism (BN). BN is not a single project but it is projects about mind-body relation. It contains a large number of sub-projects within a project. It has a focus on speech act, intentionality, consciousness, semantics, social reality, freewill and unity of mind, rationality and whatnot. Though it shares the scientific interest in consciousness among philosophers, psychologists, neuroscientists and clinicians to solve the mystery of consciousness, it is difficult to weave them into a complete perspective. Mind is a macro-system caused by the micro-system of the brain. Consciousness is a real biological phenomenon. Besides, it has intentionality as well as subjectivity. It consists of inner, qualitative (phenomenal), subjective (what is called the 'I') and the unified states of sentience, awareness, thoughts and feelings. Consciousness is much more than a person having mental and physical predicates, an agent who acts and it is called the self. There is an irreducible non-Humean Self. As against a bundle or building block theory, it presupposes a unified field approach to the problem of consciousness. Self and its unity are mutual presuppositions that sustain each other. Searle's so-called 'simple' solution is not that simple, in that it holds that
mental events and processes are as much part of our biological natural history as digestion, mitosis and meiosis or enzyme secretion.

For Searle, both consciousness and intentionality are biological processes caused by lower-level neuronal processes in the brain, and neither is reducible to something else. Thus the top-down or bottom-up or levels of descriptions are mere metaphors. This is what is meant by saying that consciousness is the system feature of the brain and it is feature of the whole system where the whole system means that the system has freewill, rational deliberations or decision-making and also caused by the system. Consciousness, in other words, is system causation but it is not based on causally sufficient conditions. So much so that, if mental causes are found amongst a cluster of physical causes it cannot overdetermine its effects. Thus causation becomes only an analytical tool in that there are causal relations at different levels. There is no causal overdetermination. The intention in action is as causally real as the solidity of the piston of the car engine. Self is not an entity but it is a system of formal constraints. The unity is neither Kantian nor empirical. We can characterize Searle's model of consciousness as a system feature with constraints of a conceptual kind. The constraints are invariably from the semantics of an intentional type. Searle agrees that meaning is a special form of intentionality. It is a special form in the sense that it is a form of what he calls as derived form of intentionality. This is where the interface between philosophy of language and philosophy of mind becomes apparent. Searle uses the notion of conditions of satisfaction as a bridge between these two disciplines.
We shall raise two questions in the context of his perspective. The first is about the theory of mental causation, which Searle uses and the second is whether such a theory is poised well enough to close the so-called explanatory gap. Nevertheless, his perspective on Biological Naturalism aims to show mind is the world of nature but yet it is presented as a species of Non-reductive Physicalism or, as Ned Block calls it, default physicalism, which asserts that it is a default that consciousness has a physical or scientific nature.1 Seeing the second question first, we shall have to ask whether Searle is able to solve the hard problem of consciousness without falling into phenomenal variety or into neuro-biological claims about activity in the pyramidal cells of cortical layers in the brain (Crick), nor the vibrations in the microtubules (Penrose). Nor is he interested in the question of what Ned Block calls the 'harder' problem of the phenomenality of consciousness.2 A mature Searle reconciles himself with modified form of epiphenomenalism that requires discussion below.

As we know, Searle's early works are in philosophy of language, especially the variety called speech act philosophy of language, which has been much derided in the literature. It appears as if that his philosophy of mind should presuppose his works in the philosophy of language. He boldly reiterates that his analysis of the logical structure of speech acts provides the necessary foundation to the logical analysis of the structure of intentionality. To what extent he tries to establish a bridge between philosophy of language and philosophy of mind will become clear if we understand his intentional theory of meaning which is
constituted out of the notion of literal meaning and compositionality account of meaning. Briefly, the contribution it makes to the crucial ingredient of intentional theory of meaning will be shown to have great relevance. Even though Searle does not make explicit the relation between former and latter, there is an implicit interface between these two domains. Semantics survives intact and acts as a bridge throughout. Meaning intentions are as much part of features of pragmatics or communicability. Searle however produces a completion-argument, which holds that the philosophy of language is to be completed in philosophy of mind and hence philosophy of language should be a branch of philosophy of mind. Therefore, no theory of language is complete without an account of the relations between mind and language and of how meaning- the derived intentionality (as opposed to intrinsic intentionality of Husserlian fame) of linguistic elements- is to be grounded in the more biologically basic intrinsic intentionality of the mind/brain. So, how exactly the conclusions about philosophy of language are to be illumined by his non-reductive naturalism? The likelihood of this happening must depend upon the relation between language and mind, which is not easily resoluble within his perspective. But one can equally go the other way saying that if his linguistic premises are okay, then the conclusion about mind can be deduced from these premises. But if they are vulnerable to attack, then his conclusions are not fully warranted. This is perhaps a good strategy. Let us start with an overall perspective of Searle’s philosophy of
language and philosophy of mind. The whole corpus of Searle can be divided into the following four or five phases.

a) The speech act phase: In this phase, Searle asserts that speech act is essential to any specimen of linguistic communication that involves a linguistic act. It is not the symbol or word or sentence, but rather it is the production of the token in the performance of the speech act that constitutes the basic unit of linguistic communication. The structuration of the species of philosophy of language has been brought under the 'code' conception of language. According to a recent assessment, all these philosophies of language will fall under verstehenist philosophies of language, which holds that a theory of meaning is a theory of communication or understanding, and they are to be classified under folk philosophy of language. As folk philosophy of language, they are criticized for what they lack. They lack explanatory power. To what extent Searle will free himself of this charge forms part of the inquiry. The erklarenist (explanatory) theory, in contrast is one, which combines truth-conditions with the structural theory of grammar such as the one that stems from Chomsky's writings. It holds that a theory of meaning is part of a theory of physical property of language.

b) The biological naturalist phase: where it is shown how language, meaning and intentionality culminate in biological (non-reductive) naturalism. Searle continues to argue that meaning and intentionality of speech act sponsors a certain interface of language and mind, culminating in Biological
Naturalism, which states that consciousness is caused by brain processes and is a higher-level feature of the brain system. We are more concerned with this alleged theory of mental causation, which requires extensive examination and its capacity to close the explanatory gap. The alleged theory has no physical base, but has an intentional base. Do they approximate to each other?

c) The social construction phase: this adds the theme of how social construction of reality is related to intentionality. For him, they are complementary to each other. What he calls the collective intentionality is used as a foil here to assimilate social reality to our basic ontology of physics, chemistry, and biology.4

d) The free will and unity phase: this is purported to explain free will, volition and unity of consciousness. We can see this matured phase of Searle in his recent article titled ‘Consciousness, Free Action and the Brain’. 5 Here, he discusses consciousness of free action, its implications for the explanation of rational behaviour and the existence of the self, and relates this to the traditional problem of the freedom of the will and proposes ways in which the problem of free will might be solved as a neuro-biological problem. This is where consciousness as a unified system but with a gap or a system of constraints comes to the fore. This is a peculiarly gappy view of consciousness along with its attending view of rationality. This is where biological naturalism is turned into a modified epiphenomenalism.
e) The rationality phase is purported to explain rationality in action, thus taking us beyond the narrow theory of mental causation of the second phase. A theory of mental causation is explainable in terms of the above system of constraints.

Such a perspective goes from the logical structure of speech acts, illocutionary speech acts, a logical structure of intention, logic of the institutional action (a collective intentionality), culminating in the logical structure of freewill and rationality thus passing from book to book. The elemental confluence however is between the philosophy of language and mind. If this is much is warranted, then the criticisms, made by philosophers like and Habermas and Karl-Otto Apel respectively on the 'reductionism' of philosophy of language to philosophy of mind and later 'retrogression' or the astonishing turn' from speech-act or pragmatic philosophy of language to cognitive or intentional philosophy of language, must be seen somehow to justify the above interface.

It was Tyler Burge who urges that, with the advance of cognitive theories, there is a natural transition from philosophy of language to philosophy of mind. Tyler Burge's article in the Philosophical Review locates the problem of singular reference that binds both traditions. While reflecting on the interface between philosophy of language and philosophy of mind, he argues that, with the perceptible shift of ferment toward the issues in philosophy of mind, the contemporary philosophy of language also felt the 'dialectical pressure' forward a shift in the philosophy of mind. One can say with equal ease, there was
continuity and an interface between them. As Burge urges, giving an account of truth and conditions of propositional attitudes ('I believe that p') and de re belief were the problematic bridges between them. The syntax and semantics of propositional attitudes (the proposition 'I believe that p' has a mental content M) gave a natural lead towards folk psychology. The debate between folk and scientific psychology became sharp. One must recall that Searle's early work on philosophy of language (a speech act variety of philosophy of language), provided a firm foundation to a later intermediate theory of direct reference within this particular framework. Questions related with this issue of the above transition are 'Is thought really occur in language?' 'Are language-less thoughts possible?' 'In which language do we think?' 'Is it a private one?' 'Is private language possible?' The mutual contribution of psychology and philosophy has also helped for the interface between philosophy of language and philosophy of mind.

Mainly, there are three reasons for the above-mentioned interface. Firstly, the arguments of Quine and Grice on meaning have shown that there is a systematic interplay between attitudes like belief and intention. Certainly, this is the reason for the emergence of the problem about the syntax and semantics of propositional attitudes of the form 'I believe that p'. Secondly, some of the most difficult problems of singular reference point toward the philosophy of mind. Finally, the philosophy of language seems to have exhausted its premise in illuminating traditional philosophical questions. Davidson in his paper 'Thought
and Talk' articulates that language and thought are conceptually interdependent. He points out that a creature cannot have a thought unless it has a language. In a sense, Davidson provides a paradigm case for an interface between philosophy of mind and philosophy of language. For obvious reasons, this is not however considered as important as his anomalous monism. One is the rich thicket of cognitive science where the controversy between reductive and non-reductive materialism becomes more and more acute. This becomes the rallying point. Even within cognitive studies, we come across cases where language serves as a focal point. Peter Carruthers subscribes to a paradigm, which holds that thinking is linguistic. Language is constitutively involved in our conscious thinking, which he refers as the cognitive conception of language. Thus, language has an intra-personal cognitive functioning, as well as having its obvious interpersonal uses. The cognitive conception of language has been endorsed by Wittgenstein (1921 and 1953), Lev Vygotsky (1934) and Daniel Dennett (1991). Often it has been associated with a radical empiricism about the mind, according to which many human concepts and the young child from adults acquires ways of thinking and much of the very structure of the human mind itself, when the child learns its native language. Recent history of cognitive science shows that researchers have become increasingly convinced by neuro-physiological and other evidence that the mind is more or less modular in structure, built up out of isolable, and largely isolated, components. They are convinced that the structure and contents of the mind are substantially innate.
and that language is one such isolable and largely innate module. However, it is important to see that someone, endorsing the cognitive conception of language, does not have to regard language and the mind as cultural constructs, either socially determined or culturally relative. In fact, the cognitive conception of language can equally be deployed along with a modularist and nativist view of language and mind, and this can be counter posed to a communicative conception of language.

While the dependence of mind on language is a matter of dispute and difficulty, the converse dependence is not generally supposed to be. Thus, it appears evident that speaking language requires the possession of thoughts, these being precisely what the sentences of a language express. In other words, performing speech acts such as assertion presupposes the possession of mind. Colin McGinn points out that the question as to whether thought is essentially linguistic has a significance, which goes beyond getting clear on the nature of thinking. For, on its resolution turns the larger question of what philosophy should, conceive itself as studying. Philosophy is mainly concerned with investigating the means by which we represent the world, and we represent reality in thought, through the exercise of concepts. So, thinking consists in the deployment of language and it also means that philosophy should address itself to language, in a primary way. An important feature of thought is that they have a structure, specifically the logical structure. Thus we have compound thoughts, like for example, thinking that snow is white and coal is black; thought involving multiple generality, for
example, the thought that everyone loves someone who hates himself, modal thoughts like the thought that necessarily 7+5=12. In fact, thoughts of any structure can be specified, simply by completing ‘X’ ‘judges that….’ with an arbitrary declarative sentence. This structure on the part of our judgments confers a capacity to have indefinitely many distinct thoughts. Judgments have what is called a recursive structure; in that they involve devices, which may be repeated at, will so as to generate infinitely many potential thoughts. It is this structure that permits a finite creature to wield such an infinite capacity and the capacity to make judgments of arbitrary complexity rest upon a finite basis of capacities relating to elements of the structure. Therefore, any theory of judgment must represent this capacity as a finitely based structured ability. Thus, the structure of thought just is the structure of some internal sentence, and so a theory of structure of language will carry over directly to the structure of propositional attitudes.

McGinn suggests that the proper procedure would be to try to elicit the general principles which govern the way thought acquires its content, and the ways this content get manifested in judgment and action. It is needed to ask what central concept best elucidates the content of thought or whether we can develop a properly systematic theory of thought or whether it is possible to give a reductive analysis of what it is for a thought to be directed on to a proposition. Hence, on the supposition that thought does not require a linguistic medium and so it is not to be explained in terms of meaning, the philosophy of mind would be
methodologically anterior to the philosophy of language. The reason is that concepts would otherwise be incapable of direct investigation. Briefly, no progress can be made on the central problem of philosophy without due consideration being given to the question concerning the relationship between philosophy of mind and philosophy of language. Let us hypothesize, after neutralizing the two stances mentioned in the above, that in Searle’s case, the confluence between philosophy of language and philosophy of mind takes on a semiotical tag allowing semantics to survive in various forms including an acceptance of a compositional theory of meaning.

1.2 Searle’s Interface Between Philosophy Of Language And Mind:

It is obvious in his view that philosophy of language is concerned with meaning, truth and reference and the method that tries to figure out how these phenomena work in the minds of actual speakers and hearers. He also adds that philosophy of mind is interested in intentional action and thought. Nevertheless, Searle changes tack categorically affirming that, ‘Several other important branches of philosophy such as epistemology, metaphysics, the philosophy of action and the philosophy of language are now treated as dependent on, and in some cases as branches of the philosophy of mind, whereas fifty years ago the philosophy of language was considered ‘first philosophy’, now it is the philosophy of mind’. 14 There are numbers of reasons for this change, but two stands out. Firstly, it has become more and more obvious to a lot of philosophers that our understanding of the issues in a lot of objects, the nature of meaning, rationality
and language in general presupposes an understanding of the most fundamental mental processes. For example, the way language represents reality is dependent on the more biologically fundamental ways in which the mind presents reality and indeed linguistic representation is a vastly more powerful extension of the more basic mental representation such as beliefs, desires and intentions.

Secondly, the rise of the new discipline of cognitive science has opened to philosophy whole areas of research into human cognition in all its forms. Besides, the basic subject matter of cognitive science is intentionality in all of its forms. Searle himself cites one precise reason. He is willing to set aside the sort of research he had done, and by others thirty years ago on the theory of speech act and on the use of language, since they become mostly absorbed as part of linguistics called 'pragmatics'. They probably form no part of philosophy of mind. But, as we theorized, semantics survives as a bridge.

If this is a correct view to take, the hypothesis of interface may not work in a straightforward way after all. True, he may very much want to ground the theory of language in the philosophy of mind. He insists that the mind imposes meaning on language via the intention to do just that. Such an interface is based mainly on two theses:

1. **Linguistic notions can be analyzed in terms of intentional notions; and**

2. **The theory of intentionality provides a conceptual frame for the classification of speech acts.**
His claim is this: Person A, by doing $x$, means that $p=x$ is an act which $A$ intends to express the belief that $P$. Here, the problem is one may meaningfully say that $P$ without possessing, oneself, any belief that $P$, as when one is telling a lie. Moreover, it would surely be implausible to claim that whenever one makes an assertion he/she refers to some actual or possible belief of her/him, as the above account would imply. In order to explain how Searle overcomes these problems, it is necessary to have a look into some of his technical terminology he has introduced.

One is intention in action, the second is direction of fit, and yet the third is condition of satisfaction. By the first, Searle means the intention, which causes and controls an intentional action that is not caused by a prior intention, it is the intention, which governs and controls a spontaneous and undeliberated action. For example, anyone playing baseball or cricket who is swinging a bat at a ball flying towards him/her may make him/her movements intentionally, but without prior intention. The intention in the action is to swing the bat just so, hitting the ball over there. Second is the manner in which a match between mind and world is supposed to be achieved. Assertions and beliefs are supposed to match the world, and so have mind-to-world direction of fit. If they fail to match the world, it is the mind that has gone wrong, not the world. Imperatives and desires, on the other hand, are supposed to get the world to match them, and so have world-to-mind direction of fit. If they fail to match the world, it is the world that is wrong, not the mind of the agent.
Third is roughly the idea corresponding to that of truth-conditions for assertions and beliefs, only generalized to cover all forms of contentful linguistic act and mental state. It is the condition of the world, which is represented by a contentful act or mental state. For example, the condition of satisfaction for the belief that the door is open, the desire that the door should be open, and the hope or wish that the door should be open, are all that the door is open. With these tools, Searle fashions his theory of meaning and intentionality. He explains the conditions of satisfaction as follows. The notion of condition of satisfaction applies quite generally to both speech acts and intentional states in cases where there is a direction of fit. We say, for example that a statement is true or false, that an order is obeyed or disobeyed, that a promise is kept or broken. In each of these, we ascribe success or failure of the illocutionary act to match reality in the particular direction of fit provided by the illocutionary point. To have an expression we might label all these conditions 'conditions of satisfaction' or 'conditions of successes'. So, we will say that a statement is satisfied if and only if it is true; an order is satisfied if and only if it is obeyed and so on. Now, this notion of satisfaction clearly applies to intentional states as well. My belief will be satisfied if and only if things are as I believe them to be, my desires will be satisfied if and only if they are fulfilled, and my intentions will be satisfied if and only if they are carried out. That is, the notion of satisfaction seems to be intuitively natural to both speech acts and intentional states and to apply quite generally, wherever there is direction of fit.\footnote{15}
For Searle, the intentions, which confer meaning on our utterances, do not have the concept of belief already embedded in their contents. He maintains that most adult forms of intentionality are essentially linguistic. They are linguistically charged or linguistically loaded. Besides, the meaning of language can be explained in terms of the intentionality of the mind, because the intentionality of the mind is broader. For example, there are kinds of intentionality present in the minds of animals and young children that do not presuppose natural language.

Searle lays foundation to his intentionalist meaning theory by means of the following argument. It is the intentional states of consciousness, such as for example, convictions, wishes, fears, hopes and (action) intentions in the narrower sense, which ultimately determine the condition of satisfaction, with the help of which the meaning of speech acts can be understood. According to Searle, the determination of the 'conditions of satisfaction' of speech acts by intentional states of mind occurs in the following way. The intentional states can express themselves in 'physical entities such as noises or marks on paper' and impose on the 'expressions', which arise in this way the 'conditions of satisfaction of special speech acts'. For him, in the case of a statement, the speakers underlying conviction lay down the direction of fit of the conditions of satisfaction, and this in fact occurs in the direction of 'word-to-world direction of fit'. In the case of an 'order' and have 'promises' by contrast, the direction of fit of the conditions of satisfaction is established in terms of an actively produced adaptation of the world to the expression ['word-to-world direction of fit']. Searle summarizes the
main semantic import of this argument as: the key to the problem of meaning is to see that in the performance of the speech act the mind intentionally imposes the same conditions of satisfaction on the physical expression of the expressed mental state, as the mental state has itself.

On the basis of these arguments regarding the determination of the conditions of satisfaction of speech acts by underlying intentional states of mind, Searle explains the relationship between intentionality and linguistic meaning. He writes: so construed, speaker's meaning should be entirely definable in terms of more primitive forms of intentionality. And the definition is non-trivial in this sense that we define speakers meaning in terms of forms of intentionality that are not intrinsically linguistic. If, for example, we can define meaning in terms of intentions, we will have defined a linguistic notion in terms of a non-linguistic notion even though many, perhaps most, human intentions are in fact linguistically realized. It is in this rudimentary sense that philosophy of language is a branch of philosophy of mind. In its most general form, it amounts to the view that certain fundamental semantic notions such as meanings are analyzable in terms of even more fundamental psychological notions such as belief, desire and intention.

In *Speech Acts: An Essay in the Philosophy of Language* (1969), Searle defines a speech act by bringing together modified versions of Frege's distinction between the force ($F$) and content ($P$) of a sentence, and between singular reference and predication, Austin's classification of speech acts into constatives (truth-bearing)
and performatives (non-truth-bearing), as well as Grice's analysis of speaker or intentional meaning. Searle points out that the semantics of a natural language can be regarded as a conventional realization of underlying constitutive rules and that Illocutionary acts are acts performed in accordance with these rules. His *Expression and Meaning* (1979) extends this analysis to non-literal and indirect illocutionary acts also. Searle may be said thus to ground the theory of Speech Act and Illocutionary Act on the theory of intentionality. For, speech acts are subclass of human actions and human actions are themselves expressions of human intentionality: intentions, beliefs, desires etc. It also provides the connecting link between the theories of mind, including the theory of action, on the one hand and the theory of speech acts, as a special case, on the other i.e., the notion of 'conditions' of satisfaction. Thus, Searle claims that we have very good reasons for supposing that the attempt to ground speech act theory in the theory of the mind is well motivated. Accordingly, the semantics of a natural language is seen as the result of the mind (intrinsic intentionality) imposing conditions of satisfaction or aboutness on objects (expressions in a language), which have intentionality only derivatively. Perception and action rather than belief are taken as fundamental. In a sense, Searle 'disparages' as-if intentionality and favours derived intentionality. It is exactly here the above-said interface between language and mind becomes apparent.

His major argument is that what stands to statements being true is what stand to order being obeyed, and what stands to promises being kept etc. And where
psychological states are concerned what stands to beliefs being true, is what stand to wishes being fulfilled, is what stands to intentions being carried out etc. Every intentional state and every speech act that has a direction of fit will be satisfied or unsatisfied depending on whether or not the actual fit comes about. Searle points out that there is nothing essentially semantic, in the linguistic sense, about the notion of conditions of satisfaction, since we need this notion to account for the intentionality of psychological states quite independently of the expression of intentional states in language. He thinks that the notion of conditions of satisfaction helps to elucidate semantic notions precisely because it is a psychological notion applied to semantics. We know what it is for a belief to be true or false or a wish to be fulfilled or unfulfilled, an intention to be carried out or not carried out, quite independently of our theory of speech acts. Searle introduces the above changes in his analysis of the structure of illocutionary acts in his earlier book, as seen more poignantly, in his two essays 'A Taxonomy of Illocutionary Acts' and 'Indirect Speech Acts'. A more perceptible change in his book on Intentionality is that he has used his account of illocutionary acts as a turn towards a general theory of intentionality. Earlier, he has developed his theory from an analysis of one type of illocutionary act, promising. Searle uses the terms 'input' and 'output' to cover the large and indefinite range of conditions, under which any kind of serious and literal linguistic communication is possible. The 'input' covers the condition for intelligible
speaking and 'output' covers the condition of understanding. Together they include such things as that the speaker and hearer both know how to speak the language; both are conscious of what they are doing; they have no physical impediments to communication, such as deafness, aphasia or laryngitis; and they are not acting in a play or telling jokes etc. 20 His condition for sincere and non-defective promising is thus open to charge that there are very many ways in which promises can be defective. A promise involves an expression of intention, whether sincere or insincere, says Searle. So, to allow for insincere promises, we need only to revise our conditions to state that the speaker takes responsibility for having the intention rather than stating that he actually has it. A clue that the speaker does take such responsibility is the fact that he could not say without absurdity. 21 The essential feature of a promise is that it is the undertaking of an obligation to perform a certain act. He thinks that this condition distinguishes promises from other kinds of illocutionary acts, and he calls this the 'essential condition'.

While Searle's Speech Act is thus restricted to take the analysis of promising as a model for analyzing the structure of other illocutionary act concepts, his 'Taxonomy of Illocutionary Acts', extends this to cover the following categories of illocutionary acts: Assertives, Directives, Commissives, Expressives and Declaratives. The dimensions of difference that he chiefly relies on to differentiate and characterize these categories are: point (or purpose); direction of fit between words and the world; psychological state expressed etc. The
direction of fit means some illocutions have as part of their illocutionary point to get the words (more strictly, their propositional content) to match the world and others to get the world to match the words. The former direction of fit is termed 'word-to-world' and is illustrated by assertives. The latter direction is termed 'world-to-word' and directives and commissives illustrate this. It is to be noted that the direction of fit is explained as an aspect of the illocutionary point. The members of the assertive class of speech acts are supposed in some way to match an independently existing world. But the members of the directive class of speech acts and the members of the commissive class are not supposed to match an independently existing reality. But which are supposed to bring about changes in world so that the world matches the propositional content of speech act. If the statement is not true, it is the statement, which is at fault, not the world. If the order is disobeyed, or the promises are broken, it is not the order or promise which is at fault, but the world in the person of the disobedyer of the order or breaker of promise. Intuitively, we might say the idea of direction of fit is that of responsibility for fitting. The third dimension of variation i.e., expressed psychological state can be understood in the following way. He wants to make it explicit that one can be expressing a belief e.g.: even if one has no such belief, so it is clear that this is not the notion of manifestation, evincing or betrayal of the state in question. With respect to the direction of fit, Searle makes the point that there is a two-way direction. He explains that since the illocutionary point of the declaration is to bring about some new state of affairs
solely in virtue of the utterance, declarations have both directions of fit. One brings it about that \( p \) by way of representing it as being the case that \( p \). Searle takes a declaration to be a combination of an assertive and something extra-linguistic convention that saying something of the right sort, in the satisfaction of certain further conditions, is sufficient to bring it about that \( p \). This analysis has the consequence that a declaration expresses both belief and desire. Thus, a declaration contains all three basic features of an assertive: the illocutionary point, the direction of fit and the psychological state expressed.

Searle's category of expressive takes the illocutionary point as expressing the psychological state specified in sincerity condition about a state of affairs specified in the propositional content. Presumably, this is supposed to be the same sense of 'express' as that in which assertives, commissives, directives and declarations express psychological states of various kinds. Searle says that since the truth of the proposition, for example: 'I thank you for writing a letter of recommendation for me or congratulate you on getting the fellowship', is presupposed rather than asserted, we are not trying to get the words to match the world in the expressive act. But a general criticism here is that Searle's specification of propositional content is incomplete.

In a sense, his book on intentionality thus, renounces any supposition about the intention to communicate with, or be understood by a hearer is necessary for illocutionary act performance and he denies in his speech act that any intention to produce other effects on hearers was required. The intention required for an
(intentional) illocutionary act is said to be an intention to represent. This representing intention is a matter of imposing the condition of satisfaction of an intentional (psychological) state on an overt act, and thereby expressing that intentional state. For him, the different types of speech acts must be analyzed in terms of the different ways in which they can be related to the satisfaction condition for the originally mentally represented states of affairs. He writes 'Different kinds of illocutionary acts in so far as they have propositional contents can be regarded as different modes in which utterances represent reality—if we see the basic form of the illocutionary act as \((f)(p)\)—then the illocutionary points will determine the different ways in which \(P\)'s are related to the world...'.26

The mode of speech act changes with the propositional attitude of the speaker and with the kind of satisfaction conditions that he imposes on the propositional content. In other words, truth conditions give the meaning of a statement, the meaning of a command is given by its obedience conditions and the meaning of a promise is given by its fulfillment conditions. It is not very clear whether he moves away from cognitive conceptions towards a communicative conception of language. If so, then Searle's approach to semantics of natural language may not be similar to the view that beliefs and desires are relations to sentences of Mentalese, an innate language of thought. Such a view is championed by, Fodor in his version of intentional realism. Nevertheless, there are arguments to show that he paved way for a marriage between Fodor and Searle for further the cause
for Folk-Psychological Realism. Naturalism is an adaptable term for all these types of approaches.

For Searle, original act of meaning constitutions on the part of the intentionality of mind is separated from the communicative purposive rationality, which is directed towards the production of effects in the consciousness of hearers. It is also uncoupled from that intentionality which is directed toward 'illocutionary effects' i.e. toward the communication of meaning in general. He formulates that communicating is a matter of producing certain effects on one's hearers, but one can intend to represent something without caring at all about the effects on one's hearers. One can make a statement without intending to produce conviction or belief in one's hearers or without intending to get them to believe that the speaker believes what he says or indeed without even intending to get them to understand it all. Therefore, there are two aspects to meaning intentions, namely the intentions to represent and the intention to communicate. Representation is prior to communication and representing intentions are prior to communication intentions. Part of what one communicates is the content of one's representations, but one can intend to represent something without intending to communicate. It is for the above reason of a derived notion of intentionality, the plausibility of thinking that it is possible to marry Searle's approach to the semantics of natural language with Fodor's view that beliefs and desires are relation to sentence of Mentalese, an innate language of thought is not clearly laid out. If the opposite is true, then the meanings of natural-language
utterances will be inherited from the prior contents of a speaker' and the contents of those intentions, in turn, reflected the meaning of the sentence of Mentalese through which they are primarily, and constitutively, expressed. Moreover, it is plausible to maintain that those propositional attitudes are relations to sentences of Mentalese, if the account appeared successful in other respects. But the intentions in question, which are appealed to, while accounting for the meanings of natural language utterance, had better be non-conscious ones. Because when one thinks aloud spontaneously he/she is surely not aware that his/her intention is both, to utter a sentence under a certain description and to impose a particular meaning on it. Fodor maintains that we should be able to give an account of the meaning of each Mentalese term without mentioning any other mental state. The natural language is a mere public expression of a thought, which was antecedently, and non-consciously, expressed in a sentence of Mentalese and from which it inherits its content. Here, I would like to mention one more similarity between Searle and Fodor, i.e. both defend the causal efficacy of the mental. At the same time, Searle opposes functionalist views of Fodor and attacks Strong Artificial Intelligence.

1.3 Searle's Challenge To Strong Artificial Intelligence:
Searle first formulated his challenge to strong AI in his paper 'Minds, Brains and Programs', published in 1980. Ever since, it has been a mainstay of debate over the possibility of what Searle called 'Strong Artificial Intelligence'. Strong AI states that thinking is merely the manipulations of formal symbols. Thus, by
designing the right kind of programmes with the right inputs and outputs, we can literally create conscious intelligence. In other words, the computer is not merely a tool in the study of the mind, rather, the appropriately programmed computer really is a mind, in the sense that computers given the right programmes can be literally said to understand and have other cognitive states. It was also called 'computer functionalism'. In strong AI, because the programmed computer has cognitive states, the programmes are not mere tools that enable us to test psychological explanations: rather the programmes are themselves the explanations. Supporters of strong AI believe that a correctly programmed computer is not simply a simulation or model of a mind; it actually would count as a mind. That is, it understands, has cognitive states and can think. In contrast, Weak AI is the view that brain processes (and mental processes) can be simulated computationally. According to weak AI, the principal value of the computer in the study of the mind is that it gives us a very powerful tool. For example, it enables us to formulate and test hypotheses in a more rigorous and precise fashion. He agrees with Weak AI's claim that the mind functions somewhat like a computer. We can see a contradiction here. Even though Searle accepts weak AI, he rejects the view that the formal syntax of a computer programme is not intrinsically semantic. Searle says, 'what the computer does is a formal representation of real phenomenon, and it is a mistake to think that a formal simulation is the real thing'. Hence, for the purpose of
refuting strong AI, he introduces his Chinese Room Argument, which is by no means uncontroversial.

It goes as follows: A monoglot English-speaking person is confined to a room containing a typewriter keyboard, a printer, and an operation manual written in English. The keyboard is designed to produce Chinese characters rather than letters of the Roman alphabet. Outside the room, a monoglot Chinese-speaking person has another such keyboard and printer, allowing him to send messages written in Chinese into the Room. The Chinese speaker is permitted to ask whatever questions he likes in these messages. On receiving a message, the English speaker inside the room has to consult the operation manual, which tells him what string of Chinese characters to type out in response. Let us suppose that the manual has been so written that, when the Chinese speaker receives the responses to his questions, he in unable to distinguish them from those of a native Chinese speaker. In that case, it seems, the Turing test has been passed. By the standards of that test, the Chinese speaker outside the room ought to conclude that he is communicating with an intelligent being inside the room. However, the English speaker inside the room has no understanding of Chinese whatever. The implication is that passing the Turing test demands no understanding of the questions posed in the course of that test. Consequently, the test is not a test of genuine intelligence, since genuine intelligence does demand understanding. 33
Now, we are in a position to examine the strong AI claims in the light of this thought experiment. Strong AI claims that the programmed computer understands the stories and that the programme in some sense explains human understanding. As regards the first claim, it is obvious that Searle doesn’t understand a word of the Chinese stories. He has inputs and outputs that are indistinguishable from those of the naive Chinese speaker, but still he understands nothing. As regards the second claim we can see that the computer and its program do not provide sufficient conditions of understanding since the computer and the programme are functioning, and there is no understanding.  

Searle examines six important replies to this thought experiment and answers to them. Briefly, the Systems Reply is simply that though Searle himself doesn’t understand Chinese in the thought experiment, it is perfectly correct to say that Searle plus look up table understand Chinese. In other words, the entire computer would understand Chinese though perhaps the central processor or any other part might not. It is the entire system that matters for attributing understanding. In response, Searle claims that even if we simply imagine the person in the Chinese room to memorize the look-up table, we have not produced a counter-example to this reply. Let the individual internalize all of these elements of the system. He memorizes the rules in the ledger and the data banks of Chinese symbols and he does all the conclusions in his head. The individual then incorporates the entire system. There is not anything at all to the
system that he does not encompass. We can even get rid of the room and suppose he works outdoors. All the same, he understands nothing of the Chinese, and *a fortiori* neither does the system, because there is not anything in the system that is not in him. If he does not understand, then there is no way the system could understand, because the system is just a part of him.

The Robot Reply, that is similar to the above, notes that the reason we don’t want to attribute understanding to the room or a computer as described by Searle is that the system does not interact properly with the environment. This is also a reason to think the Turing test is not adequate for attributing thinking or understanding. If, however, we fixed this problem i.e. we put the computer in a robot body that could interact with the environment, perceive things, move around etc. We would then be in a position to attribute, understanding properly.36 In reply, Searle notes that proponents of this reply have partially given up the tenet of AI that cognition is symbol manipulation. More seriously, he proposes that he could be in a Chinese robot, just as easily as a Chinese room, and that he still would not understand Chinese.

The Brain Simulator Reply is stated as follows. In the case of machine operating with a whole set of programmes operating in parallel, in the manner that actual human brain presumably operate when they process natural language, we would have to say that the machine understood the stories. Searle’s answer is that machine is not sufficient to produce understanding. The problem with the brain simulator is that it is simulating the wrong things about the brain. As long
as it simulates only the formal structure of the sequence of neuron firings at the synapses, it won’t have simulated what matters about the brain, namely its causal properties, its ability to produce intentional states. And, that the formal properties are not sufficient for the causal properties in the machine. We can have all the formal properties carved off from the relevant neurobiological causal properties.

The Combination Reply points out that in the case of robot with a brain-shaped computer lodged in its cranial cavity, having computer programmed with all the synapses of the human brain, and the whole behaviour of the robot is distinguishable from human behaviour with the whole thing as a unified system and not just as computer with inputs and outputs, we would have ascribe intentionality to this system. According to strong AI, instantiating a formal programme with the right input and output is sufficient condition of, indeed is constitutive of intentionality. But Searle replies that the concept of intentionality, that is attributed to the robot in the example, have nothing to do with formal programmes. They are simply based on the assumption that if the robot looks and behaves sufficiently like us then we would suppose until proven otherwise, that it must have mental state like ours that cause and are expressed by its behaviour and it must have an inner mechanism capable of producing such mental states. Further, if we knew independently how to account for its behaviour without such assumptions we would not attribute intentionality to it, especially if knew it had a formal programme.
The Other Minds Reply notes that we know that other people understand Chinese only by their behaviour. Now, the computer can pass the behavioural tests as well as they (can in principle), so if one is going to attribute cognition to other people, then he must in principle also attribute it to computers. The thrust of the argument is that it couldn't be just computational processes because the computational processes and their output can exist without the cognitive state, says Searle. It is no answer to this argument to feign anesthesia. In cognitive science, one presupposes the reality and knowability of the mental in the same way that in physical science one has to presuppose the reality and the knowability of physical objects.

The Many Mansions Reply points out that Searle's whole argument presuppose AI is only about analog and digital computers. But that just happens to be the present state of technology. Whatever these causal processes are that he says are essential for intentionality, eventually we will be able to build devices that have these causal process, and that will be AI. So his arguments are in no way directed at the ability of artificial intelligence to produce and explain cognition. For Searle, no purely formal model will ever be sufficient by itself for intentionality because the formal properties are not by themselves constitutive of intentionality and they have by themselves no causal powers, except the power, when instantiated to produce the next stage of formalism when the machine running. And any other causal properties that particular realizations of the formal model have are irrelevant to the formal model because we can always put
the same formal model in a different realization where those causal properties are obviously absent.

So, the Chinese Room argument is based on the point that ‘just manipulating the symbols is not by itself enough to guarantee cognition, perception, understanding, thinking and so forth. And, since computers qua-computers are symbol-manipulating devices, merely running the computer programme is not enough to guarantee cognition’. The main thrust of this thought experiment is to show that the syntactic manipulation of formal symbols doesn’t by itself constitute semantics. Besides, formal symbols manipulations by themselves don’t have any intentionality they are quite meaningless. They aren’t even symbol manipulations, since the symbols don’t symbolize any thing. Thus, the aim of this experiment is to show this by showing that as soon as we put something into the system that really does have intentionality (a man), and we programme him with the formal programme and this formal programme carries no additional intentionality, it adds nothing for example to a man’s ability to understand Chinese. The implications for computationalism and strong AI are held to be the following.

First is that in real cognitive system, the symbols have real semantic contents, not contents that are nearly assigned by a programmer. In other words, real or intrinsic, semantic contents are necessary for the real cognitive achievements. Thus, it is wrong to say that cognition is just a matter of symbol manipulation. This leads to the point that the computer programmes are formal, because a
computer processes information, which is encoded in the symbolism that the computer uses. Then through a set of precisely stated rules, the symbols are manipulated. These rules constitute the programme. His Chinese Room Argument shows that even though a system inside a room can manipulate symbols, it does not necessarily operate on the level of meaning. In short, programmes are defined purely formally or syntactically.

Secondly, 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. He adds that human minds have mental contents. This shows that the symbols of the programme can stand for anything the programmer or user wants, because the programme has syntax but no semantics. On the other hand, understanding thought and perception etc have mental content. But symbols are manipulated without reference to any meanings. Thus, minds cannot be equivalent to programmes.

Thirdly, syntax by itself is neither constitute of nor sufficient for semantics. Interestingly, Searle's assertions that syntax is insufficient to establish semantics predates the Chinese Room argument and in fact represent one of the main objections to the generative grammar program that he voiced back in the early 1970's. Chinese Room argument is based on the fact that a programme by itself is not constitutive of thinking, for the programme is purely a matter of formal symbol-manipulation. These symbol manipulations by themselves are not sufficient to guarantee the presence of meanings. The idea is that, computing functions syntactically or otherwise is not sufficient to endow the arguments and
values of the functions with intrinsic semantic content. That is, since computers are just formal symbol-manipulators, they can not qualify for mental ascription.

More recently (1997), Searle has argued that the Chinese Room argument granted too much to computationalism. As he sees it now, the argument wrongly took as unproblematic the assumption that computer programmes are syntactic or symbolic in the first place. Instead, he argues that there is no fact intrinsic to the physics of computers that makes their operations syntactic or symbolic; rather, the ascription of syntax or symbolic operations to a computer programme is a matter of human interpretation. Comparing this thought experiment with the Turing test, Searle argues that a computer can pass the Turing test even without a faint understanding for consciousness or intelligence on its part. According to him, this will be evident if we consider that the question (bunches of ‘inputs’ symbols) may in Chinese mean example ‘what is your favourite colour?’ And the answer (the bundles of ‘output’ symbols) may mean in Chinese. ‘My favourite is blue, but I also like green a lot’. So a person/machine can pass the Turing test (which is meant for testing conscious intelligence), even without a distinct understanding of Chinese or any other language. Digital computers are also doing this kind of symbol manipulation nearly by following the syntactic rules, which is predefined and pre-programmed through relevant programmes.

The conclusion is that if Searle does not understand Chinese solely on the basis of running a ‘programme’ for understanding Chinese, then neither thus any other digital computer merely on the basis of the manipulation formal symbols
according to rules in the programme. A brief look at the Turing test will again confirm the above controversial nature.\textsuperscript{40}

Turing test as a kind of imitation game was proposed by Alan M. Turing as a test for machine intelligence in his article 'Computing Machinery and Intelligence.' It may be described in essence as follows: Imagine that one is confined to a room equipped with a typewriter keyboard and printer on one side and another keyboard and printer on the other side. By means of these devices she can send and receive typewritten messages to and from the occupants of the two adjoining rooms. One of the occupants is another ordinary human being who speaks former's language, while the other occupant is a computer executing a programme designed to provide responses to questions expressed in that language. She is allotted a limited period of time, say ten minutes or so, during which she is at liberty to send whatever questions she likes to the two occupants and to scrutinize their answers. Her task is to try to determine, on the basis of those answers, which room contains the human being and which the computer. The computer is said to pass the test if she cannot tell except by chance which of the two occupants is human. Here, the question arises: 'can machine think?' \textsuperscript{41}

There are a number of variations of this test that limit the domain of discourse and give a chance to computers to pass this test. But the problem lies not in making 'real' answers to restricted and domain specific technical details, but to give the capability of answering questions that involves 'common sense'. This is what critics like Hubert Dreyfus state that any computing machine lacks. As P.M
Churchland observes, now the question ‘Could a machine think?’ has been replaced by a more improved and approachable question. ‘Could a machine that manipulated physical symbols according to structure-sensitive rules think?’ The debate initiated by John. R. Searle and the Churchlands during 1990 have helped us to fully appreciate the distinction between these two questions in the context of portraying a weak AI. Let us now turn to his equally interesting critique of cognitive science.

1.4 Searle’s Critique of Cognitive Science:
Searle rejects cognitive science on the grounds that neither the study of the brain as such nor the study of consciousness as such is of much interest and importance to it. The basic assumption behind cognitive science is that the brain is a computer and mental processes are computational. Besides, consciousness is purely cognitive and that these cognitive activities can be construed in functional terms. For the cognitive scientist, mind will be understood, if it is understood by our best science. According to Searle, these views involve the following four difficulties.

(1) Syntax is not intrinsic to Physics: Searle points out that; cognitive scientists are not concerned with the implications of multiple realizability. They think that it is typical of functional accounts that the same function admits of multiple realizations. The multiple realizability is a consequence not of the fact that the same physical effect can be achieved in different physical substances, but that the relevant properties are purely syntactical. The physics is irrelevant except in so
far as it admits of the assignments of 0's and 1's and of state transitions between them. This has two consequences. First, the same principle that implies multiple realizability would seem to imply universal realizability. If computation were defined in terms of the assignment of syntax, then everything would be a digital computer, because any object whatever could have syntactical ascriptions made to it. One could describe anything in terms of 0's and 1's. Second, the ascription of syntactical properties is always relative to an agent or observer who treats certain physical phenomena as syntactical. Searle argues that on the standard definition of computation, it is hard to see how to avoid the following results from these consequences: (1) For any object, there is some description of that object such that under that description, the object is a digital computer. (2) For any programme and for any sufficiently complex object, there is some description of the object under which it is implementing the programme. He thinks that the reason that the cognitive scientists do not see that multiple or universal realizability is a problem is that they do not see it as a consequence that 'syntax' is not the name of a physical feature, like mass or gravity. On the contrary, the talk of 'syntactical' and 'semantical' engines rests, on a fallacy. According to Searle, syntax is essentially an observer-relative notion. The multiple realizability of computationally equivalent processes in different physical media is not just a sign that the processes are abstract, but that they are not intrinsic to the system at all. They depend on an interpretation from outside. A physical state of a system is a computational state only relative to the
assignment to that state of some computational role, function or interpretation. The same problem arises without 0's and 1's because notions such as computation, algorithm, and programme do not name intrinsic physical features of systems. Computational states are not discovered within the physics, they are assigned to the physics.

The above argument goes a step further than the Chinese Room Argument that showed that semantics is not intrinsic to syntax. Now, he makes a separate point that syntax is not intrinsic to physics. His point is that there is no way to discover that something is intrinsically a digital computer because the characterization of it as a digital computer is always relative to an observer who assigns a syntactical interpretation to the purely physical features of the system. Generally, the characterization of a process as computational is a characterization of a physical system from outside; and the identification of the process as computational does not identify an intrinsic feature of the physics; it is essentially an observer-relative characterization. To understand this argument fully, it is essential to understand the distinction between features of the world that are intrinsic and features that are observer relative. Searle gives certain examples to these features. The expressions 'mass', 'gravitational attraction', and 'molecule' name features of the world that are intrinsic. The expressions such as 'nice day for a picnic', 'bathtub' and 'chair' name objects by specifying some feature that has been assigned to them, some feature that is relative to observers and users. Briefly, the aim of natural science is to discover and characterize features that are intrinsic to
the natural world. By its own definitions of computation and cognition, there is no way that computational cognitive science could ever be a natural science, because computation is not an intrinsic feature of the world. It is assigned relative to observers.

(2) The Homunculus Fallacy is endemic to cognitivism: Homunculus Fallacy is the idea to treat the brain as if there were some agent inside it using it to compute with. A typical case is David Marr (1982), who describes the task of vision as proceeding from a two-dimensional visual array on the retina to a three-dimensional description of the external world as output of the visual system. The difficulty is: who is reading the description? Many think that the homunculus fallacy is not really a problem because, with Dennett (1978), they feel that the homunculus can be ‘discharged’. The idea is that because the computational operations of the computer can be analyzed into progressively simpler units, until eventually we reach simple flip-flop, ‘yes-nc’, ‘1-0’ patterns, it seems that the higher-level homunculi can be discharged with progressively stupider homunculi, until finally we reach the bottom level of a simple flip-flop that involves no real homunculus at all. In short, the recursive decomposition will eliminate the homunculi. Searle advocates that without a homunculus that stands outside the recursive decomposition, we do not even have syntax to operate with. The attempt to eliminate the homunculus fallacy through recursive decomposition fails, because the only way to get the syntax intrinsic to the physics is to put a homunculus in the physics. Cognitive theorists are cheerfully
conscious that the higher levels of computation, for example, ‘multiply 6 times 8’, are observer relative; there is nothing really there that corresponds directly to multiplication; it is all in the eyes of the homunculus beholder. But they want to stop this concession at the lower levels. The electronic circuit, they admit, does not really multiply 6x8 as such, but it really does manipulate 0’s and 1’s and these manipulations, so to speak, add up to multiplication. But to concede that the higher levels of computation are not intrinsic to the physics is already to concede that the lower levels are not intrinsic either. Typical homunculus questions in cognitive science are such as the following: ‘How does the visual system compute shape from shading?’ ‘How does it compute object distance from size of retinal image?’ The parallel question would be ‘How do nails compute the distance they are to travel in the board from the impact of the hammer and the density of the wood?’ In both sorts of cases, the answer is the same. If one is talking about how the system works intrinsically, neither nails nor visual systems compute anything. One, as outside homunculi, might describe them computationally, and it is often useful to do so. But one cannot understand hammering by supposing that nails are somehow intrinsically implementing hammering algorithms and vision by supposing the system is implementing, for example, the shape from shading algorithm.

(3) Syntax has no causal powers: The thesis of cognitive science is that there are a whole lot of symbols being manipulated in the brain, 0’s and 1’s flashing through the brain at lightning speed and visible not only to the naked eye but even to the
most powerful electron microscope, and it is these that cause cognition. But the
difficulty is that 0's and 1's as such have no causal powers because they do not
even exist except in the eyes of beholder. The implemented programme has no
causal powers other than those of the implementing medium because the
programme has no real existence, no ontology, beyond that of the implementing
medium. Physically speaking, there is no such thing as a separate 'programme
level'. Searle shows that the human computer is consciously following rules, and
this fact explains his behaviour, but the mechanical computer is not literally
following any rules. It is designed to behave exactly as if it were following rules
so far practical, commercial purposes it does not matter that it is not actually
following any rules. It could not be following rules because it has no intentional
content intrinsic to the system that is functioning causally to produce the
behaviour. Cognitivism tells that the brain functions like the commercial
computer and that this causes cognition. But without a homunculus, both
commercial computer and brain have only patterns, and the patterns have no
causal powers in addition to those of the implementing media. Thus, there is no
way cognitivism could give a causal account of cognition. In other words, the
attribution of syntax identifies no further causal powers are fatal to the claim that
programme provides causal explanations of cognition. There is just a physical
mechanism, the brain with its various real physical/mental causal levels of
description.
(4) The brain does not do information processing: Searle argues that it is a mistake of cognitive science to suppose that in the sense in which computers are used to process information, brains also process information. In case of the computer, an outside agent encodes some information in a form that can be processed by the circuitry of the computer. The computer then goes through a series of electrical stages that the outside agent can interpret both syntactically and semantically even though, the hardware has no intrinsic syntax or semantics. It is all in the eyes of the beholder. Finally, an output is produced in the form of physical phenomena, for example a printout, which an observer can interpret as symbols with a syntax and semantics. It follows that you could not discover that the brain or anything else was intrinsically a digital computer, although, you could assign a computational interpretation to it as you could to anything else.

The point is not that the claim 'the brain is a digital computer' is simply false. Rather, it does not get up to the level of falsehood. It does not have a clear sense. The question 'Is the brain a digital computer?' is ill defined. At the same time, in the case of brain, none of the relevant neurobiological processes are observer relative and the specificity of the neuro-physiology matters desperately. In short, the sense of information processing that is used in cognitive is as much too high a level of abstraction to capture the concrete biological reality of intrinsic intentionality. The 'information' in the brain is always specific to some modality or other. It is specific to thought, or vision, or hearing, or touch, for example. On the other hand, the level of information processing described in the cognitive
science computational models of cognition is simply a matter of getting a set of symbols as output in response to a set of symbols as output. Briefly, the brain as far as its intrinsic operations are concerned, does no information processing. It is a specific biological organ and its specific neuro-biological processes, which cause specific forms of intentionality. In the brain, intrinsically, there are neuro-biological processes and sometimes they cause consciousness. All other mental attributions are either dispositional, or they are observer relative. In the traditional cognitive science paradigms, there is supposed to be a deep unconscious mental cause that is supposed to produce the desired effect such as the perceptual judgment or grammatical sentences. What such an inversion actually does is that they eliminate the mental cause altogether from the project. They are brute physical explanations, which exclude mind as terra incognita.

Searle's views are opposed by, Churchland. Searle’s thought experiment has been criticized most forcibly on the ground that it is the overall system that is appropriately compared to a programmed computer. And also, on the ground that the strong A1 research programme, is entitled to develop ways of bringing symbols into further interaction both with the environment and with behaviour of the machine. These together generate a better model of the cognitive subject. Searle’s own response insists that anything characterized as a thinker must have appropriate causal powers, but he also suggests that such powers essentially require ‘biology’ or ‘wetware’ rather than hardware.
For Churchland, Searle is in no position to state that rule-governed symbol manipulation never constitutes semantic phenomena. Because, people have a uniformed common-sense understanding of the semantic, and cognitive phenomena and that need to be explained. He further adds that, given proper inputs, a system would think not that it couldn’t. But Searle points out that there is a distinction between syntax and semantics i.e., the distinction between the formal symbol-manipulation that is done by the computer and the mental contents biologically produced by the brain. The idea is that computing functions is not sufficient to endow the arguments and values of the functions with intrinsic semantic content.

There is nothing in Chinese Room corresponding to the functional structure of the human mind -that is out of distinctively human interactions between perception, belief, desire, intention, and action (to name but a few of the more salient mental categories). The moral of this thought experiment is that possession of beliefs and desires is not constituted by the fact that the subject is interpretable as acting out of beliefs and desires. Searle’s strategy is to say that although the brain causes conscious states, any identification of conscious states with brain activities are unsound. Traditionally, it has been opined that the best the reductionist can hope for are correlations between subjective states and brain states, and although correlation can be evidence for causality they are not evidence for identity. Searle has tried to bolster that objection by saying that whereas a/b identification elsewhere in science reveal the reality behind the
appearance, in the case of awareness, the reality and appearance are inseparable. There is no reality to awareness except what is present in awareness. There is, therefore, no reduction to be had. But Churchland argues that Searle fails to appreciate why scientists opt for identifications when they do. Depending on the data, cross-level identification to the effect that 'a is b' may be less troublesome and more comprehensible scientifically than supposing 'thing a causes thing b'.

According to Churchlands, neuroscience can reveal the physical mechanisms subserving psychological functions in the sense that it is indeed the brain that performs those functions. That is, capacities of the human mind are in fact capacities of the human brain. It is highly probable hypothesis based on evidence currently available from physics, chemistry, neuroscience and evolutionary biology. The intricacies of brain function may be subjectively opaque to us now, but they need not remain that way forever. Neuroscience may appear to be defective in providing a purely 'third person account' of mind, but only familiarity of idiom and spontaneity of conceptual response are required to make it a 'first person account' as well. What makes an account a 'first person account' is not the content of that account, but the fact that one has learned to use it as the vehicle of spontaneous conceptualization in introspection and self-description.

Briefly, the weakness of Searle's position is that he offers no clear way to tell when genuine meaning has vanished from the system. He merely insists that some systems have intentionality by virtue of their 'causal powers' and that
some don’t. He vacillates about what those powers are due to some times it seems that the brain is composed of ‘the right stuff’ but other times it seems to be something else. It is whatever seems convenient at the moment; it is the slippery essence that distinguishes ‘form’ from ‘content’, another that separates syntax from semantics and so on. Searle seems to believe that any system whatsoever can be ascribed as beliefs, feelings and the like. If one looks hard enough for a way to describe the system as instantiation of an Artificial Intelligence programme, obviously, that would be a disturbing notion, leading the way to panpsychism. Indeed, Searle believes that the Artificial Intelligence people have unwittingly committed themselves to a panpsychic vision of the world. His escape from his self-made trap is to maintain that all those ‘believes’ and ‘feelings’ that one will uncover in inanimate objects and so forth when one begins seeing mind everywhere are not genuine but ‘pseudo’. They lack intentionality and causal powers of the brain. Certainly, minds come in different grades of sophistication, but minds worth calling minds exist only where sophisticated representational system exist, and no describable mapping that remains constant in time will reveal a self-updating representational system in a machine. Minds exist in brains and may come to exist in programmed machines. If and when such machines come about, their causal powers will derive not from the substances they are made of, but from their design and the programmes that run in them.
Thus, Searle's philosophy of mind is based on his earlier views in the philosophy of language and also that implicitly he makes a bridge between these two. It is very much clear when he argues that the philosophy of mind is concerned with nature of mind and consciousness, perception and intentionality of intentional action and thought. In the same way, philosophy of language is interested in meaning, truth, reference and necessity, and analogously should use any epistemic method that comes to hand to try to figure out how these phenomena work in the minds of actual speakers and hearers. Even though, Searle looks less successful in his attempt to give satisfactory answers to the problems within the philosophy of language, it is difficult to answer the above question without discussing his defense of the weak AI in philosophy of mind. This is what we characterize as a system with conceptual constraints and defends the above interface as we move ahead. Indeed, this becomes an analytical model for his mature theory of intentional causation with gaps. Later, we shall have occasion to see how his semantics outlives at least as an interface in the general defense of non-reductive materialism also as illustrated in Ned Block. The conclusion here is Searle himself tramples his semantic investigations under his feet in his zeal to counter reductive programmes. Thus, a perspective around the above-mentioned two questions will be developed in the next two chapters to point at the major flaws in his arguments.
REFERENCES


2. The harder problem is related to the problem of other minds. The problem is: why should physically different creatures overlap phenomenally in one way rather than another or not at all?

   (hereafter RM)


5. John Searle, Consciousness, Free Action and the Brain, an article in the Journal of Consciousness Studies, 7, No: 10, 2000, pp.3-22


8. Ibid, p.28ff


15. John Searle, *IN*, p-10


20. Ibid, p-47

21. Ibid, p-62


23. John Searle, *IN*, p-7

24. Ibid, p-171


28. Ibid, p-85


34. John Searle, *MBP*, pp.420-431

35. Ibid, pp.423-427
36. Ibid, pp.427-428
37. Ibid, pp.428-429
38. Ibid, pp. 429-530
39. Ibid, pp. 430-431
41. Ibid, p-451
42. The controversy with functionalists like Churchland originally started in Scientific American; see Churchland's Could a Machine Think? In Scientific American 262 1990, pp. 32-37; and Searle's Is the Brain's Mind a Computer Programme? in Scientific American 262 1990, pp. 26-31
43. John Searle, RM, p-190
45. Peter Carruthers, LTC, pp.26-27
47. Ibid, p-127