= A) and the false ones (A =

A or B). The first can subsist independently of the second, but the second can occur only because of the existence of the first:

From the point of view of semantics , errors must be accidents : if in the extension of " horse " there are no cows , then it cannot be required for the meaning of " horse " that cows be called horses . On the other hand , if " horse " did not mean that which it means , and if it were an error for horses , it would never be possible for a cow to be called " horse . " Putting the two things together , it can be seen that the possibility of falsely saying " this is a horse " presupposes the existence of a semantic basis for saying it truly , but not vice versa . If we put this in terms of the crude causal theory , the fact that cows cause one to say " horse " depends on the fact that horses cause one to say " horse " ; but the fact that horses cause one to say " horse " does not depend on the fact that cows cause one to say " horse " ... "

= = Functionalism = =

During the 1960s , various philosophers such as Donald Davidson , Hilary Putnam , and Fodor tried to resolve the puzzle of developing a way to preserve the explanatory efficacy of mental causation and so @-@ called " folk psychology " while adhering to a materialist vision of the world which did not violate the " generality of physics " . Their proposal was , first of all , to reject the then @-@ dominant theories in philosophy of mind : behaviorism and the type identity theory . The problem with logical behaviorism was that it failed to account for causation between mental states and such causation seems to be essential to psychological explanation , especially if one considers that behavior is not an effect of a single mental event / cause but is rather the effect of a chain of mental events / causes . The type @-@ identity theory , on the other hand , failed to explain the fact that radically different physical systems can find themselves in the identical mental state . Besides being deeply anthropocentric (why should humans be the only thinking organisms in the universe ?) , the identity @-@ type theory also failed to deal with accumulating evidence in the neurosciences that every single human brain is different from all the others . Hence , the impossibility of referring to common mental states in different physical systems manifests itself not only between different species but also between organisms of the same species .

One can solve these problems , according to Fodor , with functionalism , a hypothesis which was designed to overcome the failings of both dualism and reductionism . What is important is the function of a mental state regardless of the physical substrate which implements it . The foundation for this view lies in the principle of the multiple realizability of the mental . Under this view , for example , I and a computer can both instantiate (" realize ") the same functional state though we are made of completely different material stuff (see graphic at right) . On this basis functionalism can be classified as a form of token materialism .

= = Evolution = =

Fodor has co @-@ written a book with the biolinguist Massimo Piattelli @-@ Palmarini called What Darwin Got Wrong (2010) which describes neo @-@ Darwinists as being " distressingly uncritical " and says of Darwin 's theory of evolution that " it overestimates the contribution the environment makes in shaping the phenotype of a species and correspondingly underestimates the effects of endogenous variables . " Evolutionary biologist Jerry Coyne describes this book as " a profoundly misguided critique of natural selection " and " as biologically uninformed as it is strident . " Moral philosopher and anti @-@ scientism author Mary Midgley praises What Darwin Got Wrong as " an overdue and valuable onslaught on neo @-@ Darwinist simplicities " . The book also received positive review by mathematician and Intelligent Design Theorist William Dembski .

= = Criticism = =

A wide variety of philosophers of diverse orientations have challenged many of Fodor 's ideas . For

example , the language of thought hypothesis has been accused of either falling prey to an infinite regress or of being superfluous . Specifically , Simon Blackburn suggested in an article in 1984 that since Fodor explains the learning of natural languages as a process of formation and confirmation of hypotheses in the LOT , this leaves him open to the question of why the LOT itself should not be considered as just such a language which requires yet another and more fundamental representational substrate in which to form and confirm hypotheses so that the LOT itself can be learned . If natural language learning requires some representational substrate (the LOT) in order for it to be learned , why shouldn 't the same be said for the LOT itself and then for the representational substrate of this representational substrate and so on , ad infinitum? On the other hand , if such a representational substrate is not required for the LOT , then why should it be required for the learning of natural languages? In this case , the LOT would be superfluous . Fodor , in response , argues that the LOT is unique in that it does not have to be learned via an antecedent language because it is innate .

In 1981 Daniel Dennett had formulated another argument against the LOT . Dennett suggested that it would seem , on the basis of the evidence of our behavior toward computers but also with regard to some of our own unconscious behavior , that explicit representation is not necessary for the explanation of propositional attitudes . During a game of chess with a computer program , we often attribute such attitudes to the computer , saying such things as " It thinks that the queen should be moved to the left " . We attribute propositional attitudes to the computer and this helps us to explain and predict its behavior in various contexts . Yet no one would suggest that the computer is actually thinking or believing somewhere inside its circuits the equivalent of the propositional attitude " I believe I can kick this guy 's butt " in Mentalese . The same is obviously true , suggests Dennett , of many of our everyday automatic behaviors such as " desiring to breathe clear air " in a stuffy environment .

Some linguists and philosophers of language have criticized Fodor 's self @-@ proclaimed " extreme " concept nativism . Kent Bach , for example , takes Fodor to task for his criticisms of lexical semantics and polysemy. Fodor claims that there is no lexical structure to such verbs as "keep", " get ", " make " and " put ". He suggests that, alternatively, " keep " simply expresses the concept KEEP (Fodor capitalizes concepts to distinguish them from properties, names or other such entities). If there is a straightforward one @-@ to @-@ one mapping between individual words and concepts, "keep your clothes on ", "keep your receipt "and "keep washing your hands "will all share the same concept of KEEP under Fodor 's theory . This concept presumably locks on to the unique external property of keeping. But, if this is true, then RETAIN must pick out a different property in RETAIN YOUR RECEIPT, since one can 't retain one 's clothes on or retain washing one 's hands. Fodor 's theory also has a problem explaining how the concept FAST contributes, differently, to the contents of FAST CAR, FAST DRIVER, FAST TRACK, and FAST TIME. Whether or not the differing interpretations of " fast " in these sentences are specified in the semantics of English, or are the result of pragmatic inference, is a matter of debate. Fodor 's own response to this kind of criticism is expressed bluntly in Concepts: " People sometimes used to say that exist must be ambiguous because look at the difference between 'chairs exist 'and 'numbers exist '. A familiar reply goes: the difference between the existence of chairs and the existence of numbers seems, on reflection, strikingly like the difference between numbers and chairs. Since you have the latter to explain the former, you don't also need 'exist' to be polysemic."

Some critics find it difficult to accept Fodor 's insistence that a large , perhaps implausible , number of concepts are primitive and undefinable . For example , Fodor considers such concepts as EFFECT , ISLAND , TRAPEZOID , and WEEK to be all primitive , innate and unanalyzable because they all fall into the category of what he calls " lexical concepts " (those for which our language has a single word) . Against this view , Bach argues that the concept VIXEN is almost certainly composed out of the concepts FEMALE and FOX , BACHELOR out of SINGLE and MALE , and so on .

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