

# Theories of Mind

## Writing Assignment 2

Due: Friday 23 November, 4pm

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Describe and discuss the 'Folk Psychology' debate, especially as characterized by Horgan and Woodward, Stich and the Churchland. Which stand on the issue do you find most plausible? - explain and defend your view.

We begin by giving a quick definition of Folk Psychology (henceforth known as FP). We then discuss the arguments against FP as proposed by Churchland and Stich where they argue that FP needs to be eliminated as a theory because it is false and that FP is incompatible with cognitive psychology, respectively. Within those arguments we appeal to the other side of the debate with defence from Horgan and Woodward's essay, 'Folk Psychology is Here to Stay'. Finally, I will then defend my view that although FP has stayed and is currently still here, I am more inclined to believe that it is effective on the most part, but not strong enough to stand as a 'true' theory.

"FP is the term used for the process of attributing thoughts, beliefs, intentions and meaning to each other." [1] Churchland begins by acknowledging FP as a *theory* and builds upon this by showing that the issue becomes the matter of how the ontology of the theory of FP relates to the ontology of completed neuroscience. Thus, he can take the eliminative reductionist approach to the problem and show that FP is a false theory, irreducible to neuroscience, and therefore discardable. He uses three lines of attack to prove that FP is (indeed) a false theory (as described in [3], quoting [2]): "First, FP suffers explanatory failures on an epic scale". Second, "it has been stagnant for at least twenty-five centuries". And third, "its intentional categories stand magnificently alone, without any prospect of reduction."

Churchland illustrates his first point by giving a variety of instances where FP appears to fail to work. In particular, examples such as accounting for the psychological functions of sleep and the way our retinas 'transform' 2-D stimuli to 3-D images is highlighted by Horgan and Woodward. Horgan and Woodward retorts by aptly noting that FP is intended for *rational*

*action*, not for explaining every type of cognitive phenomenon. However, it is the example involving a large-scale conceptual change (e.g. linguistic ability/comprehension in children as given by Churchland) and the dynamics of mental illness that I find plausible in supporting the superficiality of FP. Horgan and Woodward give no concrete evidence to account for this apart from stating vaguely that “*cognitive psychologists have developed theories about learning that employ concepts like the folk-psychological concepts of belief, desire, judgement etc.*” (p. 401). Furthermore, there is no mention of how to account for *radical* change of ‘beliefs’ in the head such as mental illnesses which, although are not common on the extreme scale, occur more-often-than-not in milder forms such as depression, bi-polarity, Asperger’s Syndrome etc.

Secondly, Churchland claims that FP as a theory has not progressed enough to be taken seriously as a true theory (p. 212) [2], by example of the explanation of the development of the human race (*homo sapiens*). He states that the results from the perspective of natural history and physical sciences give a rich and continually growing answer. He continues to support this and his third point by noting that FP is not part of this growing synthesis and so it has no prospect of being reduced to neuroscience. In short, while neuroscience is constantly advancing, FP has remained stagnant. Horgan and Woodward counteracts this claim by insisting that FP is far from unprogressive - modern users of FP now appeal more to ‘situational’ factors rather than enduring personality traits as one might have done in the 18th/19th century. More convincing is the assertion that there is greater willingness and prospect for FP to appeal to unconscious beliefs and motivations. This

idea will be further elaborated when dealing with Stich's argument later.

Finally, Horgan and Woodward addresses Churchland's issue of irreducibility with reference to Donald Davidson's anomalous monism as an alternative to reductionist materialist which makes clear that even if FP is not reducible to neuroscience, FP may still hold. That is, even if type-type reduction fails, there is still the availability of token-token identity theory which Horgan and Woodward claim that "*token mental events posited by FP might well exist, and might well bear all the causal relations to each other...and to behaviour which FP says they do*". (p. 404). Horgan and Woodward then concludes that Churchland is mistaken to assume that FP must be reducible to neuroscience in order to be compatible with it. However, we note that Churchland *does* defend his view that eliminative materialism is strictly *consistent* with functionalism (p. 216-218). Essentially, Churchland concludes that FP is a redundant form of functionalism (eliminating FP doesn't mean rejecting functionalism), and proceeds to dwell on the potential of what one may achieve if FP were gone as a theory. However, those are just suppositions (or rather just theoretical observations) that bear little support for the ineffectiveness of FP and so we move on to Horgan and Woodward's defence against Stich's claim that FP is unlikely to prove compatible with 'mature' cognitive science.

Stich offers two basic arguments against FP; first, the overall causal organisation of cognitive system doesn't conform to the causal organisation that FP ascribes them, and second, that there is a lack of fit between high and low level theories of cognitive science (henceforth, known as CS) and FP through his *modularity* principle.

His first argument revolves around the two ways FP attributes belief and cause to an event. Verbally - events in this class are ones which cause the subject (of event) to *'utter an assertion that p'*. Non-verbally - these are the events which cause the subject to perform actions according to FP (i.e. in light of subject's beliefs, desires etc.). Stich uses the example in attribution theory performed by Storms and Nisbett[5] as the backbone of his assertion that the mechanisms which control non-verbal behaviour are distinct from the mechanisms which control the subject's subsequent verbal account of the reasons for that behaviour. In this experiment, subjects were given placebo pills and told the relevant side effects which would explain their role in increasing/reducing the subjects' insomnia. However, results showed the contrary, that although the subjects had the non-verbal 'answers' they gave alternative reasons that bear little resemblance to this class (non-verbal). Moreover, Stich proceeds to claim that this result can be extended such that verbal and non-verbal events are mutually exclusive in general.

Again, Horgan and Woodward defends his position by appealing to the consideration of unconscious belief and desires, in particular Timothy Wilson's idea of 'dual cognitive control' over verbal and non-verbal behaviour is used, who acknowledges that *"people often have direct conscious access to the mental causes of their behaviour and that at such times these states typically cause accurate reports about themselves"*(p. 415). However, I note that this doesn't resolve results of Storms and Nisbett's experiment because the subjects in the study were told explicitly the effects that imply belief and desire attribution. It seemed that their unconscious minds 'preferred' to ascribe specific and introspective causes rather than a general cause that

would have been easier to infer from the information they were given about the effects of the pills.

Next, Stich's modularity principle requires that beliefs and desires should be identical with 'naturally isolable' parts of the cognitive system. He focuses on the modelling of human memory from CS as a basis and cites from Minsky's 'Society of Mind' which deduces that '*no natural part of the system (CS) can be correlated with "explicit" or verbally expressed beliefs*'. In other words, the structure of human memory consists of 'giant-webs' of neurons, all so intricately connected such that its realm is too large for it to be 'naturally isolable' as FP events and its causal relations.

Horgan and Woodward contends the modularity principle on the grounds that it is implausible as a intertheoretic-compatibility condition. They use Davidson's laws on causality to show this theoretically and moreover, through the analogous example of Skinnerian psychology to show that if the modularity principle were to hold then it would fail. The argument is that if we were Skinnerian creatures and the causal architecture assumed by FP is not instantiated in us by either simple or complex events, then this fact will show up on analysis of our behaviour. Stimulus-response laws akin to Skinnerian theory that are incompatible with the causal architecture of FP will then be used and so is usable to explain the full range of human behaviour. Thus, even though FP is useful on a large-scale, FP will be false because of its failure to fit with this underlying (Skinnerian) theory. This failure to fit is too 'all-or-nothing' in nature and Horgan and Woodward concludes that because of this rigidity and its denial for higher-level theories to have adequate degree of epistemological autonomy, that the modularity principle is not useful as a

compatibility condition for disregarding FP.

In conclusion, I find the opposing arguments to FP as the most plausible. Between Churchland's argument that FP is a superficial theory, specifically the lack of resolution for the cases of mental illnesses and their associated milder manifestations, together with Stich's first argument where Horgan and Woodward fail to provide a direct explanation for the results of the insomnia placebo pill experiment, I find it difficult to regard FP as a credible theory of prediction.

## References

- [1] Simon Blackburn, *Oxford Dictionary of Philosophy*. Oxford University Press, 2005.
- [2] Paul M. Churchlands, *Eliminative Materialism and the Propositional Attitudes*. In William G. Lycan (Ed.), *Mind and Cognition, A Reader* (p. 206-223). Blackwell Publishers Ltd, 1990.
- [3] Terence Horgan and James Woodward, *Folk Psychology is Here to Stay*. In William G. Lycan (Ed.), *Mind and Cognition, A Reader* (p. 345-361). Blackwell Publishers Ltd, 1990.
- [4] Stephen Stich, *From Folk Psychology to Cognitive Science: The Case Against Belief*. Cambridge, MA, Bradford, 1983.
- [5] M. Storms and R. Nisbett, "Insomnia and the attribution process", *Journal of Personality and Social Psychology*, vol. 2, 1970.