Abstract

The predominant conception of our everyday understanding of other people’s actions is as a commonsense psychology that is a (proto-)scientific theory. A central version of this conception is that this theory takes propositional attitudes as mental states which are causally effective in the production of human purposive action. In this essay, I argue that this central version of our commonsense psychology is mistaken. I take Jerry Fodor’s *Psychosemantics* as a *locus classicus* of this view. I examine arguments from Daniel Dennett and Lynne Rudder Baker that Fodor (and others who argue along the same lines as Fodor) make serious errors in being committed to a hyper-realist (i.e., physicalist) conception of mental states and causality. I argue that Fodor does not provide an adequate exposition of how his candidate for a scientific theory that vindicates his version of commonsense psychology accounts for the meaning of a propositional attitude. I further argue that our everyday practices that deploy commonsense psychological concepts are inconsistent with characterising commonsense psychology as a (proto-)theory or as part of a (proto-)science. From this investigation, I conclude that Fodor’s conception of commonsense psychology
psychology is untenable. Finally, I discuss briefly an alternative that is suggested by the rebuttals of Dennett and Baker that commonsense psychology is better conceived as an non-theoretical explanatory practice that deploys an alternative conception of psychological causality distinct from physical causality.
For my wife, Andrea
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Preface

A very popular way of engaging with our everyday understanding of each others’ action is to take what might be called a psychological point of view. By this I mean that what people take as the important question is ‘what psychological theory best accounts for what we do when we predict and explain human purposive behaviour?’ My approach will not be by examining the empirical theories and evidence gathered by cognitive scientists, psychologists, and other social and computer scientists. It seems to me that the contribution that philosophers (qua philosopher) can have is in the careful examination of the conceptual landscape of the empirical endeavour. My view is informed by Wittgenstein’s work in that I will be attempting to get a clear overview of just what is going on conceptually with an eye to ‘dissolving’ the problems (that can be so treated). By examining the presuppositions upon which the ‘standard’ account of our commonsense psychology is built and the ‘logic’ of those everyday psychological concepts, I seek to show that the central questions regarding our everyday psychological concepts and the way we use them have been misconstrued. I share Wittgenstein’s view that philosophical problems are not typ-
ically solved by providing alternative theories but by characterising the problem in a way that suggests a dissolution.

Philosophical problems can be compared to locks on safes, which can be opened by dialling a certain word or number, so that no force can open the door until just this word has been hit upon, and once it is hit upon any child can open it.¹

Another way to put it is to call my method ordinary language philosophy (OLP).

OLP is characterised, by Baz, as

“a particular form of Western philosophy—one that seeks to alleviate philosophical entanglements and obscurities by means of consideration of the ordinary and normal uses of philosophers’ worlds, and the worldly conditions that make those uses possible and give them their specific significance […] OLP rests on the claim that philosophical difficulties arise when we take our words to express thoughts, or to otherwise carry commitments or implications […] in virtue of something called ‘their meaning’, and irrespective of how we mean or may reasonably be found to mean them (which here just means irrespective of how we use or may reasonably found to use them).”²

There are a couple of things that this essay is not. It is not an attempt to vindicate Wittgenstein’s philosophy or metaphilosophy. I am very sympathetic to Wittgenstein’s methods and aims, but I do not directly rely upon his arguments. The most important reason I have chosen to avoid this way is that the interpretation of Wittgenstein’s work is itself a very difficult and often controversial task.

This essay is also not a work in cognitive science or psychology. In that respect, I am following Wittgenstein’s adage that philosophy leaves everything as it is. I take Wittgenstein to be saying that our everyday understanding is left as it is. If something changes, it is our attitude towards that everyday understanding. I am going to argue by re-arranging what we already accept and will leave the empirical theory-building to those better disposed to do so. As such, I will not be evaluating the empirical evidence or reviewing the empirical experimental results of psychological or cognitive scientific theories. I am concerned with the conceptual presuppositions that inform the literature and those presuppositions are most readily seen in those very first arguments about the nature of common-sense psychology, so it is there I begin. I hope to be able to provide a few of the turns needed to unlock the safe.

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Our investigation is a grammatical one. Such an investigation sheds light on our problem by clearing misunderstandings away. Misunderstandings concerning the use of words, caused, among other things, by certain analogies between the forms of expression in different regions of language.  


4. PI, §90.
1 Commonsense Psychology

How does the philosophical problem about mental processes and states and about behaviourism arise?—The first step is the one that altogether escapes notice. We talk of processes and states and leave their nature undecided. So we have to deny the yet uncomprehended process in the yet uncomprehended medium. And now it looks as if we had denied mental processes. And naturally we don’t want to deny them.

PI, §308

1.1 So, what are we talking about?

In our everyday lives we encounter people obtaining information from others, deceiving each other, anticipating the actions of their rivals, sussing out the hidden desires of their opponents, striving to meet the expectations of their lovers, and a host of other interpersonal activities. All of these activities involve an understanding of other people. We use that understanding to negotiate the social world with a great deal of success, and we typically do it without paying very much attention to how we do it. In our efforts to understand others and make ourselves understood, we use words like ‘believe’ and ‘want’ and ‘intend’ and ‘hope’. Almost everyone learns to do it, but it is rarely ever explicitly
taught. Our interpersonal skills usually get better as we become adults and eventually some very complicated social situations become easily understandable to us—so much so, that even doing so becomes mostly transparent. On other occasions, the actions of others seem puzzling or downright bizarre. In those cases, we find ourselves applying what we know about people’s intentions, characters, goals, and fears in a not so transparent way.

This everyday understanding of others’ behaviour is often called ‘commonsense psychology’ (frequently, ‘folk psychology’) and a great deal has been written about it. There is a widespread confusion about the use of these two terms. In order to avoid this issue, unless I specifically say otherwise, by ‘commonsense psychology’ I am going to be referring to our everyday understanding of each other’s behaviour. For the most part, the literature about commonsense psychology has dwelt on issues resulting from trying to characterise what we do when we understand other people. These characterisations can be called philosophical or psychological theories of commonsense psychology. I shall avoid the term ‘folk psychology’ as far as possible.

In developing these theories of commonsense psychology, the literature has pursued a number of lines of questioning. Is this understanding itself a ‘folk’ theory? Is it some sort of imaginative identification with other people? Is it made possible by the way our brains are structured and have evolved? Do we have natural affinities drawing people together that make this understanding work? Are there people who do not ever develop this understanding or develop it imperfectly? How do we go about predicting what people will do in specific situations? What mental mechanisms are responsible for making those
predictions and underpinning what we understand? How exactly do beliefs and desires interact in order to cause purposive behaviour?’ It seems that while the cognitive scientific side of the literature has developed theory after theory, we see less investigation of the concepts that are at the heart of the matter: the everyday psychological terms and the ways in which these terms are used in their daily dealings with others. A question relatively infrequently asked is ‘What exactly is commonsense psychology?’ After all, it isn’t perfectly straightforward what philosophers and psychologists who study commonsense psychology are talking about. How do people use everyday psychological terms like ‘belief’ and ‘desire’ in explaining behaviour? How do emotions and ‘character traits’ fit into understanding others? What exactly does a ‘commonsense understanding of others’ look like?

I think that one could be excused for assuming that such a concept as frequently written about as ‘folk psychology’ would have a long standing, more or less widely agreed upon definition in the literature. A brief look quickly shows that such an assumption would be a mistake.

There are two different things that ‘folk psychology’ has come to mean, and they are not always distinguished: (1) common-sense psychology that explains human behavior in terms of beliefs, desires, intentions, expectations, preferences, hopes, fears, and so on; (2) an interpretation of such everyday explanations as part of a folk theory, comprising a network of generalizations employing concepts like belief, desire, and so on. The second definition […] is a philosophical account of the first.¹

Think of common-sense psychology as a term-introducing scientific theory, though one invented long before there was any such institution as professional science. Collect all the platitudes you can think of regarding the causal relations of mental states, sensory stimuli, and motor responses...[a]dd also all the platitudes to the effect that one mental state falls under another—'toothache is a kind of pain', and the like... Include only platitudes which are common knowledge among us—everyone knows them, everyone knows that everyone else knows them, and so on.²

Each of us understands others, as well as we do, because we share a tacit command of an integrated body of lore concerning the law-like relations holding among external circumstances, internal states, and overt behaviour. Given its nature and functions, this body of lore may quite aptly be called 'folk psychology.'³

We all share a (largely) tacit theory according to which the behaviour of people and higher animals is to be explained (in part at least) by appeal to their beliefs and desires. It is in virtue of being embedded in this 'folk psychology' that such terms as 'belief' and 'desire' acquire their meaning.⁴

['Folk psychology' is] a sort of common-sense theory about how to explain human behaviour.”⁵

['Folk Psychology' is] just the capacity for practical reasoning, supplemented by a special use of a childish and primitive capacity for pretend play.⁶

This seems to me most patently obvious as soon as we reflect on our most mundane and routine social activities, let alone when we reflect on the diagnoses we make when the behaviour of friends or colleagues seem initially

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out of character or puzzling: we employ unthinkingly, and largely success-
fully, a rich, intricate, and sophisticated framework of ['folk psychology'].

['Folk psychology'] refers to the ordinary person’s repertoire of mental con-
cepts, whether or not this repertoire invokes a theory.

It has come to be a standard assumption in philosophy and psychology that
normal adult human beings have a rich conceptual repertoire which they
deploy to explain, predict and describe the actions of one another and, per-
haps, members of closely related species also. As is usual, we shall speak of
this rich conceptual repertoire as ‘folk psychology’ and of its deployment as
‘folk-psychological practice.’

Most broadly, folk psychology is simply the information that lay people have
about the mind.

I take folk psychology to be the basis—whatever it is—of our ability to de-
scribe, interpret, and predict each other by attributing beliefs, desires, hopes,
feelings, and other familiar mental states.

Almost all discussions of the topic begin by stating or presupposing that ['folk
psychology'] is the ability to attribute intentional states, principally beliefs
and desires, to other people and perhaps also to oneself, in order to predict
and explain behaviour.

12. By ‘intentional’, Ratcliffe refers to ‘the power of minds to be about, to represent, or to stand for, things, properties and states of affairs’ (Pierre Jacob, ‘Intentionality’, in The Stanford Encyclopedia of Philosophy, Fall 2010, ed. Edward N. Zalta (2010)) rather than the more mundane notion of ‘purposeful, done on purpose, or deliberately’. If I mean the latter sense, I shall use the terms ‘deliberate’.
13. M. Ratcliffe and D. D. Hutto, ‘Introduction’, in Folk Psychology Reassessed (Dortrecht: Springer Ver-
lag, 2007), 1.
So, this commonsense understanding has been defined as, variously: an ability, the basis of an ability, a conceptual repertoire, a repertoire of concepts (I am not sure if the previous two mean the same thing), a capacity, a body of lore, information, a framework, a term-introducing scientific theory, a largely tacit theory, and a sort of common-sense theory. This is admittedly an unsystematic sample of definitions but we can discern at least two different ideas being expressed. The first is the idea of a body of knowledge or information being consulted. We see terms like ‘lore,’ ‘framework,’ and ‘theory.’ The second is the idea that there is a (perhaps, specialised) skill being exercised. Note the use of terms like ‘ability’ and ‘capacity.’ A body of knowledge is something that is learnt, considered, altered, and applied. On the other hand, a skill is something acquired, practised, and sharpened. One can know certain facts and generalisations about a task, say, without having the skills to perform them (changing the oil in one’s car) and one can have a skill without being able to provide many (or any, in some cases) of the details of how that skill works (throwing a curveball).

As a quick aside, the literature about commonsense psychology is loose when it comes to the terms ‘folk theory’ and ‘proto theory’. A quick perusal of the discussion about these terms reveals a marked reluctance to be specific about just what is to be understood by them. I am going to use the term ‘(proto-)theory’ to refer to both of these phrases, though I acknowledge that they are often not used to mean exactly the same thing. What I shall mean by ‘(proto-)theory’ is just ‘a theory (a set of falsifiable generalisations intended to explain facts and/or events) which is non-rigourous (i.e., ‘pre-scientific’) in that it is
not the subject or the result of special scrutiny or extensive experimentation. This may strike some as overly restrictive, but I believe it captures the notion that ‘folk’ theories are not technical in nature but are involved in how we explain everyday happenings to each other.

It looks as though these definitions are trying to get at (at least) two different aspects of our commonsense understanding of other people’s behaviour. An argument has been made by Stich and Ravenscroft that the term ‘folk psychology’ should be understood to have two different senses: an ‘external’ sense and an ‘internal’ sense.\textsuperscript{14} The external sense refers to “a psychological theory constituted by the platitudes about the mind ordinary people are inclined to endorse.” The internal sense refers to “an internally represented knowledge structure or body of information” \textit{that subserve our capacities} to describe each other with terms like ‘believe’ and ‘desire’, predict and explain behaviour using terms like ‘believe and ‘desire’, and a propensity to agree with a wide range of generalisations linking terms such as ‘belief’ and ‘desire’ to regularly observed behaviour.\textsuperscript{15}

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\textsuperscript{15} A further distinction has recently been made by Ian Ravenscroft, ‘Folk Psychology as a Theory’, in \textit{The Stanford Encyclopedia of Philosophy}, Fall 2010, ed. Edward N. Zalta (2010). The third term comes from separating the internal sense of folk psychology into two further uses. The term ‘mindreading’ refers “to a particular set of cognitive capacities which include—but are not exhausted by—capacities to predict and explain behaviour.” This use is distinguished from the use of ‘folk psychology’ that refers to any theory of behaviour represented in the brain. Very little follows from this distinction for us. It is enough to note that ‘mindreading’ and ‘the internal sense of folk psychology’ refer to psychological descriptions of ‘what goes on the the head’ of a person when she uses commonsense psychology.
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The most frequent distinction drawn is that between two different debates involving our commonsense psychology: the ‘use’ debate and the ‘status’ debate. The ‘use’ debate attempts to answer the question ‘what is the best characterisation of what people do when they give commonsense psychological explanations, predictions, and so forth?’ This debate is joined by defenders of various theories: the Theory Theory (TT), the Simulation Theory (ST), various TT/ST hybrid theories, and lately theories based in phenomenological concerns and concepts. TT theories characterise our commonsense understanding of others as a naïve or ‘proto-scientific’ theory with which we infer the mental states of others. ST theories tend to characterise our understanding of others as either empathetic or imaginative projection in order to attribute mental states to others. The TT/ST hybrid theories combine TT and ST elements into a theory by which we deploy some sort of simulation underpinned by theories held by agents in order to at-


tribute mental states. The phenomenologically based theories tend to focus on innate interpersonal abilities that connect individuals without necessarily attributing propositional attitudes. I will be paying this debate very little attention.

The second debate is known as the ‘status’ debate. This debate attempts to answer the question “To what extent is the commonsense belief/desire framework correct?” This debate is taken up on the one side by Intentional Realists, such as Fodor, and on the other by Eliminative Materialists, such as Churchland. Eliminative materialists hold that “our common-sense understanding of psychological states and processes is deeply mistaken and that some or all of our ordinary notions of mental states will have no home, at any level of analysis, in a sophisticated and accurate account of the mind. In other words, it is the view that certain common-sense mental states, such as beliefs and desires, do not exist.”

On the other hand, intentional realists, such as Jerry Fodor, maintain that a correct psychological science will indeed vindicate the intentional vocabulary of our com-

21. For example, Nichols and Stich, Mindreading: An integrated account of pretence, self-awareness, and understanding other minds.


monsense psychology. They maintain that propositional attitudes are real and that any vindicating scientific theory must hold “that there are mental states whose occurrences and interactions cause behaviour and do so, moreover, in ways that respect (at least to an approximation) the generalisations of common sense belief/desire psychology” and “that these same causally efficacious mental states are also semantically evaluable.”

To be semantically evaluable is to be able to mean something, like the symbol ‘Au’ can mean the element gold. It is to be able to be satisfied or fulfilled, like a desire or a wish.

There is still another distinction to be made. As we saw above, Lynne Baker points out that there is a useful distinction to be made between the object of study and the result of the study. Our ordinary commonsense understanding that is used to make sense of our behaviour with terms such as ‘belief,’ ‘desire,’ and ‘intention’ should be clearly distinguished from the philosophical or psychological interpretations of these explanations being the result of the operation of a theory, a vocabulary of terms like ‘belief’ and ‘desire’, and so forth. The latter sense of ‘folk psychology’ is to be understood as a conception or interpretation of our commonsense psychology (what I am calling ‘theories of commonsense psychology’). As Baker points out, this distinction is often poorly maintained.

If we are unclear about our starting point, then much of what follows will be of limited value. It gets remarked upon again and again that the literature about commonsense

28. For example, M. Ratcliffe, ‘From Folk Psychology to Commonsense’, in *Folk psychology Re-assessed* (Dortrecht: Springer, 2007), 223–243; D. D. Hutto, *Folk Psychological Narratives: The social*
psychology takes (mostly) for granted that what we do in understanding each other is attribute intentional mental states to each other (in the form of propositional attitudes) that causally figure in predictions and explanations.

### 1.2 So, what’s the problem?

A persistent question about our commonsense psychology is whether it can be defended, vindicated, eliminated, supplemented, or augmented in order to adequately account for human social cognition. An orthodox conception of our commonsense psychology has developed in these last thirty years and I wish to ask whether a specific part of that conception of commonsense psychology can be defended. This orthodoxy centrally involves the attribution of propositional attitudes, which are said to be causally effective in bringing about our actions, in order to predict, explain, and describe the actions of others and ourselves. But, crucially, it is said that it is within or in virtue of a theory or a theory-like structure that we are able to make these attributions.²⁹

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²⁹ Just to be clear about what I mean, I offer Churchland on this point:

Not only is folk psychology a theory, it is so obviously a theory that it must be held a major mystery why it has taken until the last half of the twentieth century for philosophers to realize it. The structural features of folk psychology parallel perfectly those of mathematical physics; the only difference lies in the respective domain of abstract entities they exploit-numbers in the case of physics, and propositions in the case of psychology. (Churchland, ‘Eliminative Materialism and Propositional Attitudes’, 71)
One function of our commonsense psychology is to answer questions like “why did you do this?” or “why did she do that?” When I am asked why I drove to work this morning rather than walk, I might reply “I wanted to take advantage of such a nice day” or “I believe that I am going to have to bring a large number of exams home today and I do not want to carry them home while walking.” When we provide the reasons for our actions, we are readily understood. However, if we are further pressed to give an account of in exactly what way our reasons explain our actions, i.e., how does giving beliefs and desires explain those actions, we are somewhat nonplussed. Perhaps we say ‘that’s just what we do’ or ‘that’s what you asked after’ or some such. So, what is the relationship between a reason for an action and the action is purports to explain?

It is somewhat puzzling on its face. It would seem that when we talk about actions, we are talking about bodily movements in space and time. But when we talk about reasons, we appeal to mental entities, like desires and intentions. The problem belongs to any number of philosophical concerns about the relationship of mind to body and is primarily driven by the overwhelmingly mechanical view of the world by a great deal of contemporary science.

There are two very popular positions in the various theories of commonsense psychology: physicalism and causalism. Causalism is the general position that inner mental states cause purposive behaviour. Physicalism is the idea that “everything is physical, or as contemporary philosophers sometimes put it, that everything supervenes on, or is neces-
sitated by, the physical’’\textsuperscript{30} and, as such, each instance of a propositional attitude is to be identified with, or considered constituted by, an instance of a particular brain state.\textsuperscript{31}

One way of arguing to physicalism in commonsense psychology can be called the argument from causal explanation. It goes like this (substituting any intentional mental state for ‘belief’): “Genuine causal explanations must appeal to physical states or entities. The only internal states that plausibly can explain behaviour are brain states. So, if beliefs are candidates for causally explaining behaviour, then beliefs must be brain states.”\textsuperscript{32}

On the other hand and despite the insistence of many (like Churchland and Fodor), it isn’t perfectly clear that saying something like “Alice was driving very quickly today because she wanted to make it home before the evening news came on television” doesn’t seem akin to “Alice was driving very quickly today because the throttle on her car requires maintenance.” If “Dan forgot to pick up butter tarts after work for dessert” is a causal explanation for why “Dan baked a cake this afternoon” then we should consider this explanans as an hypothesis. But if Dan sincerely reveals to his son that his forgetting the tarts is indeed why he is baking, how is this an hypothesis? What tests are available to refute it? Are we typically in a position to doubt our reasons for our actions? What would it be like for Dan to discover that, unbeknownst to him, he was really baking

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\textsuperscript{32} Ibid., 17.
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because he felt guilty that he was home earlier than his spouse? It simply isn’t obvious that commonsense psychological explanations are causal in nature.

In this essay, I will argue that the predominant conception of commonsense psychology—that it is a (proto-)theory in which propositional attitudes are seen as causally effective in the production of human purposive behaviour—is mistaken. In the rest of this chapter I set the stage for the arguments of the essay. I first say a few words about the way in which I will pursue the investigation. Next, I lay out just how the vast majority of philosophers, psychologists, and cognitive scientists see our commonsense understanding of each others’ behaviour. Within that tradition, I point out the various detractors and alternatives, settling upon what I think centrally characterises the most basic aspects of that traditional view and how those central aspects provide a foundation for the dominant conception. Lastly, I provide a short explanation as to why I am starting my investigation with arguments from more than twenty years ago.

In chapter two, I give Fodor’s account of commonsense psychology. He has come to think that a reliable, although metaphysically contingent, co-instantiation of propositional content and the intrinsic physical properties of the corresponding brain states is sufficient to establish the intentionality of the attitudes and, thus, avoid mental epiphenomenalism while vindicating commonsense psychology as a (proto-)theory. Such co-instantiation depends on some very general facts about the world. So, in nearby worlds in which those facts are present, mental properties are causally efficacious in producing bodily move-
ments. I, however, argue that Fodor’s argument has serious troubles and, thus, he does not show how the content of reasons causally explains actions.

In chapter three, I discuss Daniel Dennett’s criticisms of Fodor’s project. Dennett’s attack on Intentional Realism is somewhat subtle. One main idea is that Fodor is simply intolerant of positions which stray too far away from the central tenets of Fodor’s brand of Realism; if a view is not committed to his representational theory of mind, then it is simply wrong. Another is that meaning must be atomistic, that is, the meaning of a symbol/propositional attitude is individuated entirely by the properties of the attitude. Fodor’s commitment to grounding intentionality in physical states is non-negotiable. So too is the fixation on nomological laws within commonsense psychology. I will examine Dennett’s criticisms of Fodor on two broad points: a) just how real does one have to take propositional attitudes to be a realist, and b) what kind of content does a propositional attitude have to take in order to account for the putative causal features of commonsense psychology. Lastly, I will take some time to examine these criticisms and while agreeing in principle with many of them, ultimately I will argue that they suggest something other than the Intentional Design Theory that Dennett is championing.

In chapter four, I consider Lynne Rudder Baker’s criticisms of Fodor’s position. Baker rejects the physicalist conception of commonsense psychology, i.e., that to have a propositional attitude is to have a brain state of some sort that has intentional content. Baker argues that what ultimately defeats Fodor’s physicalism is the inability of physicalism to account for the causal properties of propositional content with which he is committed.
in order to ground and explain how commonsense psychology could be anything like a (proto-)theory that provides for causal explanations of purposive action.

1.3 A Few Comments about Method

My contention is that the theories which share the standard conception of commonsense psychology have not adequately justified their use of everyday psychological terms. These theories co-opt the everyday term for their own use without explanation or justification. In order for these theories of commonsense psychology to be taken to refer to our everyday psychological situations, they need to show exactly what these co-opted terms mean and that they mean (at least approximately) the same thing as the everyday psychological term. Indeed, for the most part, all they have done is assume that the orthodox view of these psychological concepts is EveryPerson’s view. It seems to me that commonsense psychology rarely conceives of one’s reasons for acting as causes of one’s action, and, if I am right, an investigation of our everyday psychological terms will reveal that the means by which we understand, explain, predict, and interpret each other’s actions are too highly ramified—i.e., varied, complicated, unsystematic—to do the philosophical work that a comprehensive theory about commonsense psychology would require.

So, why do I think this? Consider what Wittgenstein wrote about our commonsense psychology:
Psychological concepts are just everyday concepts. They are not concepts newly fashioned by science for its own purposes, as are the concepts of physics and chemistry.³³

If we leave the difficulty of separating what is ‘everyday’ from what is ‘scientific’ for later, surely we can see that the concepts of aeronautical engineering are different than our everyday knowledge of folding and flying a paper airplane. A person with no acquaintance with the terms ‘airfoil’ or ‘aileron’ or the technical term ‘lift’ can fold and glide a small model airplane, as well as teach the craft to others. We see in the physical sciences the creation of terms such as ‘molecule,’ ‘impedance,’ and ‘valence’ to mean extremely specific things to figure in specific kinds of scientific theories, models, and explanations. It would be very puzzling to hear someone claim that the term ‘valence’ in chemistry had any relation other than metaphorical with the same term from linguistics.

Scientists create new terms for a number of specific reasons, but it would be no stretch to say that scientists often coin new terms in order to distinguish one thing or kind of thing from another thing or kind of thing. Sometimes entirely new words are coined from Greek or Latin (e.g., ‘biogenic’), sometimes words that have nothing to do with the new subject matter are christened with new meanings (e.g., the term ‘quark’ (reputedly taken from *Finnegan’s Wake*) and the various types of quarks (e.g., ‘up’, ‘down’, ‘strange’, ‘charmed’, ‘truth’, ‘beauty’, etc.). In the case of theories of commonsense psychology, the terms ‘belief,’ ‘desire,’ ‘intention,’ etc. have all been taken from our everyday practices.

and put to use in various scientific theories in an effort to account for, *inter alia*, the success we generally have in anticipating when people will show up for a meeting and which doughnuts they will bring. It is quite clearly the case that these terms are supposed to mean the same thing in everyday situation and in the scientific theories that put them to use. Let us say that $\text{BELIEF}_{\text{everyday}}$ and $\text{BELIEF}_{\text{scientific}}$ are supposed to refer to (more or less) the very same things. If not, then what exactly is $\text{BELIEF}_{\text{scientific}}$ supposed to be about?

But are the purposes to which we put our everyday concepts in our everyday explanations the *very same purposes* to which our theories of commonsense psychology put those everyday concepts? How do the everyday concepts work in explanations? Do the corresponding scientific terms have the same connections with other concepts? Do we use concepts from commonsense psychology the same way as we use the scientific ones? What criteria for ‘sameness’ should we apply? Does our commonsense psychology deploy the concept of propositional attitude? Do we think that when we are giving reasons for our actions that others understand our explanations as causal explanations? And so on. These are the kind of questions I intend to use to pursue my investigation.
1.4 The Central Commitments of Commonsense Psychology

There has been a great deal written since an ape pulling a ball across a floor caught someone’s attention\(^\text{34}\) to where we are now. It remains a commonplace that the only game in town vying to provide an adequate philosophical account in the form of theories about commonsense psychology came from the theory theory/simulation debate. That debate turned into a sort of détente where it was more or less agreed that some sort of hybrid of theory and simulation would finally settle the matter. However, it has turned out—as so many of these sorts of debates do—that a new perspective has emerged and the debate has received new life. The very idea of a commonsense psychology came out of the desire to explain how we understand other people as purposive agents by attributing mental states to them and so a rejection of propositional attitudes being the key to commonsense psychology is somewhat radical. The phenomenology-based ‘embodied/enactivist’ approach\(^\text{35}\) is not directed solely at the commonsense psychological orthodoxy—it takes aim at any number of issues in the philosophy of mind, including the experience of time, consciousness, action, embodiment, and intentionality—but it would seem that the focus on social cognition is gaining the most attention. However, this new perspective has its detractors\(^\text{36}\) and so the debate goes on.

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Notwithstanding the debate, the vast majority of cognitive scientists still seem settled on the idea that commonsense psychology is committed to at least these main features: that we see our propositional attitudes as (some sort of) state (or combination of states—functional or otherwise) of the brain, that that we see our actions as the result of the interactions of various propositional attitudes, and that commonsense psychology is primarily engaged with providing causal explanations and predictions of our actions. The dominant theories about commonsense psychology—TT and ST—both take the prediction and explanation of human action through some sort of appeal to propositional attitudes such as belief, desire and intention as at least in part, and most frequently centrally, what commonsense psychology does. The way in which this is accomplished differs between the two theories. As for TT, mental state attributions are made possible by the possession of some sort of theory (often characterised as a set of generalisations—a knowledge base of some kind—about mental states and the actions that are correlated with them). Simulation theory on the other hand denies that we require the sort of systematic knowledge that TT requires. ST postulates that we need only to use our own minds to somehow ‘simulate’ another person’s mental states and processes by relying upon the similarities in psychological constitution that we share with other human beings. Prediction in ST proceeds more or less like this: I imagine that I am in the very same mental states as the


person whose behaviour I am trying to predict then ‘pretend’ that I am making decisions as that person. The decisions I come up with are the predictions I project onto the other person.

In her recent book, Kristin Andrews mounts a sustained attack against what she calls ‘Standard Folk Psychology’. Andrews rightly points out that the standard story of commonsense psychology, upon which most theories about commonsense psychology are based, involves attributing beliefs and desires to others, appealing to some general law that connects beliefs and desires, etc. to action of some sort, then inferring that those others will act in that fashion (or asserting that because of the law cited and their beliefs and desires of the agent, the action took place). As Andrews points out, on this view, we deploy propositional attitudes, i.e., our intentional mental states, because we take them to be the cause of our behaviour. She argues that it is this picture that informs the most popular psychological theories about commonsense psychology. This general approach, ‘Standard Folk Psychology,’ Andrews argues, makes four commitments:

1. Propositional attitudes are the cause of all [deliberate] behaviour.

2. Folk psychology is the attribution of propositional attitudes.


39. Ibid., 253, fn 1 for chapter 1.

40. See footnote 12
3. One needs to be a folk psychologist to have robust success in predicting, explaining, and interpreting behaviour.

4. The cognitive mechanism that allows us to predict behaviour is also the cognitive mechanism that allows us to explain behaviour.\(^{41}\)

I wish to focus on the first three of these commitments about the nature of commonsense psychology as they pertain to a view of commonsense psychology as a theory. As for the last, I am of the view that whether the very same cognitive mechanisms, whatever they turn out to be, are involved in both explanation and prediction is a matter best left to another investigation for it seems to me to be a matter of cognitive psychology.

Andrews sets herself up in opposition to these four features and the rest of her book is dedicated to setting them aside by offering a ‘pluralistic’ theory about commonsense psychology. Her concerns are not mine as she is worried about how her theory will fare in the mix of debates about human cognition in the cognitive sciences. My concerns are about whether this picture of commonsense psychology can stand scrutiny.

So, let us begin our investigation. If our reasons for acting are supposed to be causes of our behaviour, viz., propositional attitudes, then we will need an account of it.

\(^{41}\) Andrews, *Do Apes Read Minds? Toward a new folk psychology*, 7–8.
1.5 Why Fodor? Why now?

The literature about our commonsense psychology aims to provide an account of how we explain, predict, and interpret other people’s behaviour. At the centre of these accounts lies a conception of intentionality. After all, the concept of a propositional attitude carries with it the idea of ‘aboutness’; the attitude in question is about the proposition it is directed toward. This ‘problem of meaning’—how can anything manage to be about anything else?—is a central problem, it is said, because a connection between mind and language and world needs to be forged in order that our everyday psychological explanations can have the necessary connection to the behaviour to be explained, predicted, or interpreted and the mental states of the agent in question. This connection is characterised as causal. If not, it is claimed, then we cannot escape epiphenomenalism.

A word or two about epiphenomenalism and why physicalists typically think it needs to be avoided is in order. On one hand, it seems perfectly obvious that our mental states and processes can bring about changes in the world. Furthermore, many people see the mental as distinct from the physical, that the mental is more than the mere sum of the physical parts and processes of the nervous system. On the other hand, a naturalistic world view seems to exclude the possibility of any sort of ‘mental causation’. Such a view seems to require that we accept that the physical world is causally closed; that every physical effect be completely accounted for without appeal to non-physical forces or objects. Seeing as our bodies are part of the physical world, this view dictates that any
putative mental state also be a physical state (in some fashion). However, if we can always provide, at least in principle, a purely physical account of our actions and if indeed the mental is distinct from the physical, then there seems to be no work left over for the mental to do. In other words, ‘the mental,’ on this view, would contribute nothing to the production of our actions. It certainly seems that anyone who takes physicalism at all seriously has a dilemma on their hands: accept that my wanting to go to the store is not really part of the causal explanation of why I am on my way to the store right now or reject the idea that every physical event (e.g., my arrival at the Safeway) is brought about by a physical cause. Fodor submits that this worry is a mere neurotic one and that ‘epiphobia’ (the fear that one is turning into an epiphenomenalist)\textsuperscript{42} can be treated, in part, by properly understanding how a property can be causally responsible.

Jerry Fodor is one of the most ardent defenders of a particular conception of commonsense psychology, and who takes great pains to avoid epiphenomenalism. Specifically, the approach is that commonsense psychology forms a (proto-)theory which conceives of everyday psychological explanation as causal explanation. Fodor’s position, dubbed Intentional Realism, is the doctrine that a proper science of mind should, to a substantial degree, vindicate the intentional idiom of commonsense psychology, that is, that the states invoked by the theory will be intentional (‘semantically evaluable’) and that the theory will take these states to be causally effective in the production of behaviour by figuring in

\textsuperscript{42} Fodor, \textit{A Theory of Content and Other Essays}, 137.
the causal laws and explanations of the theory. The central commitments of intentional realism are found, to some degree, in most arguments of these debates.

If it is true that a) what I have dubbed the standard conception of commonsense psychology shares the same commitments as intentional realism and b) Fodor provides a clear and concise articulation, then it suggests itself that we use Fodor as a stalking horse, despite the vintage of the book. In the first chapter of *Psychosemantics*, he begins his attempt to vindicate commonsense belief/desire psychology with a scientific theory. There are a number of reasons for using Fodor’s account as a starting point beyond the obvious suggestion.

The first reason is that Fodor explicitly argues, as essential, the two aspects of folk psychology that I am interested in: for Fodor, commonsense psychology is a theory which takes actions as the causal effects of propositional attitudes.43 *Psychosemantics* is an attempt to give a sketch of a solution to how mental states exist in a physical space (Brentano’s Problem) by defending our commonsense psychology, which does (according to Fodor) take mental states like belief and desire as real, causally effective states of the mind (intentional realism). For Fodor, any scientific theory that could possibly vindicate commonsense psychology has to involve states with the very same properties (being semantically evaluable and being causally efficacious in producing action) that he argues makes commonsense psychology so indispensable. If these aspects of commonsense psychology are

of interest to us, then anyone who places them at the centre of their discussion is a good candidate for close examination.

The second is that, as the above assortment of definitions of folk psychology illustrate, there is some variety in what is taken to be the core elements in a conception of our commonsense understanding of one another. Selecting and subjecting to sustained scrutiny a single and, more than not, thorough description of just what commonsense psychology is supposed to be and how it works will make for a clearer picture of what we are talking about. Fodor’s account fits this bill. Cobbling together a description from the sources cited above (among others that are available) would require a great deal of qualification and would lead to unnecessary complication. I am willing to trade off generality for simplicity.

Another reason is perhaps less important but notable. Fodor’s work appears at a key place in the debates about commonsense psychology. *Psychosemantics* appeared in 1987 and should be seen as a reaction to the Churchland’s arguments to eliminate folk psychology from serious cognitive scientific study.44 The debate at this point could sensibly be seen as between those who disagreed about the truth of commonsense psychology, but not about whether commonsense psychology was what we used to predict, explain, and interpret each other’s actions. It was only in 1986 that Gordon45 and Heal46 independently offered

44. Churchland, ‘Eliminative Materialism and Propositional Attitudes’.
45. Gordon, ‘Folk Psychology as Simulation’.
46. Heal, ‘Replication and Functionalism’.
simulation theory to counter the prevailing ‘theory theory’ tradition of which Churchland and Fodor were so clearly part. Fodor’s position here in *Psychosemantics* can be seen as the last best serious expression of commonsense psychology as a folk theory before the TT/ST debate really began. Seeing as my concern is more about what we do when we understand, explain, and interpret other people’s actions and less so about the scientific theories that are offered to vindicate or replace our commonsense psychology, Fodor’s effort to describe commonsense psychology makes for a clear, distinct starting point. It has the central elements that are still part of a standard account of our commonsense psychology and it makes very clear the differences between our commonsense psychology and any scientific psychological theory that might vindicate it.

My last reason is the forthrightness with which Fodor characterises our commonsense psychology as an “intricate theory that connects beliefs, desires, and actions”; an “explicit theory” that we rely upon to make sense of the actions and reasoning about actions of others.\(^47\) It is quite obvious what Fodor thinks commonsense belief/desire psychology consists in, even if we are not quite sure just what each and every one of his terms means.

2 Fodor: Intentional Realism

I would have thought that explaining the empirical data by postulating processes whose nature is left for later investigation is a characteristic of rational theory construction. Isn’t that exactly what Newton did about gravity? Is it psychology that Wittgenstein doesn’t like, or is it science as such?

Fodor, *Hume Variations*, 11, note 4

*Psychosemantics* is, as Fodor says, about “showing how you could have (or at a minimum, showing that you could have) a respectable science whose ontology explicitly acknowledges states that exhibit the sorts of properties that commonsense attributes to the attitudes.” However, achieving such a thing is but means to an end for him. Despite his being convinced that commonsense belief/desire psychology is more or less true, there are still problems understanding just how it manages to be true. Commonsense psychology explains behaviour by reference, he says, to the way organisms ‘take the world to be’—how they represent the World to themselves. But, without abandoning physicalism and a commitment to the existence of mental states that ‘take the world to be a certain way’, he says we need to be able to account for the phenomenon of something being *about*

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2. Ibid., x.
something else. Fodor thinks that the only two things that can manage to be about something else are mental states, such as believing or desiring, and symbols, such as linguistic utterances. This engagement with the problem of meaning is one motivation for the book itself. Another motivation is to show that vindicating our commonsense psychology is, in part, providing an answer to the problem. In order to do all of this, he starts at the beginning, showing what he means by ‘commonsense belief/desire psychology’, why it is something for which we should seek a vindication, then offering not only a specification of the kind of ontology required to vindicate commonsense psychology, but an outline of the scientific theory that he believes does just that. In this chapter, I lay out Fodor’s project.

2.1 Great Theatre

Fodor offers a passage from *A Midsummer Night’s Dream* as a plausible piece of reasoning that illustrates the use of our commonsense psychology of others. I offer something less difficult to follow which preserves what Fodor is getting at.

Diane is still in her office at 6pm. Susan, her colleague, raps on the door and asks her, “Why are you still here? Your office hours ended at 2?”

Diane: “Well, today is my birthday. Andi knows that I generally don’t like parties but today is my 50th birthday and she has said that that’s an important one. My friends have all avoided talking to me about my birthday for the last two weeks but have been asking me what sorts of books and movies I like to read and watch. She’s thrown surprise parties for her sisters before. So, I am pretty sure she has a surprise party at home for me. I know that a few of my friends do not get off work until 5pm, so I am still here to give Andi time to get everything ready for my surprise party tonight.”

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Here we have, Fodor would say, a (perhaps not very) ‘convincing (though informal) piece of implicit, non-demonstrative, theoretical inference.’ I attribute a number of beliefs to Andi: for instance, that today is my birthday, that my friends are likely to show up to a party that she’d throw for me, that I might suspect that she is throwing a surprise party. I attribute intentions to my friends: for instance, that the ones that have been invited intend to keep the secret and intend to give gifts of books and/or movies. According to Fodor’s approach, the reconstruction of that reasoning looks something like this:

Today is my birthday. Andi believes it to be an important birthday. People who think that certain anniversaries are special tend to think they should be celebrated. So, Andi most probably believes that this birthday should be celebrated. She also believes that I am not keen on birthday parties. Now, people who are keen on birthday parties sometimes hold surprise parties for those who are not keen on them. Andi has held surprise parties for loved ones in the past. People who have done something in the past are likely to repeat the act in similar circumstances. My friends have suddenly been asking me about which movies and books I have seen or read. People who are considering buying gifts for others often ask about viewing and reading habits. They have also been avoiding talking about my upcoming birthday. People who have secrets often avoid conversations where they might give away clues or have to lie about the secret. If $x$ believes that $p$, and also desires that $q$, and further believes that not-$q$ unless $p$, $x$ will make efforts to make $p$ the case, all things being equal. So, it is likely that Andi is having a surprise party for me tonight. Since some of my friends work late and will need time to get dressed for the party and people do not typically take time off work to go to a friends birthday party no matter how special it is, I believe that a few people will be late. I also believe that Andi will be disappointed if everyone is not there to shout ‘surprise’ at me. I really want Andi to be happy with the party she throws for me, so I am still here in my office.

In this particular case, I am right. There was a surprise party and I happily acted as if I were surprised. After all, people tend to prefer to do that which pleases their loved ones.

However, you can just as easily have anticipated a failure of my reasoning. Any number
of the attributions and generalisations to which I appealed could have been wrong. Fodor’s contention is that, in order to have come to my conclusion here, I used an implicit theory which employs concepts like ‘belief’ and ‘desire’ and generalisations about those concepts and actions which make possible my predictions and explanations about other people’s actions.

Fodor’s purpose in his short introductory chapter is to begin the defence of commonsense psychology by giving reasons why we should care about ‘saving’ commonsense psychology at all. Fodor argues that because commonsense psychology, as we use it, is mostly accurate, deep and systematic, and essential for us to get along, we should make an effort to justify it with a proper scientific theory. Before we plunge in, perhaps we should slow down and explain why Fodor thinks our commonsense psychology needs vindication at all.

It turns out that the notion of commonsense belief/desire psychology had been (and still, is, in some quarters) under quite a lot of pressure from the eliminative materialists, primarily Paul Churchland.3 The eliminativist position is that, while our commonsense understanding of other’s behaviour does indeed consist of a theory which puts forward mental state terms like ‘belief’ and ‘desire’ and relates those terms together with generalisations which link those terms to behaviours, that theory is radically false. It is radically false in the sense that the terms proposed—mental state terms (propositional attitudes) like ‘belief’ and ‘desire’—are non-referring. In other words, there are no such things as ‘be-

liefs’, ‘desires’, intentions’, and the principles, which we take to say things like ‘if someone desires something, then they will try to obtain it, all things being equal’, are false.

You do not believe that you are reading this sentence, for instance, because there are no such things as beliefs. The important thing to note here, I think, is that Churchland and Fodor do not disagree that this theory is indeed what our commonsense understanding of others consists in. They just disagree about whether the theory is true. Since Fodor thinks we should keep the theory around, his job is to convince us it is worth keeping around.

First, according to Fodor, our commonsense psychology gets the explanation and prediction of human behaviour right far more often than it gets it wrong. Commonsense psychology is so successful, he argues, that it is practically invisible to us. This success is argued to be due to commonsense psychology bridging the gap between utterance and behaviour. But exactly what does this last point mean?

Fodor uses the example of being asked to give a lecture next Tuesday and agreeing by saying ‘I’ll be on the 3 p.m. flight.’ Fodor says that the ‘gap’ between the utterance ‘I’ll be on the 3 pm flight’ and him arriving on that flight next Tuesday is bridged by our commonsense theory. It is a remarkable thing that Fodor thinks that there is a gap here. Presumably, he is pointing at the large number of utterances and actions not mentioned here; packing bags, ordering tickets, going to an airport, etc. It isn’t clear to me that there is a ‘gap’ at all. If someone brings you a coffee after having asked for one, it is pretty odd

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5. Fodor, Psychosemantics: The problem of meaning in the philosophy of mind, 3.
to suggest that there is anything requiring an explanation. Fodor might reply, ‘You see? The theory works invisibly! How else, but with an inference, could anyone have have connected the movements of the server with the noises you made a few minutes earlier? You need to consult the generalisation “Servers in restaurants very often bring you what you ask for.”’

However, the generalisations of commonsense psychology are sometimes criticised for requiring ceteris paribus clauses to ensure some measure of accuracy. Fodor argues that commonsense psychology is no less scientific than any ‘special science’, such as geology, because of these clauses. He points out that the same criticism could be levelled at just about every special science. So, if commonsense psychology is somehow fraught by these clauses, so too is geology, and any number of other special sciences. Even so, Fodor singles out Davidson’s argument that the generalisations of real science are “perfectible”—that the ceteris paribus clauses can be completely discharged by providing an exhaustive list of the expectation conditions. Fodor responds by saying that, typically, the exceptions in the special sciences get explained in some lower level science rather than in the same science as the generalisation. Fodor argues that we have no reason to doubt that commonsense generalisations will eventually be cashed out in a ‘lower level’ science (e.g., neurology, biochemistry, or even physics) as well and, thus, ceteris paribus clauses are no threat to treating commonsense psychology as the successful theory Fodor thinks it is. So, on Fodor’s view, the ‘predictive adequacy’ of commonsense psychology is simply

undoubtable and there just isn’t any reason to believe that this success is ‘cheating’ due to ceteris paribus clauses either.

Second, Fodor says that commonsense psychology looks a great deal like ‘real’ science in the sense that it involves generalisations that use unobservables that ‘iterate’ and ‘interact’ to predict behaviour. He then argues that since there are probably no generalisations which directly connect preferences to actions without involving beliefs, there must be some sort of implicit theory involved to make behavioural predictions.

Fodor compares the ‘folk’ theory that we hold to ‘real’ science and implies that our commonsense understanding of others constitutes a folk theory because of its similarities to ‘real’ science. What exactly does he mean by ‘real science’? Well, “when such [folk theoretical] explanations are made explicit, they are frequently seen to exhibit the ‘deductive structure’ that is so characteristic of real science.”\(^7\) He goes on to say that the similarities are that “the theory’s underlying generalisations are defined over unobservables [propositional attitudes], and they lead to its predictions by iterating and interacting rather than being directly instantiated.”\(^8\)

So, Fodor’s position is that our commonsense understanding of each other should be considered a folk theory because everyday explanation of behaviour has a deductive structure involving generalisations about mental states—which can be taken as unobservable causes of action—(presumably) just as the ‘real’ sciences do. These generalisations


\(^{8}\) Ibid.
do not make predictions by directly linking behaviour directly to desires. Rather, the prediction is the result of the interaction of a large number of generalisations about how one’s behaviour is caused in a large number of circumstances. Think, perhaps, of the large number of forces acting on an aircraft at any particular time during flight. In order to predict what the aircraft will do (e.g., bank right, vibrate, lose altitude, etc.) and how it will do it (e.g., violently, smoothly, suddenly, etc.), a large number of causal factors must be included in the model. A theory is involved in connecting all of these factors to the prediction of the aircraft’s behaviour. Similarly, for our folk theory about each other. The depth of the folk theory, Fodor says, is borne out of the theory taking for granted that “overt behaviour comes at the end of a causal chain whose links are mental events—hence unobservable—and which may be arbitrarily long (and arbitrarily kinky).\(^9\)

Third, Fodor argues that there simply is no alternative to commonsense psychological terms. The ‘gap between our utterances and our behaviour’ has to be bridged somehow, he says. So, we require generalisations to bridge the gap. Fodor argues that movements are ‘cross-classified’ by actions and behaviour consists of actions. Fodor points out that any two different actions might consist of the very same movements (e.g., waving ‘good-bye’ and waving ‘hello’). As such, you need to know what sort of action the person is performing to know which commonsense generalisations apply. But actions can only be identified using the vocabulary of commonsense psychology (presumably by reference to the intentions and motivations of the actor). Thus, Fodor concludes, commonsense

psychology is required to bridge the gap and so it is ineliminable in principle. However, he says that even if it were eliminable in principle, that's not a good enough reason to do so because we simply do not know how to explain and predict our behaviour without the vocabulary of commonsense psychology.

The 'we don’t know how to get along without it’ argument seems to do a lot of work here. After all, the argument goes, even if we developed a new commonsense theory, we’d be at sea with even being able to say that we believed that the new theory was true without recourse to the old theory. But if it turned out that we somehow developed theory which made more reliably correct predictions and provided more satisfactory ('deeper') explanations, then we’d perforce know how to get along without our current theory.

I think that this objection reveals something else. Fodor clearly means that there is no other plausible (or perhaps even implausible) candidate theory to replace commonsense psychology. Perhaps, though, it is not so much that we wouldn’t know how to get along without our current commonsense theory, but that our current understanding of ourselves and others is bound up in a much tighter way than is made out by the objection. After all, if you change the rules of chess (say, pawns are not promoted when they reach the other player’s back row), it is very tempting to say that you are no longer playing chess. But if we change enough of the rules, it is quite certain that we are no longer playing that game but some other one. What this suggests to me is that perhaps human purposive behaviour
is related to the explanations given for it more like the constitutive rules of a game than the nomological specifications of a scientific theory.

Nevertheless, Fodor concludes that we have good reasons to be motivated to vindicate commonsense psychology. The way to vindicate it, he says, is to show that one could have a ‘respectable’ science that deploys states that have the same sort of properties that propositional attitudes do.

A term left undefined in this book is ‘propositional attitude’. Luckily, we have from elsewhere that propositional attitudes are “relations between organisms and internal representations.” I suggest, this is unhelpful. I think at this point, we should go with a less laden definition and simply say that a propositional attitude is a mental state that refers to an inclination an organism bears toward some state of affairs, be it ‘internal’ or ‘external’ to the organism. Thus, my believing that there is a cat on a mat is the particular way that I take the purported state of affairs ‘the cat is on the mat’ (to be the case or not to be the case). The vindicating theory that Fodor intends to propose will certainly have to have more to say about this that what I have here, but I do think I have captured at least the important bit of what is going on when we talk of ‘attitudes.’

2.1.1 So, what are the attitudes then?

Fodor argues that any scientific theory that could vindicate commonsense psychology must postulate mental states that have these three essential features of propositional attitudes: the

states have to be semantically evaluable, the states must have causal powers, and that the implicit generalisations of commonsense psychology are (more or less) true of those states. These three properties, he claims, are how commonsense understands the attitudes.

Semantic evaluability seems a rather straight forward notion on its face. It is the property by which an attitude towards a proposition (state of affairs) can be said to be ‘fulfilled’. For example, a belief that \( p \) is either true or false, a desire that \( p \) is either fulfilled or unfulfilled, etc. However, I note that Fodor does not give a simple definition of semantic evaluability. It seems to me that he thinks of it like a function: “to say of a belief that it is true (/false) is to evaluate that belief in terms of its relations to the world.”11 Belief is the function and truth or falsity the resultant value when the function operates upon the content of the belief. Each attitude which an organism can have towards a proposition then can generate various values: beliefs ‘calculate’ truth/falsity, desires ‘calculate’ fulfilment/a lack of fulfilment.

Fodor also talks about the content of a psychological state which he says is ‘intimately connected’ to the notion of a propositional attitude. He doesn’t say just what this intimate connection consists in at the point, but the content of a state is supposed to be what in the world the state is about. If you know the content of the state, you know the determinant of the semantic evaluability of the corresponding propositional attitude.

Fodor argues that any generalisations proposed by the vindicating theory cannot be ‘crazy’ from a commonsensical point of view. As well, any vindicating science will have

to hold at least most of the implicit generalisations of commonsense psychology to be true. A very large number of our commonsense psychological generalisations, Fodor says, we have no reason to doubt. As such, the vindicating science will have to validate them. I have no objections to this point. Psychology is going to have to be (at least in part) able to account for what we actually do when we explain the actions of ourselves and others. One of the things we sometimes do when explaining ourselves or others is say that these sorts of commonsense psychological generalisations apply to them.

The most important claim is that commonsense psychology is ‘deeply committed’ to mental causation of at least three sorts: behaviour caused by mental states, mental states caused by the environment of the organism, and mental states caused by other mental states. A great deal hangs on this particular point for the key point for any vindicating science is this claim that commonsense psychology ‘attributes contents and causal powers to the very same mental things that it takes to be semantically evaluable.’\textsuperscript{12} This too is key for us, for it ties mental content, mental causation, and semantic evaluability together within commonsense psychology and not just in any vindicating scientific theory. Furthermore, Fodor notes that the purported causal relations between propositional attitudes and the relations between contents are respected in that there is a parallel between the semantic relations between the steps in an argument and the causal relations seen in the train of thought that led to the conclusion. This parallel is going to have to be explained by the vindicating scientific theory.

\textsuperscript{12} Fodor, Psychosemantics: The problem of meaning in the philosophy of mind, 12.
Fodor claims that the only scientific theory that can satisfy all three of these requirements is the Representational Theory of Mind.

2.1.2 The Representational Theory of Mind (RTM)

As I pointed out above, while Fodor is overall concerned about solving the problem of meaning, his aim for the book is to argue for RTM as the best vindication of commonsense psychology against those who would argue that commonsense psychology is false. Fodor postulates a ‘language of thought’ (LOT): “an infinite set of ‘mental representations’ which function both as the immediate objects of propositional attitudes and as the domains of mental processes.”

In short, these mental representations are to what propositional attitude terms refer. So, a language of thought is akin to the internal logical structure and workings of a digital computer. The LOT hypothesis is comprised of the following three claims:

1. Cognitive processes consist in causal sequences of tokenings of internal representations in the brain. So, what it is to have a cognitive process happen in a nervous system is for there to be a specific kind of causal happenings between inner states which represent the world in some way.

2. These internal representations have a combinatorial syntax (complex symbols are built out of simple symbols) and semantics (in that the meaning of a sentence in the

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LOT will be a function of the meanings of the atomic symbols out of which it is built. The symbol manipulations (essentially, thinking) preserve the semantic properties of the thoughts (in the sense that they are truth-preserving). This was famously put this way: “If you take care of the syntax of a representational system, the semantics will take care of itself.”

(3) Mental operations on internal representations are causally sensitive to the syntactic structure of the symbol. This means nothing more than the kinds of combinations that a symbol can enter into (at least partially) determine the outcomes of mental operations which involve those symbols. In other words, the symbols have inherent powers to affect the outcomes of causal chains in which they figure.

For our purposes, it is important to see that LOT makes the claim that propositional-attitude tokens are relations to symbol tokens. This claim (in part) forges the putative connection between our commonsense psychology and RTM.

With all of this having been said, Fodor’s RTM consists of two claims:

1. “For any organism O, and any attitude A toward the proposition P there is a (‘computational’/‘functional’) relation R and a mental representation MP such that MP means that P, and O has A if O bears R to MP.”

2. “Mental processes are causal sequences of tokenings of mental representations.”

Some unpacking is needed here.

Claim one amounts to this: ‘To have an attitude towards something is to have a mental representation with the appropriate meaning tokened in your head in a way that corresponds to that propositional attitude’. Fodor talks about that token being ‘in your belief box’ or ‘in your hope box’ as the case may be. This ‘box’ idiom is a shorthand for indicating that these tokens are instantiated as functional states of the mind.

Claim two amounts to this: ‘To have a mental process is to have a chain of mental symbol transformations in your head.’ This clearly follows directly from presuming the existence of a LOT as above. Basically, thinking is computation\(^\text{17}\) and this is supposed to be the best account of why we see this reputed parallel between the causal properties of trains of thought and semantic properties of arguments.

The best reason to hold RTM true, argues Fodor, is that this is the theory which our best psychological research presumes (it underlies practically all current psychological research on mentation) and our best science is our best claim about what is and isn’t: the only game in town. I suppose that this is supposed to be an appeal to the coherence of science, that if different theories converge on a single conception, then that in itself is evidence for its plausibility. While this certainly seems reasonable, such a claim requires an account of what is meant by ‘best science.’ Surely behaviourism was our ‘best psychological science’ in 1958. The cognitivists that followed wouldn’t (and shouldn’t) have

taken this sort of argument very seriously. Furthermore, we need to take seriously the possibility that there are questionable presumptions underpinning our ‘best science’.

Fodor’s second reason is that RTM provides a plausible mechanism for why the semantic relations among propositional objects mirror the causal relations among mental states so well. As Pinker puts it,

\[\ldots\] arrangements of matter have both representational and causal properties, that is, \[\ldots\] they simultaneously carry information about something and take part in a chain of physical events. Those events make up a computation, because the machinery was crafted so that if the interpretation of the symbols that trigger the machine is a true statement, then the interpretation of the symbols created by the machine is also a true statement.\(^{18}\)

His last reason is a response to the charge that commonsense psychology is an unproductive theory. Fodor argues that commonsense psychology shouldn’t be compared to research science—no one claims that it is one. Fodor says that we should look to the best vindicating theory for progress and there, RTM is supposed to meet the challenge.

So, RTM is supposed to vindicate commonsense psychology by giving an account of how semantically evaluable mental states can have causal powers that are compatible with the implicit generalisations of commonsense psychology which (more or less) rest upon the semantic relations between the propositional attitude contents.

According to Fodor, RTM requires (for the biconditional in claim 1) both

1. “For each instance of a propositional attitude, there is a instance of a corresponding relation between an organism and a mental representation”, and

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2. “For each instance of that relation there is a corresponding instantiation of a pro-
positional attitude.”  

Fodor admits that this is far too strong and that both of these if taken without ex-
ception would be false. However, he argues, if we take RTM as the special science he
supposes it to be, we can understand that not every single generalisation need meet these
conditions. Only the generalisations that RTM identifies as the core cases need meet these
conditions. All of the other cases (where you have attitude instances without the relation
and relation instances without attitudes) can then be seen as derivative cases.

Fodor then gives examples of objections that correspond to each of the two derivative
cases: attitudes without representations and representations without attitudes. First, he says
that there is no principled reason why there might not be attitudes without corresponding
mental representations. There are a number of behaviours that seem to be underwritten
by some form of encoded representations (e.g., ‘wh-’ movement, modus ponens), but
need not be underwritten in the same way that there is a difference between following a
rule and merely acting in accordance with the rule.  

Second, there is no principled reason why there might not be mental representations
with no corresponding propositional attitudes. For instance, sub-personal states (mental
states which operate at the very most basic cognitive levels) might very well be ‘invisible’
to commonsense psychology.

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20. Ibid., 21.
Fodor argues that treating these cases as derivative answers both objections above. RTM does not require commonsense psychology to account for every single mental representation nor does every single mental representation have to have a corresponding propositional attitude. All that RTM needs to do is specify which cases count as core cases.\(^{21}\)

Fodor argues that claim 2 provides what counts as a core case: For every instance of an attitude which is a step in a mental process, there must be an explicit representation of the content of the corresponding mental state. Thus, Fodor’s motto is “No Intentional Causation without Explicit Representation.”\(^{22}\) The idea is that a particular propositional attitude that \(p\) can act as a cause only when there occurs a token of the syntactic kind that means that \(p\) and when that token causes an appropriate action and/or a further thought content. By understanding the way a symbol’s syntactic properties determine its causal powers, we are supposed to see how the semantic and physical parallel one another—how something physical can have semantic properties, specifically, how it can be about something.

### 2.2 The Theory Contention

Fodor contends that commonsense psychology forms a theory.

There are three main points I wish to address:

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\(^{22}\) Ibid., 25.
a) the question of vindicating commonsense psychology

b) the notion that there is a ‘gap’ between an utterance and a behaviour that stands in need of explanation

c) the idea that commonsense explanations are ‘deep’ in that they involve generalisations defined over ‘unobservables’ and predictions follow by ‘iterating’ and ‘interacting’ rather than by being ‘directly instantiated’.

2.2.1 Vindication?

Fodor argues that if commonsense psychology is a theory, it is a folk theory—a naive theory which stands in peril of being eliminated if it turns out to be a false theory. I agree. Fodor goes on, though, to argue that since commonsense psychology is indeed a theory and that it is true, therefore, he maintains, a scientific theory is going to have to vindicate it. What exactly stands in need of vindication?

To vindicate means to show or prove to be right or justified, but it also has the meaning of clearing someone of suspicion, as when someone has been accused of wrongdoing and subsequently shown to have acted rightly. This second meaning is significant, for what motivates Fodor, in part, is to clear away the shadow of the possible elimination of commonsense psychology by those such as Paul Churchland. If we can show commonsense psychology to be correct, then we vindicate in both senses.  

24. Ibid., 25.
Fodor’s response is to provide a reputable scientific theory that deploys the same ontological objects with the same causal powers as commonsense psychology and holds most of the same generalisations.\textsuperscript{25} But, if commonsense psychology is a theory, why not just look to see if it works? Why do we require a further theory that somehow mirrors it? Fodor has already argued that commonsense psychology works fabulously well in the core cases\textsuperscript{26} and if commonsense psychology works like one of the special sciences, then the ceteris paribus clauses shouldn’t bother us. Even all the phenomena that Churchland complains commonsense psychology fails to even anticipate (e.g., sleepwalking and blindsight) can and should be explained by other sciences (presumably neuroscience in these cases).

Two factors seem to come to bear at this point. First, Fodor is committed to the notion that the attitudes are \textit{real} and for Fodor ‘real’ means grounded in physics. He is committed to the notion that psychological states must be provided for by non-intentional/non-semantic conditions. If there is no account of how psychological states supervene on physical states, then physicalism has to be abandoned. Commonsense psychology doesn’t seem to have anything that could be said to directly support such a doctrine, thus, to maintain a physicalistic position, a scientific theory that does has to be provided. Second, Fodor claims that the kinds of explanations that commonsense psychology provides are causal ones. But to what extent does his belief that this is true stem from his commitment to physicalism? Consider the putative generalisation that “someone who suffers a sharp

\textsuperscript{25} Fodor, \textit{Psychosemantics: The problem of meaning in the philosophy of mind}, 16ff.
\textsuperscript{26} Ibid., 20–1.
pain typically winces.” It certainly seems on its face to be a causal generalisation that connects experiencing a pain to wincing behaviour. But surely this is a case of giving partial criteria for being able to say of someone that they are in pain. In other words, part of the criteria for using the term ‘is in pain’ is the manifestation of certain kinds of pain-behaviour. Our putative generalisation looks less like ‘bricks thrown at windows tend to break them’ and more like ‘She hasn’t eaten since breakfast and it now being late evening, she must be hungry.’ Not having eaten in an extended period of time is conceptually connected to someone being hungry.

It seems to me that if it can be shown that commonsense psychological concepts do not have the same logic, roles, and connections as are attributed to it (i.e., that it is a causal explanatory (proto-)theory), then there is no need for vindication at all (at least by a scientific theory). Commonsense psychology should stand or fall on its own merits, i.e., whether it predicts, explains, and provides interpretations of what people do.

### 2.2.2 A Theory of the Gaps?

Fodor contends that there is an explanatory gap between the expressions of certain beliefs, desires, etc. and the actions which satisfy them. For example, I say to my student that I will meet her for a conference at 3 PM here in my office and at 3 PM it turns out that I am here waiting for her. Fodor insists that this is a significant fact that stands in need of an explanation. What exactly is in need of explanation?

27. Fodor, Psychosemantics: The problem of meaning in the philosophy of mind, 3.
Perhaps someone in my department who observed this shows up at 3 PM to give me a paper of his that I asked for earlier in the day. All he heard was that I was making an appointment to be in my office at 3 PM. How can we explain why he turned up just at that moment? What does commonsense psychology provide for us? Fodor claims that there is a gap here—some missing step of practical reasoning not articulated. Presumably, Fodor would say that the missing step is something like ‘People do what they sincerely say they will do’. The question is why should we think that what bridged this ‘gap’ is theoretical in nature?

Consider this example: I stand up in the living room with an empty glass in my hand and say to my wife, “I am going to the kitchen. Would you like anything?” She tells me “Yes, a soft drink, please.” I go to the kitchen, place the glass in the dish washer, open the refrigerator, get a soft drink, return to the living room, hand it to my wife, and sit down. If my wife expressed any surprise at my actions, I would be baffled. What precisely, provided she wasn’t distracted when she asked for a soft drink, would she be surprised by? My returning to the living room? My handing her a soft drink? I submit that there is no explanatory gap here just as there is no explanatory gap in the case of my colleague showing up at 3 PM to hand me the paper. An explanation of my actions, in either case, would not be given by saying “people typically do what they sincerely say they do.” In the first case, the explanation of my showing up at the office would be “I have made an appointment to meet a student for now” and in the second case if my wife asked me why I was handing her a ginger ale, I would explain that she had asked me to
get one for her. The generalisation ‘people tend to do what they sincerely say they will do’ is no more part of a theory than is ‘the sidewalk tends to get wet when it rains.’ We expect people to do what they sincerely say they are going to do not because we have come to see the correlation between certain speech acts and certain bodily movements but because acting in certain ways is partially constitutive of what it is to say, sincerely, what you will do.

But there is another implication as well. When I declare my intention to be in my office at 3 PM, Fodor’s picture postulates an inner state, viz., my intention to be in my office at 3 PM, that causes me, in large part, to be at my office at 3 PM. My colleague’s inference is supposed to look something like this then: “DG said Φ. Therefore DG intends to Φ. If DG intends to Φ, then DG will produce behaviour that brings about Φ, because to intend to Φ is to be in an internal state ϕ such that ϕ brings about behaviour that results in Φ.” The gap is supposed filled by the action of the causally effective mental state ϕ. However, “DG said Φ as an expression of her intention to Φ, therefore she intends to Φ” is true simply by virtue of what we mean when we use these words; it is a ‘logical’ truth. To go on to say “if DG intends to Φ, then DG will produce behaviour that brings about Φ” is similarly ‘logically’ true. The inference goes through by virtue of the logic of the concepts being deployed rather than a gap being bridged by virtue of a causal generalisation over an inner state.

If there is a gap to be explained, it is only because of Fodor’s presumption that commonsense psychology forms a causally explanatory (proto-)theory. The explanatory gap
appears when we look at the action as an effect and the reason for which that action was performed as a cause. Otherwise, the gap is already closed by the logic of how we use intention words.

2.2.3 How ‘Deep’ is Commonsense?

Fodor argues that what are sometimes taken to be the generalisations of commonsense psychology—the ‘platitudes’, like ‘absence makes the heart grow fonder’—are no such things.\(^{28}\) If they were, we’d be no worse off for their elimination. No, for Fodor, commonsense generalisations exhibit a characteristic deductive structure reminiscent of the sciences that trade on two aspects: generalisation over ‘unobservables’ (presumably, he means propositional attitudes) and prediction through ‘iteration’ and ‘interaction’\(^{29}\).

This is a rather opaque point Fodor is trying to make, but it seems to me that he is arguing that the generalisations of commonsense psychology, like the generalisations of real science, do not typically make direct reference to behaviour, but rather make claims that support further behavioural predictions depending upon various other mental states the person may have, thus, displaying the ‘deductive structure’ displayed by science.

Presumably, Fodor is referring to such generalisations in physics as “The angle of light reflection is equal to the angle of incidence” or “For every action there is an equal and opposite reaction.” Indeed, these generalisations do not directly implicate any particular

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29. Ibid., 7–8.
result; the circumstances at the moment are crucial for any prediction of effect. I certainly see the parallel he is trying to make. However, it is not clear to me that the generalisations of commonsense psychology enter into the kinds of explanations Fodor claims. Consider the following explanation of behaviour: “I was late to school today because of the traffic on the highway. People typically take more care in acting when their surroundings are dangerous. It is snowing heavily. Heavy snow on the highway is a dangerous condition. Taking more care when driving typically involves driving more slowly. Driving more slowly won’t get me to work on time if I leave at the normal time and I left at the normal time.” I submit that Fodor would accept the italicised sentence as a commonsense generalisation. First, I wish to point out that the connection between ‘taking care in acting’ is partially constitutive of what we mean by ‘dangerous conditions.’ In part, what ‘dangerous condition’ means is ‘those conditions where people typically take more care in acting.’ Second, we could take the generalisation out entirely and the explanation would be just as stilted an utterance, but lose none of the explanatory power because the link between ‘taking more care’ and ‘danger’ is already there in the meanings of the phrases. This putative generalisation is an idle wheel on which nothing turns.

My last points here involve the claim that what makes commonsense psychology ‘deep’ is the deployment of ‘unobservable causes’. Fodor says that commonsense ‘passes the test’ with respect to unobservable causes because
[i]t takes for granted that overt behaviour comes at the end of a causal chain whose links are mental events—hence, unobservable—and which may be arbitrarily long (and arbitrarily kinky).\textsuperscript{30}

First, it is unclear to me what he means by ‘mental event’ here. What exactly is a mental event? Is believing that \( p \) a mental event? I am going to have to presume he means something like a mental event is a mental state expressing its causal power, whatever that means; the interaction of mental states, perhaps. At any rate, this will have to be cleared up in the next section.

Second, it is not clear to me at all that commonsense assumes anything of the sort. I will grant that there are actions which are the result of a great deal of deliberation, soul-searching, consultation, and review of preferences (e.g., careful consideration of whether to uproot one’s entire family to take a new job across the country). I will grant that some of these factors that eventuate in an action can take place months, even years, before the actions itself (e.g., resentment due to a very old wrong). However, it would be very odd to say that my decision to let bygones be bygones was a causal factor in my reconciliation with an old friend. I would say my forgiving my friend \( \textit{was} \) (at least, in part) the reconciliation. But my decision to forgive someone for a wrong they had committed is no more a \textit{cause} of the reconciliation than is me moving my Queen to checkmate my opponent’s King the \textit{cause} of the end of the game.

Lastly, in exactly what way is a mental event ‘unobservable’? The notion that a mental state, process, or event is unobservable is a piece of Cartesian dualism that hung around after the ghost was banished. When I look into the face of someone who has just received a phone call from a loved one they have not spoken to in a long while, I see the joy. I do not see certain facial patterns as ‘happiness’ and decode certain noises as ‘laughter.’ When my daughter runs off toward the end of a dock and I see her foot go through a board, hear the snap of her leg and her subsequent scream, I do not process all of this as data from which then I then infer that she is intense pain. I see the pain manifested in her actions. She expresses her pain in her screams rather than encodes the information ‘I am in great pain’ for me to decode. When I see my cat hunker down as she sees a toy scoot by her and her bum wiggles in that tell-tale way just before she pounces, I do not infer that she intends to attack her toy, I see the intention manifested right there in front of me. Someone might keep their intentions or beliefs to themselves, but that does not imply that they are unobservable, only that they are not being displayed.

In this section, I have argued that there is good reason to begin to suspect that commonsense psychology, as it is practiced, is not a theory. In the next section, I examine the purported causal power of propositional attitudes.

2.3 Causal Power

Fodor begins with a rather sweeping statement:
Commonsense psychological explanation is deeply committed to mental causation of at least three forms: the causation of behaviour by mental states; the causation of mental states by impinging environmental events [. . . ]; and—in some ways the most interesting commonsense psychological aetiologies—the causation of mental states by one another.31

It is the last commitment that Fodor most requires us to accept. He suggests that commonsense takes a chain of reasoning to be a causal chain of mental events. He maintains that it is part and parcel of commonsense psychology that it takes the things that have causal power and content (i.e., mental states) to be the very same things that are semantically evaluable (i.e., propositional attitudes). The reason for this is that for his RTM to go, he requires an explicit connection between our propositional attitudes and the mental (i.e., computational) symbols instantiated as physical brain states. Well, that’s fair enough. Additionally, Fodor says

if it isn’t literally true that my wanting is causally responsible for my reaching, and my itching is causally responsible for my scratching, and my believing is causally responsible for my saying. . . . [I]f none of that is literally true, then practically everything I believe about anything is false and it’s the end of the world.32

If he needs this connection, it certainly makes sense that he would seek to show how commonsense psychology fits the bill. However, I am not convinced that a simplistic picture of causation, the way we do it, fits this picture.

Peter Hacker has a discussion of causation that should help us understand better my objection to mental states being called unobservable that follows from the claim that they

32. Fodor, *A Theory of Content and Other Essays*, 156.
have causal power.\textsuperscript{33} Hacker argues for a shift from event causation as a prototype for understanding what causation consists in generally to agent causation. He argues that event designators are typically pointing out amongst other things that event designators generally trade upon substance-referring expressions (i.e., usually constructed by nominalising a term that described the outcome of some causal happening).\textsuperscript{34} It is by focussing our attention on these nominalised phrases that contributes to an obscurity that makes it seem as if the causal relation itself is unobservable. Hacker argues that we ought to find the idea that causation is unobservable as absurd. We see causation all the time. He reminds us that ‘[w]e watch the rain soaking the laundry, observe a car flatten a tin can, see a stone break a window pane.’\textsuperscript{35} Causation would not be seen as unobservable if we paid attention instead to our \textit{everyday} ability to observe and participate in causal happenings, such as filling a glass with water and seeing laundry dry on the line. On this view, while agent causation is a prototype, it is \textit{only} a prototype, as it is ‘only one among a variety of centres of variation around which we can fruitfully organise the forms of our various kinds of causal attributions.’\textsuperscript{36}

If all of this is true, then when we revisit the example of my making an appointment with a student at 3 PM, there is no gap that needs to be filled by an inner cause (i.e., my intention to show up at 3 PM) that brings about my showing up at 3 PM. What fulfils

\begin{flushright}
\textsuperscript{34} Ibid., 66.
\textsuperscript{35} Ibid., 69.
\textsuperscript{36} Ibid., 88.
\end{flushright}
my expressed intention to show up at 3 PM is my showing up at 3 PM, not a putative inner cause that needs to be inferred by my colleague to know where to find me to hand me the paper.

Both Dennett and Baker have further serious objections to raise on this point and I shall reserve further comments until I can bring theirs to bear in chapters 3 and 4.

2.4 Cause and Content

Externalism, with respect to semantic evaluation, is the idea that those attitudes must be related to the environment of the organism in the right way in order for the attitude to have the meaning it does. Propositional content that is individuated at least in part externally is called ‘broad content’. Internalism, on the other hand, is the idea that propositional attitudes (and the mental states that correspond to them) have the meaning they do in virtue of their intrinsic properties. Contents which are individuated solely in virtue of intrinsic properties is called ‘narrow content’. Fodor, in Psychosemantics, is committed to the position that mental contents are narrow contents.37

The twin world thought experiments are intended to demonstrate that mental content must be construed externally.38 Putnam offers a situation where two people who have the same intensions—descriptions in their heads—refer with the same word to different

extensions of the word. According to internalism, this is impossible. Thus, he concludes that externalism is true.

Consider a planet which is an exact duplicate of Earth, right down to duplicate versions of all the people, cows, buildings, etc. This Twin Earth is exactly the same except that water is made of some compound, XYZ, rather than H$_2$O. XYZ is completely different but looks identical under all the same conditions as on Earth. When I, someone on Earth, say ‘water’, Putnam maintains that I refer to H$_2$O. However, when my duplicate on Twin Earth says ‘water’, she is referring to XYZ. But because, ex hypothesi, her mental states and my mental states are identical, it cannot be the case that the contents of mental states are intrinsic. Thus it is concluded, what our mental states refer to must be at least partially individuated by what is not intrinsic to the mental state, such as the environment.

Fodor’s initial response to these thought experiments was to simply say, in the context of Twin Earth-type thought experiments, that XYZ-thoughts and H$_2$O-thoughts do not have different causal powers. If they do not have different causal powers, then they are of the same natural kind. If they are of the same natural kind, then these thoughts are the same intentional states with respect to psychology. The problem is, of course, that for Fodor, propositional attitudes are individuated by propositional content and they only have the same content if content is individuated intrinsically.

Fodor’s notion of ‘narrow’ content has come under quite a lot of pressure and he has had to resort to a new conception of content in order to show that propositional contents have their meanings by virtue of their intrinsic properties a different way. In
the following, I will undertake to show that Fodor’s newer approach fails as an acceptable account of meaning and thus fails to give an acceptable account of how meaning is causally relevant to behaviour.

2.4.1 Fodor’s Expert

In *The Elm and the Expert*, Fodor now denies that there are any narrow contents anyway and as such there aren’t any narrow content laws. Further,

> [t]he coinstantiation of broad content with its computational implementers is reliable and explicable but metaphysically contingent; that they coinstantiate depends on some very general facts about the world, not on the metaphysical constitution of content as such.\(^{39}\)

So, he gets rid of narrow content altogether, but adds that it doesn’t matter because they are superfluous. Despite there being no metaphysically necessary relation between broad content and the computational structures which implement them, there *is* a reliable and stable correlation between them because of certain facts which obtain in the world. On this view, broad contents match up with what instantiates them because the world is as it is. Moreover, these facts “obtain not just in the actual world, but in all nearby worlds where the laws of psychology are implemented in the same way that they are here.”\(^{40}\)

So, Fodor holds that there are in fact law-like relations between these broad contents and that which implements them, it need not hold in every possible world, just those

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40. Ibid., 25.
that are pretty similar to our own. It follows then, that Fodor’s position is that, in all nearby worlds, propositional attitudes are causally relevant to the production of behaviour because the very same psychological laws hold in all of these nearby worlds.

So, why, according to Fodor, do twin cases not arise (at least often enough for him to care)? Let’s look at the H₂O/XYZ case, the jadeite/nephrite case, and the elm/beech case.

In the H₂O/XYZ experiment, for Fodor, what prevents the existence of XYZ in nearby worlds are the laws of chemistry, which allow for nothing that has all the secondary qualities of water, but isn’t water. On this view, XYZ is nomologically impossible. There simply is no XYZ in any of the worlds in which our laws of nature are in force. As such, in all nomologically possible worlds, (and our psychological laws would hold in these worlds, a fortiori), no XYZ would cause anyone to have ‘water’ tokens. Therefore, the computational properties of ‘water’ tokens coinstantiate with the content water in all the worlds in which our psychological laws hold. So the problem that two different intentional states eventuate in the same behavior will not occur in this case.

However, according to Fodor, there are other twin cases that are nomologically possible. Consider another experiment. The term ‘jade,’ as it turns out, applies to two minerals, jadeite and nephrite, which have all the same secondary qualities. So, suppose that jadeite is found only on Earth and nephrite found only on Twin Earth. Then my ‘jade’ tokens mean jadeite and my twin’s ‘jade’ tokens mean nephrite. As a result, twin
cases arise; different concepts will correlate with the same computational processes and, thus, eventuate in the same behaviour.

Fodor does admit that the jadeite/nephrite case forms a twin case. But he claims that it is merely accidental that the content of my thought is jadeite and the content of my twin’s thought is nephrite while we fail to distinguish them. His reasons are as follows.

Fodor remarks that Twin cases do not arise when there is:

... a law [of nature] that the kinds among whose instances I regularly fail to distinguish when I apply C are very generally indistinguishable in respect of their causal properties. For, if they were, they would constitute a functional higher-level kind, and it would be reasonable to say that C is the concept of that functional kind.41

For Fodor, concepts are mental tokens and their types, which express properties and meanings. For example, the concept RED expresses the property of being red.42 Having a concept RED is having, or being disposed to have, thoughts that are causally or nomologically connected, in a certain way, to being red.43

Now, suppose there are two natural kinds, X and Y, on Earth. If it is nomologically impossible to distinguish X instantiations from Y instantiations because of the similarity of their effects, then we cannot have a concept which expresses only X or only Y. In other words, under these conditions, if we have a concept C that expresses X, then C expresses Y as well as X (or X-or-Y).

42. Ibid., preface.
43. Ibid., 37–8.
Further, Fodor argues out that Twin Cases could not arise if there is even

\[ \ldots \text{a law that [kinds] K1 and K2 are very generally indistinguishable in their effects on me. If they were, then, ceteris paribus, there would be a subject-relative functional kind of which K1 tokens and K2 tokens are both instantiations.} \] \[44\]

To illustrate this, presume that the properties of being red and of being brown are generally distinguishable in respect of their causal properties so that most people can distinguish them. Suppose further that a pre-linguistic child is color-blind so that she cannot distinguish these two colours. Consequently, she represents the two colors by a single concept, call it ‘RB’. So we can tell a twin story in which she accidentally comes across only redness, and her twin accidentally comes across only brownness. According to informational semantics, the content of her concept RB is the disjunction of redness and brownness, since she bears the same dispositions to the two colours, not by virtue of the similarity of their general effects, but just by virtue of the similarity of their effects on her. Thus, the redness/brownness case is not a twin-case either.

So, one condition for the jadeite/nephrite case to form a twin case is that it be nomologically possible for me to distinguish jadeite from nephrite. That is, there is a nomologically possible world in which I distinguish jadeite from nephrite. Otherwise, informational semantics always assigns disjunctive contents to me and my twin in all nomologically possible worlds. Therefore, it may happen that, at a given place or time, e.g., I was born in 1500 when geology was not developed, I would be unable to distinguish jadeite and

nephrite (in this world and the nearby worlds) because there would be no mechanism to enable me to do so. My failure or my twin’s failure to distinguish them is not according to the law. Suppose that, by sheer luck, there is an accident that Earth has only jadeite and Twin-Earth has only nephrite so that my concept jade applies only to jadeite and my twin’s concept jade applies only to nephrite. Then, in this case, we can have different mental contents but the same computation in our heads. The same computation produces the same behaviour. In consequence, the broad content law at issue does not hold in such cases. Thus, on Fodor’s account, in such cases, mental contents are irrelevant to the explanation of the behaviour. However, such cases only happen accidentally. Intentional laws are ceteris paribus laws; they do not hold in all situations and the cases where they do not hold do not tell against those laws generally.

Fodor claims that even if Twin cases occur, they occur only accidentally. But there is a related kind of case, i.e., deferential concepts, in which different broad contents seem to correspond non-accidentally to the same computational processes. Consider the case of the elm trees and beech trees. I can’t distinguish elms from beeches, but some experts can. So, I defer to the experts to distinguish between them. Therefore, the concept elm and the concept beech are thus deferential concepts for me. Accordingly, the computational implementation of my elm-thoughts and my beech-thoughts are functionally indistinguishable, and my dispositions to elms and beeches are the same. However, on this view, the contents of my elm-thoughts and my beech-thoughts, which are determined by the expert, are the set of elms and the set of beeches respectively. As such, different contents
would eventuate in the same behaviour. Thus, deferential concepts again give rise to the epiphenomenalism of content.\textsuperscript{45}

Fodor’s response is to insist that, despite first appearances, I could distinguish elms from beeches, i.e., my dispositions with respect to elms would be different from my dispositions with respect to beeches. (In other words, elms would cause ‘elm’ tokens and beeches would cause ‘beech’ tokens in my head.) Although, usually, I do not distinguish elms from beeches, I could (i.e., really could) distinguish them by asking a botanist. Fodor claims that

Semantics, according to the informational view, is mostly about counterfactuals; what counts for the identity of my concepts is not what I distinguish but what I would distinguish if I cared to.\textsuperscript{46}

Thus, according to Fodor, the content of my elm thoughts is determined by my discriminative capacity. So, it would seem that it is not the case that the content of my elm-thoughts is determined by the expert. Rather, the expert is only an instrument exploited by me to distinguish elms from beeches.\textsuperscript{47} Consequently, if I asked an expert, my elm thoughts and beech-thoughts would have different computational implementation and hence would eventuate in different behaviour.

\textsuperscript{45} We can also construct Twin cases from deferential concepts. Suppose that on Twin Earth, the terms ‘elm’ and ‘beech’ are switched so that ‘elm’ means beech, and ‘beech’ means elm. Neither my twin nor I can distinguish elms from beeches. So when I think, ‘this is an elm,’ I’m thinking about elms. When she thinks, ‘this is an elm,’ she is thinking about beeches.

\textsuperscript{46} Fodor, \textit{The Elm and the Expert: Mentalese and its semantics}, 37.

\textsuperscript{47} Botanists may exploit other instruments, e.g., a magnifier, or their fine-tuned eyesight to distinguish elms from beeches.
Usually, however, I don’t care about the differences between elms and beeches. Consequently, most of the time, my elm-thoughts and my beech-thoughts have the same computational implementation and hence result in the same behaviour. So, in this case, different contents will have the same actual consequences for behaviour. For example, I want to cut the tree I think is an elm. But I will cut it even if I think that it is a beech. So the content of my elm thought is explanatorily irrelevant to my cutting the tree. However, that is what our common sense requires. Our intuition only requires that the content of our thoughts is explanatorily relevant to the production of our behaviour when we care about the content.

It might be instructive to note that there is little substantive difference in the jadeite/nephrite case and the elm/beech case. With respect to the jadeite/nephrite case, according to Fodor, it may happen that, at a given place or time, I could (really could) not distinguish jadeite and nephrite; suppose that I were born in 1500 when geology had not yet been developed. But at a time at which there are geologists, I could distinguish jadeite and nephrite by asking them, even though I don’t actually know their differences. With respect to the elm/beech case, it may happen that I were born at a time at which botany had not been developed. So I could not distinguish elms from beeches. But at a time at which there are botanists, I could distinguish elms from beeches even if I don’t actually know their differences. So the apparent difference between the elm/beech case and the jadeite/nephrite case is that in the elm/beech case, we are at a time at which botany has already been developed. We know there is a difference between elms and beeches (so
we have two terms ‘elm’ and ‘beech’). In the jadeite/nephrite case, we suppose that we were at a time at which geology had not been developed. We didn’t know there was any difference between jadeite and nephrite (so we had only one term ‘jade’) and, a fortiori, we were not able to distinguish them. If, later, geology has been developed, then we could distinguish them even if we don’t actually know their differences.

On the whole, according to Fodor, the content of our thoughts does not metaphysically supervene on the computational processes in our heads. Nonetheless, content correlates reliably with its computational implementations in the worlds in which there are mechanisms in play whose operation prevents twin cases (including those cases that can be constructed from deferential concepts) from arising very often. In the $\text{H}_2\text{O}/\text{XYZ}$ case, the mechanism is our chemical laws which do not allow the existence of XYZ in any nomologically possible worlds, a fortiori, in any nearby worlds in which our computational psychology holds. In the jadeite/nephrite case, my twin and I accidentally fail to distinguish them. But the fact that intentional laws accidentally do not hold does not count against intentional laws generally. In the elm/beech case, the mechanism is the expert who enables me to distinguish elms from beeches, i.e., enables me to have different computational implementations to correlate with my elm-thoughts and beech-thoughts.

2.4.2 The Challenge of Indeterminacy

A satisfactory account of intentional explanation qua causal explanation is based on a satisfactory account of intentionality. We can have a satisfactory account of intentionality only
if we can solve the problem of indeterminacy (or ‘the disjunctive problem of meaning’). Let’s look at just what this problem is for a moment.

The problem posed is that any theory of the content of a propositional attitude must be able to explain how a propositional attitude can misrepresent, e.g., how can someone wrongly believe that the cat is on that mat. Basically, how its content can be false of the object represented.

One way of putting this is that we need an account of how the propositional attitude can correctly represent some of the objects which bring about its existence, yet misrepresent some other of the things which bring about its existence. So, we need to be able to say that my belief that the rat is on the mat is about the rat over there being on the mat. But, if a mouse on the mat also brings about my belief that there is a rat on the mat, then the mouse’s current situation is misrepresented. So, my belief’s content, that there is a rat on the mat, is false of the mouse.

The problem, according to Fodor, is that this simply won’t do. If the mouse on the mat can also bring about my believing that the rat is on the mat, then there is no principled reason for identifying the content of my belief as that the rat is on the mat rather than the disjunction ‘either a rat or a mouse is on the mat’. If this is true, then when the mouse brings about my belief that the rat is on the mat, this belief doesn’t represent the situation as something that it isn’t. This belief has the disjunctive content (‘either a mouse

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or a rat is on the mat’) and this is true of the mouse on the mat. Fodor maintains that any account of propositional content must solve the problem of indeterminacy. It has to be able to explain misrepresentation, by indicating unambiguously what a propositional content is but also how that very content can be elicited by some state of affairs to which that content is not connected.

So, how does Fodor think he has solved the problem? Consider the elm/beech case. Why do my ‘elm’ tokens mean elms instead of elms-or-beeches? According to the informational semantics discussed in The Elm and the Expert, ‘elm’ means elms, but not elms-or-beeches, in case only elms would cause ‘elm’s in nearby possible worlds. Nevertheless, if this is true, then how could I sometimes misrepresent beeches as elms? In fact, in The Elm and the Expert, Fodor ignores the asymmetric dependence condition (which he discussed in earlier work) which is supposed to take care of cases of misrepresentation. In fact, Fodor uses the asymmetric dependence condition to take care the ‘robustness’ cases, which involve both misrepresentations and cases in which mental tokens are caused by something other than their meaning but the mental tokens do not count as misrepresentations. For example, my seeing of grass may cause horse-thoughts in my head. In other words, grass may occasion in me mental tokens of ‘horse,’ which mean horse. But I do not misrepresent grass as horses. But let’s put aside the distinction between misrepresent-

49. Fodor, Psychosemantics: The problem of meaning in the philosophy of mind, 89–90.

50. The nomological possibility of misrepresentation cannot explain why I really do misrepresent beeches as elms in the actual world.
ations and robustness cases because such a distinction is something of a distraction for my argument.

According to the informational semantics discussed in *Psychosemantics*, ‘A’ means A if

(1) A’s cause ‘A’s.
(2) ‘A’ tokens are not caused by B’s in nearby worlds in which A’s do not cause ‘A’s.
(3) A’s cause ‘A’s in nearby worlds in which B’s don’t cause ‘A’s. \(^{51}\)

Now, (1) says that there is a causal law connecting the A type and the ‘A’ type. (2) and (3) say that the ‘A’/B connection is asymmetrically dependent on the ‘A’/A connection. So, although B’s cause ‘A’s in nearby worlds, B-caused ‘A’s are misrepresentations.

Consider an example:

(1’) Horses cause ‘horse’s.
(2’) ‘Horse’ tokens are not caused by cows-on-a-dark-night in nearby worlds in which horses don’t cause ‘horse’s.
(3’) Horses cause ‘horse’s in nearby worlds in which cows-on-a-dark-night don’t cause ‘horse’s.

So, (1’) says that there is a causal law connecting the horse type and the ‘horse’ type. (2’) and (3’) say that the ‘horse’/cow-on-a-dark-night connection is asymmetrically dependent on the ‘horse’/horse connection. So the ‘horse’s caused by cows-on-a-dark-night are misrepresentations. (1) - (3) are established by the laws of nature. They have their own ceteris paribus conditions which are fulfilled in nearby worlds. In this example, nearby worlds are probably all nomologically possible worlds.

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51. Fodor, *Psychosemantics: The problem of meaning in the philosophy of mind*, 109. However, in *A Theory of Content and Other Essays*, Fodor maintains that (1) to (3) are not sufficient for ‘A’ to mean A. He adds a further condition that requires that ‘A’ tokens are actually caused by A’s. He, however, drops this further condition in *The Elm and the Expert*. 

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Let’s return to the elm/beech case. In parallel, ‘elm’s mean elms because

(A) There is a causal law connecting the elm type and the ‘elm’ type.
(B) The ‘elm’/beech connection is asymmetrically dependent on the ‘elm’/elm connection, which is mediated by botanists.

(B) says that, in the worlds in which there are botanists, beeches don’t cause ‘elm’s if elms don’t, and elms cause ‘elm’s even if beeches don’t. Thus, my beech-caused ‘elm’s are misrepresentations. However suppose I ask the wrong people, who sometimes point to elms and sometimes point to beeches when asked to identify elms for me. Then, do I mean the disjunct, elms-or-beeches, by ‘elm’s? Can Fodor claim that my beech-caused ‘elm’s are mistakes? Whether Fodor can do so depends on whether his account can tell who are botanists without appealing to the fact that botanists are those who distinguish elms from beeches. Otherwise, he simply begs the question as to what we mean by ‘elm’s.

Perhaps Fodor might respond in the following way. According to Fodor, ‘elm’s mean elms because of (A) and (B), which are natural laws with ceteris paribus conditions. The ceteris paribus conditions of (A) and (B) can be fulfilled in different ways. For botanists, the ceteris paribus conditions of (B) are fulfilled after their perceptual systems have been fine-tuned. For the rest of the community, the ceteris paribus conditions of (B) are fulfilled after they ask botanists. In sum, botanists are those who fulfill the ceteris paribus conditions of (B) by hard work. Therefore, Fodor’s account can tell who are botanists without appealing to the fact that botanists are those who distinguish elms from beeches.

But this raises a further problem for Fodor. On this view, in the worlds in which there are botanists but I don’t ask them, I do not fulfill the ceteris paribus conditions of
(B). For example, among these worlds, while there are some worlds in which elms cause ‘elm’s and beeches don’t, there are also some worlds in which beeches cause ‘elm’s and elms don’t. This is so because, in these worlds, the features I use to recognize elms are not the essential features of elms, and in some of these worlds, elms lack such features but beeches have them. Thus, the ‘elm’/beech connection is not asymmetrically dependent on the ‘elm’/elm connection. In other words, my ‘elm’s do not mean elms. My ‘elm’s may not mean elms-or-beeches either. It really isn’t clear, on this view whether they mean anything at all. So, it would seem, Fodor fails to provide an account of meaning.

2.5 Conclusion

In this chapter, I have unpacked Fodor’s conception of commonsense psychology as a causal explanatory theory of behaviour, why he thinks it requires a scientific theory that postulates inner causes of behaviour, and some selected portions of that putative vindicating theory. I ended the chapter by pointing out a series of what I consider serious issues that undermine Fodor’s project and should give us pause about whether Fodor has gotten his description of commonsense psychology right and whether commonsense psychology requires a vindication at all. In the next chapter, I add to these comments by examining Daniel Dennett’s frequently scathing criticisms.
3 Dennett on Fodor

We talk of processes and states and leave their nature undecided. Sometime perhaps we shall know more about them—we think. But that is just what commits us to particular way of looking at the matter.

Dennett has quite a few choice things to say about Fodor’s conception of and project to vindicate commonsense psychology. In this chapter, I provide and evaluate Dennett’s unhappiness with Fodor’s Intentional Realism and the conception of commonsense psychology that follows from it. From his Review of *Psychosemantics*, I discuss Dennett’s attack on meaning holism and the problem of indeterminacy of content, along with Dennett’s two rhetorical complaints about how Fodor goes about his business. This leads me to investigate Dennett’s attack on what he call’s Fodor’s ‘industrial strength’ Realism of everyday psychological terms and Dennett’s alternative of ‘mild’ realism. I also discuss the idea that Dennett floats that commonsense psychology is best seen as a ‘craft’ rather than a theory. I end the chapter with a review of the argument against Fodor’s hyper-realism and the idea that everyday psychological concepts are not part of the vocabulary of a theory.
3.1 The Review

The review of *Psychosemantics* by Dennett is a good place to begin.¹ Dennett characterises the book as “a vigorous—even frantic—defence of what he calls *Intentional Realism*: beliefs and desires are real, causally involved, determinately contentful states.” This characterisation really has two parts. First, there is the claim that beliefs and desires are real, i.e., they are physical things or configurations of physical things in the physical world. Second, intentional realism seems to imply that we must guard this crisp distinction from ‘meaning holism’—the notion that “the identity, i.e., the intentional content, of a propositional attitude is determined by the totality of its epistemic liaisons.”² Dennett characterises this attitude of intentional realism:

> Science is nothing if not “naturalistic,” however, and, when one tries to naturalise psychology, it begins to look more and more biological, and hence teleological, and hence functionalistic; its crisp traditional categories—in particular, propositional attitudes—begin to slide toward the murky relativity of functional interpretation, and beyond: to the indeterminacy of radical interpretation.³

Fodor argues against this ‘slide’ because he feels that meaning holism is itself ‘a crazy doctrine.’⁴ What I would like to do now is show how Dennett responds to the second of these aspects of Intentional Realism. I will deal with hyper-realism in the section that follows.

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3.1.1 Meaning Holism and Indeterminacy

Dennett takes significant issue with Fodor’s rejection of meaning (or ‘semantic’) holism. As Dennett puts it, meaning holism is just the idea that what any particular propositional attitude means is dependent on the content of other beliefs you have. As I said above, Fodor dismisses this a “crazy doctrine.” However Dennett isn’t convinced. Further, Dennett argues that in opposing meaning holism, Fodor gives away much of his own position as a result.

When Fodor makes a distinction between strong and weak functionalism, he endorses only the weaker version.

\[ \ldots \text{ all you need is the claim that being a belief is a matter of having the right connections to inputs, outputs and other mental states. What you don’t need} \ \ldots \ \text{is the much stronger claim that being the belief that } p, \ \text{being a belief that has a certain content is a matter of having the right connections to inputs, outputs, and other mental states.} \]

As Dennett points out, by taking this weaker view, Fodor rejects the one aspect that so many theorists take to be the very thing that makes functionalism attractive: functional role semantics. Fodor claims that functional role is not a very important determinant of meaning. Meaning is a matter of denotation because, he argues, “concepts are individuated by reference to the properties they express, thoughts by the states of affairs they

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5. Fodor’s attempts to provide a non-semantic, non-functional, non-teleological theory over the years (especially his revisions in *The Theory of Content* and *The Elm and the Expert*) significantly complicates explicating exactly what Fodor’s position is and what parts of it have survived the evolution of his position.

correspond to, and so forth.”⁷ So, on this view, the meaning of a symbol (concept, mental representation) is a ‘brute metaphysical fact’ of the causal (not functional) link to the meaning. This clearly needs an account.

Fodor’s task now is to provide this account of how a mental representation can be about something (‘express a property’) in ‘nonsemantic, nonfunctional, non-teleological terms.’⁸ The debate about semantic holism is a long and complicated one and while it is tempting to go into detail, I fear that this will obscure my main concern with the attempt to naturalise meaning. As I argued in chapter two, a central problem of any project to give a naturalised account of meaning (so construed) is to avoid the problem of indeterminacy. Fodor offers the notion of ‘asymmetrical dependence’⁹ to avoid the problem and we saw in chapter two that this did not fare well.

Dennett has a different ‘solution’ to the problem of indeterminacy in that he argues that meaning is potentially indeterminate in certain cases anyway and, as such, there is no problem. On Dennett’s view, the problem only arises because of the commitment to intentional realism. I wish to give a quick account of Dennett’s idea here, in order to see clearly just what he thinks is wrong with Fodor’s account, then look more closely.


⁹ This idea is that not only will there be a law connecting a symbol (“X”) with what it means (X), but also that for any other items that are lawfully connected with the symbol (“X”), there is an asymmetrical dependency of laws or connections. The asymmetry is such that, while it is true that the other items (Ys) are capable of causing the symbol to be tokened (“X”s), the Y → “X” law depends upon the X → “X” law. But for the latter the former would not hold. Were this dependency to exist and were it to be asymmetrical, it is supposed to account for why the symbol “X” is dedicated to representing Xs, not Ys (where “Y” can range freely over any non-X). The asymmetrical dependence locks the symbol to its meaning.
at Dennett’s complaints about how Fodor tries to solve the problem and finally look to Fodor’s response.

Fodor distinguishes two kinds of intentionality: intrinsic and derived. Intrinsic intentionality is precise, determinate, and dictated by the parts of the agent which represent the content in question. Derived intentionality is by its nature interpretive. For Dennett, any potential pattern (including belief, desire, etc.) is intrinsically intentional in the sense that the existence of such a pattern is objective and thus independent of interpreters, but also derivative in the sense that actual patterns are derived from interpretation. Dennett thus rejects the dichotomy entirely on the grounds that there is no intentionality which is purely intrinsic nor purely derived.

For Dennett, the final arbiter—interpreter—of content is the evolutionary process on the grounds that “the meaning of words, and all the mental states that somehow lie behind them, is grounded ultimately in the rich earth of biological function.” So, in a manner of speaking, the content of our mental states is indeterminate without some reference to the way we have evolved—our current and past biological endowments. Thus, on this view, the content of a person’s beliefs is indeterminate if appeal to the design forces of evolution cannot settle between various interpretations. Dennett offers the analogy of the ‘wandering two-bitser.’ It turns out that Panama has a kind of coin, called a quarter-balboa, which has a similar weight and size to a US quarter dollar. The

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two-bitser is a device which is designed to distinguish US quarter dollars from other objects as input to a vending machine. It turns out that the device fails to distinguish between US quarter dollars and quarter balboas. So, the device could indeed be installed in Panamanian vending machines and work as the importing vending machine owner intends: to accept quarter balboas. So, the function of the device is determined by the intention of the person who puts it to work. In this case, the Panamanian vending machine owner. Applying this example to organisms, Dennett maintains that the content of our mental states are fixed by the biological functions they serve. So, the biological functions of belief, like the biological function of any part of the organism, are interpreted by evolution. Thus, Dennett says:

evolution can select an organ for its capacity to oxygenate blood, can establish it as a lung. And it is only relative to just such design “choices” of evolution—“endorsed” purpose—raisons d’être—that we can identify behaviours, actions, perceptions, beliefs, or any of the other categories of folk psychology.  

Consider a frog. When it flicks its tongue out to catch a fly, does it see a fly as a fly or does it see the fly as a black dot/moving dot/etc.? For Dennett, asking what the frog sees or what the internal state of the frog represents already presupposes that the frog has beliefs, i.e., is an intentional system. But notice that there is no way to clearly distinguish

11. Daniel C. Dennett, *The Intentional Stance* (Cambridge, MA: The MIT Press, 1987), 300. Note that Dennett is not committed to saying that, for example, my beliefs about physics have any biological functions. Instead, he can say that my beliefs about the physics are based on some fundamental beliefs that have biological functions as their raisons d’être.

12. “It is not that we attribute (or should attribute) beliefs and desires only to things in which we find internal representations, but rather that when we discover some object for which the intentional strategy
these two possibilities of attributions from the past behaviour or current dispositions of the frog. According to Dennett, in such a case we should use the frog’s ‘environment of selection’ (as far as we can know) to select amongst the possibilities. In other words, we adopt the intentional stance towards the evolutionary process itself in order to see what “Mother Nature has on her mind.” So the story goes something like this: seeing as flies are the only source of food in the frog’s ‘environment of selection,’ some sort of detection system to indicate ‘fly there now’ would be very advantageous when a fly was indeed ‘there’. Seeing as evolution need only ‘get the job done’, a ‘black dot detector’ would serve the purpose nicely and the frog gets lunch. On this view then, the function of the frog’s eye is to detect flies in typical environments. That the frog can also detect (and snap at) other small dark flying bits (like BBs from a pellet rifle, say) makes no difference. Dennett would say that if the frog did indeed snap at a flying BB, the frog misrepresented, i.e., mistook, the BB for a fly. Similarly, in the case of the two-bitser and the vending machine, its function in the US is to accept quarters, although it can also accept q-balboas. If we do not know where the vending machine with the two-bitser is located, the function of the device is indeterminate. So, “to the extent that there is just no telling what that environment of selection has been, there is also just no fact of the matter about what the frog-eye report really means.”

works, we endeavour to interpret some of its internal states or processes as internal representations. What makes some internal feature of a thing a representation could only be its role in regulating the behaviour of an intentional system” (Dennett, The Intentional Stance, 32).


14. Ibid.
Suppose, says Dennett, that we change this ‘environment of selection’ for some frogs. Say we put a collection of frogs in a zoo where rather than flies buzzing by, we shoot pellets of food past the frogs. For the first group of inmates, on this view, there is no fact of the matter to distinguish between “fly there now,” “fly-or-pellet there now,” or “pellet there now”. What each report means has not been fixed because the environmental situation within which such reports are interpreted has not occurred before. These possible meanings thus are fodder for evolution to select for, says Dennett. After a number of generations of selection, the process will have assigned a meaning to the frog-eye report, in this example, ‘pellet there now’ in the same manner as the vending machine device’s function changes from selecting US quarter dollars to selecting Panamanian quarter balboas. And so, Dennett concludes: “Meaning, like function, on which it so directly depends, is not something determinate at its birth. It arises not by saltation or special creation, but by (a typically gradual) shift of circumstances”\(^\text{15}\)

There is an important upshot to this discussion. In what sense are we to take the notion that evolution has beliefs and desires in the manner Dennett seems to imply? Does evolution really have beliefs and desires or is this some sort of metaphor on the brink of becoming untenable? It is pretty clear that Dennett would answer the question “Does the thermostat really have beliefs and desires?” with a “no.” According to Dennett, adopting the intentional stance towards a thermostat does not give us a more efficient—accurate over time—way to predict the behaviour than adopting the design stance. Besides being

\(^{15}\) Dennett, Darwin’s Dangerous Idea: Evolution and the meanings of life, 408.
saddled with an extremely counter-intuitive, idiosyncratic position, Dennett would further argue that since there is no objective pattern that can be identified by the intentional stance that cannot be recognised by taking the design stance, there is no potential pattern of beliefs and desires that emerges out of the thermostat’s behaviour and behavioural dispositions. On the other hand, with respect to evolutionary pressures, Dennett points out:

Certainly we can describe all processes of natural selection without appeal to such intentional language, but at enormous cost of cumbersomeness, lack of generality, and unwanted details. We would miss the pattern that was there, the pattern that permits prediction and supports counterfactuals.\(^{16}\)

On this view, taking the intentional stance towards evolutionary processes is warranted because the stance provides a more efficient way to anticipate what evolutionary changes will occur in the design processes of organisms. So, it would seem, if we accept Dennett’s view, we are committed to attributing beliefs and desires to ‘Mother Nature,’ but not to the thermostat. Further, Dennett is committed to seeing evolution’s beliefs and desires as just as real as any that you or I possess:

We may call our own intentionality real, but we must recognise that it is derived from the intentionality of natural selection, which is just as real—but just less easily discerned because of the vast difference in time scale and size.\(^{17}\)

Nonetheless, Dennett also says something which appears to contradict the above quotations. According to him, “the chief beauty of the Darwinian theory is its elimination

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\(^{16}\) Dennett, *The Intentional Stance*, 317.

\(^{17}\) Ibid., 318.
of mind from the account of biological origins.”18 In the following, he explains how evolution can design organisms without a mind:

It does not consciously seek out these rationales, but when it stumbles on them, the brute requirements of replication ensure that it “recognise” their value. The illusion of intelligence is created because of our limited perspective on the process; evolution may well have tried all the “stupid move” in addition to the “smart moves,” but the stupid moves, being failures, disappeared from the view. All we see is the unbroken string of triumphs.19

In Dennett’s view, scientific psychology requires some sort of content attribution. However, the content can be ascribed in an ontologically neutral fashion: “the intentional story we tell about an entity, is not a history of actual events, processes, states, objects, but a sort of abstraction.”20 As such, it is not the task of a mature psychology to deal with ‘laws of behaviour’ in non-intentional terms on the simple ground that it cannot be done21 because it is the behaviour, characterised as intentional behaviour, that is what a mature psychology is aiming to account for. However, for Dennett (i.e., adopting the intentional stance), insofar as anything like behaviour or brain states/events as having some sort of content just is to describe it as being “environmentally adapted.”22 Such adaptation, since such adaptation is “a highly improbable state of affairs in a contingent

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18. Dennett, The Intentional Stance, 316.
19. Ibid., 317.
21. Ibid., 13–16.
22. “Something has to give. Either you must abandon meaning rationalism—the idea that you are unlike the fledgling cuckoo not only in having access, but also in having privileged access to your meanings—or you must abandon the naturalism that insists that you are, after all, just a product of natural selection, whose intentionality is thus derivative and hence potentially indeterminate” Dennett, The Intentional Stance, 313
universe,” requires some sort of explanation. But that explanation cannot be given in intentional terms on pain of begging the question.

Dennett considers an argument by Burge to the effect that it is not true that

[t]he meaning or content of an individual’s states and events (types and tokens) could not be different from what they are, given the individual’s physical, chemical, neural, or functional histories, where these histories are specified non-intentionally and in a way that is independent of physical or social conditions outside the individual’s body.

Burge calls it ‘individualism’ and Dennett doesn’t doubt that this doctrine is not true. His ‘two-bitser’ example seems to put that idea to rest. But Dennett thinks that there is something more interesting going on here. Burge’s arguments are motivated by the same sorts of concerns that give rise to the two-bitser example, but notably, Dennett says, he ‘leaves no room for indeterminacy of content: [Burge’s] formulations always presume that there is a fact of the matter about what something precisely means.’ In taking the position that there just aren’t any good arguments to lead him to believe that the use of intentional terms is merely ‘heuristic, instrumentalistic, or second class in any other sense’, Burge seems to be saying that original intentionality and derived intentionality are both context sensitive.

Dennett then launches into a short argument that he believes applies to Fodor, just as much as it does to Burge. They both fail to see, according to Dennett, that the evolution-

24. E.g., ibid., 12.
ary considerations that he bases his arguments upon force him to reject his commitment to his realism about content. In short, Burge commits himself to certain ‘optimality conditions’ that rely upon ‘making sense of what Mother Nature had in mind.’ This method then must make the methodological assumption that the organism in question has adapted to the environment in such a way that when we come to attribute contents to the organism’s states, those states ‘come out veridical, and useful.’ But here is Dennett’s point: the notion of ‘utility’ (certainly with respect to evolutionary considerations in general, but in almost all other situations) is not an objective, determinate property that inheres in whatever we are deeming ‘useful.’ The two-bitser example illustrates this. What counts as useful is given by considerations outside the system which, in part, are not obviously the sort of consideration that can be waved away by appealing to laws applying in this or nearby worlds. So, Dennett concludes, for Burge (and for Fodor),

he must relinquish the very feature that makes his conclusion so initially intriguing: this Realism about “intentional content,” or in other words his beliefs that there is a variety of intrinsic or original intentionality that is not captured by our strategies for dealing with merely derived intentionality like that of the two-bitser.

As such, the problem of indeterminacy lives on when intentional realism is one of the starting assumptions.

Fodor addresses this criticism directly by arguing that Dennett doesn’t really solve the problem, he has ‘merely decided to live with . . . the massive intentional indeterminacy.’

27. Dennett, The Intentional Stance, 311.
28. Ibid.
29. Fodor, A Theory of Content and Other Essays, 75.
I am pretty sure that this is not what Dennett has decided to do, but let’s play out Fodor’s argument here. He correctly identifies his not taking account of ‘utility’ as that which Dennett thinks give him trouble, but Fodor simply turns the tables. Fodor says, “as far as I can see, usefulness is useless for the purposes at hand.” In the case of the frog, it is perfectly useful for it to eat flies or bee-bees in a world where flies or bee-bees turned out to reliably be flies (or reliably edible, presumably). Fodor considers a counter argument where Dennett might turn to appeals to counterfactual cases where it turns out that flies or bee-bees turns out to be more bee-bee than fly. He identifies three problems.30

The first is that Dennett holds that it is the selectional history that determines content. As such, he is explicitly rejecting the idea that content rests in causal relations that would indeed hold in counterfactual situations. Second, it isn’t clear to Fodor just which counterfactuals are relevant. If in some nearby world, bee-bees are actually edible by frogs, surely this would be useful to the frog. The last criticism is crucial to Fodor and it is this: deploying a counterfactual strategy to explain what function and thus content is, he contends, undermines a Darwinian solution to the problem of indeterminacy since ‘utility that accrues in counterfactual arguments doesn’t produce actual selectional advantages.’ In other words, counterfactual advantages are incompatible with a theory which sees content and function in the light of selection history, for the simple reason that a counterfactual

advantage cannot ever have been part of the selection history of an organism else it would not have been counterfactual. 31

Now, these are all good counterpoints to someone who would accept the counterfactual that ‘flies or bee-bees turns out to be more bee-bee than fly.’ However, I do not think that this is where Dennett would go. My first reason is that it is quite clear that nothing could select for counterfactual advantages; they are counterfactual. I hardly think that Dennett would make this mistake. However, this is clearly a false dichotomy (in that Fodor allows for ‘no room for any sort of gradualism, between, say, the considered goal of an adult philosopher and the utterly intentionless behaviour of, say, a paramecium’), and this due to what Dennett likes to call hysterical realism. 32 Second, Fodor is surely right that the relevant counterfactuals are impossible (or at least merely speculatively) to determine. Edible bee-bees might be more nutritious than flies, for instance. And lastly, Fodor is exactly right that Dennett explicitly rejects the idea that content rests in causal relations that would indeed hold in counterfactual situations. Dennett’s point here is that he is insouciant about whether the frog believes ‘there’s a fly’ or ‘there’s a fly-or-bee-bee’ if it turns out that the frog gets dinner when it eats it. There is no fact of the matter about it, in this particular case. The problem of indeterminacy is generated by adopting a view of

31. “But inferences from observed correlations to causal involvements are always contingent. It is thus perfectly possible that most (or all) of the individuals selected were in fact t but that none of them was selected for being t. Consider the case where it is not being t but being t′ that was selected for, but where t and t′ are extensionally equivalent in the observed cases.” (Jerry Fodor, ‘Against Darwinism’, Mind & Language 23, no. 1 (2008): 4, fn 5)

meaning that has the need for there to be one, and only one, specific, identifiable meaning for every ‘mental representation’ (whatever that turns out to be) that is responsible for the frog’s behaviour.

To underscore this point, Dennett offers the example of the tribe that uses the word ‘glug’ to refer to an invisible, explosive gas they encounter in nearby marshes. When they encounter acetylene (presumably we visitors are doing a little welding in our off hours), and they call it ‘glug’, Dennett wants to know if they are making a mistake? Presuming their marsh gas was methane, it seems precipitate to say that ‘glug’ means methane, seeing as they are unfamiliar with chemistry. So, ‘there is no ground to be discovered in their past behaviour or current dispositions that would license a description of their glug-state as methane-detection rather than the more inclusive gaseous-hydrocarbon-detection.’

The laws of nature don’t help us here, so is there a deeper fact of the matter here that will conclusively determine what they mean? Dennett agrees that they will eventually come to mean one thing or another, but right now the meaning of their belief is simply indeterminate. ‘It is not just that I can’t tell, and they can’t tell; there is nothing to tell.’

So, for Dennett, no mental state is intrinsically contentful because attribution of content is entirely framed by what we know of the system’s patterns of behaviour and what we know about the “natural function” of the behaviour of the system; the latter being understood in the light of natural selection. So, says Dennett, attributing content is “po-

34. Ibid.
tentially indeterminate” in the sense that there is no fact of the matter as to whether one interpretation is the “correct” one. There is no fact of the matter when my cat digs his claws into the scratching post whether my cat wishes to sharpen his claws or is stretching or is trying to distract me, etc. Similarly, there may be no fact of the matter when I drink my coffee whether I desire the caffeine to wake me up or I wish to satisfy my thirst or I want to do something with my hands when conversing, etc. According to Dennett, therefore, while it may be said that I want to drink a cup of coffee and while certain “ways that I am” can be captured only by sentences containing psychological terms, propositional attitudes are not to be seen as capturing an internal state of the system, but should be taken to characterise the whole system (device or organism) as an object of interpretation from within the intentional strategy.

3.1.2 Quibbles

Dennett has a rather minor rhetorical point about Fodor’s book (this is a review, after all) insofar as that the way that Fodor has argued “is to emphasise small disagreements and generally force all fence sitters to jump one way or the other.”\textsuperscript{35} By doing so, Dennett says, Fodor manages to stake out for himself what Fodor then considers to be the only defensible position. Dennett doesn’t think this strategy very advisable. I agree with Dennett here for much the same reasons.

\textsuperscript{35} Dennett, ‘Review of Fodor, Psychosemantics’, 388.
First, Dennett says, staking off territory in such a clear-cut, rigid way leads to the discussion degenerating into ‘squabbles about minutiae.’ While small points can indeed make or break an argument, Dennett doesn’t think that this is really the proper way to get ahead. Unless you are supremely confident in the position you have staked off, you run the risk of not noticing whether you’ve made a mistake in drawing the correct lines to begin with; of missing any big mistakes while tending only to the details.

Surely, this is a fair enough point. Fodor does indeed tend to venture a bold thesis, then take on all comers; sometimes several at a time. This does run the risk that the debate gets bogged down in skirmishes over points that really don’t seem to matter very much. However, from Fodor’s point of view, it is the skirmishing that firms up where the lines of battle are to be drawn. Worrying over minutiae is part and parcel of the kind of detail that a scientific theory requires in order to ensure that we get it all right, Fodor might say.

Second, if you find yourself spending a lot of time ‘amplifying disagreements’, as Dennett thinks Fodor is doing (for example see chapter 4 in *Psychosemantics*), when one needs to make certain concessions, it tends to undermine confidence in the entire position. Dennett says “It turns out the crazies weren’t so crazy after all,” but it seems to me he means that it would have been better to have a less rigid position to begin with, then all the little squabbles could have been dispensed with.

Surely this is good advice for any writer (as is the third point), however, I am not sure that Fodor’s style of stating his position confidently, then backing away when shown

wrong is, on its face, the weakness that Dennett makes it out to be. I am not sure that people have stopped reading Fodor or stopped taking him seriously over the years because of this bold style. Certainly, he has had to retrench his positions, but then, he might say, that is after all the way we do science.

Third, Dennett calls the book “a tireless exercise of that philosopher’s pastime, burden-tennis.” The charge is basically that Fodor, when putting arguments into the mouths of his Granny or Aunty as interlocutor, frames his target argument in such a way that he can meet that argument on his own terms rather than concerning himself with “whether this is a sympathetic rendering of any real opponent’s claims.”

I really do think that Dennett is being too harsh here. When dealing with many critics, one has a choice to take them on one at a time or take them all on at once, and Fodor has deployed both of these strategies on several occasions. Lynne Baker is a case in point. She likes to gather her opponents together into a composite position against which she argues. On the other hand, and to be fair, Baker is much better than Fodor at making sure the reader knows exactly whom she believes falls under her characterisations. If this is Dennett’s complaint, then he has a fair point, but I think he goes further than this. I think what Dennett is saying is that Fodor is making something tantamount to a straw man. This is a serious charge and I should like to think that when such a charge is made, a detailed accounting of it would follow. I am unaware of any such account from Dennett.

Now, all of this having been said, I do think that these quibbles amount to a substantive complaint. Fodor’s rhetorical style tends to mislead us into seeing the problem in almost Manichaean terms: there is Intentional Realism and then all the other positions; the implication being that all of these other positions are competing with Intentional Realism on Fodor’s terms. What I mean here is that the starkly bifurcated way of seeing the problem robs us of the perspective to see that the question that we are trying to answer (e.g., are beliefs and desires real?) might be the wrong question entirely. Either they exist (somehow) as physical objects or configurations in the physical world or they do not. If they do not, they are not real. I think this is significant. When then, exactly, counts as ‘real’? Are we really merely rhetorically fenced in to accepting this dichotomy, as Dennett suggests? I think so.

3.2 ‘Industrial Strength’ Realism

The other main complaint of Dennett’s in the review is that Fodor owes us an argument from the practical indispensability of commonsense psychology to the “hard-core Realism” that Dennett believes should have been the task of the first chapter. Fodor’s realism is very strict and he maintains that we have no reason at all to suspect that we won’t develop a vindicating scientific theory for commonsense psychology. Rather than the argument Dennett expects, Fodor says merely that we can’t give up our commonsense terms because we wouldn’t know how to do so. Dennett’s point is well taken: just why is it that
we cannot do so? What other theory (for Fodor insists that commonsense psychology is a theory) could we not give up because we wouldn’t know how? Granted, I am not really sure how to give up electromagnetic theory, but presumably that isn’t a principled reason to suspect either that current electromagnetic theory is true nor that I couldn’t think in terms of the replacement theory eventually.

Nevertheless, Dennett’s main complaint with this version of realism is that Fodor seems to take an all-or-nothing view of things: either one is a Realist (committed to RTM, and the attitudes as semantically evaluable and etiologically involved) or one is some kind of instrumentalist (or worse, an eliminativist). Dennett wonders,

In which camp would Fodor place someone who was a realist about entities which met these two conditions but were not enough like the propositional attitudes to constitute a (realist) vindication of commonsense psychology?  

3.2.1 Everyday Psychological Terms

If we return to the claim that everyday psychological concepts are like theoretical concepts, we see that Dennett accepts that mental terms are theoretical and irreducible. However, what Dennett sees as so counting as theoretical differs from Fodor’s conception. Dennett asserts the central role of the indispensability of mental state ascription (e.g., belief ascription) in how we understand each other. As well, Dennett conceives of this indispensability on both conceptual and instrumentalist grounds.  


39. Dennett objects to being called an instrumentalist. He also complains that he is sometimes called a realist. He has a certain insouciance about -isms and I shall follow his lead. Where his position has

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monsense psychology provides a basis for useful practical reasoning about our everyday behaviour. But, Dennett denies that commonsense psychology can deploy causal explanations without being exempted from “literal-factual” interpretations. By ‘literal-factual interpretation,’ I mean the kind of hyper-realism that Fodor demands of the objects of our mental idioms.

Fodor considers the matter:

It may strike you as odd that, whereas instrumentalists hold that belief/desire psychology works so well that we can’t do anything without it, eliminativists hold that it works so badly (“stagnant science” and all that) that we can’t do anything with it [...] This is not however, a real paradox. Instrumentalists can agree with eliminativists that for the purposes of scientific/serious explanation the attitudes have to be dispensed with. And eliminativists can agree with instrumentalists that for practical purposes, the attitudes do seem quite indispensable. In fact...what largely motivates Anti-Realism is something deeper than the empirical speculation that belief/desire explanations won’t pan out as science; it’s the sense that there is something intrinsically wrong with the intentional.  

Seeing as action explanation has both normative and rationalising aspects, Dennett maintains that mental terms are to be understood as abstracta rather than illata. Illata are postulated unobservables like sub-atomic particles and forces. They are supposed to be the objects involved in causal nexuses and their only epistemic burden is that we do not experience them directly. Abstracta, though, are abstract objects. These objects

instrumentalist undertones, I shall lean that way. Where his position has realist undertones, I will lean that way.


are necessarily unobservable by virtue of their logico-conceptual nature. Objects such as numbers, centres of gravity, and propositions are not the sorts of things we generally consider to be involved in the causal workings of nature. Abstracta are supposed to be entirely conceptual objects.

If everyday psychological concepts are abstracta, then it would seem that only a form of instrumentalism can account for the success that these psychological concepts have in enabling us to predict and explain the behaviour of others. If so, Dennett argues that we should take some kind of interpretive point of view of these concepts—the intentional stance. According to Dennett, our everyday psychological terms are very useful, however,

[s]trictly speaking, ontologically speaking, there are no such things as beliefs, desires or other intentional phenomena . . . and we should see what we can do to make sense of their employment in what Quine called an “essentially” dramatic idiom. Not just brute facts, then, but an element of interpretation must be recognised in any use of the intentional vocabulary.42

To illustrate, consider a computer program that plays chess. According to Dennett, there are three stances from which we can understand the behaviour of the machine: the physical, the design, and the intentional. With respect to the physical level, we describe the machine in terms of the causal properties of the hardware. But the causal structure of a modern digital computer is so complex, that such a description would be so unwieldy as to be time consuming beyond usefulness. The design stance is the next level of abstraction where we predict and explain the behaviour of the system in terms of what functions the parts of the machine are intended to serve. For example, a group of chips wired together

42. Dennett, *The Intentional Stance*, 342.
which serve to drive the video display of the machine can be taken as a functional unit, i.e., all we need to know is that it takes certain inputs and sends certain outputs to the video device. The highest level of abstraction is the intentional stance in which we treat the machine as if it has beliefs and desires and intentions. So, for the computer running a program designed to play chess, we predict the moves it will make by treating it like a rational agent with the goal of winning a game of chess. With such a machine, this is the most successful point of view to adopt. Dennett’s point here is to illustrate why we ought to abandon the distinction between ‘derived’ and ‘original’ (or ‘real’) intentionality. His idea is that we grasp what it is to be an intentional system once we grasp what it is to adopt the intentional stance toward a system. It is the presumption of rationality that is central to Dennett’s conception of how we understand intentional behaviour. In so taking the intentional stance, we idealise and then take the system (machine or person) to do that which they rationally ought to do. Dennett maintains that our understanding of such intentional events necessitates the use of interpretive tools such as the principle of charity and as such is an irreducibly normative enterprise.

This view is in contrast to Fodor’s approach that we saw last chapter. Dennett anticipates that “the actual internal states that cause behaviour will not be functionally individuated, even to an approximation, the way belief/desire psychology carves things up.” 43 I think it is pretty clear that Dennett does not consider everyday psychological terms ‘theoretical’ or ‘scientific’ terms in the same way that Fodor does. As such, it is certainly

understandable that he is charged with being an instrumentalist. In Fodor’s view, if beliefs and desires are merely abstractions that cannot be individuated in any way with some physical object or configuration, then, the argument goes, they cannot have any causal efficacy in the physical world. As such, the argument ends, they are not real.

Dennett’s view is that everyday psychological terms like beliefs and desires are posited under idealising assumptions, and as such correspond to nothing in particular. We could compare beliefs and desires, under this view, to the notion of an ideal gas in chemistry. Empirical testing tells us nothing about ideal gases. In fact, the notion of an ideal gas allows us to mathematically interpret experiments on gases in the real world, so to speak. Dennett sees nothing wrong with this, “optimality assumptions are popular ploys in many disciplines.”

And, unlike Fodor, Dennett thinks the normative elements of common-sense psychology render these concepts non-causal.

It is crucial to Dennett’s view and his objection to hyper realism that what makes the intentional stance work is the assumption that the system we are interpreting from the intentional stance is rational. It is only through taking the system as rational that intentional patterns are detectable and that is why beliefs and desires have no place in physical explanations of behaviour.

Dennett argues that there are objective patterns out there in the world that are observable/detectable only from the intentional stance. As such, what we do to explain the actions of other people is to attribute beliefs and desires. But, because this is done under

the idealising assumption that the person you are observing is rational, there is no sense
in which what is attributed, i.e., beliefs and desire, are being located inside the person’s
head. They are attributed to ‘the intentional system’, viz., the person. Our ontological
commitment to them is real, but only insofar as our predictive practices are successful and
so they are instrumentally indispensable.

My ism is whatever serious realists adopt towards centers of gravity and the
like since I think beliefs are like that—in being abstracta rather than part of
the ‘furniture of the physical world’ and in being attributed in statements that
are true only if we exempt them from a certain familiar standard of literality.45

This is all well and good, but how do abstracta figure in genuine explanations of
behaviour? Fodor’s view trades on familiar notions of causal explanations which have their
home in physics. One way we might wish to understand this is to say that insofar as beliefs
and desires are conceived of as abstracta, Dennett advances no ontological thesis. The
idea of an abstract object is certainly connected to the explanatory practices in which they
have a home. Seeing as the idealising assumptions ground those practices, i.e., provide
a meaning to the practice, the characterization of an entity as abstract is a psychological
claim about us rather than an ontological claim about the world.

3.2.2 Mild versus Hyper Realism

Dennett’s position, as we have seen, attempts to account for everyday psychological terms
without being committed to referring to anything ‘inside the head.’ This does not sit well

45. Dennett, The Intentional Stance, 342.
with Fodor. On his view, if one stops their analysis anywhere ‘outside the head’, then there is no way in which one can explain the success of commonsense psychology (or the intentional stance, for that matter). Without some account of the connection between mental states and behaviour, an account that takes those states as actual causal states, the success of the ‘predictive strategy’ is left mysterious. Surely, Fodor says, we are licensed to make the inference from predictive success of the theory to the truth of the theory. Seeing as commonsense is successful, he argues we are licensed to accept mental states as real states.46

For Fodor, the crucial connection between beliefs and desires and human behaviour rests in characterising mental states as inner, causally effective, computational states. The causal properties of a mental state are connected, on this view, to that state’s semantic properties (its content) through the syntax of the symbol. The syntax of the symbol is an ‘abstract’ feature. Fodor likens it to its shape. Insofar as objects with different shapes allow for different configurations, so too does the syntax of the various mental states allow for certain configurations and prevents others from coming to be. And so, symbol tokens interact causally on account of their syntactic structure in much the same way “that the geometry of a key determines which locks it will open.”47 For Fodor, it is the modern

46. “It is not obvious... why such a presumption should not militate in favour of a realist conception... of the interpretations of beliefs/desires.” Fodor, ‘Fodor’s Guide to Mental Representation: The intelligent auntie’s vade-mecum’, 79

47. Fodor, A Theory of Content and Other Essays, 22.
digital computer which illustrates exactly how the semantic and putative causal properties of mental states are connected.\textsuperscript{48}

Dennett characterises Fodor’s realism this way:

Beliefs and desires, just like pains, thoughts, sensations and other episodes, are taken by folk psychology [i.e., commonsense psychology] to be real, intervening, internal states or events, in causal interaction, subsumed under covering laws of causal stripe. Folk psychology [i.e., commonsense psychology] is not an idealised, rationalistic calculus but a naturalistic, empirical, descriptive theory, imputing causal regularities discovered by extensive induction over experience. To suppose two people share a belief is to suppose them to be ultimately in some structurally similar internal condition, e.g., for them to have the same words of Mentalese [Fodor’s ‘Language of Thought\textsuperscript{49}] written in the functionally relevant places in their brains.\textsuperscript{50}

Dennett maintains that Fodor is taking a gratuitously strong realist position here, when he doesn’t have to do so. This is a function of his commitment to Intentional Realism in an all-or-nothing fashion. There is simply nowhere for Fodor to go when pressed. So, what other kind of account is available for a connection between beliefs and desires and their behaviour they bring about while asserting their ‘reality’? Dennett’s strategy is to place the ‘reality’ spotlight away from beliefs and desires and onto something else.

Dennett maintains that, from any of the stances, patterns in the world can be discerned; that the patterns are there—real and objective. However, these patterns are such that they can only be discerned from the point of view of the stance. In other words, they are

\textsuperscript{49} Fodor, \textit{The Language of Thought}.
\textsuperscript{50} Dennett, \textit{The Intentional Stance}, 53.
objectively there to be detected, but they are not out there independently of us since these patterns are composed in part by our own subjective reactions to what is out there.\textsuperscript{51}

A main aspect of Dennett’s theory is that it is a competence theory, that is, it presupposes and implies nothing about what is happening ‘inside’ the system under observation, so to speak. It is agnostic about whatever mechanisms might be underpinning those behaviours we can see. The set of behaviours that get interpreted are perceptual behaviours rather than internal cognitive or neurological events or mechanisms. This is why Dennett maintains that interpretations are made of the entire system rather than of any of its internal/constituent parts.\textsuperscript{52} Dennett asserts that

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\text{[s]ince the general power of the intentional stance is thus not explained by any knowledge we might happen to have about mechanisms in the objects we thereby comprehend, I continue to resist the brand of realism that concludes from the stance’s everyday success that there must be belief-like and desire-like states in all such objects.}\textsuperscript{53}
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Another way of putting this might be to say that Dennett rejects any sort of talk of one-to-one mapping between intentional states and internal states of an intentional system. So, Dennett’s ‘mild’ realism is much different than Fodor’s brand of intentional realism.

Now, if beliefs are features of a holistic interpretation of a system’s overall behaviours and dispositions to behave, but not systematically connected to some underlying mechanisms, it is difficult to see how Dennett can account for any putative causal relevance of

\textsuperscript{51} Dennett, \textit{The Intentional Stance}, 39.

\textsuperscript{52} Ibid., 58.

\textsuperscript{53} Ibid., 80–1.
belief patterns for the generation of behaviour. It seems that Dennett took a purely instrumentalist approach in the past, for example he has argued that “the success of the stance is of course a matter settled pragmatically, without reference to whether the object has beliefs, intentions, and so forth.”

More recently, Dennett admits of a “brute existence of pattern” and he believes that this endorsement will reflect a rejection of epiphenomenalism. So, I think it would be safe to say that Dennett is maintaining that belief patterns have two natures, an interpretive and an objective. This needs some unpacking.

As I said, Dennett takes it that patterns are recognisable from different stances. Beliefs, machinery, and subatomic particles are, under this view, features of different patterns. So, because “a pattern is ‘by definition’ a candidate for pattern recognition,” that pattern is interpretive. Further, it would follow that for something to be “real” would be for it to be recognisable from a particular stance. Sub-atomic particles can be recognised via the physical stance and calculators are recognisable from the design stance—if it can perform calculations, it is, by this light, a calculator. So, on this view, systems of all sorts, not just those that have mental states, require interpretation.

As for patterns being objective as well, Dennett argues that ‘a pattern of belief’ (presumably, a pattern of actions an organism undertakes on account of having a particular

54. Dennett, Brainstorms: Philosophical essays on mind and psychology, 238.
56. Ibid., 33.
belief) is akin to any (non-random) pattern, for example, the pattern of pixels on a computer screen that were generated by an algorithm of some kind.

A mathematically random sequence is not a pattern, and any patterns “discerned” in it are strictly illusory, not real; and any sequence that is not mathematically random has a pattern that is recognisable-in-principle by some observer or other, up to and including what we might call the maximal observer: the whole universe considered as a potential observer.  

It is this “recognisability-in-principle” that Dennett believes gets him the objectivity he wishes to predicate of mental states as abstracted from patterns of behaviour.

With respect to beliefs, Dennett claims that

the intentional stance provides a vantage point for discerning similarly useful patterns. These patterns are objective—they are to be detected—but from our point of view they are not out there entirely independent of us, since they are patterns composed partly of our own “subjective” reactions to what is out there; they are the patterns made to order for our narcissistic concerns.

What Dennett seems to be arguing here is that for anyone who does not share our goals—say, intelligent aliens—everyday human belief patterns would not be detectable to them. However, belief patterns are still real patterns because interpreting human or animal peripheral behaviour and dispositions as belief patterns from the intentional stance simply proves to be a more successful point of view than seeing human or animal behaviour from the physical stance, where, by all lights, humans and animals would have to be treated as wildly complicated biochemical-mechanical entities. Dennett indeed claims


58. Dennett, The Intentional Stance, 39.
that, in fact, interpreting animals, people, mechanical devices, etc. from the intentional
stance is the only strategy that is at all practical for us to predict their behaviour.

So, Dennett concludes that it is simply objectively true that taking the intentional
stance makes possible certain kinds of successful prediction about other people. Beliefs and
desires and other mental states that figure in our commonsense psychology are thus real
because they are recognisable-in-principle by anyone who takes the intentional stance;
that is, they are there to be seen by anyone who takes the person they are looking at as
if they were rational creatures. In other words, the success of commonsense psycholog-
ical prediction comes from our exploiting real patterns in the world that are detectible
only from the intentional stance. Dennett characterises the patterns discernible from the
intentional stance as “patterns in human behaviour”\(^{59}\)—patterns ‘discernible in agents’
(observable) behaviour—when we interpret from the intentional stance.\(^{60}\) As such, we
should take Dennett to be saying something like this: we should be mild realists about be-
liefs because our ascriptions of propositional attitudes from the intentional stance represent
real patterns in human behaviour, as demonstrated by the success of folk-commonsense
psychological prediction. Thus we need not follow Fodor’s hyper-realism.

\(^{59}\) Dennett, The Intentional Stance, 25.

\(^{60}\) Ibid., 30.
3.3 Theory versus Craft

I have said above that the claim that our everyday psychological explanations from part of some sort of (proto-)theory about human behaviour is ubiquitous. This picture forms a central kernel around which a tremendous literature has been amassed. Dennett rejects the idea that commonsense psychology is a theory and in this section I wish to elucidate what I think his position is.

Dennett suggests that it makes perfectly good sense to look to commonsense psychology when pondering what sorts of things ‘beliefs’ and ‘desires’ might be, seeing as the words ‘belief’ and ‘desire’ are everyday psychological terms. He asks “what do we learn beliefs and desires are when we learn to use the words ‘belief’ and ‘desire’?” Well, he rightly says, we are not told what a belief is directly when we are taught how to use these words. An excellent point, frequently overlooked in these discussions, is that the everyday use of the term ‘belief’ is considerably different than the philosopher’s use of the term. We rarely go about talking about each other’s beliefs, but about what each other thinks or knows or thinks they know. The philosopher’s use of the term ‘belief’ frequently glosses over all of this and this gloss distorts some of what is going on when we use these terms. Nevertheless, what we are taught is to use these terms to do certain things. What we are not taught is that these terms refer to ‘mental states’ or some such.

Dennett argues that from this follows that commonsense psychology is learned—we are

62. Ibid., 46, fn 2.
taught to use it as—as a ‘vernacular social technology, a craft...’ Dennett points out that he is not making a sweeping categorical distinction between craft and academic theory, but he does say that even experts who are very good at their scientific jobs as say a chemist and still ‘find it embarrassingly difficult to produce a satisfactory textbook definition of a metal or an ion.’63

It is important to note that, here in The Intentional Stance, Dennett is not saying that commonsense psychology is a craft of some sort, but that we learn to use it as one. He goes on to claim that if anything can be gleaned from all that has been written about commonsense psychology, we can say that beliefs are, according to commonsense psychology, ‘very roughly, ... information-bearing states of people that arise from perceptions and that, together with appropriately related desires lead to intelligent action.’64 In his paper, Two Contrasts, he seems to go quite a bit further when he says ‘we might better call [commonsense psychology] a folk craft rather than a folk theory.’65

Dennett points out that what we learn to do (and perhaps already have built into us in some way) is a ‘multifarious talent for having expectations about the world’. He is in agreement with the later Paul Churchland (the connectionist one) that none of this has the appearance of a theory of any kind and that is a good reason to refrain from calling commonsense psychology a theory: it does not consist of explicit theorems or laws. So,

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63. Dennett, The Intentional Stance, 46.
64. Ibid.
he asks, what kind of craft could commonsense psychology be? He answers by suggesting that we compare commonsense psychology and ‘folk physics’; two crafts that he believes ‘should be studied with the methods of anthropology.’

Dennett argues that we should distinguish the craft from the ideology of folk psychology. The craft is the unreflective use of the everyday psychological terms and relations between the terms. The ideology is a set of ideas about the craft of folk psychology. The ideology of folk psychology, for Dennett, is something that has no role (or very little role) in the ordinary social use of the craft. It is purely a piece of theory used to explain or account for the craft. This is (more or less) the same distinction I make between commonsense psychology and theories about commonsense psychology.

It isn’t much of a stretch to say that at least some of the debate about whether commonsense psychology is a (proto-)theory comes from confusing the craft with the ideology, so to speak. Fodor’s take on the ideology, for instance, constrains commonsense psychology to a kind of scientific theory wherein certain internal properties of the organism serve as the definitive criterion for whether the organism has a particular belief, for example. Everyday psychological attribution doesn’t rely upon looking into the internal states of agents because, simply, we do not see any of these putative internal states of agents.

Now, as has been said by many, the ideology of commonsense psychology tends to be realist and largely Cartesian in nature. However, scientists and philosophers tend to drop the dualism and replace it with some form of materialism. But when this occurs, it seems that reductionism comes along with it. Now, it would seem, seeing as we can now ‘see’ into the brains of others (i.e., via various neuroimaging technologies), we can finish the work by being able to identify these internal states of agents. The discovery of ‘mirror neurones’ encourages and seems to validate this reductionist view.

It is this sort of argument that both informs and animates the kind of view of commonsense psychology that we see in Fodor: internal mental states as causally effective in bringing about behaviour. But the craft of commonsense psychology has been around a lot longer than any of these particular conceptions (and the technological apparatus to ‘look inside the brain’). It seems to me that, to some extent at least, what is happening is that those who take commonsense psychology as a (proto-)theory are reading this ideological conception into the craft itself. It isn’t clear to me at all that when we provide commonsense explanations, we attribute anything like ‘internal causally effective mental states’. When I say of someone, ‘she is going to take the side streets to work because there is an accident on the freeway,’ I am not attributing any internal states to anyone. But, says

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68. This is a kind of neurone that activates both when an animal acts and when the animal observes the same action performed by another. (Giacomo Rizzolatti et al., ‘Premotor cortex and the recognition of motor actions’, Cognitive brain Research 3, no. 2 (1996): 131–141)
Fodor, this explanation is incomplete. There are all kinds of missing premisses, some of which will have to claim that she is in certain mental states like belief and some of which will be empirical generalisations about what people typically do (ceteris paribus), and other beliefs about accidents on freeways. Presumably, the account would also have to claim that she knows how to drive, that she wishes to get to work on time, and a host of other things. But this strikes me as implausible, even if all of this is tucked away as implicit. We are talking about what I do when I make the prediction and these so-called gaps are no gaps at all. Anyone who understands what it is like to drive in a major city understands the prediction.\footnote{This is essentially the same point Dennett makes about telling a joke in The Intentional Stance, 76}

This point about craft versus ideology of the craft, I think, is well taken. However, it is not just that people understand the prediction or get the joke because they understand the facts that are being deployed (i.e., that clothes irons are shaped like telephone receivers and traffic on the Don Valley Parkway can frequently grind to a halt in the morning). People also understand the ways in which the ‘vocabulary’ of commonsense psychological terms relate to one another. For instance, to have a desire satisfied is to obtain the object of one’s desire. This is not something we must wait to have validated by ensuring that each time our desires are satisfied, we observe that that which satisfied it was the object of our desire. There is a logical connection between our desires and that which is desired, our beliefs and that which is believed, that is part and parcel of our use of these terms when
we make use of commonsense psychology to explain and predict the actions of others. It is in the next section that I explain what I mean by this.

3.4 Facta Non Verba

Dennett's criticisms of Fodor amount to an attempt to re-align the way in which commonsense psychology can be understood.

3.4.1 Realism in Commonsense Psychology

I believe that there is a fundamental misunderstanding in asking whether beliefs and desires are real. Of course, beliefs and desires and intentions and so on are real. The questions is, what do we mean by ‘real’. The sense of ‘real’ that Fodor is trying to express seems to be simply that there is some object or configuration of objects (‘object’ taken broadly) that is or corresponds to what we mean when we say ‘a belief’; that a belief is not imagined or merely supposed. It strikes me that this is due to the confusion that Dennett is getting at when he talks about the confusion between ‘the craft’ and ‘ideologies of the craft’. An ideology is a system of ideas and ideals. I suggest that this is more or less what a scientific theory of some phenomenon is. But a scientific theory aims at explaining or accounting for scientific observations. Without straying too far into difficult discussions about what a scientific theory consists in, I can say that Fodor’s program looks, on its face, to do exactly
that: provide a scientific account of how we understand one another’s behaviour in our everyday fashion.

But there are all sorts of things that are real without being ‘objects or configurations of objects’ no matter how ‘configuration’ is conceived. Surely traffic laws, the rules of chess, and the love of a parent for their child are all real. But traffic laws are not instantiated by objects like pieces of paper with writing on them, the police who enforce the laws, nor the courts that adjudicate those laws. On the other hand, traffic laws are abstracta. If Dennett indeed means to use the term in the same sense as Reichenbach, then abstracta are ‘reductive complexes’. I certainly do not want to explicate this notion in detail, but traffic laws, my office’s pleasant ambiance, and the esprit de corp my favourite hockey team enjoys are all just as real as the chair I am sitting on.

Furthermore, it seems to me that Dennett is making some sort of mistake when he says that insofar as one takes the intentional stance toward a system, one ‘treats that system as if it were rational’—that the system has the beliefs and desires that it ought to have. There are two things wrong here, I think. First, when I encounter another person, I do not treat them as if they are rational. In order to do that, I would already have to know what would count as ‘acting rationally.’ But if the intentional stance is supposed to provide me with the interpretive framework that allows me to recognise rational behaviour, I am at sea. From where do I get the bootstrapping? Do I learn to take the intentional stance and then learn what it is for a system to act rationally or do I learn what it is for a system

70. Reichenbach, Experience and Prediction: An analysis of the foundations and the structure of knowledge, 93.
to act rationally in order to take the intentional stance? On the other hand, when I do try to understand what other people do and why they do it, I rarely assume that they have the beliefs and desires that they should have. It is a commonplace that human beings frequently do not act in optimal ways.\textsuperscript{71}

The problem that I see with calling beliefs and desires abstracta is not that I do not think that Dennett’s intentional stance ideology takes them as abstracta, but that I am not sure that everyday psychological use of the terms bear out this description. Why should we take our everyday psychological terms to be abstracta in this fashion? Reichenbach pointed out that while illata exist in both time and space, abstracta exist only in time (well, perhaps they could have some sort of spatial quality).\textsuperscript{72} I will address this below, but is it really the case that belief is a mental state with a content; a state with a genuine duration in time? If not, I am not sure at all what to do with Dennett’s characterisation. We would be stuck, again, with an ideology that bears little descriptive relation to (or, be outright incompatible with) our commonsense psychology.

Much of Dennett’s criticism of Fodor is that Fodor pre-conceives what we do in terms of inner, causally effective states, then constructs a scientific theory to account for those states (RTM). This conception of commonsense psychology seems altogether obvious to Fodor. What I wish to suggest is that Fodor reads the ontology of his putative theory back into the phenomena that he aims to explain. In other words, the reason that Fodor sees Hermia’s


\textsuperscript{72} Reichenbach, \textit{Experience and Prediction: An analysis of the foundations and the structure of knowledge}, 93.
reasoning as ‘a piece of implicit, non-demonstrative, theoretical inference’ is that he is already thinking of what we do in terms of RTM. This is further underscored by Fodor’s inability to solve the indeterminacy problem. His non-semantic, atomistic approach fails because he cannot (nor can anyone else, it seems) provide an adequate causal theory of meaning which he thinks he needs. It is needed because he already sees commonsense psychology as a (proto-)theory which takes mental states as inner, causally effective states, and commonsense psychology is no such thing. The reason he cannot solve the problem is that he is trying to impose his preconceived notion of how commonsense psychology does what it does from a non-normative point of view and thus, the normative aspects of commonsense psychology are passed by. Commonsense psychology is resisting the imposition of the ideology, one might say.

I submit that Dennett’s attempt to account for the ability for beliefs to be about something is also problematic. There are several reasons for this. First, while Dennett maintains that he can provide an account of how our reasons for acting (the beliefs, desires, etc. for which we act) can bring about our actions, the reliance upon ‘Mother Nature’ to provide for that account is both obscure and somewhat mysterious. Surely


74. There is an illuminating and very pointed set of criticisms of Dennett’s methods and presuppositions and his intentional stance in Bennett and Hacker, *Philosophical Foundations of Neuroscience*, 413–26. I do not intend to rehearse those arguments here, but merely note that some of what I say has some similarity and sympathy with those remarks. There is also an interesting set of exchanges between Bennett and Hacker, Dennett, and John Searle to be found in Maxwell R Bennett, *Neuroscience & Philosophy* (Columbia University Press, 2007)
saying something like ‘Mother Nature has purposes’ is merely an anthropomorphic gloss on how evolutionary pressures bring about changes in species.

Second, while an ideology of commonsense psychology has the freedom to characterise beliefs and desires as ‘abstracta’ (in a scientific theory about commonsense psychology), it still isn’t clear to me what we are supposed to understand our everyday terms as meaning. Saying that a belief that \( p \) is an abstract object doesn’t advance our understanding of our everyday psychological concepts.

Third, Dennett seems reluctant to give us a clear account of how the craft is supposed to work and why it is so successful. The normative character that he does talk about is linked to the normativity of ‘Mother Nature’ in the guise of natural selection pressures and solutions, but it is still unclear to me how the normativity of linguistic concepts can be derived from evolutionary results. Upon what exactly does an environmental pressure act? Surely, evolutionary selection pressures work on expressed genetically transmitted features of an organism. Is the capacity to have a belief such a feature? It seems implausible to me, but nevertheless, Dennett owes us some kind of account of it.

So, even if we accept that somehow evolutionary pressures shape our capacity to have beliefs and desires (and presumably the beliefs and desires we can have), this does not account for the complicated network of normative connections between the various terms. If I believe certain things and desire certain other things, I may form an intention to bring about that which I desire. When I act in the world, I sometimes act without being convinced that I will be successful, but only with the hope. Other times, I can see the
determination on someone’s face, only to be disappointed (and surprised) when she fails. The notions of belief, desire, intention, hope, disappointment, conviction, etc. are all interconnected in what have been called internal connections. These internal connections are conceptual, sometimes called (logico-)grammatical relations.\footnote{Bede Rundle, \textit{Grammar in Philosophy} (Oxford: Clarendon Press, 1979).} It is altogether mysterious how these kinds of conceptual connections are forged by ‘Mother Nature’, let alone how evolutionary pressure could be brought to bear on them. I do see how the \textit{capacity} to forge these kinds of conceptual connections might be the result of selection pressures, but the question remains how ‘Mother Nature’ could select for the normative connections I mention above.\footnote{Perhaps organisms that display certain very complicated and regular patterns of behaviour have better survival chances, and as such, organisms that have the capacity to have a wide range of these patterns of behaviour could have an increased chance of passing their genes on, but it is not clear how evolutionary pressure can be brought to bear on the specific patterns themselves.}

3.4.2 Everyday Psychological Terms

I submit that the trouble that Fodor experiences is due to his taking commonsense psychology as a theory. In part, he does so because he is committed to a picture of the mind that is both Cartesian and materialist in nature and that he is reading the picture back into the description of that which he is trying to vindicate. So, he conceives of commonsense psychology as a kind of (proto-)theory and the vocabulary of commonsense psychology as some sort of set of theoretical terms. That much, I think is clear. The point I would
like to outline here is that the everyday psychological terms we are talking about do not seem to form the basis of a theory which provides for explanations.

It is my contention that both Fodor and Dennett mistakenly conceive of the use of our everyday psychological terms as referring to either (or both) propositional attitudes or mental states. First, it is a mistake to take a statement such as ‘she believes that p’ as an attitude towards a proposition. While this is indeed the way the sentence reads, it is puzzling why we would take that which someone believes as a proposition. To believe that \( p \) is not the same as to believe the proposition that \( p \). Clearly, it is not a proposition I fear, if I say that I fear that \( q \). What I fear is that \( q \) will come to pass. I do not typically fear propositions. It is even stranger to claim to fear that certain propositions will be true. If I fear the thunder, then a loud noise that typically follows lightening is what I fear. I do not fear the truth of there being thunder. If, as Fodor says, to believe that \( p \) is to stand in a relation with a propositional attitude and a state of affairs, then when I correctly believe that \( p \), then I do not believe what is the case (viz., \( p \)) but some proposition \( p \) which is another relation to some state of affairs. When I believe that there is snow on the ground, then that is exactly what I believe. Consider expecting that \( p \). Do I expect my wife to come home at any moment or do I expect the proposition ‘my wife will come home any moment’ (or do I expect the proposition ‘my wife will be home at any minute’ to be true)? The notion of a ‘propositional attitude’ does not seem to do the work assigned to it by Fodor. Commonsense doesn’t seem to support this particular conception of our everyday psychological terms. It would seem that the grammatical structure ‘A \( \Phi \)s that \( p \)’
is ‘merely an indirect rendering of the words with which an attitude is expressed’ and nothing more.

Second, I asked above whether our everyday notion of belief was consistent with calling it a ‘mental state.’ Hacker makes a few remarks that help sort this out. To begin, mental states certainly seem to be something that ‘one is in’. I can be in a state of depression, of joy, of concern. It is unlikely that it would occur to anyone to answer the question ‘what state is she in this morning?’ with ‘She is in the state of believing that \( p \).’ Surely, if someone did answer in such a way, you’d take it as a kind of joke.

Further, there are mental states where you can say things like “I am feeling happy (or sad or relieved or cheerful)”. However, there is no corresponding ‘feels’ construction for ‘belief’: “I am feeling belief-ful” is a nonsense, though having a feeling of conviction is not. But conviction is not a kind of belief-state, nor is it a feeling toward a belief, but a kind of trust in the evidence or reasoning that goes into accepting a belief. This last point suggests that mental states may have other emotional effects on a person. Some states can be pleasant to have, exhausting to experience, or distracting or tedious to endure. One does not ‘endure’ a belief, though it might be unpleasant to have to accept something you would prefer not be true.

States (and so mental states) also have ‘genuine duration’, that is they have an onset, a course, and an ending. But belief does not seem to have the same structure. While I can


be sad for an hour or two, it seems odd to say that I believed that \( p \) for an hour, except in very specific circumstances—perhaps during the course of a lecture during which I change my mind several times. I read a book in high school about quantum physics and it can sensibly be said that ever since I have believed that electrons are made of quarks. Now, while I may have found myself in a state of wonder for an hour or so to learn about the paradox of Schrödinger’s Cat, it is quite another thing to say that I have been in a state of believing for 35 years. A state of sadness can be interrupted by the visit of a close friend, but one cannot be distracted from believing something. Furthermore, we can ask whether someone is still frustrated by a puzzle, “Are you still frustrated by the crossword?”, but you’d not ask whether someone was still believing that Nelson Mandela had died.

We can sensibly say that we believe an indefinite number of things (due to disjunction, implication, etc.) If I believe that my car is light green, I also believe that it is not red or orange or white. However, it is not the case that we typically think that someone can be in an indefinite number of mental states. We can be in a number of mental states simultaneously: we can be overjoyed and anxious or surprised and angry, but not an indefinite number of them at the same time.

So, the ‘logical grammar’ of these terms does not fit the schema of ‘propositional attitude’ and so the notion of ‘propositional attitude’ *qua* mental state does not serve the function to which Fodor wishes to put it. Similar things can be said for other putative intentional states such as desire and hope and fear. It is beyond the scope of my purposes
here to go into a long detailed genealogy of psychological concepts, but that is certainly
a project that needs to be done. Nevertheless, it is plain that not all of the putative
intentional states that have been characterised as ‘propositional attitudes’ have the same
uses, let alone the kind of uses that we have been led to believe they have.

All of this having been said, if all that I have said is correct, we have only hints and
suggestions as to how to properly conceive of our everyday psychology. But this is not
my goal—all I have been trying to do is cast doubt on whether commonsense psychology
is sensibly conceived in the way Fodor has offered. In the next chapter, Lynne Baker takes
aim at the idea that commonsense psychology is a causal explanatory (proto-)theory from
a different angle. Her project is grander, in that she is trying to provide a ‘metaphysics of
everyday life’, something she calls ‘practical realism.’ While I am going to be looking just
to her criticisms of intentional realism, her project is much wider than I could possibly
survey here.

(hereafter cited as RPPI).
4 Baker: Practical Realism

What is called an alteration in concepts is of course not merely an alteration in what one says, but also in what one does.

RPPI, §910

To recap my overall project, I am arguing that the dominant conception of common-sense psychology, as articulated by Jerry Fodor, is seriously mistaken. This conception takes commonsense psychology to be a (proto-)theory that allows us to predict and explain the purposive behaviour of others. The components of this theory are taken to be propositional attitudes as intentional states that have semantic content—the things which they are about—and causal generalisations that connect these putative states to behaviour. This theory is further taken to be more or less true and thus in need of vindication by a proper science of some sort lest it be rejected as a false theory. There are two commitments said to be made by our commonsense psychology that any vindicating theory is going to have to have. Specifically, a mature, vindicating psychology will have to posit states with these two features: (1) they will be intentional: they will be “about” things (in the sense that the belief that Stephen Harper is presently Prime Minister of Canada is about Stephen Harper) and they will be semantically evaluable (in the sense that the ex-
ample above is true (but will eventually be false)), and (2) they will be causally efficacious, figuring in genuine causal explanations and laws.

Lynne Rudder Baker’s complaints with Fodor come primarily due to her overall project of attempting to undermine the physicalist conception of commonsense psychology that she takes to underpin the dominant view. She argues that in the stead of a view which holds attitudes to account by metaphysical and scientific theories, the attitudes are ‘accountable to views of successful explanatory practice in everyday life.’

In this chapter, I briefly outline her alternative view and her argument against the standard view of the attitudes, entertain a number of objections, present her argument that commonsense psychology is no (proto-) theory at all, and finally argue that, while her arguments against intentional realism are somewhat effective, she seems to miss several key aspects of the nature of commonsense psychological terms and how they function to provide the explanations that we accept. I begin with a discussion of her picture of what she has dubbed the Standard View of the attitudes and Practical Realism.

### 4.1 The Standard View and Practical Realism

#### 4.1.1 The ‘Standard View’

**Some preliminary definitions** Baker argues that to adopt what she calls the ‘Standard View’ view is to accept that

(SV) To have a mental state that \( p \) is to possess a brain state which has the propositional content that \( p \).\(^2\)

Her overall project is to defend a commonsense metaphysical framework, i.e., the conceptual scheme which represents reality as containing, among other things, middle sized physical objects, persons, and intentional psychological phenomena such as beliefs and desires.

Baker’s argument characterises SV as being committed to a constitution view: To say that beliefs are (or are constituted by) brain states is to say that for every belief token, there is a brain-state token that constitutes the belief. According to Baker, the type-token distinction is central to SV. Physicalism in the philosophy of mind is the idea that mental states reduce to or are identified as some sort of physical states of the brain. Baker argues that there are (typically) three kinds of physicalism:\(^3\) type identity, token identity, and “constitution” theories. In type identity theories, types of mental states are identified with types of brain states. In these theories, the relation between a mental state and a brain state is the same kind of relation that exists between water and \( \text{H}_2\text{O} \). In token identity theories, particular tokens of mental states are identified with particular brain states. In

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2. Baker, *Explaining Attitudes: A practical approach to the mind*, 7. She also provides an alternative definition of SV:

For all persons \( S \) and propositions \( p \), \( S \) believes that \( p \) only if there is some neural token, \( n \), such that (i) \( n \) has the content that \( p \), or means that \( p \), and (ii) \( S \) tokens \( n \). Lynne Rudder Baker, ‘Practical Realism Defended: Replies to critics’, in *Explaining Attitudes: A practical approach to the mind*, ed. Anthonie Meijers (Stanford, CA: CSLI, 2001), 18.

It doesn’t strike me that this is substantively different, except that it uses belief as a prototype mental state.

these theories, a mental state is identical to a certain brain state; however, that mental state can be ‘realised’ by—be identical to—a different brain state as well. In constitution theories, mental states are constituted by brain states but are not identical to those brain states.4

Baker identifies, in the Standard view, two central ideas: that all concrete entities are reducible to physical entities (of some kind), and in particular, to particles and fields; and second, that all properties of concrete entities supervene on physical properties (in the sense that there can be no difference in any of the properties of two concrete entities unless there is a difference in their physical properties). These, she says, are the main metaphysical claims of the Standard View. Its main epistemological claim is the thesis that insofar as reality is knowable at all, it is knowable exclusively by means of science. With respect to mental states, SV takes it that (provided that mental states actually exist) they are either identical with brain states or constituted by brain states, as above. Also, SV maintains that any causal powers that mental states enjoy are derived from the causal powers of brain states. So, on this view, science is the arbiter of whether these mental states exist and what their nature might be. With respect to causation, Baker argues that the SV holds that causal explanation has to appeal to physical objects or properties. On this view, causal explanations rendered in ‘higher level’ sciences are asymmetrically dependent on causal explanations at the physical level.

Baker identifies three arguments for SV: the argument from metaphysics, the argument from science, and the argument from causal explanation.

**The Argument from Metaphysics**  Baker offers that SV has inherited something of the Cartesian view of the mind. Insofar as Descartes conceived of the human body as entirely material, contemporary materialists, in rejecting the immaterial component of Descartes’ view, have pushed the point so far that they have arrived at the position that mental states must be brain states of some kind. So, the argument from metaphysics looks like this: “Belief (if there is such a thing) is either an immaterial substance or a brain state. Belief is not a state of an immaterial mind. Therefore, belief (if there is such a thing) is a brain state.”

Baker agrees with the second premiss, but rejects the first as a false dichotomy. So, she concludes, the argument is fallacious.

**The Argument from Science**  This argument looks like this, according to Baker:

“Science has confirmed the conception of belief as brain state. Any conception confirmed by science is correct. Therefore, the conception of belief as a brain state is correct—that is, belief (if there is such a thing) is a brain state.”

Baker challenges the first premiss. There are two ways a ‘standard theorist’ might go here. One can take the eliminativist route and deny the first premiss and say that on ‘the best science available’ (whatever that means), the internal causally efficacious states that are responsible for behaviour are not to

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6. Ibid., 15.
be identified with brain states. So, they conclude there are no beliefs. The other route is to disagree with the eliminativists about what the best theories are and argue that the first premiss is true. On either of these routes, it seems to me that what counts as ‘best science’ is a scientific matter, not be decided by philosophers; a maxim frequently ignored.

But Baker’s point is that for any scientific theory to be relevant here, it would have to be able to distinguish between two very subtly different beliefs: say, between the belief that ‘a soldier’s following orders is a slightly mitigating factor in assessing misconduct and a soldier’s following orders is a substantially mitigating factor in assessing misconduct.’ Her conjecture here is that there will never be a neurophysiological theory nor psychological theory that will identify brain states that are candidates for these mental states. While neuroscience may find correlations between particular brain states and particular beliefs, her point is that it is not in the realm of neuroscience that brain states be thought of as belief states in the first place. If this correlation is not implied by the ‘best theories’ then one could either take the eliminativist route or simply reject SV.

**The Argument from Causal Explanation**  
Baker maintains that this argument is the most compelling for those who subscribe to SV, in that they accept that genuine causal explanations must appeal to physical states or entities. This argument goes like this: “Unless beliefs were brain states, they could not causally explain behaviour. Beliefs can causally

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explain behaviour. Therefore, beliefs are brains states.” Baker accepts the second premiss, but rejects the first as a ‘source of metaphysical mischief.’ Her retort is that beliefs are explanatory not because they are brain states, but because they support counterfactuals about the person.

4.1.2 Practical Realism

What is Practical Realism?  Baker’s alternative to SV is what she calls ‘Practical Realism’ (PR). On this view, the attitudes are to be understood as being identified with facts expressed by counterfactuals that describe what people would (or not) do and say in various situations. The main contrast between SV and PR is that SV takes scientific or metaphysical theory always to trump commonsense practice and PR starts from no theory at all and takes as foundational our successful cognitive practices of everyday life in addition to science.

PR is a metaphysical position based on practice in the sense that it is accountable to successful performances in everyday activities. It rejects propositional attitudes as any sort of brain state and holds that the attitudes are global states of persons characterised as sets of relevant, true counterfactuals about that person. Furthermore, on this view, beliefs are not things; there are no beliefs, just people believing something. PR is realism in the sense that it holds that something is real when it is casually explanatory and observer-independent.

On Baker’s account, SV presumes a metaphysical thesis:

(MT) Reality, insofar as it is knowable, is knowable exclusively by means of science.\(^9\)

This thesis entails that if there is such a thing as ‘intentionality’, it is knowable and thus vindicated by a special science, e.g., scientific psychology. The argument for MT is inductive and based on the success of science to the effect that many phenomena previously thought beyond the ability of science to characterise, have been found to have scientific explanations. So, the argument goes, it is reasonable to think that for every real phenomenon, there will ultimately be a scientific explanation for it within some science.

**Baker’s argument against MT**  First, if we take MT seriously, either nothing can be known as a portrait (simply, a painting, drawing, etc. of a person’s face or head and shoulders), which is absurd, or portraits are knowable by some science. The latter claim means that either (i) portraits *qua* portraits are knowable by science, or (ii) portraits *qua* physical objects are knowable by science. On the one hand, to say (i) is to say that the property of being a portrait is taxonomic in some science. But Baker contends that it seems unlikely that there will be a science of portraits, in any constrained sense of ‘science.’\(^{10}\) On the other hand, to say (ii) is to say that if there are portraits, they are physical objects, and *qua* physical objects they will be understandable as portraits by physics. According to such an interpretation, however, MT would also vindicate the reality of witches: if there are witches, they are people, hence physical objects, and *qua* physical

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10. Ibid., 87.
objects they will be studied by physics. So, according to Baker, since that would not be a satisfactory way to use MT to vindicate the reality of witches, (ii) cannot vindicate the reality of portraits either.

In response to Baker, a proponent of SV, like Fodor, might very well affirm that (i) is true. According to Fodor, the property of being a portrait is taxonomic in some science because the property of being a portrait is a causally relevant property. In other words, it can be expressed in a causal law. For instance, a portrait of The Queen reminds me of The Queen, or something like this (perhaps causes in me a mental representation of The Queen that is relevantly and adequately similar to my past representations of The Queen). Since science categorises properties according to their causal power, the property of being a portrait is knowable by science. Indeed, a portrait is a representation, as is a propositional attitude. So portraits, like propositional attitudes, are knowable by psychology. Thus, portraits \textit{qua} portraits are knowable by science.

However, the patterns of rings in a freshly cut tree section might also remind me of The Queen, but we would be hard pressed to say that the tree section should count as a portrait. Portraits are created in specific kinds of circumstances and the intention of the artist is internally related to whether the artwork stands in the relation of portrait of The Queen or as a curiosity suitable for passing about on the Internet. To count this account as an example of (i) being fulfilled is tantamount to begging the question.

This first point needs to be spelled out a bit more. I think that Baker is exactly right when she says that taxonomic science is going to provide us with no insight into
portraits *qua* portraits. It is not clear to me just what Baker has in mind by the phrase by ‘portraits *qua* portraits knowable by science’, but I suspect that she means something like ‘a physical science that would, among other things, enable us to distinguish between a portrait and, say, a landscape or a still life.’ If this is what Baker means, then by all means, I agree. Without intentional concepts playing an intimate role in saying what counts as a portrait, there is no sense in which, say, chemistry, is going to be able to make this kind of distinction. Another task set for a taxonomic science is to categorise the subject matter. Categories of portraits distinguishable by chemistry or physics would be utterly irrelevant to the categories we are interested in with respect to portraits. Clearly, portraiture can be used as a *method of inquiry* for, say, anthropology, but this would clearly not satisfy the requirements of (i) above.

Baker presents another inductive argument against MT. According to her, scientific advances have always taken place against a background of extra-scientific assumptions, the making of which presupposes the phenomena of experiments, non-fraudulent results, hypotheses, etc. Those phenomena ‘show no sign of ever being incorporated into scientific theory.’ But the use of these concepts are vindicated by the success of science, yet we have no *science* of hypotheses, etc. So, her argument concludes, the success of science provides no reason to support MT.

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Granted both of these arguments are inductive, and so do not provide conclusive reasons to reject MT, but if MT is true, then we are forced to conclude that such things as hypotheses and the practice of experimentation are not real, seeing as these are not things which are discovered and understood as such by science. Baker’s point here is that there are things which can sensibly be said to be real whose reality is not established by science. Thus, MT is false, by her lights.

Because Baker’s arguments against MT are inductive, Baker accepts that it is possible that some sort of science could eventually provide a ‘science of portraits’ or a ‘science of hypotheses.’ It is not so clear to me that this makes sense. Portraits, for example, are by their nature artefacts. Not just any representation (i.e., drawing, painting, photograph, engraving, etc.) that resembles the head and shoulders of a person counts as a portrait. Moreover, not just any representation that resembles a particular person counts as a portrait of that person. It isn’t even clear to me that the photograph of my head and shoulders that appears on my driver’s licence counts as a portrait. Something counts as a portrait within the social practice of portraiture in particular circumstances, e.g., photo day at elementary school or the likenesses of Prime Ministers that hang in the Parliament Buildings. It seems to me that a portrait isn’t merely a likeness of a person, but one that has a particular ritual, ceremonial, or social role. Now, any science of portraits would be much more akin to a social science than a natural science and that social science would be concerned with non-physical relations. It seems less that it is unlikely that there will eventually be a physical or chemical science of portraits and more that it is logically im-
possible to have such a science because portraits (and things like portraits) are conceptually 
beyond the reach of such a science. My point is that this seems to be a logical/categorical 
exclusion rather than a contingent one.

4.1.3 Dretske on Baker

Dretske has a series of complaints about Baker’s approach. First, seeing as Baker explic- 

tly denies that intentional states are states of the body (i.e., they are not ‘in the head’), 

Dretske asks ‘where else could they be?’ Dretske says that Baker’s position is that be-

liefs are relational states of affairs and that these relations are not inside agents. However, 

Baker’s semantic externalism is more or less the ‘received wisdom’ in the philosophy of 

mind. Baker herself says that SV and externalism are compatible, so Dretske is surprised 

to read that Baker charges standard theorists with ignoring this aspect of intentional states. 

Dretske’s point is not that somehow Baker misreads standard theorists, but that it is no 

reason that an intentional state’s intentional properties are external that we should con-

clude that those states are not inside the bodies of the agents. Dretske gives an example 

that seems to suggest itself: something counts as currency due to the external relations it 

has with social, legal, and political institutions and practices. However, I can still have a

$5 bill inside my pocket.

13. Fred Dretske, ‘Where is the Mind?’ In Meijers, *Explaining Beliefs: Lynne Rudder Baker and her critics*, 39–50. Fodor rarely engages Baker directly, so I am going to take the opportunity to use Dretske as a proxy for Fodor. At the very least, Dretske and Fodor agree upon the points that Dretske offers.


15. The remnants of a Cartesian view of the mind can be clearly seen here.
Dretske further argues that locating beliefs inside the agent in this way has a bonus: beliefs can, thus, causally explain action. If beliefs are supposed to explain human behaviour, it is hard for Dretske to see how the content of a belief, say, is supposed to ‘determine the trajectory’ of a person while we insist that the belief is not inside the agent. There are causally irrelevant states of a person that can be located outside the body of an agent, e.g., being an uncle. But Dretske argues that a state doesn’t have to be a brain state unless those states, like belief, control bodily movements.

Dretske points out that many standard theorists see intentional states like ‘mental coins’: in the very same way that it is the causal properties of a coin (rather than the relational properties that determine that it is worth $1) that determine whether you get a ginger ale out of the vending machine, it is the causal properties of the mental state that determines whether you reach into your pocket for a coin. The problem here, as Dretske points out, is that this picture makes the content of one’s beliefs and desires irrelevant in explaining behaviour. In other words, this picture is tantamount, if not identical to, epiphenomenalism. Dretske is quite right when he says that one can simply bite the bullet and embrace that this is ‘all we can expect of materialism’. However, he agrees with Baker that the content of a belief is causally relevant to explanations of behaviour. So, Dretske argues that the way we get this relevance is to locate intentional states inside the agent. But, as Dretske rightly points out, the Practical Realist denies this. The Practical Realist argues that there is nothing mental inside the agent that causes purposive beha-
viour. So, Dretske asks, how can the Practical Realist give anything that amounts to a causal explanation of behaviour?

Further to this point, Dretske underscores what he thinks is a weakness in Baker’s account of the causal explanation of beliefs: a ‘tight little circle.’ Baker does indeed admit that the brain is relevant to behaviour and that, in some way, the brain’s dispositions to move the body in ways appropriate to belief in various circumstances are open-ended. In new situations, the brain moves the body in ways that continue the intentional pattern. How the brain accomplishes this, I do not think anyone knows.¹⁶

But, she stresses, this is not a problem with which philosophers can be concerned; it is a matter for neuroscience. This sort of statement puzzles Dretske for he takes her to be saying that if you want to know where someone will be a 3 PM tomorrow, look at their brain and if this is so then there seems to be no explanatory role left for beliefs and desires. But, Baker insists that there is an explanatory role for beliefs and desires because there are patterns that can be detected from the point of view of intentional attitudes but not from the point of view of neuroscience. But, as Dretske rightly says, we are not given examples of these patterns. Dretske cannot see how they could amount to anything other than mental causes that are to be found inside the agent.

Lastly, Dretske believes that Baker is making a mistake in thinking that standard theory sees mental states as the proper study of brain science—i.e., neurophysiology. He argues that token identity theories, the ones at which Baker is especially aiming, are entirely

¹⁶ Lynne Rudder Baker, ‘Are Beliefs Brain States?’ In Explaining Attitudes: A practical approach to the mind, 35.
indifferent to neural organisation. RTM, in particular, holds that the specific neural substrates in which the representation is realised are irrelevant. All the substrate needs to be able to do is manifest the representation. And so, many standard theorists (like Dretske and Fodor) hold that token brain states are token states of the brain, but deny that there are any neurophysiological properties that those brain state tokens must share.\textsuperscript{17} Dretske argues that SV has held for a long time that, essentially, things like bug detectors are to be found inside the nervous system, but what makes them whatever they are, i.e., bug detectors, is outside the nervous system. Another way to put this is to say the bio-mechanical machinery (and however it is organised such that it can perform the relevant task, say, detecting bugs) is inside the agent, but the contingent relationships that machinery has to the rest of the world is what makes it a bug detector.\textsuperscript{18} So Dretske asks, ‘If this is true of detectors, as standard theorists insist, why isn’t it also true of beliefs?’\textsuperscript{19}

Baker’s response to these two charges, that a) she cannot account for beliefs and desires figuring in causal explanations and b) SV need have no commitment to ‘how the brain is organised’, rests in her conception of what a belief and other intentional states are and are not. Specifically, PR maintains that there are no such \textit{things} as beliefs. They are not located inside the agent, nor are they located outside the agent. ‘Belief’ on this view, is merely a nominalisation of the term ‘believes that.’ Beliefs are not, for Baker ‘outside

\textsuperscript{17} Dretske, ‘Where is the Mind?’, 48.
\textsuperscript{18} This is Dennett’s point about the ‘wandering two-bitser’ as well.
\textsuperscript{19} Dretske, ‘Where is the Mind?’, 48.
where the observable facts are.’ ‘Believing that p’ is a property of an agent and that property is partially constituted by facts outside of the agent’s body (though, she says, this property might be partially constituted by conditions inside the agent). Since ‘believing that p’ is a relational property of the agent, if we are forced to say that some agent’s belief that p is anywhere, we’d say it was wherever the agent was.

As for the charge that she cannot account for beliefs and desire figuring in causal explanations, she simply says that she believes Dretske to be labouring under a metaphysical misapprehension about what is required for something to be a causal explanation. On her view, beliefs do not need to be brain states in order to explain behaviour because ‘there are no metaphysical constraints on causes. Causes are what successful causal explanations cite.’ To demand that the causes of behaviour be inside the agent is, on Baker’s view, ‘covertly to place a gratuitous metaphysical constraint on what can be a cause.’

So, to the charge that Baker cannot account for beliefs ‘controlling’ behaviour, she replies that it depends on what you mean by ‘control.’ Baker takes the notion of ‘control’ to be subordinate to casual explanation and so if a belief, say, explains some action, then ipso facto that belief controls the bodily movements. She says,

a belief that there’s beer in the refrigerator explains Clyde’s behaviour when the behaviour is a manifestation of a disposition (e.g., if x wanted a beer, then, other things being equal, x would go to the refrigerator) such that (a) it is one of a set of dispositions that constitutes Clyde’s believing that there is beer in the refrigerator, and (b) Clyde would not have gone to the refrigerator (other


21. Ibid.

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things being equal) if he had not had a set of dispositions that constitute his believing that there is beer in the refrigerator.22

On this view, the property of ‘believing that \( p \)’ is given by a set of counterfactuals about the actions of the agent. It is necessary that Clyde’s body move in a certain way for us to be able to say that he went to the refrigerator. It is also necessary that there be certain neural activities that moved the relevant muscles in the relevant ways. But, she stresses, none of this would have happened if Clyde hadn’t believed that there was beer in the refrigerator.

As for the charge that Baker’s account of causal explanation amounts to a ‘tight little circle’, Baker maintains that, for example, if someone writes a cheque in order to donate money to a charity that would raise that person’s standing in their community, there does need to be certain neural activities that constitutes, say, writing a cheque. However, she denies that there need be any ‘distinct element in the neural process’ that amounts to having a desire to raise one’s social standing. She explains that if the cheque writer had not wanted to raise her status in the community, there would not have been neural activity amounting to cheque writing. But it is here that she accedes that we do not know how this works: ‘Somehow, by mechanisms that I do not think are at all understood, there is a coordination of dispositions of the person and dispositions of the brain.’ Nevertheless, even though we do not know how this co-ordination works, we do know that such co-ordination takes place because ‘part of the criterion for wanting to improve one’s social

status is that one be disposed to do what one thinks will improve one’s social status and one cannot be disposed to do what one thinks will improve one’s social status in various circumstance unless one’s body moves appropriately in such circumstances. Further, Baker points out that this putative co-ordination she mentions does not require that any particular brain state be able to be identified with a desire to raise one’s social status.

Baker, however, is not particularly concerned with what might appear to be a hole in her account. She argues that causally explanatory properties are one thing while the mechanisms that underpin bodily movements that constitute actions explainable by beliefs are quite another. The causally explanatory properties are taken to be mechanisms in many areas, typically, physics, but not all areas. Baker offers economics as a field in which causal explanations often appeal to anything but underlying mechanisms. Frequently, it isn’t even clear what would count as an underlying mechanism. Take the example she gives: ‘the decline in new housing starts was caused by the rise in the discount rate.’ When this relationship is explored within economics, what we see are appeals to actions, expectations, beliefs, and desires. What we do not see are appeals to non-intentional, mechanistic entities. Baker’s point is that this feature of causal explanation in economics causes no one to worry that we are not in possession of causal explanation in economics. What we do see are that these economic patterns are reliable; we see them again and again. Surely, Baker suggests, no one thinks that, at bottom, a rise in the discount rate

has to be eventually reduced to an identifiable physical mechanism recognisable in the language of physics. She concludes that this distinction makes clear how commonsense psychological explanations need not be seen to be making an appeal to mental states as brain states, however construed.

The aforementioned circularity is supposed, by Dretske, to arise by Baker’s characterisation of behavioural patterns being so described so as to ‘give a reason to introduce attitudes.’ Baker denies this for two reasons: first, in her words, attitudes are not introduced as say electrons are in a scientific theory. The attitudes, according to PR, are already here, embedded in the normal everyday commonsense way in which we explain ourselves. Secondly, Baker denies that ‘the pattern we need the attitudes to explain is only a pattern that is created by attitude explanation.’ Baker points out that attribution of character traits, for example, can be described in any number of ways that do not involve the attribution of the attitudes: the pattern is real and is there and is independent of being characterised in terms of the attitudes.

As to Dretske’s complaint that SV is unconcerned about neuroscience, Baker responds with a rather blunt argument. Baker rightly points out that SV is the view that beliefs, if there are any, are brain states and if neuroscience is the scientific study of nervous systems, then the answer to Dretske’s question about why we should think neuroscience relevant in understanding beliefs is manifest. Dretske’s point about SV being amenable to ‘evolutionary biology or the learning history of the organism’ as relevant to identifying any particular state as believing that \( p \), Baker suggests, is tantamount to begging the question.
In order for us to bring any other feature to bear on how this particular state of the organism amounts to the organism believing that $p$, we need to be able to identify which state we are talking about—other than by referring to the state as ‘believing that $p$’. As such, we are back to neuroscience again.

I have a number of critical comments about Baker’s exchange with Dretske. First, on the one hand, it strikes me that Dretske has a very narrow idea of just what counts as neuroscience, i.e., he seems to think that neuroscience is merely neurophysiology. But neuroscience is a much more interdisciplinary field of endeavour. Neuroscience draws from, among other disciplines, computer science, chemistry, engineering, and philosophy. Much in the same way that cognitive science, as a discipline, grows to embrace more and more ideas from allied (and not so allied) fields, so too does neuroscience. Indeed, the division between cognitive science and neuroscience is getting more blurred every year. So it seems to me that Baker’s point still stands: the dominant view (SV) is still committed to something that identifies intentional states in neurological states of some kind. After all, Dretske still maintains that beliefs are inside the agent.

On the other hand, I am somewhat confused by what Baker thinks the relationship is between the way our nervous systems work and the way our commonsense psychology works. If ‘believing that $p$’ is a property of a person characterised by a set of true counterfactuals, and there are systems of patterns of behaviour controlled by the brain, what is this relationship? She makes the distinction between causal explanations of behaviour and the mechanisms that underpin bodily movements, but show doesn’t say how; for example,
Clyde’s body would move to the refrigerator if he wanted another beer. The counterfac-
tual account that she provides is well taken. It seems to me perfectly clear that we often use claims like ‘Had she not forgotten her car keys on her desk, she never would have returned to the office’ to narrow down possible motivations for a person’s actions. It is all too common in police procedural novels and television shows to hear dialogue like this. But, if I could take the Intentional Realist’s point of view for a moment, what is the connection? It would seem to an intentional realist that the Practical Realist is perfectly willing to leave this gap between the reasons for action and the action itself wide open. Giving a set of counterfactuals may indeed provide an explanation, even a causal explanation, but it does nothing to close the gap. Indeed it seems to leave the gap even more mysterious.

It is well and good to say that this is a matter for science, but if it is, there is the possibility that the gap will be closed by a science in which intentional states are mapped upon brain states, seemingly vindicating physicalism. Baker maintains that PR takes as foundational our successful cognitive practices of everyday life in addition to science. It would seem that she has left open the possibility that everyday practices will be overturned by science and that just seems to fly in the face of what she takes PR to be. It seems to me though that perhaps what leaves her vulnerable here is the notion that in order to write a cheque for the purpose of raising one’s status in the community, there needs to be certain neural activities that constitute writing a cheque. It isn’t clear to me that this is true. There does need to be neural activity that moves the hand that grasps the pen in certain
patterns. But those patterns do not constitute writing a cheque. The very same neural patterns can result in certain marks on paper that in one social context constitute signing a cheque and in others solemnising a marriage. There is an intrinsically normative character to movements properly described as actions and the right point here is that neurological descriptions of the body while the person performs these actions are not properly part of the explanation of why the person committed the act.

4.2 Indeterminacy (Once Again)

We return, for the last time, to the problem of content indeterminacy. If commonsense psychology is as Fodor says it is, then propositional attitudes are semantically evaluable. And while I certainly do not wish to dispute that the phrase ‘believes that p’ has something like satisfaction conditions, I do wish to dispute that they are brain states of some kind that have as their ‘content’ something that is causally connected to the attitude.

Recall the asymmetric dependence theory.

(AD) The law ‘C → D’ is asymmetrically dependent on the law ‘A → B’ (where A, B, C, D are properties) iff the A/B connection can not be broken without breaking the C/D connection; but the C/D connection can be broken without breaking the A/B connection.25

Baker points out that whether the law ‘C → D’ is asymmetrically dependent upon ‘A → B’ is to be determined by answering the question “In the nearest possible world

in which the A/B connection is broken, is the C/D connection thereby broken?” with a ‘yes’ and by answering the question “In the nearest possible world in which the C/D connection is broken, is the A/B connection thereby broken” with a ‘no’.

Combining the idea of asymmetric dependence with that of nomic relations, we have Fodor’s reduction, (R):

(R) A token of some nonsemantic type T represents a property P if (i) instances of P cause (or are nomically related to) tokens of T, and (ii) any tokens of T that are caused by instances of non-P are asymmetrically dependent on tokens of T that are caused by instances of P.26

It is the second clause that Baker maintains Fodor requires in order to solve the indeterminacy problem. If this second clause is not true, Fodor’s solution fails.

**Baker’s Argument** Baker offers a thought experiment.27 Suppose a pre-linguistic child, Sally, lives where there are an equal number of cats and robot-cats. Suppose further that while Sally cannot reliably distinguish them, others who have experience with both cats and robot-cats can. Now, Sally has seen a large number of robot-cats and each of these robot-cats has produced in her a nonsemantic token of type F, but nothing else has ever done so. One day, she sees a cat that produced a token of type F. Baker asks, what does this token represent?

There are the three standard options: “(i) The cat-caused F-token correctly represents a cat, and the other F-tokens have misrepresented robots as cats all along; (ii) the

27. Ibid., 22.
cat-caused F-token misrepresents a cat as a robot; (iii) the cat-caused F-token correctly represents the cat as a cat-or-robot-cat.” As we know, Fodor has selected (iii). Baker gives quick reasons why Fodor is forced down the road to option (iii).

With option (i), Fodor would be committing himself to describing the robot-cat-caused F-tokens as asymmetrically dependent on the cat-caused F-tokens, which is the wrong way around on his view. With option (ii), we would have to ignore relevant counterfactuals. Had Sally come across cats, they would have caused F-tokens. But it is only by accident that she had never come across a cat before. According to Fodor, ‘the semantically relevant samples include not just the ones that were encountered, but also the ones that would have been encountered but for an accident.’28 Neither of these options are palatable to Fodor, so he settles for the last one.

Fodor seems satisfied with saying that the cat-caused F-token represents robot-cat-or-cat, that it does not ‘rekindle’ the debate about indeterminacy, because ‘it is OK for some predicates to be disjunctive as long as not all of them are.’29 Baker thinks that this is a good response as far as it goes, but she maintains that the example can be generalised; that the same story could be told for most any symbol. If so, Fodor seems to land back in the midst of the problem.

At this point in the supposition, Fodor is committed to saying that Sally cannot misrepresent a cat as a robot-cat, because the F-tokens represent cat-or-robot-cat. Baker calls

28. Fodor, A Theory of Content and Other Essays, 97.
29. Ibid., 104.
this ‘scene 1.’ If we move on and suppose that, in ‘scene 2,’ Sally sees a lot more cats and comes to be able to respond to cats differently than she responds to robot-cats. So, cats and robot-cats are no longer ‘causing F-tokens indiscriminately’, but they each cause tokens of different types. Finally, suppose Sally encounters a cat, and for whatever reasons, misrepresents a cat as a robot-cat. Baker calls our attention to three points.

First, if Sally remembers a time when she mistook a robot-cat for a cat and thinks ‘oh! I made a mistake back then!’, Baker argues that on Fodor’s view, she didn’t make any mistake at all. Back in scene 1 she saw a robot-cat and what was represented was ‘robot-cat-or-cat’ and that is correct. The mistake she is making, says Baker, is to think she made a mistake. Fodor replies in two points: i) the mistake Sally made was in discriminating between cats and robot-cats, and ii) Sally’s mistake was that in scene 1, she took robot-cats to have some non-existent property that they shared with cats and robot-cats. Baker argues that it seems, at best, inconsistent to say of Sally “both that the first ‘cat’ token means cat or robot and is thus true of the cat that it’s applied to AND that its tokening involves a mistake.”  

Second, there seems, under AD, to be no way to describe exactly what change took place between scene 1 and scene 2. Scene 1 involved no misrepresentation at all. Scene 2 has Sally misrepresenting a cat as a robot-cat. Baker finds the response—that Sally has learned to discriminate between cat and robot-cats—insufficient. Baker argues that an ability to discriminate cannot be the relevant difference between the two scenes. Suppose

Sally is presented with two robot-cats and a cat. She can discriminate in the sense of classifying robot-cats as more like the other robot cat than like a cat. Being able to discriminate won’t do, first, because Sally could do this is scene 1 as well as in scene 2. Second, if Sally were given, say, two small cats and one large cat to discriminate, she can still group them as small and large. This doesn’t say anything about them all being cats or not.

Third, Baker claims that the difference between scene 1 and scene 2 ‘bears an uncanny resemblance to the distinction on which Fodor has argued teleological theories of content rest.’ Seeing as Fodor has rejected teleological theories, it seems that this move is unavailable to Fodor. Quickly, teleological theories of content seem to be committed to a distinction between two types of situations. In type 1 situations, ‘if it’s a law that Ps cause S-tokens in type one situations, then S means P (and if P is disjunctive, then so be it)’\(^{31}\)

In type 2 situations, S-tokens may be caused by non-Ps. In such a circumstance, they still mean P. So, only in type 2 situations can you have misrepresentation. For Baker, this is a clear parallel to scene 1 and scene 2 for Sally. Baker concludes that if she is right in this, then Fodor inherits the very same problems that he has identified in teleological theories of content.\(^{32}\) She then further concludes that the three reasons she gives here undermines Fodor’s account of content.

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32. Ibid., 64ff.
**Fodor’s Reply**  Fodor’s reply is brief and to the point. He rejects entirely Baker’s objections. First, with respect to opting for iii) above, he acknowledges that he has to show that somehow Sally is right in thinking that she was wrong when she used to call cat-robots ‘cats’. Baker’s complaint of inconsistency, Fodor says, is no such thing unless one also asserts that the mistake is of applying a term to something not in its extension. Fodor complains that it is question begging of Baker to demand that “he show that what was wrong was that Sally used to use ‘cat’ about things it didn’t apply to.”

It seems to me that Baker and Fodor are talking past one another. Baker is trying to undermine Fodor by trying to show, in part, that the implications of using AD to solve the problem fail to cohere with our commonsense intuitions about how the terms are used. Of course, Baker wants Fodor to show that what was wrong about what Sally did was think that robot-cats were cats. Surely that is is the problem that Baker is concerned about. This really is a concern for isn’t that exactly what we say of children using the term ‘dog’ to apply to all four legged animals until they sort things out? Fodor, though, is worried about the internal logic of AD. I suggest that this talking past one another is telling. As Fodor’s attempt to vindicate commonsense psychology gets more and more technical, the putative theory seems to be losing its ability to account for the way in which commonsense psychology works in common, everyday situations.

Second, he rejects as irrelevant Baker’s examples of discrimination between different sized cats. These patterns of discrimination are irrelevant, says Fodor, because conditions

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for what counts as content are given as nomic relations between Mentalese symbols and
causal properties. Fodor seems to be at a loss as to why he should care about counterfac-
tuals about what Sally might mean and what she might be able to do. After all, responding
to a category in a specific way is independent of other responses to individual members
of the category.

I think Fodor has a point here, if, indeed, what counts as content is given by nomic
relations between symbols and contents. But surely Baker has a point as well. The ability
to distinguish between categories doesn’t respect just and only the ones that Fodor deems
to be relevant. A Doberman Pinscher is a kind of dog, but so too is a dog a kind of
mammal.

Lastly, Fodor denies the ‘uncanny resemblance’ of distinguishing type 1 from type 2
situations to Baker’s scene 1 and 2. In those theories which allow for type 1 situations,
the true counterfactuals that apply when “X” means X or X or Y are relative to the type
one situation. Fodor points out that for those theories which allow for Type 1 situations,

if you take a timeslice of Sally, then there is one bundle of counterfactuals
true of her at t that determine what happens when she’s in a type 1 situation,
and another batch of counterfactuals also true of her at t that determine what
happens when she’s not in a type 1 situation.34

Fodor maintains that this simply isn’t his position. He maintains that there is one set of
ture counterfactuals about Sally at t₁ and an entirely different set of true counterfactuals
at t₂; i.e., her dispositions changed from scene 1 to scene 2.

I am not sure what to make of this response. I just do not see how Fodor, given this account of his theory, can reject what Baker says his theory permits. If there are two entirely different sets of true counterfactuals at $t_1$ and $t_2$, how exactly does that exclude what he says is the application of the teleological theories picture above? Surely these two pictures are consistent. Nevertheless, Fodor does make a point: if Sally’s dispositions have changed, then the set of true counterfactuals associated with them have changed.

**Two questions for Fodor**  There are two related questions that I believe Fodor cannot adequately answer. First, let’s go back to bug detectors. The question there was ‘what representations does the frog have: *flies* or *flies-or-bee-bees*? Either of these representations are supposed to be able to trigger a tongue response. Fodor says “[t]he bottom line is that it’s impossible for frogs to have fly concepts but not impossible for us to have fly concepts. This is because it’s consonant with our psychology, but not with theirs, to sometimes distinguish flies from bee-bee.”\(^{35}\) I grant this point, but my question is why is this representation not about ‘*this* pattern of activation in the visual cortex’ or ‘*this* pattern of activation in the retina’ or ‘*this* movement pattern’ or as many alternatives as I can think up? The frog can certainly have the brain or retinal activation patterns. These physiological effects can happen even when there is neither a fly nor a bee-bee around, so it escapes me how we can maintain that there is a law-like relationship between black dots and particular states being connected with particular contents.

\(^{35}\) Fodor, *A Theory of Content and Other Essays*, 108.
I presume that Fodor would respond to me by saying something like, ‘that’s very clever, but far-fetched.’ He might point out that retinal patterns or patterns of activity in the visual cortex are *typically* caused by things moving about in front of your face when your eyes are open and there is enough light. I object to the use of the term ‘typical’ here. I think that Fodor might go this route because of the frequent use of the term ‘nearest (or closest) possible world’. I certainly have an intuitive notion of what this means, but when we are doing the fine work that AD seems to require, I do not understand how I am to know which facts I am holding fast while the facts of the rest of this world change to the ‘nearest possible’ world. Let me illustrate.

Two quick examples of ‘indeterminate’ counterfactuals:

- If Baker and Fodor believed the same things, then they would both be Practical Realists.
- If Baker and Fodor believed the same things, then they would both be Intentional Realists.

Which of these counterfactuals above apply to ‘the closest’ possible world?

- If Hannibal had commanded US troops in Afghanistan, then he would have used elephants.
- If Hannibal had commanded US troops in Afghanistan, then he would have aggressively pursued bin Laden into the mountains.

Clearly, counterfactuals are deployed to further a particular point and that is well and good. However, a whole cloud of tacit conditions apply and can (and should) be asked after. We typically do not ask after whether gravity still applies in the military counterfactuals above—it isn’t clear how that might be relevant. But, in the two pairs of
counterfactuals above, it just isn’t clear what we are supposed to be holding fixed. It is a relatively simple matter in both cases to stipulate what gets fixed, say, in the first pair we say ‘presuming physicalism has been shown to be true.’ We then see which of the pair is appropriate.

Fodor does anticipate this and says that

If God has a look at both the actual causal relations of your mental states and the surrounding space of counterfactual causal relations, he can tell the content of your state.\textsuperscript{36}

Basically, it would seem that Fodor is arguing that from the “God’s eye” point of view no particular interests or purposes come to bear. But it still isn’t clear what would fix what counts as the ‘closest’ possible world in any particular situation. What counts as the ‘objectively relevant’ aspects of a possible world? It seems to me that Fodor is required to answer these questions, else we have no reason to accept AD and we are still left with indeterminate content.

\subsection*{4.3 The Myth of Commonsense Psychology}

Eliminative materialists and intentional realists agree that commonsense psychology is a theory of some kind. What they disagree about is whether that (proto-)theory is (more or less) true. Eliminative materialists argue that it is not and intentional realists maintain that it is. Of course, if commonsense psychology is not a (proto-)theory, in a relevant sense, this

\textsuperscript{36} Fodor, \textit{A Theory of Content and Other Essays}, 125.
disagreement is entirely beside the point. Baker argues just that: commonsense psychology is “not a theory in competition with science.” She maintains that the prevalent myth is that commonsense psychology is a (proto-)theory. What Baker proposes to replace this conception with is the idea that commonsense psychology is a practice; ‘a systematic activity, governed by rules or conventions, that groups of people engage in for a common purpose.’ Her contention is that some of our social practices involve providing causal explanations and commonsense psychology is one of these causally-explanatory practices.

First, it is important to see just what Baker means by ‘practice’ and ‘proto-science’. A practice is, for Baker, foremost, a systematic activity. This activity is characterised by being governed by rules and conventions, and by groups of people engaging in this activity for some shared purpose.

(A) Commonsense psychology is a practice iff groups of people engage in the activity of describing, explaining and predicting human thought and action in terms of propositional attitudes like belief, desire and intention.

On the other hand, a proto-science is also a systematic activity of description, explanation, and prediction. However, by ‘proto’, Baker means to identify those practices that have arisen spontaneously and unreflectively. As for the ‘science’ part, Baker has a specific thing in mind; for something to be a science, it has to be entirely replaceable.

(B) Commonsense psychology is a proto-science iff (i) it was not self-consciously made up by anybody, and no special training is needed for its


39. Ibid., 4.
use, and (ii) its descriptions, explanations and predictions of human thought and action are subject to being falsified in toto by a mature science.\(^{40}\)

Baker is clear to point out that, under this view, proto-sciences are practices (just as sciences are), but proto-sciences do not exhaust all possible practices. One way of putting this is that if it were the case that all practices were somehow (proto-)sciences, then all would be science. She has argued against this notion as we have seen above in her arguments against MT. As for the notion of a ‘mature science,’ she takes her cue from evolutionary psychology and sees ‘a science to be mature for purposes here if its categories are suitably related to physical categories.’\(^{41}\)

### 4.3.1 The Three Arguments

Baker identifies, then attempts to refute, three broad arguments that she believes to be the best candidates to support the idea that commonsense psychology is a proto-science.

**The first argument**

1. Commonsense psychology purports to explain actions.  
2. Actions are properties of human agents, who are wholly physical.  
3. The instantiation of any property of a wholly physical thing is ultimately explainable by a physical science. So,  
4. Actions are ultimately explainable by a physical science.  
5. If actions are ultimately explainable by a physical science and commonsense psychology purports to explain actions, then commonsense psychology is subject to being falsified in toto by a physical science. Therefore,  
6. Commonsense psychology is a proto-science.\(^{42}\)

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40. Baker, ‘What is this thing called ‟Commonsense Psychology’?’, 5.  
41. Ibid., 2.  
42. Ibid., 5–6.
Baker’s response is to deny premise (3). If ‘wholly physical thing’ means just the particles that make up the object, then it seems to Baker that (3) is manifestly untrue. Middle-sized objects such as cars and candle holders have properties which do not depend upon just the physical properties of its particles. For example, this car has the property of belonging to me and my wife and this candle holder has properties by virtue of its being a menorah. Neither property can be understood let alone predicated of these objects outside of a large number of legal, cultural, and religious practices.

Now, Baker points out that properties such as these are explanatory: this being a menorah explains why it is in the window on such and such a night with so many candles. That this car belongs to both me and my wife explains why we both have to sign the transfer of ownership slip if we sell the car. Baker also reminds us that these properties are not taxonomic in any science. This is the same point made above about portraits: these properties are relational properties and the relations are forged by virtue of the social practices within which they gain their meaning. Lastly, she dismisses the complaint that ‘the instantiation of the properties of medium-sized objects is not explainable by a physical science.’\textsuperscript{43} She maintains that the explanatory power of these concepts depend only upon other concepts at the same level of explanation. Explanation from ‘deeper’ levels neither illuminate or explain.\textsuperscript{44}

\textsuperscript{43} Baker, ‘What is this thing called ‘Commonsense Psychology’?, 6.

\textsuperscript{44} See Lynne Rudder Baker, ‘Belief Ascription and the Illusion of Depth’, \textit{Facta Philosophica} 5 (2003); for further discussion on this point.
I find this argument persuasive. The relational properties that cars and candle holders enjoy are properties of these items by virtue of the social practices in which they are embedded. Nothing is a ‘pawn’ without the social practice of playing chess. The rules and conventions partially constitute what counts as a ‘pawn’. The legal rules and conventions, court rulings, and statutes which govern what counts as marriage, who gets to marry whom, what marital property is, etc. make possible that this car has the property of being owned by myself and my wife. While science can surely study these social practices, those social sciences do not dictate, for example, what marriage ‘really’ is. There can be no scientific discovery that would justifying us saying that no one has ever been married in Canada.  

Concepts gain their meanings from the social practices within which they find a home; i.e., these relations depend only upon other concepts at the same level of explanation. Complete (i.e., satisfying) explanations are available without going ‘deeper’.

The second argument

(1) Commonsense psychology purports to provide causal explanations. (2) All purported causal explanations can be falsified in toto by a mature science. (3) If commonsense psychology purports to provide causal explanations that can be falsified in toto by a mature science, then commonsense psychology is a proto-science. So, (4) Commonsense psychology is a proto-science.  

45. This is not to say that it is logically impossible that no one has ever been married in Canada. Imagine if some statute was poorly worded in 1867. The Supreme Court of Canada could rule that the law was of no force or effect and as a result no one has ever been (legally) married in Canada. But notice, this is not a scientific discovery. Under some theories of law, this ruling would not even count as a discovery.

Baker’s response is to deny premise (2). There are innumerable causal explanations that can be neither verified nor confirmed by a mature science (in Baker’s sense). The reason follows from my point above: the social practices within which these explanations find their home are partially constitutive of the concepts used in the explanations. Using an example of Baker’s, a mature science of human behaviour, in order to explain why someone in prison would spend so much of his time researching the law and his case, would have to explain all of this in terms of particles, etc. But unless this mature science could also provide an explanation of legal and social practices, the very thing that we wish to explain—‘why this prisoner is spending so much time in the library’—would disappear. Without the background assumption that there is a practice of putting people in prison, that there are such things as ‘appeals’ and ‘re-opening the case’, etc., there is nothing to explain.

Baker sees an important reason to doubt whether a mature science could ever give an account of the rules and conventions required to prevent the explanandum from disappearing. It is simply not clear that, if there were such an account, that we’d be talking about the same things in physical and social terms. Physics does not deal with rules and conventions. An explanation in physical terms simply cannot replace explanations given in commonsense terms. Baker’s example is of a legislature’s cutting of the budget for a state university system. What would a physical explanation of this phenomenon look like?
Baker entertains the claim that “all commonsense explanations stand in need of such grounding in ‘deeper’ explanations of a mature science.”\textsuperscript{47} This is the more general claim that Fodor makes when he sets up his argument in \textit{Psychosemantics}: in order to save commonsense psychology from elimination, we are going to have to vindicate it with a \textit{proper} scientific theory (i.e., a reductive, physicalist theory). Baker rejects this claim by making the obvious point that it is only upon occasion that commonsense explanations are falsified by mature-scientific explanations. Certainly, we can envision a situation where the commonsense explanation of an event (e.g., driver inattentiveness caused the car crash) is falsified by a mature-scientific explanation (the driver suffered a heart attack). Baker’s point rests on the falsification of \textit{all} commonsense explanations by a mature science and this is implausible on her view.

\textbf{The third argument}

(1) Beliefs are, or are constituted by, brain states. (2) Neuroscience determines what brain states there are. (3) If beliefs are, or are constituted by, brain states and neuroscience determines what brain states there are, then commonsense psychology can be falsified in toto by neuroscience. So, (4) Commonsense psychology is a proto-science.\textsuperscript{48}

Baker’s response is to deny premise (1). As we saw above, she argues that beliefs cannot be brain states.\textsuperscript{49} She cites her empirical arguments to the effect that it simply isn’t plausible to expect neuroscience to be able to answer the question ‘Which neural tokens

\textsuperscript{47} Baker, ‘What is this thing called ‘Commonsense Psychology’?’, 9.

\textsuperscript{48} Ibid., 10.

\textsuperscript{49} Baker argues in both Baker, ‘Are Beliefs Brain States?’; Baker, \textit{Explaining Attitudes: A practical approach to the mind}, to this point.

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are a token of the belief that p?’ If there is no answer forthcoming, then to make the
claim that beliefs are brain states is, to Baker, vacuous. As I said above, I am not very
happy with this argument. Simply pointing and saying this is implausible is, frankly, not
good enough. Just saying in reply that neuroscience is just starting out is very convincing
to many theorists. It seems to me that the correct move is to say that beliefs are simply
not states that brains could be in; they are not states at all.

4.3.2 The Commonality

Baker maintains that the three premises of the three arguments that she has attacked above
all share an important feature. They all flow from what she calls ‘the physicalist picture
of reality.’ She argues that this picture gives us a ‘one size fits all’ notion of causality. Her
reconstruction looks like this:

\[ x's \text{ having } F \text{ at } t \text{ causally explains } y's \text{ having } G \text{ at } t' \text{ in virtue of there being an } \]
\[ \text{underlying spatiotemporal story that connects } x's \text{ having } F \text{ at } t \text{ and } y's \text{ having } G \text{ at } t'. \]

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It is the ‘underlying spatiotemporal story’ that causes physicalists so much worry over
intentional states, says Baker. This view is the primary motivation for characterising
beliefs as brain states. This picture of causation is pervasive and, indeed, part of our
commonsense picture of the world. How else would we train someone how to play
billiards except through this simple casual picture? But this picture clearly does not apply

50. Baker, ‘What is this thing called ‘Commonsense Psychology’?’, 11.
(or if it does, it is profoundly obscure how it applies) to economic explanations like the relationship between housing prices and the discount rate.

But Baker does see commonsense psychological explanations as causal explanations. So, her suggestion is that the notion of causation does not pick out of the world just one phenomenon; “maybe ‘causation’ is just the word that we use when we think that we have found an explanation of a certain sort.”51 If there are different sorts of causes, then the kinds of causes we find in physics are different than the kind we find in economics, or in commonsense psychological explanations. Baker argues that a causal explanation is ‘one that satisfies certain interests.’ In other words, what counts as an explanation is that which satisfies our purpose in asking after it. Different interests in different domains would imply that we have different kinds of causes in those domains.

4.4 Conclusions

It would seem that the picture of commonsense psychology that Fodor has offered has serious problems that cannot be solved within the scope of the resources of the picture. Fodor’s conception of commonsense psychology turns on three basic commitments: 1) that commonsense psychology forms a kind of (proto-)theory involving propositional attitudes and a set of empirical generalisations, 2) that it takes what propositional attitudes refer to (mental states) as a kind of brain state, and 3) that those mental states are causally

51. Baker, ‘What is this thing called ‘Commonsense Psychology’?’, 12.
effective in the production of human purposive behaviour. What I have shown is that we have good reasons to believe that 1) commonsense psychology does not form such a (proto-)theory because our everyday practices of explaining each other’s actions are not consistent with the way theories work, 2) Fodor’s picture of commonsense psychology is fraught with conceptual issues due primarily to his brand of hyper-realism, and 3) Fodor’s commitment to physicalism further commits him to too narrow a concept of cause to adequately capture the relationship between our actions and the reasons we have for performing those actions.

4.4.1 Psychological Cause

This discussion of the nature of commonsense psychological terms leads us to seriously re-consider the nature of psychological explanation. Commonsense psychological explanations have typically been conceived of as a causal affair; our mental states, however otherwise conceived, cause human purposive action. This makes the connection between our mental states and our actions contingent. But we have seen that some of the connections between the reasons we give for our actions and those actions are internally related, i.e., partly constitutive of the meaning of those actions.

The manner in which the causal nexus is described is frequently in terms of an event; e.g., ‘the brick hitting the window causes the breaking of the glass’ and ‘my believing that there is beer in the fridge and my desiring said beer caused me to go to the fridge.’ While the first example is given in fairly typical terms, the second is not. We rarely speak
in such a way. When asked, ‘why did you go to the fridge?’ we typically respond with ‘I wanted a beer’ or ‘that’s where the beer is’ or ‘to get a beer’. However, the example in which belief and desire are explicitly cited is typically the way the putative causal nexus is described for human actions by philosophers.

Baker’s argument at this point is reminiscent of some remarks of Wittgenstein:

> It is thus perfectly possible that certain psychological phenomena cannot be investigated physiologically, because physiologically nothing corresponds to them.

> I saw this man years ago: now I have seen him again, I recognise him, I remember his name. And why does there have to be a cause of this remembering *in my nervous system*? Why must something or other, whatever it may be, be *stored-up there* in any form? Why must a trace have been left behind? Why should there not be a psychological regularity to which no physiological regularity corresponds? *If this upsets our concepts of causality then it is high time they were upset.*

I think we have ample reason to suspect that the realists have it wrong; intentional, mild, and (to some extent) practical realists are somehow missing the essentially normative aspects of what we do when we give explanations for actions. I suggest a distinction that usually finds a home in the so-called ‘free will debate’. Following Aristotle, Thomas Reid, among others, Chisholm proposed a distinction between ‘agent causation’ and ‘event causation’. And while Chisholm, in later years, rejected his original distinction

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52. RPPI, §§904–5, emphases mine.

53. I am not interested in the ‘free will debate’ and so I will have nothing to say about how the arguments go there.

by suggesting that agent causation is a sub-species of event causation,\textsuperscript{55} I wish to suggest that he got it the wrong way around. What is needed is not a taxonomy of causation stemming from a single notion, but to treat ‘cause’ as a family resemblance concept.

In the same way that members of a family rarely share a single facial feature common to all, our closely related concepts need not share a single ‘essence’. It is the overlapping network of meanings that form a ‘cloud’ of different meanings, not necessitating a single encompassing definition. In the case of ‘cause’, we might talk of physical causes, psychological causes, economic causes, political causes, etc., but not imply that these are all sub-species of a single super-concept, ‘Cause’. Of course, this implies that ‘physical causes’ are not to be identified as the prototype for ‘causes’ in general. Thus, the charm of the physicalist picture is broken and much of the argument that commonsense psychology is a (proto-)theory loses its motivation because we are no longer forced to choose between a ‘proper scientific conception of the mind’ and ‘making an admission of the existence of a soul alongside the body, a ghostly mental nature’.\textsuperscript{56} We have an alternative: treat different kinds of causation as ‘only one among a variety of centres of variation around which we can fruitfully organise the forms of our various kinds of causal attributions.’\textsuperscript{57}


\textsuperscript{56} RPPI, §907.

\textsuperscript{57} Hacker, \textit{Human nature: The categorial framework}, 88.
4.4.2 So, What About Elimination?

My next point deals with the notion that our entire commonsense picture of the world could be replaced. After all, if we *insist* we could still do so, surely then we could still consider it all a theory. Baker says that part of the commonsense picture of the world can determine ‘without specialised training or credentials, that traffic is heavy on Friday afternoons before long weekends or that people resent being insulted.’ If *everything* were replaced then not only would there be no such things as insults, but there would be no such things as people. I submit that we could not reject, whole cloth, the entirety of our commonsense picture. It seems to me that the patterns of reaction and emotion that we exhibit as human beings bracket what kinds of commonsense pictures we could adopt. Further, I submit that any of the commonsense pictures we could adopt, given our biological affordances, would be relatively similar.

My intuition is driven by the ways in which alien (i.e., extraterrestrial) cultures are portrayed in science fiction literature. Compare any fictional alien culture with one of our own. In every case, in order to meet the demands of making the alien culture understandable and relatable to readers, authors must presume a tremendous amount of background that is similar to our own cultures, for us to be able to understand the differences in cultures. If an alien culture is particularly violent, then there must be a pattern of action in that culture that we can understand as being violent, and so forth. The less like humanity

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58. Baker, ‘What is this thing called ‘Commonsense Psychology’?’, 15.
the culture is portrayed, the fewer background assumptions we share with the aliens. If we remove all of the common background assumptions, it seems to me that not only would the life forms we are observing be entirely alien, we could not recognise them as persons of any kind. Vulcans and Klingons and Wookies, and all the other alien species which are part of (at least) the North American cultural imagination are recognisable as persons because they are sufficiently like us; they participate in at least some of the most basic social practices we do.

Now, this is not to argue that our conception of ourselves never changes, for it quite clearly does. Scientific discoveries, literature, and politics all contribute to changes of how we understand ourselves and others. The idea that our actions and motivations can be influenced by ‘unconscious’ elements of the mind, introduced within the last 300 years, has embedded itself in the very notion of who we are. The discovery of the neurochemical bases of conditions like depression and schizophrenia have changed the notion of personal responsibility. But change is frequently incremental and relatively slow, and introduces conceptual problems that need to be resolved. For example, should a person who was not criminally responsible for an act due to an organic injury at the time of the act be punished once that person is healed? Exactly how we are going to understand responsibility in novel cases, such as this one, is still being negotiated.

What ties a concept to its meaning is, at least in part, the way in which the concept is deployed by those who use the concept (and are typically understood, etc.). But no concept floats freely: concepts are tied together in a sort of mutually dependent web of
meaning. Insofar as one says something is green, one also says that it is not blue, etc. If you change one concept, it ripples through the other concepts. The more closely tied the concepts are, the more profound the effect will be. Consider the way the conceptions of belief, desire, and intention are interconnected. If we wished to introduce a kind of intention that is not based on what one believes to be true, a great deal would have to be explained. Typically, having an intention requires that we take the world to be a certain way (else how can we reasonably expect our actions to satisfy our intention?), so, if this new concept of intention is uncoupled from how we take the world, we can legitimately ask upon what is this new notion of intention based? Surely we couldn’t just substitute the new concept for the old one simpliciter. As such, if we are going to suggest a new use for a concept, we are obliged to account not just for the new meaning, but for the changed relationship the new use has with the concepts that were related to the old use. This principle applies in the same way for everyday concepts as it does for specialised (e.g., scientific) concepts.

That this conceptual web is so highly interconnected requires that we pay careful attention to how any changes to the use of a concept manifest themselves with respect to other concepts, whether we wish to adopt that meaning, and so on. Change is inevitable (and desirable!) as the material conditions of our existence as human beings change—technologically, physiologically, and culturally. But if we are going to make sense of all of these changes, careful conceptual investigation is needed in order that we understand these changes without falling into the kind of philosophical confusion that the dominant
conception of commonsense psychology has found itself. It seems to me that a description of how concepts are used and the social/linguistic practices within which they find their uses provides a clear and perspicuous method of getting an overview of how these systems of meaning are related and thus how philosophical puzzles and confusions arise and how they can be subsequently dissolved.

So, the idea that the entirety of the conceptual framework of our commonsense psychology could be replaced at once is a non-starter because our whole lives—all the social practices that make up what counts as living our lives and being who we are—are intimately bound up in what counts as our commonsense psychology, and, as explained above, our human nature brackets what practices and conceptions prove to be useful or acceptable. If we were able to reject entirely and at once the commonsense picture that we now have, we would have to shed not only our culture but our nature as persons. As I said, I think that this is not possible, but even if it were, I can see absolutely no reason to consider doing so. The price of rejecting commonsense psychology at once is to reject our humanity.

4.4.3 Leaving Everything as It Is

So, commonsense psychology is not a (proto-)theory, but a ‘practice’. The Practical Realist takes commonsense psychology as part of the whole package of the commonsense conception of reality which underpins all of our social practices. This strikes me as correct. It seems to me that these commonsense practices are akin to what Wittgenstein calls ‘forms
of life’; the historical, social, conceptual, and practical background against which words, gestures, symbols, and practices gain their meanings. There are innumerable things that simply could not take place without there being in place already any number of social practices: telling a lie, meeting someone at 3 PM, following a series of signs to one’s destination, going to a movie, and on and on. Commonsense psychology is not the ground or precondition of our mental and social lives, but rather, it is bound up in or ‘abstracted from’ a whole commonsense conception of the world, and thus cannot be rejected without taking the rest of the picture with it. In other words, normativity and intentionality are presupposed by the forms of life which comprise our commonsense picture of the world and our place in it.

It seems to me that this last point, that commonsense psychology is not the ground of our commonsense picture of ourselves but is abstracted from a larger picture of the world and our place in it, has at least one important implication for philosophical investigations of our commonsense psychology. Taking human practices as ‘forms of life’ in this way suggests that we should take a more ‘anthropological’ attitude toward understanding commonsense psychology. On this view, commonsense psychology is a complicated, overlapping system of social (specifically, linguistic) practices deployed to articulate or express things about ourselves, predict the actions of others, and understand (i.e., place ourselves as persons) the actions of ourselves and others within or on account of a larger context of (diverse and overlapping systems of) everyday activities.
At the beginning of this essay, I suggested that philosophy should be descriptive; that the task of philosophy was to give the lay of the conceptual geography, so to speak. I had this famous quote in mind:

Philosophy may in no way interfere with the actual use of language; it can in the end only describe it. For it cannot give it any foundation either. It leaves everything as it is.\(^{59}\)

The anthropological approach to describing these social practices as forms of life, etc. does exactly this: it leaves everything *under observation* as it is. Of course, the aim is to change our understanding of the situation so as to dissolve the philosophical puzzle, but the social practice remains as it was; everything open to view. The only change is how we see that which we are looking. Commonsense psychological practices go on quite oblivious to philosophical suggestions that there is a true theory, a false theory, or no theory at all. Only substantive changes in the practices themselves—however those changes are effected—make a difference to commonsense psychology.

It might be said that relegating philosophy to the role of ethnographer or journalist is to ignore the power of philosophy as an engine of science. Peter Hacker has said that “[f]or Philosophy is not the underlabourer of the sciences but rather their tribunal; it adjudicates not the truth of scientific theorising, but the sense of scientific propositions. Its rewards lie not in furthering our knowledge, but rather in restraining us from nonsense and in giving us a proper understanding of what we know.”\(^{60}\) This is perhaps a bit strongly

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59. PI, §124.

worded, but the spirit of the division of labour is particularly clear here. The proper philosophical task is to clarify concepts, not offer theories—scientific or metaphysical. Philosophy can suggest hypotheses but it is the proper role of science to test them and determine how the theorising should proceed. But then, the job of the philosopher is to double check the scientist’s zeal for moving the conceptual boundaries for one or a number of concepts without explaining how the rest of the concepts dragged along for the ride fit into the new conceptual landscape.

So, to take such an anthropological or ethnological attitude is to give us the distance required to see the philosophical entanglements in psychology that perplex us. Wittgenstein pointed out that even mathematics is an anthropological phenomenon.\(^6\) By this, he did not mean that mathematical statements are somehow anthropological claims about how people do arithmetic or derive a proof in geometry any more than he thought that the criminal law is somehow an ethnology of how a society deals with its criminals.\(^2\) A system of mathematics, to Wittgenstein, is a system of rules that determines what ‘counting’, ‘calculating’, ‘proof’, etc. means in just the same way that a criminal code sets out meanings of offences, specifies to officials what punishments may and may not be levied, etc. It is the fact that these rules specify and determine what counts as ‘committing a crime’ or ‘proving that the internal angles of a triangle add to 180°’ (and thereby what counts as performing these actions) is what is an anthropological phenomenon.

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62. RFM, 192.
To take the anthropological attitude is also to afford us something that the dominant conception of commonsense psychology specifically denies: the centrality of interaction with the social world in understanding ourselves as persons. The dominant conception of commonsense psychology takes the person as a lone figure trying to understand the world around her armed only with her observations, a theory, and her intellect. The social context is merely a set of inputs or parameters. But what we have seen is that the meaning of actions are embedded and afforded by human actions taking place in social circumstances: social practices. This would suggest that the normativity of meaning that Fodor sought to account for by marrying computation to syntax is to be found in the regularity of social practices within which those words, phrases, and gestures are embedded. However, investigating this last idea is a project best left for another day.
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