

In N. Nettleman (ed.),
New Essays on Belief
(Palgrave Macmillan, 2013).

PROOF

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Belief and Belief's Penumbra

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1. Introduction

People seem to believe some pretty strange things; at least they say things that suggest that they do. Among the more dramatic of these are the various monothematic delusions which have recently been the focus of much philosophical discussion:¹ Patients suffering, for example, from the Capgras syndrome claim that a loved one, typically a spouse or parent, has been replaced by an impostor; patients suffering from the Cotard syndrome claim that they are dead. Monothematic delusions are of interest to philosophers of mind, not because of any particular clinical interest, but because it is deeply puzzling just how to take these patients' claims: Do these patients really *believe* what they claim, or are their claims to be understood in other ways, perhaps metaphorically or perhaps as the expression of a propositional attitude other than belief? What makes it difficult to credit these patients' claims as expressions of belief is not simply their unbelievable, sometimes even pragmatically self-defeating contents. How, for example, could anyone believe that they are literally dead? It is also that these claims are typically not accompanied by the behavioral, cognitive, and affective responses that we expect of someone who genuinely believes what these claims suggest. Most Capgras patients, for example, don't take action to find their missing loved one, (e.g. reporting their absence to the police); most seem curiously unconcerned as to the fates of these missing loved ones. Cotard patients are typically unmoved when it is pointed out to them that they continue to do things that presumably only the living are able to do, for example, conversing with their therapist, eating and drinking, experiencing hunger, feeling pain, sensing a need to relieve themselves, and so on; for them such inconsistencies seemingly count for nothing.

It is as if these patients' delusions are cognitively encapsulated: acquisition of these delusions typically does not result in significant modification of conflicting pre-existing beliefs, nor do conflicting pre-existing beliefs typically restrain these patients' commitment to their delusions. All in all, there is much in these patients' behavioral, cognitive, and affective responses to suggest that they don't really believe what they claim.² And yet the traditional construal of these patients' delusional claims has been to take them to be expressions of belief – pathological beliefs to be sure, but beliefs nonetheless.³

If delusional claims were the only cases that gave rise to questions about doxastic status, then they might be neglected on the ground that in philosophy, as in law, hard cases make bad law. But very similar cases arise in non-clinical domains, where again the behavioral, cognitive, and affective responses associated with the claims in question don't seem appropriate if these claims are expressions of genuine belief. Religious claims are an obvious case in point: Many Roman Catholics profess to believe in the transubstantiation of bread and wine into the body and blood of Christ, though seemingly without wondering why the taste of the host remains, so far as they can tell, one of stale bread and bad wine. And then there are Christian fundamentalists who professed to believe firmly that the world would end on October 21, 2011, yet in the run up to that date continued to burden themselves with life projects whose undertaking made no sense if the end of time was truly close at hand. Ideologically motivated political claims provide other examples, where given their accompanying behavioral, cognitive, and affective responses, it is difficult to credit these claims as expressions of genuine beliefs. Do a significant number of American right-wing partisans really believe what they claim, namely, that Obama was born outside the United States and thus not eligible to be President? And what about conspiracy theorists: do they really believe what they claim, for example, that the CIA, in collaboration with Israel's Mossad, orchestrated 9/11, not with planes as the media reported, but with truck bombs; that Roosevelt allowed Pearl Harbor to be bombed by the Japanese in order to draw the United States into World War II; that the Apollo moonwalk was a hoax, elaborately staged by NASA somewhere in the U.S. desert southwest? There are as well the sorts of cases that Tamar Gendler (2008) uses to motivate her claims for the existence of a mental state that she calls "alief", cases in which subjects claim to believe something, and yet behave reflexively in ways that suggest that they don't in fact believe what they claim to believe. The conclusion here seems clear: monothematical clinical delusions are only particularly striking examples of a more general

phenomenon in which we are inclined to describe someone as believing one thing or another on the basis of his or her sincere professions of belief, and yet when we consider carefully this person's behavior, cognition, and affect, it is not at all clear that such a description is warranted. There is not at all what we take to be the typical behavioral, cognitive, and affective profile of someone who believes what they claim.⁴

Let us call these belief-like mental states, including monothematic delusions, which we are inclined to describe in belief terms but which on careful reflection don't seem to warrant such a description, *belief's penumbra* in order to emphasize the unclear, problematic relation that these states bear to paradigmatic examples of belief, which we are quite comfortable describing in these terms. In describing such states as "penumbral", I want to leave open the question whether they are genuine beliefs or maybe only belief-like, but I do intend to call attention to what seems to be a significant vagueness in our commonsense notion of belief, one that allows us to grade these states as more or less belief-like along a number of different dimensions.

Much of the recent philosophical discussion of monothematic clinical delusions has been concerned to defend a propositional attitude construal of these delusions according to which patients' delusional claims are expressions of some propositional attitude that has the content of the delusional claim. These construals are of three basic sorts. First, there are the traditional doxastic construals, which treat delusions as beliefs, albeit delusional beliefs. These construals acknowledge the bizarre character of these delusional beliefs, but note their similarity with equally bizarre non-clinical beliefs which we feel perfectly comfortable describing in doxastic terms. These construals typically dismiss the seeming irrationality of patients' delusions, arguing that they are no less rational than many non-clinical beliefs, sometimes arguing that the apparent irrationality of delusional beliefs is in fact a rational response to certain aberrant perceptual experiences.⁵ The failure of patients to act on their delusional beliefs is often explained in terms of their not unreasonable fear of being committed to a mental institution were they to do so.

A second sort of propositional attitude construal concedes that delusional claims are not the expression of beliefs, but argues that they are instead the expression of a propositional attitude other than belief. On some such construals, the propositional attitude with which the delusion is identified is said to be some antecedently recognized attitude type such as imagining, or perhaps a pair of recognized attitudes of different type, for example, imagining and believing that one believes (Currie 2000, Currie and Jureidini 2001, Currie and Ravenscroft 2002). On other

construals, the propositional attitude is said to be of some hitherto unrecognized attitude type, e.g., a hybrid of imagining and believing), which Andy Egan (2009) calls "bimagining". The strategy of this latter sort of construal is to explain the behavioral, cognitive, and affective encapsulation characteristic of delusions by identifying the delusions with a propositional attitude which like imagining exhibits a similar encapsulation: normal subjects rarely act on their imaginings, rarely modify their pre-existing beliefs in light of their imaginings, and so on. Currie's and Egan's proposed construals go further, discovering a concomitant belief or belief-like component that would explain the conviction and tenacity with which patients assert their delusional claims.

A third sort of construal argues that delusional claims are the expression not of belief as we commonly understand it, but of a particular kind of belief. These construals argue that our commonsense notion of belief is ambiguous (perhaps along lines of the kinds of belief-like mental states distinguished by Pettit (1998)), or at very least multi-dimensional (Bayne and Pacherie 2005), but that this ambiguity or multi-dimensionality goes largely unnoticed, because it is only in the clinical cases that these different meanings or dimensions become dissociated. These construals argue that once we recognize the ambiguity or multi-dimensionality of our commonsense notion of belief, we can explain both our predilection to describe delusions as beliefs and explain the behavioral, cognitive and affective encapsulation characteristic of these delusions.

There is much that could be said by way of the inadequacy of these various sorts of propositional attitude construals, much of which has already been said by others (see, e.g. Davies and Coltheart 2000, Bayne and Pacherie 2005). But in the interests of time, let me simply say that each proposal appears to fail in characteristic ways. Construals that propose to identify delusions with recognized propositional attitudes invariably fail to explain convincingly both the observed encapsulation of the delusions, as well as the conviction and tenacity with which patients assert their delusional claims. Construals that claim to discover a hitherto unnoticed propositional attitude of which delusions are an instance seem unacceptably ad hoc, especially when one considers the inter-subject variability in the behavior, cognition, and affect of delusional patients, even among patients diagnosed with the same clinical delusion.

There are a number of reasons why one might want to defend a propositional attitude construal of delusions. The default stance of our culture's commonsense psychology is to conceive of persons, to the extent possible, as acting out of their beliefs, desires, and other

propositional attitudes. And despite the strains that often attend attempts to understand delusional patients' behavior, cognition, and affect in these terms, we are actually quite adept at qualifying our propositional attitude attributions so as to make sure that our interlocutors don't draw incorrect inferences as to how these patients are apt to behave, think or feel.⁶ Thus, we may claim that a Capgras patient "believes" that his spouse has been replaced by an impostor but hasten to add that this patient doesn't act in expected ways on this belief. And yet as adept as we may be in qualifying our propositional attitude attributions so as not to mislead our interlocutors, the philosophical and clinical literature on delusions makes clear that we have nagging doubts about the appropriateness of such descriptions: Considered in the context of their behavior, cognition, and affect, these patients' delusional claims just don't seem to be expressions of genuine belief, or any other familiar propositional attitude. Clearly there is a genuine puzzle here about how to think about delusions, and this puzzle extends to non-clinical cases.

The question I want to ask in this chapter is this: *How are we to conceive of monothematic delusions and penumbral cases more generally, if not as beliefs?* I want to address this question by asking the following, related question: *How are we to understand our being of two minds about these cases, specifically, wanting to describe them in belief terms and yet on reflection thinking that such descriptions are not fully warranted?* I believe that by asking and answering the second of these two questions will shed light on the nature of belief, in particular on both its dispositional and its social constructivist nature. This dispositional, constructivist nature, I want to argue, enables us to explain two crucial features of the concept of belief as it figures in our culture's commonsense propositional attitude psychology: (1) that it is a *gradable* concept (such that cognitive mental states are more or less belief-like, and beliefs themselves more or less paradigmatic), and (2) that it can be *explanatorily and predictively powerful* despite significant cross-cultural variation in commonsense psychologies.

The question of how we should conceive of monothematic delusions, and penumbral cases more generally, has special currency because many contemporary philosophers of mind assume that our commonsense propositional attitude psychology limns the universal causal-functional architecture of our minds. Thus, for example, Representationalists, such as Jerry Fodor, often claim that commonsense propositional attitude psychology is proto-scientific cognitive psychology. Their claim is not simply that there exist certain

mental representations that play various causal-functional roles in production of behavior, thought, and affect – pretty much everyone in computational cognitive science believes this. Their claim is also that these causal-functional roles are type individuated in roughly the way that propositional attitudes are. This further claim is crucial, for otherwise there would be little reason to think of our commonsense propositional attitude psychology as proto-scientific cognitive psychology, little reason to suppose that it provides a window onto the causal-functional architecture of our minds.⁷ But this further claim remains largely undefended. Indeed, Representationalists have said little about why our commonsense-psychology type individuates the attitudes in the way that it does, why it recognizes certain attitude types and not others. Rather they have tended to emphasize, correctly (but irrelevantly) in my view, the predictive power, deductive depth, practical indispensability of our commonsense propositional attitude psychology,⁸ drawing the reasonable conclusion that given these properties we should be realists about the attitudes, at least about beliefs and desires. But being realists about the attitudes is not enough to make our commonsense propositional attitude psychology proto-scientific cognitive psychology. Most of us are realists about tables and chairs, and these objects figure in various sorts of explanations and predictions, even law-like generalizations, and yet few of us suppose that any developed science will advert to such objects. Failure to address these questions about the type individuation of the attitudes is perhaps understandable given Representationalists' long preoccupation with difficult issues of intentional content. But in the absence of answers to these questions, there would seem to be little reason to suppose that our commonsense propositional attitude psychology tells very much at all about the causal-functional architecture of the mind/brain, beyond the obvious truth that this architecture, whatever it is, is capable of subserving the commonsense propositional attitude psychology that we in fact have. What is needed, and what is missing, is some reason to accept these Representationalists' assumption that our commonsense psychology's taxonomy of attitude types reflects certain severe endogenous constraints on possible attitude types.

2. Bromberger's question

One recent strategy, we saw, for defending a propositional attitude construal of delusions, and penumbral cases more generally, has been to hypothesize hitherto unrecognized propositional attitude types of

which these cases are said to be instances. The obvious question here is whether there exist (or could exist) such attitude types. Gendler (2008, 557f) reports that in response to her proposal that there exists a belief-like mental state that she dubs "alief" Sylvan Bromberger asked her how she could have been so fortunate to have discovered a category of thought that has evaded the eyes of philosophers for two millennia. Bromberger's question, I assume, was not a rude question about Gendler's powers of philosophical discernment but rather a somewhat provocatively put metaphysical question about whether Gendler's alief is a possible category of thought, a possible mental state type. Bromberger's question could equally well be asked of Egan's (2009) proposed hybrid propositional attitude type "bimagining", and more pertinently still of his more striking claim that there exists a propositional attitude, "besiring", that is a hybrid of belief and desire.

Representationalism offers no answer whatever to Bromberger's question, for its construal of propositional attitudes says simply that having a propositional attitude is a matter of having a mental representation with a propositional content that plays the particular causal-functional role that defines an attitude of the specified type (see, e.g., Fodor 1987, 16ff). The causal-functional roles associated with different attitudes types are referred to in just those terms, namely, as the causal-functional role that representations of that particular attitude type play.

So how then do we go about addressing Bromberger's question? We might start by asking what proposed propositional attitudes, such as Egan's "bimagining", would have to be like in order to support the claim that each was a genuine attitude type. Minimally, bimagining would have to be a commonsense psychological natural kind in just the way that paradigmatic propositional attitudes such as belief and desire are – in much the way, for example, that species of fauna or flora are biological natural kinds. By this I mean that minimally certain commonsense psychological law-like generalizations would advert to bimagining this or that, just in the way that certain law-like commonsense psychological generalizations often advert to believing this or desiring that. For such generalizations after all are our best evidence for the existence of beliefs, desires, and other recognized propositional attitudes. These law-like generalizations would include ones to the effect that if a subject was in this mental state, then (*ceteris paribus*) he or she would (or would be disposed to) behave, think or feel in certain characteristic ways, conditional of course on such other mediating propositional attitude states this subject might be in. Thus, for example, if bimagining were a commonsense psychological natural kind, then we would expect

law-like generalizations of the following sort to hold: *for any p, a subject who bimagines that p will assert (or be disposed to assert) that p, even while exhibiting behavior, thought, and affect inconsistent with p.* In addition to law-like generalizations like the above which focus on the "downstream" effects of being in these mental states, there might be commonsense law-like generalizations regarding the "upstream" causes of bimaginings (analogous to the trivial, *for all p, if one sees that p, then one comes to believe that p*). There might also be commonsense law-like generalizations of both the upstream and downstream sort that are specific to certain populations of subjects, say patients suffering from monothe-matic delusions or specific kinds of such delusions.

The relevant question, then, with respect to newly "discovered" propositional attitude types such as Egan's bimagining is whether they figure in law-like commonsense psychological generalizations to the same extent and manner as do recognized propositional attitude types such as belief and desire. If they do, then these newly "discovered" attitude types would have a strong claim to be such. Whether in fact they do is a matter for careful empirical investigation, but I am dubious. The problem, as I see it, lies principally in the often remarked inter-subject variability in behavioral, cognitive, and affective responses of delusional patients mentioned above, a variability that exists even when we control for differences in other mental states among these patients. It seems doubtful that there exists a propositional attitude of the hypothesized type that might, in conjunction with other mediating propositional attitudes, plausibly be held to be causally responsible for these responses. Put another way, the behavior, cognition, and affect of delusional patients, even of patients diagnosed with the same delusion, does not seem to constitute a sufficiently well-defined pattern to conclude that what we see are the effects of some causally efficacious propositional attitude of the hypothesized type. Take, for example, Capgras patients. Most don't act on their delusion that a loved one has been replaced by an impostor, but a significant percentage do, sometimes in quite violent ways. Most make no effort to find out what happened to their loved one, but some do. Some confabulate stories to explain the disappearance of their loved one (e.g. that they have been snatched by aliens), but others don't. Some freely acknowledge that their delusions are incredible, but others don't. For most, the replaced object is a spouse or parent, but for others it is a pet, oneself or even one's home. Simply put, there seems to be too much variability in the behavioral, cognitive, and affective responses of these patients to warrant the conclusion that these patients share a certain type of

propositional attitude that is causally efficacious in the production of these responses. What we have, to be sure, is a *syndrome*, but given the inter-patient variability that characterizes the syndrome, we lack a reason for thinking the syndrome manifests a hitherto unrecognized underlying propositional attitude that is causally responsible for the syndrome.

Now it might be argued that the situation with respect to proposed attitude types such as "bimagining" is no different from that of paradigmatic attitude types such as belief and desire, because in these latter cases, too, we find significant inter-subject variability in behavioral, cognitive, and affective response.⁹ There is, for example, no characteristic pattern of behavior, cognition, and affect associated with believing that it is likely to rain this evening. Some will carry an umbrella, others will not; some will stay inside, others will not; some will be happy, others will be disappointed; and so on. But there is an important difference between the inter-subject variability in these two cases. In the latter case the variability is largely predictable, given the subjects' other propositional attitudes. In the former case, the variability is not predictable precisely because the "discovered" attitude, by hypothesis, does not bear the sorts of rational relations to the subject's other propositional attitudes which enable prediction of this subject's behavior, cognition, and affect. Thus, if I am told that a certain patient bimagines that his wife has been replaced by an impostor, I will not be able to predict how this patient might behave (beyond predicting that he will be disposed to assert that his wife has been so replaced), even if I have a firm grasp on this patient's non-clinical propositional attitudes. Nor will I be able to predict how, if at all, this patient will explain his wife's replacement. The reason is that this patient's delusions are not rationally integrated with his other propositional attitudes in the way that beliefs and other propositional attitudes typically are. Delusions are, as Davies and Coltheart (2000) put it, cognitively circumscribed (encapsulated, as I prefer to put it) in their rational relations. If I am asked to explain why this Capgras patient acted on his delusion, whereas another did not, I could not explain it by appeal to the patient's other propositional attitudes precisely because Egan's hypothesized propositional attitude of bimagining does not interact with these other propositional attitudes in a predictable way. And this fact, it should be noticed, entails that it is unlikely that there will be the sorts of law-like commonsense psychological generalizations that would lead us to conclude that bimagining was a commonsense psychological natural kind. (We will return to this point later.)

3. Does commonsense propositional attitude psychology limit the causal-functional architecture of the mind?

Assuming, as I argued above, that genuine propositional attitude types are commonsense psychological natural kinds, let us now ask ourselves: *What are we to make of the fact that our commonsense folk psychology recognizes certain propositional attitude types, and not others?* In particular, *what if anything can we infer from a given taxonomy of attitude types about the causal-functional architecture of the mind/brain?*

To answer this question we need to ask what makes for a commonsense psychological natural kind, a kind to which law-like commonsense psychological generalizations advert (or could advert).¹⁰ On the assumption that such law-like generalizations underpin commonsense psychological explanations, even if they don't always figure explicitly in such explanations, the answer to this last question would seem to be that there is something about commonsense psychological natural kinds that makes them (or makes adverting to them) explanatorily and predictively powerful. There is a spectrum of proposed explanations on offer. At one end of the spectrum are the endogenous explanations favored by nativists such as Fodor. On such explanations, the taxonomy of attitude types reflects the fixed causal-functional architecture of the mind/brain, such that an attitude type is a commonsense psychological natural kind, and thus has explanatory and predictive power, just in case it picks out a functionally specified innate structure of the mind/brain.¹¹ At the other end of the spectrum are the exogenous explanations favored by social constructivists.¹² On such explanations, an attitude type is a commonsense psychological kind and thus has explanatory and predictive power, just in case it reflects a socially constructed concept that serves with other such concepts to structure individual behavior, cognition, and affect. On a constructivist account of the attitudes, propositional attitudes are explanatorily and predictively powerful precisely because through enculturation, individuals come to conform to the commonsense generalizations that advert to these attitudes. The upshot here is clear: In the former case, the taxonomy of attitude types would reflect in transparent fashion the endogenously determined causal-functional architecture of the mind/brain that a developed scientific cognitive psychology might be expected to describe, whereas in the latter case, this taxonomy might reflect only poorly the endogenously determined causal-functional architecture of the mind/brain, since this taxonomy would also reflect exogenous social factors and as such could be expected to vary both cross-culturally and diachronically within any particular culture.

There is in fact considerable evidence of cross-cultural variation in the role played by propositional attitudes in commonsense psychological explanations, with some cultures seeming not to traffic in such explanations at all, much less having anything that approximates the exceptionally rich taxonomy of attitude types of Western European-based cultures (Lillard 1998). The commonsense psychology of central Peru's Junín Quechuan culture, for example, reportedly makes little or no use of propositional attitude attributions, and indeed of mental attributions of any sort (Vinden 1996), so much so that early Jesuit missionaries apparently found it a challenge to render in the local Quechuan language the Latin "credo" (*I believe*) of the Church's *Apostles' Creed*. These missionaries settled on the Quechuan expression for "I say, Yes". Over the centuries, the Spanish verbs "creer" (*believe*) and "pensar" (*think*) have entered Quechuan as loan words, though mental attributions apparently continue to figure only minimally in Junín Quechuan explanations of behavior. To the extent that members of this culture explain behavior at all, they like the members of many other non-Western cultures apparently do so in largely situationist terms that advert to contextual facts: "Why is Jones looking in the covered bowl for the food?" – "Because that's where he left it". A provocative way of characterizing such cultures might be to describe them as not acknowledging the existence of propositional attitudes.¹³ The anthropologist Rodney Needham (1973) makes just this claim about belief: he claims that the Nuer and several other non-Western peoples not only lack a word in their language for believing or belief, but also lack the concept of belief. None of this, of course, is to deny that we Westerners can predict and in some sense of the word "explain" the behavior of members of these cultures in terms of their believing this or knowing that. We do precisely this when we describe children from these cultures as passing the so-called "false belief" test.¹⁴ But such descriptions do raise in a particularly stark fashion the question of just what we are claiming about these children and their behavior. One might, I suppose, argue that these explanations presume the existence of certain propositional attitudes, even if these children are ignorant of their existence. Clearly one reason for *our* assuming this to be the case rests largely on the fact that this is *our* particular way of explaining human behavior; we find it hard to imagine any plausible alternatives.¹⁵ Those who favor an endogenous explanation of the commonsense taxonomy of propositional attitude types will no doubt challenge exogenous explanations on the ground that the social role of propositional attitude attribution in our lives depends, *enter alia*, on these attributions being genuinely predictive and explanatory, for why

else would they emerge. And this, they will argue, in turn requires that the taxonomy of attitude types reflect to a significant degree the endogenous causal-functional architecture of the mind/brains of subjects. But this criticism fails to address the obvious question: how closely, if at all, must the commonsense taxonomy reflect this endogenous causal-functional architecture in order to secure the observed predictive and explanatory powers. Of course our individuation of the attitudes has to be sufficiently faithful to the fixed causal structure of the mind/brain responsible for behavior, cognition, and affect in order to support the degree of precision and reliability of prediction and explanation that we in fact observe. It also has to support the causal/constitutive relations among different attitudes that we see manifested in behavior, cognition, and affect and which we represent in inferential terms. But it is far from obvious that satisfying this requirement constrains our individuation of the attitudes, either within type or across types, to the degree that proponents of endogenous explanations suppose.

But how could the exogenous contribution emphasized by social constructivists possibly explain, or even contribute to an explanation of, the explanatory and predictive power of our commonsense propositional attitude psychology? The answer is this: Our commonsense propositional attitude psychology may be predictively and explanatorily powerful, not because it gets right the endogenously determined causal-functional architecture of the mind-brain, but because through a process of enculturation, we as individuals come to have the behavior, thought, and affect that ensures the predictive and explanatory efficacy of our culture's commonsense psychology. More precisely, perhaps through enculturation, we come to be reasonably good *models* (in the philosophy of science sense of that term) of the prevailing commonsense psychology of our culture, that is, good models in the sense that our behavior, cognition, and affect instantiate reasonably well the law-like generalizations of that psychology. The idea here is that there is social pressure on each of us to become such models presumably because of the clear social utility both to others and to ourselves that we be such models. The utility is not only predictive (i.e. it is useful to know how others are likely to behave, think, and feel in various circumstances), but it is also conceptual: It provides us with a coherent way of conceptualizing ourselves and our behavior as social creatures. In the case of a commonsense propositional attitude psychology like our own it provides us with a coherent way of thinking of ourselves as rational agents, agents whose actions are shaped in a rational way by our beliefs and desires, desires setting the goals of our actions, beliefs modulating

and shaping actions in pursuit of those goals in a fashion that reflects environmental facts that rational action must accommodate.

The idea here is that we as individuals, with the particular fixed causal-functional architecture with which we are endowed as a species, are born into a particular culture with a particular prevailing commonsense psychology, a psychology that is, by the mere fact of its existence, one which creatures like ourselves can normally come to model reasonably well through a process of enculturation. If this prevailing commonsense psychology is like ours a propositional attitude psychology, then this is a psychology that the majority of us can in fact come to model reasonably well. And because we are such models, commonsense psychological explanations and predictions of our behavior, cognition, and affect based on these generalizations will be (approximately) true of us.

Once we begin to think of the explanatory and predictive successes of commonsense propositional attitude psychology in these terms, then it is no longer necessary to suppose that these explanatory and predictive successes are attributable to the fact that our commonsense taxonomy of the attitudes limns the fixed causal-functional architecture of the mind/brain. For the explanatory work here can be done by the fact that through enculturation we are able to become reasonably good models of this commonsense propositional attitude psychology (though, again, our endogenously determined causal structure must be such that we *can* become such models – no amount of learning and enculturation will turn the trick for creatures without the appropriate causal-functional architecture). Of course, there is no reason to suppose that the explanation of the explanatory and predictive efficacy of our commonsense propositional attitude psychology must be purely exogenous, purely constructivist; the explanation may involve both endogenous and exogenous factors. And, of course, even if the explanation were purely exogenous, our commonsense psychology's taxonomy of propositional attitude types might, *per mirabile*, turn out to limn the fixed causal-functional architecture of the mind/brain. But the explanatory and predictive successes of commonsense propositional attitude psychology give us no reason to suppose this to be the case.

The obvious question here, then, is why believe that there is anything like an enculturation process by which we become reasonably good models of our culture's prevailing commonsense propositional attitude psychology? One obvious prediction is that if there were such a process, we would expect to observe cross-cultural variation in how subjects conceptualize and explain the behavior, cognition, and affect of others and themselves, which in fact we do observe.¹⁶ We would also

expect to find, and indeed do find, significant cross-cultural variability in the developmental trajectories that eventuate in the mastery of the commonsense psychology of one's culture.¹⁷

The constructivist proposal that I am making here regarding what makes for the commonsense psychological natural kinds does not preclude there being a significant endogenous contribution, but the empirical evidence points strongly to a significant exogenous contribution that cannot but challenge the unargued nativist assumption that our commonsense propositional attitude psychology limns the causal-functional architecture of the mind/brain. The proposal is one that, as I argue below, fits comfortably with a dispositionalist account of belief and other propositional attitudes, inasmuch as what gets shaped in the course of enculturation are particular dispositions to behavior, cognition, and affect. The constructivist proposal also suggests a somewhat different way of thinking about those in our own culture whose mental states are not propositional attitude describable, or at least not comfortably so describable: these are individuals who for one reason or another, and to some extent or another, fail to be good models of our commonsense propositional attitude psychology. Monothematic delusional patients are just such individuals: for one reason or another they become no longer good models of our commonsense propositional attitude psychology, though their deviance is narrowly restricted in its domain. That their deviance is so restricted should presumably figure in any explanation of why it is that we find ourselves of two minds about these individuals, namely, wanting to describe them in propositional attitude terms, and yet acknowledging that there is something inappropriate about describing them in these terms.

4. Explaining our being of two minds about how to conceive of delusions

Schwitzgebel (2002) has suggested that if we think of belief in dispositional terms, specifically if we think of believing this or that as a matter of possessing what he calls a particular "dispositional stereotype", which includes not simply behavioral dispositions but also cognitive and affective dispositions,¹⁸ then we will realize that delusions are cases in which subjects have some but not all of the dispositions that constitute the dispositional stereotype for believing the delusion's content.¹⁹ The fact that delusional patients possess some of the dispositions that compose the dispositional stereotype, including most especially the disposition to assert the delusional claim, is said to explain our predilection to describe

delusions as beliefs (with the propositional content of the delusional claim), while the fact that these patients do not possess all of the dispositions that compose the dispositional stereotype is said to explain our reluctance, upon reflection, to credit these delusions as genuine beliefs.

Schwitzgebel's proposed explanation has some clear virtues, not the least of which is its embrace of a dispositional account of belief, especially when the relevant dispositions are construed expansively, as Schwitzgebel does, to include behavioral, cognitive, and affective dispositions. A dispositional account of this expansive sort for belief and other propositional attitudes, I think, is plausible on independent grounds, though admittedly there are significant challenges to such accounts that have not been adequately addressed, much less answered. Most notably, there is the problem of explaining the seeming semantic evaluability, intentionality, and inferential involvement of the attitudes. There is also the problem of explaining the role of *that*-clauses in the individuation of the attitudes.²⁰ These problems aside, in the present context a dispositional account that identifies belief with possession of a set of dispositions has the virtue of construing the concept of belief as a gradable notion, in accordance with which beliefs can be more or less paradigmatic, mental states more or less belief-like. Representationalist construals, by contrast, have a *prima facie* difficulty accounting for belief-likeness. The causal-functional roles which Representationalists take to define attitude types such as belief are not easily construed as explicitly gradable, at least not in a way that would capture our intuitive, commonsense judgments about being more or less paradigmatic, more or less belief-like, precisely because the causal-functional roles of mental representations, unlike dispositions, need not have characteristic causal manifestations. At best, type individuation of the attitudes in terms of the causal-functional role of mental representations enables Representationalists to think of the belief predicate as vague, though without being able to spell out in any detail what makes for this vagueness, much less for the apparent gradability. Dispositional accounts have the virtue of tying the type individuation of the attitudes more closely to the behavior, cognition, and affect that manifests the dispositions constitutive of a particular attitude type. But this virtue aside, there is in the present context a serious difficulty with Schwitzgebel's dispositional proposal, namely, that it doesn't seem to explain why we should have the predilection that we do to describe delusions in propositional attitude terms. Explaining delusions and other penumbral cases as simply cases of vagueness, which is effectively what Schwitzgebel and Bayne and Pacherie do, leaves this unexplained. The difficulty, very simply,

is that whatever dispositionalist accounts may tell us about belief, they don't tell us how to think about delusions and other penumbral cases. One needs to say more about these collections of dispositions that dispositional accounts tell us are constitutive of beliefs if we are to explain our being of two minds about delusions and other penumbral cases. The key, I want to suggest, is how we think of belief (and other propositional attitudes) and their relation to their constitutive dispositions, what Schwitzgebel calls the "dispositional stereotype".

5. More about what belief (and maybe other attitudes) might be like

Once we begin to think of beliefs as aggregations of dispositions, we can then see that it is dispositions, not propositional attitudes, which are from this dispositional perspective psychologically primitive.²¹ We can then think of the possessors of propositional attitudes as the possessors of the dispositions constitutive of these attitudes. But these dispositions are not distributed randomly through a subject's disposition space. They tend to aggregate in certain characteristic ways. And some of these aggregations we call "beliefs", others "desires", and so on. Just why these dispositions aggregate as they do depends, I have argued, on both endogenous and exogenous factors. But the crucial point here is that they do aggregate in certain characteristic and predictable ways. Thus, for example, in the usual case if I am disposed to utter sentences like "there is a beer in the fridge", then I am also disposed both to go to the fridge if I come to want a beer, and to be surprised if I go to the fridge and find no beer.

Suppose that for whatever reason we tend to aggregate our behavioral, cognitive and affective dispositions in such a fashion that we can successfully predict and explain our own and others' behavior, cognition and affect in terms of these aggregations. It would then be predictively and explanatorily useful to label these aggregations, treating them as if each were an explanatorily primitive, causally efficacious psychological state, even though any causal efficacy is arguably attributable to the dispositions (or their bases, depending on how one spells out the metaphysics of dispositions) that compose these states. Commonsense propositional attitude psychology, so conceived, abstracts away from the underlying aggregated dispositions and their complex interactions, thereby facilitating prediction and explanation, and thus avoiding having to address difficult questions about the complex etiology of the behavioral, cognitive, and affective responses that the aggregated dispositions are

dispositions for. It can do this because in the usual course of events it is of no particular importance just why these responses pattern in the ways that they do, specifically whether these responses are the effect of a single cause or of many distinct causes. Commonsense psychology is concerned with the practical matters of everyday life, not with inventoring the constitutive causal interactions involved in the exercise of these aggregated dispositions.

6. A way to think about delusions and other penumbra

The dispositions of some subjects don't aggregate in the normal way. If their dispositions are completely helter-skelter across a wide range of domains, then propositional attitude talk simply won't get hold; there would be little point, or utility, in our trying to describe these subjects in such terms. But in certain other subjects, notably those suffering from monothematic delusions (or their non-clinical counterparts), by and large their dispositions do aggregate in the normal way in most domains. It is only within a very local, quite circumscribed domain that they don't. In these cases there is considerable motivation to try to extend our propositional attitude descriptions of these subjects into this domain. The motivation is completely understandable: even in the case of normal subjects we often find ourselves puzzled by specific patterns of behavior, cognition, and affect. But in these cases we don't simply give up the interpretive enterprise. We try to make sense of these patterns, and very often our efforts are rewarded by the discovery that we can make sense of these patterns in propositional attitude terms (especially given our ability [see end note 6] to tweek our accepted commonsense psychological typologies on the fly). Our efforts are often rewarded because in point of fact most of us are reasonably good models of our culture's commonsense propositional attitude psychology. This, I suggest, is what explains our predilection for describing, or trying to describe, these subjects' delusions and penumbral cases more generally, in propositional attitude terms: It is simply a familiar exercise of a normal interpretive practice, one that is often successful, but one whose eventual success or failure cannot of course be known beforehand.

It is important not to over-intellectualize what goes on in these cases. Faced with a subject suffering from Cotard delusion, for example, we don't consider this subject's dispositions as evidenced by his responses, determine that they don't aggregate in the way that beliefs normally do, and then decide, as Schwitzgebel (2002, 257) puts it, whether, given

"the practical demands of the moment", to call it a "belief". The process is much more spontaneous. We do what we normally do when interacting with anyone: we try to make sense of the subject's responses in propositional attitude terms. Specifically, we take what the subject says at face value, taking this subject's claim to be dead to be an expression of a belief and looking for a way of understanding this apparent belief such as to confirm his overall rationality. We try to conceive of the subject in these terms all the while noting that this belief is not simply false but also aberrant in its various behavioral, cognitive, and affective manifestations. We may describe this subject's delusions in belief terms, even while recognizing that there is something anomalous in the description, not because we are committed to the appropriateness of this description, but simply because we lack any alternative, better way of describing the delusion in propositional attitude terms. Our culture's commonsense psychology, after all, is one that takes propositional attitudes as explanatory primitives. At least in these cases describing the subject as *believing* the delusional content gets right some of the subjects' dispositions, notably his verbal behavior. In many cases so describing this subject will be accurate enough, and where it is not we can fall on our shared ability to tweek if necessary our shared typology of attitude types to achieve a more accurate characterization of this subject's dispositional profile. Yet if we are asked, or ask ourselves, whether this Cotard subject really *believes* that he's dead, we are reluctant to embrace our description: it doesn't really fit. The subject's delusion may be sufficiently belief-like that we are willing to go with the belief description; after all the subject is otherwise largely rational; but we nonetheless realize that, our descriptive predilections notwithstanding, these are not genuine beliefs, because the aggregated dispositions are not all of the right sort. Thus, we are prepared to signal in various ways, for example, by putting "belief" in scare quotes, that these are not genuine beliefs, even if we continue to talk in these terms, and even if there is only limited predictive efficacy of talking in these terms. What we might on reflection want to say about these subjects is that in the restricted domain of their delusions they possess some belief-making dispositions without actually possessing the belief for which these dispositions are belief-making.

The suggestion here is that although we often talk about monothematic delusions and other penumbral cases in belief terms, all the while being uncomfortable about doing so, delusions are not beliefs or indeed any other generic propositional attitude. But because the mental lives of monothematic delusional patients, like those who exhibit other

penumbral cases, are largely intact, that is, they are by and large pretty good models of commonsense propositional attitude psychology outside the immediate domain of their delusions, it remains useful (and probably charitable) to describe these patients' delusions in propositional attitude terms.

7. Some conclusions as to what we learn about the attitudes from delusional "beliefs" and other penumbra

So here's the picture that emerges from conceiving of delusional "beliefs" and other penumbral cases in dispositional terms: As individuals we have all sorts of dispositions, some of which are no doubt innate, others of which we acquire through enculturation. What we come to have when we come to be reasonably good models of our commonsense propositional attitude psychology is a propensity to package these dispositions to behavior, thought, and feelings in certain fairly predictable ways, ways that facilitate our social lives and the social lives of others. There are no doubt different ways that different cultures might (and indeed do) package these dispositions, if they attend to dispositions at all – ways that would lead to different commonsense psychologies, some of which might not traffic in propositional attitudes at all. But the crucial point is that whatever the commonsense psychology of one's culture, most members of that culture come to be reasonably good models of that psychology. From this perspective of our culture's commonsense psychology, it is dispositions, and not propositional attitudes, that are fundamental, since it is dispositions that get aggregated through the interplay of endogenous and exogenous factors as certain propositional attitudes and not others. It is this fact that makes possible our otherwise surprising ability to tweak our commonsense psychological typologies on the fly. It also makes room for the possibility that for one reason or another some individuals will aggregate dispositions in nonstandard ways and as such not be good models of our prevailing commonsense propositional attitude psychology. If they aggregate dispositions in ways that resemble sufficiently the standard ways, then we might nonetheless find it useful to describe these individuals in propositional attitude terms in order to exploit the predictive and explanatory powers of our commonsense propositional attitude psychology.

This, I suggest, is precisely what we are doing when we describe delusions and penumbral cases in propositional attitude terms. These individuals aggregate their dispositions in ways that are sufficiently similar to the disposition aggregations constitutive of propositional attitudes

such that we find ourselves disposed to describe them in terms of these propositional attitudes, even while recognizing the discrepancy between the dispositions they possess, and the manner in which they aggregate them, and the disposition aggregations required to count as possessing the propositional attitude in question. But this is a situation that we encounter sufficiently often in everyday life when dealing with normal subjects that we know how to hedge our propositional attitude attributions in order both to be able to take advantage of the explanatory/predictive power of the prevailing commonsense propositional attitude psychology while at the same time guarding against the dangers of misleading our audience. In the usual case we know how our attributions are likely to be understood and used, and if necessary we can caution against potential misunderstandings.

Given the exogenous forces that in the normal cases shape us into good models of our culture's prevailing commonsense psychology, we should think of commonsense propositional attitude psychology as reflecting only opaquely the causal-functional architecture that scientific cognitive psychology is concerned to reveal. We should therefore think of this commonsense psychology not as a proto-scientific cognitive psychology, but primarily as a useful tool for conceptualizing and dealing with ourselves and others. We can still be realists about the attitudes, but the realism here is of a theoretically rather shallow sort, of a piece with a realism about tables, chairs, and other middle-sized physical objects. Our individuation of such objects reflects our particular pragmatic interests, consistent with and constrained by our inherent abilities to distinguish, recognize, etc. such objects. And so too with propositional attitudes: There are such states, but they are aggregations of dispositions whose type individuation reflects our particular pragmatic interests in getting along in a social world where being able to predict, explain, and justify our actions, as well as being able to conceive of and present ourselves and others as rational beings, demands paying close attention to our various behavioral, cognitive, and affective dispositions.

Notes

1. See, for example, Davies and Coltheart (2000), Bayne and Pacherie (2005), Egan (2009), Bayne and Fernandez (2009), Pacherie (2009).
2. Cf. Bayne and Pacherie (2005): "delusions lack the kind of holistic character that beliefs are supposed to have: they do not interact with perceptual input, other cognitive states or behavior in the ways beliefs should" (165).
3. The traditional doxastic construal is expressed clearly in the *DSM-IV-TR* 2000 which defines delusion as "a false belief based on incorrect inference about

external reality that is firmly sustained despite what almost everyone else believes and despite what constitutes incontrovertible and obvious proof or evidence to the contrary" (821).

4. There are of course cases that run in the opposite direction as well, where we are inclined to describe someone as believing this or that, despite their sincere protestations to the contrary, for example, cases in which someone asserts with seeming conviction that their spouse would never cheat on them, but at the same time is forever searching furtively for evidence of cheating. And there are the quite common cases, which Schwitzgebel (2002) calls cases of "in-between belief", where subjects talk and act as if they simultaneously believe and don't believe something to be the case, (e.g. that they suffer from some terminal illness, that their child is guilty of some crime).
5. One common explanation of Capgras delusion (e.g. Coltheart et al. 2011) attributes it to lesions of the pathways between the sensory cortex and the amygdala, which deprives patients suffering from this delusion of the emotional experience that normally accompanies perception of a loved one, leading them to conclude, perhaps rationally, that the perceived loved one must in fact be an impostor.
6. Bem (1992) argues in a similar vein that it is an essential feature of our commonsense personality theory that we are able to tweak recognized trait typologies "on the fly" in order to provide accurate, illuminating descriptions of personality.
7. This claim is defended vigorously by Fodor (1987), Pylyshyn (1984), and Sterelny (1990). Fodor, for example, says: "*We have no reason to doubt – indeed, we have substantial reason to believe – that it is possible to have a scientific psychology that vindicates commonsense belief/desire explanation. [...] For there is already in the field a (more or less) empirical theory that is, in my view, reasonably construed as ontologically committed to the attitudes and that – again, in my view – is quite probably approximately true*" (1987,16; emphasis Fodor's). The crucial point here is Fodor's idea that scientific psychology is ontologically committed to the attitudes, a commitment would necessarily involve more than simply a commitment to mental representations with propositional contents.
8. This is the burden of Fodor (1987, chapter 1): "The Persistence of the Attitudes".
9. Egan (2009), for example, argues that "the behavior-guiding role of the belief-role isn't all-or-nothing. A single [belief] representation can play the behavior-guiding role that's distinctive of belief *sometimes* without playing it *all the time*" (285). Similarly, "representations of delusional content play a belief-like behavior-guiding role sometimes, with respect to some of their behavior, but do not play such a role most of the time, with respect to most of their behavior" (285).
10. I take it that the fact that propositional attitudes of a particular type figure in such law-like generalizations is *evidence* of their being a natural kind, not what "makes" them natural kinds.
11. A representational nativist such as Fodor might put this point by saying that commonsense psychological natural kinds inherit their explanatory/predictive efficacy from the innately specified causal-functional roles that the mental representations associated with different attitude types can play.

12. Schwitzgebel (2002) seems to suggest a social constructivist construal of the attitudes when he proposes construing belief in terms of "dispositional stereotypes", which he describes as "[capturing] something about how we think people *ought* to think, feel, and behave" (262), when he describes there being "a kind of social accountability to the stereotypes" (ibid).
13. The failure to make use of propositional attitude talk is not as disabling as we Westerners might at first suppose. Quechuan, for example, is an evidential enclitic language in which obligatory enclitics (verb suffixes) serve to mark much of the epistemic and justificatory information we Westerners mark by means of distinctions between different propositional attitude types, for example, between knowing, believing, and suspecting. Enclitics also explicitly mark claims as based on direct perception, reliable testimony or hearsay/rumor.
14. I say "so-called" because in looking versions of the test, children are asked not where a third person *thinks* or *believes* the hidden object is located, but simply where this person will *look* for the object, which entails nothing about the children's beliefs, except on a psychological model that presumes that the looking is a manifestation of belief.
15. The issues here are just the ones that in studies of animal cognition (especially of primates and corvids) separate cognitive ethologists like Michael Tomasello from animal experimentalists like Daniel Povinelli, the former insisting on propositional attitude descriptions that the latter finds theoretically overly committed to our culture's commonsense psychology.
16. There is in fact significant variability in cultural preoccupation with the subjects' psychological states (see Lillard 1998): Western European-based cultures are exceptionally so preoccupied.
17. Until recently, developmental psychologists assumed that young children of different cultures followed basically the same developmental path, one that these researchers typically measured in terms of certain developmental milestones in anticipating and predicting the behavior of others (one such milestone being the age at which children can pass the so-called "false belief test" mentioned above). But recent research has challenged this assumption, revealing significant variability in the age at which certain milestones are met, but also questioning the cross-cultural validity of the milestones themselves (Vinden 1999, Callaghan et al. 2006, Bauman and Sitka 2006, Sabbagh et al. 2006).
18. Schwitzgebel (2002: 258–60) credits Ryle being the first to recognize that the dispositions constitutive of belief are not simply behavioral but also cognitive and affective. Schwitzgebel also credits Ryle with the idea that believing is a matter of having the appropriate dispositional stereotype, arguing that the core idea of the Rylean account is that belief works in essentially the same way as personality traits, where having a certain trait is having a certain dispositional stereotype.
19. Bayne and Pacherie (2005) endorse Schwitzgebel's claim that his dispositionalist account can make sense of clinical delusion and cases of "in-between belief".
20. I address the problem of explaining what are taken to be the salient properties of propositional attitudes, notably semantic evaluability, intentionality, and inferential involvement in Matthews (2007, 2011).

21. They are primitive, that is, from the perspective of our culture's common-sense psychology, a psychology which includes trait psychology which is decidedly dispositional. Dispositions are arguably primitive from the perspective of our culture's ethnoscience more generally, but there is no reason to suppose that they are also primitive from the perspective of any developed science, psychological or otherwise. Dispositions, theoretically speaking, are pretty shallow.

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