Chapter Six

A Phenomenal, Dispositional Account of Belief

In this chapter, I offer what I call a phenomenal, dispositional account of belief. I call it a dispositional account because it treats believing as nothing more or less than being disposed to do and to experience certain kinds of things. I call it a phenomenal account because, unlike dispositional accounts as typically conceived, it gives a central role to first-person, subjective experience, or "phenomenology."

Dispositional accounts are usually thought to be motivated by a desire to justify talk about mental states by reducing it to talk about something that behavioristically-minded philosophers find less objectionable, viz. dispositions to behave. I want to make it clear from the start that this reductionist motivation plays no role my project. My aim in presenting this account is, as I hope became clear in the previous chapter, to describe a way of thinking about belief that is both faithful to the facts and useful for the purposes of philosophy and psychology — an account, especially, that can provide us with a framework for understanding subjects not accurately describable as either simply believing that P or simply not believing that P, subjects in what I have called in-between states of believing. It is not necessary for this purpose — in fact, it is positively

detrimental - to insist on reducing mental state talk to talk about anything else.

I will begin with a statement of the account. I will then discuss in-between states of believing in some detail. I will conclude with a discussion of the relations between the present account of belief and several other positions one might take regarding belief.

1. The Account

It will be helpful to begin by disarming several preconceptions the reader may have about accounts of belief that focus on the dispositions of the believer. I have already alluded in the introduction to two of these preconceptions.

First, as I suggested in the introduction, a dispositional account of belief need not aim at being reductive. It need not, in other words, aim to show how all talk about beliefs (in particular) or mental states (in general) can be transformed or "reduced" into talk about other, less objectionable things. It is rare in science to manage reductions of this sort, in which a whole range of discourse is shown to be replaceable by some other different kind of discourse. Fortunately, insight into scientific subjects does not seem to require such reductions. In describing the dispositions relevant to a belief, I will feel no compunction about appealing to dispositions that themselves involve beliefs. So, for example, relevant to Maurice's belief that smoking is dangerous is his disposition to recommend against it, if he believes that the recommendation will do any good.

A second preconception about dispositional accounts of belief is that they can only appeal to behavioral dispositions. Once a dispositional account of belief is unshackled from reductivist demands, however, the range of allowable dispositions broadens substantially. Dispositions to acquire new beliefs and desires, for example, would be perfectly acceptable. Especially important, in my view, are what I will call phenomenal

dispositions — dispositions, that is, to undergo certain kinds of subjective, phenomenal experiences, like a conscientious student's disposition to feel surprise and disappointment were she to get a B- on a paper. In calling my account a phenomenal dispositional account, I mean to be emphasizing the role these phenomenal dispositions play in belief.

A third preconception about dispositional accounts of belief has to do with what it is to have a disposition. Ryle, who launched contemporary interest in dispositionalism, made a point of arguing that dispositions are bare 'inference tickets,' licensing us to make hypothetical claims of the sort, "If P occurs, then Q will," but in no way warranting inferences about the existence of any non-dispositional states or facts underlying the dispositions in virtue of which the dispositional claims are true (Ryle 1949). Ryle's account of dispositions has since been the subject of much critical scrutiny (for a review, see Prior 1985), and there is no need to attach his particular view to dispositional accounts of belief in general. My dispositional account of belief is in fact quite compatible with a robust, anti-Rylean view of the physical and causal underpinnings of dispositional properties.

My account of belief employs the concept of a dispositional stereotype for a belief. The notion of stereotype to which I am appealing here is somewhat like that described in Putnam

(1975a).¹ A stereotype is a cluster of properties conventionally associated with a thing, class of things, or property. To use Putnam's example, stereotypical properties of tigers include their being striped and their being four-legged. Some things worth being classified as tigers — tigers dipped in ink, three-legged tigers — may not have all the stereotypical features of tigers; although such creatures may be tigers, they are not stereotypical ones. Indeed, we might discover that some of the stereotypical features of tigers are had by no tigers at all (for example, if it were part of the stereotype of tigers that they lived in African jungles). Stereotypes may in fact be broadly inaccurate, although this is not normally the case. Putnam points out that the stereotype for gold involves its being yellow, although chemically pure gold is more nearly white.

Understanding dispositional stereotypes also involves understanding dispositions. Prior (1985) again provides a useful review of contemporary positions. Without getting overly involved in the tangle of issues arising in the philosophical debate on the nature of dispositions, I would characterize a disposition by means of a conditional statement of this form: If condition C holds, then object O will (or is likely to) enter (or remain in) state S. O's entering state S we may call the manifestation of the disposition, and condition C we may call the trigger or condition of manifestation of the disposition.

Exactly what the connection is between O's having the

¹ The present concept of 'stereotype' does differ from Putnam's in associating stereotypes with things rather than with words, and in seeing it as a cluster of

dispositional property to enter state S in condition C and the truth of the conditional statement associated with that disposition is a matter of some debate, but as a rule of thumb, we may suppose that O has the disposition in question just in case the corresponding conditional statement is true. Thus, for example, salt has the dispositional property of being soluble in water because it is apt to dissolve (the manifestation) when placed in water (the trigger). Mirrors are disposed to reflect light because when light shines on them (the trigger), it reflects back (the manifestation). Carlos is disposed today to get angry when his car doesn't start because if his car doesn't start today, he is likely to get angry.

A dispositional stereotype, then, is a stereotype whose elements are dispositional properties. Consider, for example, the stereotype for being a reliable person. This stereotype will include the disposition to show up to meetings on time, the dispositions to follow through on commitments, to be prudent and careful in making important decisions, and so forth. Personality traits, such as being hot-tempered, courageous, tenacious, and so forth, are all characterizable by means of such dispositional stereotypes. To have these personality traits is really nothing more than to match these stereotypes. My core claim is that belief can be characterized in much the same way.

Thus, consider a favorite belief of philosophers: the belief that there is a beer in the fridge. A sample of the dispositions associated with this belief includes: the disposition to utter,

in appropriate circumstances, sentences like 'There's a beer in my fridge'; the disposition to go to the fridge if one wants a beer; a readiness to offer beer to a thirsty guest; the disposition to think to oneself, in appropriate contexts, 'There's a beer in my fridge'; an aptness to feel surprise should one go to the fridge and find no beer; the disposition to draw conclusions logically entailed by the proposition that there is beer in the fridge (e.g. that there is something in the fridge, that there is beer in the house); and so forth.

It is important to notice that no one of these dispositions is either necessary or sufficient for the possession of belief. Intuitively, it may seem that the disposition to feel assent to an internal utterance of P comes close to being a sufficient condition for believing that P; nevertheless, we must allow that people sometimes feel assent to utterances that it is not wholly accurate to describe them as believing, e.g., when they don't really understand what the utterance means or when they are "self-deceived." (I will discuss the case of self-deception in chapter seven.)

The list of dispositions that informed common sense is capable of associating with any given belief may be indefinitely long. I would not want my talk about "stereotypes" to suggest that we must already have associated with each belief each of these dispositions. Rather, think of the dispositional stereotype for the belief that P as consisting of the cluster of dispositions that we are apt to associate with the belief that P.

These stereotypes will be composed primarily of behavioral and phenomenal dispositions, although other sorts of dispositions, such as dispositions to acquire new beliefs and desires, will play a role as well. The dispositions belonging to stereotypes for belief will include all the behavioral and other dispositions typically referred to by those advocating standard "functionalist" accounts of belief (Putnam 1966; Lewis 1972, 1980; Fodor 1968), as well as many phenomenal dispositions that play at most a derivative role in standard, functionalist accounts — such as dispositions to feel surprised or disappointed and to make internalized utterances.

The reason I say that the stereotype consists of a *cluster* of dispositions is to bring out two ideas: first, that some dispositions are more central to the stereotype than others, and second that there may be vagueness and conflict regarding exactly which among the more peripheral dispositions should belong to the stereotype. Stereotypes are not thereby rendered useless: Rosch (1977) and Wittgenstein (1958) have argued that many of our most useful concepts depend on clustering properties together in this way.

A person who possesses all the dispositions in the stereotype for believing "There is a beer in my fridge" can always, on my view, accurately be described as having the belief that there is a beer in his fridge. A person who possesses none of the relevant dispositions can never accurately be so described. And, of course, bridging the gap between these two extremes is a wide

range of cases in which the subject has some but not all the dispositions in the stereotype. Roughly speaking, the greater the proportion of stereotypical dispositions a person possesses, and the more central those dispositions are to the stereotype, the more appropriate it is to describe him as possessing the belief in question. An additional element of vagueness is introduced if one accepts that having a disposition is itself not a simple yes-or-no matter.

To believe that P, on the view I am proposing, is nothing more than to match to an appropriate degree and in appropriate respects the dispositional stereotype for believing that P. The belief that P, in any organism, is whatever state of that organism that causes it to respond in ways that match the dispositional stereotype for believing that P. What respects and degrees of match are to count as "appropriate" will vary contextually and cannot be specified by any simple rule, and so must be left as a matter of judgment. I hope the numerous examples in this chapter and the next will help reveal what course such judgments tend to take. The view offered here does not imply, nor is it intended to suggest, that beliefs are

² An organism may then be said to "have a belief" just in case that organism is in a state that causes it to respond in ways that match the relevant dispositional stereotype. It is thus logically possible, on the definitions I have given, to believe that P but not to have the belief that P — if the organism matches the stereotype for believing that P but is not caused by any of its states to respond in the stereotypical ways. In a richly causal universe such as our own, however, believing that P and having the belief that P will always go hand in hand. If one is nonetheless concerned to close the logical gap between the characterizations I have given here, one might wish to alter the first sentence of the paragraph in the following way: To believe that P is to be in a state that causes one to respond in ways that match, to an appropriate degree and in appropriate respects, the dispositional stereotype for believing that P. I have no serious objections to such a definition of belief, although I think the definition in the text is simpler and for all practical purposes amounts to the same thing.

metaphysically secondary or that talk about them is somehow eliminable.

If a metaphor for talking about belief is necessary, I would prefer the metaphor of matching profiles to the container metaphor: Rather than thinking of P as the content of the belief that P, I would prefer to think of P as the profile of that belief. This allows, much better than the container metaphor does, in-between cases of the type that will shortly be occupying our attention. One's dispositions may have something of a P-ish profile, something of a Q-ish profile, or something in between; one's dispositional profile may match up quite precisely with P or it may be less exact a match. For a discussion of the infelicities of the container metaphor of belief, the reader is referred to the previous chapter.

Ceteris Paribus Clauses and Excusing Conditions

A substantial complication arises from the fact that common sense regards all these dispositions as holding only ceteris paribus or "all else being equal." Joe might believe there is beer in his fridge, but if he is particularly stingy with his beer, he may not have some of the dispositions described above — he may not, for example, be ready to offer a guest a beer or even to admit that there is beer in his fridge at all — but we wouldn't want to say that lack of these dispositions makes it any less accurate to describe him as having that belief. Behavioral dispositions seem particularly defeasible in this way, phenomenal

dispositions a bit less so: If we were to imagine that Joe was not disposed to feel surprise upon opening the fridge and noticing a lack of beer, this would generally seem to reduce at least to some degree the aptness of describing Joe as believing there is beer in his fridge.

In any case, the dispositions in the stereotype of a belief are best seen as defeasible, loaded with tacit "if" clauses, e.g., Joe is disposed to assent to utterances meaning that there is a beer in the fridge if he hears the utterance, if he has decided not to lie about the matter, if he understands the language in which the utterances take place, if he has the physical capacity to indicate assent, and so forth.

Note that in being ceteris paribus defeasible these dispositional claims are not different from many scientific and ordinary generalizations. Human beings are born with two legs if they have developed normally in the womb, if they don't have an unusual genetic make-up, if the doctor does not saw off a leg before removing the child, etc. Rivers erode their outside bank at a bend if the river is not frozen, if the bank is made of an erodable material, if there isn't a powerful fan in place preventing the water from touching the outside bank, etc. The ceteris paribus nature of such generalizations does not in these cases, nor I think in the dispositional case, hinder their productive use.

I leave it as an open metaphysical question whether the dispositions in question must always be manifested if all their

conditions of manifestation are met. If so, then dispositions must often have an indefinitely large number of tacit conditions: Condition C of the disposition's conditional characterization must, if completely fleshed out, be an indefinitely long conjunction. (I am presuming we do not want to cut the matter short by adding something like "and nothing prevents it" to the conditions of manifestation.) On the other hand, one may wish to include only a few conditions in the trigger for any given disposition, if one is not averse to the idea that dispositions do not always manifest themselves when their conditions are met (see Martin and Heil 1996). Attempting to resolve such questions would lead us away from our main project, since nothing in my account depends on such details.

A person may then be excused from a dispositional manifestation — i.e. not seen as deviating from the dispositional stereotype — if one of the tacit conditions of manifestation is not met or if the disposition is simply not manifested for some reason consistent with possession of the disposition, perhaps because it is blocked by another disposition. Certain types of conditions are regularly regarded as excusers, such as physical incapacity or the presence of a desire or situation that makes a particular manifestation prudentially inadvisable. If Joe's mouth is sealed shut, it does not count against his believing that there is beer in the fridge that he is unable to tell us so. Other conditions may be somewhat less excusing and are apt to propel us again into vagueness: ignorance about related topics

(e.g., Joe believes that Budweiser is not a type of beer), distraction by other cognitive demands, or apparent failure to reason correctly. If Joe knows there is only Budweiser in his fridge, but Joe does not think Budweiser is a type of beer, does Joe believe there is beer in his fridge? Those fond of the de re/de dicto distinction might remark that Joe seems to believe (de re) of a certain type of beer that it is in his fridge, but not to believe (de dicto) that there is beer in his fridge. This is only one way (and a questionable one: see Stich 1983; Dennett 1987) of trying to get a handle on intuitions that pull us in different directions in such cases.

One wants to find a single, unifying principle that can guide us in distinguishing cases of genuine deviation from excused non-manifestations. This is essentially a demand for a principle unifying all the *ceteris paribus* excusers from dispositional manifestation. I think the prospects for finding such a principle are slender, but a brief look at the question is nonetheless instructive.

Let us begin with examples. Certainly when there is a sense that the disposition in question would have manifested itself but for the presence of some hindrance external to the agent's mind, we are ready to grant excuses. If Joe doesn't offer beer to a guest only because someone with a gun to his head is telling him not to, we are hardly inclined to count his not offering beer as a mark against the accuracy of describing him as believing there is beer in the fridge. A general shutdown of the mind also seems

to be excusing: We don't blame Joe for not offering the beer if he has blacked out. On the other hand, if Joe denies having beer in his fridge when a guest requests some, and we cannot tag his denial on any external cause, nor on an intention to lie, nor on a misunderstanding of the question, there may be no explanation left other than to say he doesn't realize that there is beer in the fridge; if then, five minutes later, he turns around and offers his guest a beer, though nothing in the situation seems to have changed, we may be greatly puzzled. We look for some way to explain this "inconsistent" behavior: Perhaps he suddenly remembered there was beer in his fridge after all? What, then, are we to say about his belief five minutes ago - that he really did believe there was beer in his fridge, but only "in some corner of his mind"? Does it matter whether he would have recalled it then, had he only stopped to think more carefully about it? Even, however, if some of Joe's dispositions five minutes ago accorded with the stereotype, Joe's deviation from the stereotype at that time may have been symptomatic, in a way the deviations introduced at the beginning of this paragraph were not, of a systemwide likelihood of deviation from many aspects of the dispositional stereotype.

This last point may seem to hold some promise for the construction of a general principle differentiating excused non-manifestations from genuine deviations. In cases of linguistic misunderstanding, or of deliberate concealment, or of yielding to external pressures, failure to manifest the stereotypical

disposition does not seem to be symptomatic of a systemwide, behavioral and phenomenal nonconformity to the stereotype. Joe might well be thinking silently to himself, in any of these cases, "There is a beer in my fridge." We have no reason, in such cases, to expect a general non-adherence to the stereotype; there seems to be a natural containment of the deviation to a particular range of circumstances: If the gunman were to walk away, if his guest were to start speaking English, if Joe did not feel his precious beer threatened by the presence of a thirsty guest, we would again see a general conformity to the stereotype. One could even bring cases of general mental or physical shutdown under this umbrella, if one were to think of these conditions as particular, narrow circumstances. Perhaps, then, some idea of containment of the deviation could be drafted to serve as a general principle for identifying excusing conditions.

The question then arises, however, whether in putting forward such a principle we have added anything of substance to the account. Scientific and everyday generalizations are shown false by deviations that undermine our reasons for thinking the generalization is widely, approximately, or at least in "ideal" circumstances, right; we introduce ceteris paribus excusers in just those cases where we feel that a deviation from the generalization does not affect its overall validity. Introducing a rule, then, that says ceteris paribus excusers are to be admitted exactly when a deviation does not threaten the basic accuracy of the generalization is simply to state what is

implicit in the admission of *ceteris paribus* defeasibility from the beginning.

Clarifying this point helps us to see the two factors that come together in assessing deviations as potentially excused. The first factor is an empirical assessment of the likelihood of the generalization's broadly falling apart given that the deviation has taken place. The second is a practical understanding of the role of the generalization in one's cognitive structuring of the world. Where can one afford a certain amount of looseness in the generalization because the cases are marginal or covered by other generalizations, and where will one want to insist on a stricter adherence to the rule? No set of explicit rules seems to be able to guide us as well in making these assessments as does a well-practiced intuitive grasp of the generalizations in question. This lack of explicitly specifiable rules for separating excused from unexcused deviations from a generalization infuses even the most robust scientific theories (for examples in physics, see Cartwright 1983). Philosophers of science have learned to resist the temptation of attempting to spell out in full detail the ceteris paribus conditions for any substantive, specific scientific generalizations.

A failure to manifest a disposition, then, can either be excused or unexcused. When the failure is excused, the deviation detracts not at all from the accuracy of describing the person in question as having the belief. When the lack of manifestation is

not fully excused, the question of whether it will count as an important deviation - one that makes us hesitate to ascribe the belief or makes the belief ascription less apt than it could be will generally depend on the context in which the belief ascription takes place. Suppose, for example, that a child studying for a test reads, "The Pilgrims landed at Plymouth Rock in 1620," and remembers this. She is bit confused about what pilgrims are, though: She is unsure whether they were religious refugees or warriors or maybe even some kind of bird. Now, does she believe that the Pilgrims landed at Plymouth Rock in 1620? In some contexts - e.g., if we are talking about her likely performance on a history dates quiz - we might be inclined to describe her as believing this; in other contexts we would not. Note that I am not saying that the mental state of the child varies with context. Rather, given that the child deviates from the stereotype in some respects but not in others, how best to describe her mental state will depend on the practical demands of the moment.

This context-dependence is an important feature of the proposed account. Different dispositional properties will, in different contexts, be more or less crucial to decisions about whether to ascribe a particular belief or not, and in mixed cases failure to attend to the context of ascription can result in differing assessments of the appropriateness of a belief ascription. Such inattention to context may be partly responsible for much of the wavering and disagreement about how

to describe the kinds of in-between cases that are puzzling to those who approach these cases looking for all-or-nothing answers. Further examples of context-dependence in belief ascription will be developed as the discussion of belief continues.

The Importance of Phenomenology for a Dispositional Account Dispositional accounts of mental states are not, of course, new. Gilbert Ryle's The Concept of Mind (1949) began a trend toward regarding much of mental life as fundamentally dispositional or at least as dispositionally specifiable (Armstrong 1968) - or, not so differently, as "functionally specifiable" (Lewis 1972, 1980; Putnam 1966; Fodor 1968). (A dispositionally specifiable state is a state of an object, e.g., a brain, apt to bring about specified effects under specified conditions; a functionally specifiable state is a state of an object apt to bring about specified effects under specified conditions and to be produced by specified causes.) Others have argued for dispositional accounts specifically of belief, or specifically of unconscious, non-"occurrent" belief, independent of any broader dispositionalist or functionalist program (e.g., Searle 1992; Marcus 1990). None of these accounts (except perhaps Searle's, which is in any case limited to unconscious beliefs), however, appeal to phenomenal dispositions in their characterizations of belief.

The inclusion of phenomenal dispositions in my account ensures that the standard anti-behaviorist objections to Ryle's dispositional account of belief are inapplicable. The most compelling of these objections belong to a single genus, exploiting the loose connection between mental states and behavior (e.g. Chisholm 1957; Putnam 1963; Strawson 1994). Putnam, for example, imagines a society of "super-spartans" who feel pain but do not exhibit the range of behaviors typically associated with pain (except avoidance, which is not specific to pain). Similarly, Strawson imagines a species of "weather watchers" who have beliefs and desires about the weather but are not constitutionally capable of acting in any way on the basis of those beliefs and desires. Chisholm emphasizes that we should not describe someone as disposed to act in a certain way, given a particular belief, unless we grant that that person has other particular beliefs and desires. For example, though Jones may have the belief that his aunt will be arriving at the railroad terminal in twenty-five minutes, it is only true to say he is disposed to go there to pick her up if he wants to pick her up and if his beliefs about how to get to the railroad terminal are not too deeply confused. Full conditions for the possession of any particular belief or desire can never be given in terms of behavioral dispositions alone; appeal to some other aspect of the subject's mental life will always be necessary.

The appeal to phenomenal dispositions gives the dispositionalist about belief a clear and natural way around

these objections. Putnam's super-spartans and Strawson's weather watchers, though they lack the manifest behaviors associated with believing, still have the phenomenal life attending belief - if they did not, there really would be no reason to regard them as believing. Furthermore, they have clear, typical excusers from behavioral manifestation: contrary desires in the case of the super-spartans and incapacity in the case of the weather watchers. We can also grant Chisholm his point: There is no way to analyze away mental life in favor of behavioral dispositions or to replace all talk of belief with some other kind of talk. These are behaviorist aims not naturally suited to a nonbehavioralist dispositionalism. Since it is no part of phenomenal dispositionalism to bring about these ends, it is no objection to phenomenal dispositionalism that it is impossible to do so. Nevertheless, it is interesting to observe that at least some phenomenal dispositions have quite a tight connection between trigger and manifestation. A person who believes that Pwill normally feel assent to an internal utterance or verbal image of a sentence expressing P in her own language regardless of what else is true of her; similarly for her feeling surprise at discovering that P is false. If she is not disposed to feel assent toward the thought that P or feel surprise at finding Pfalse, we rarely allow excusers: These are central cases of deviation from the stereotype. 3 (We may nonetheless want to ascribe the belief if the subject matches the stereotype in

 $^{^3}$ Assuming that a person has privileged access to her own phenomenology, we may have here the beginnings of an explanation of the high accuracy of first-person belief

enough other respects, which is part of why feeling assent to an utterance of P is not equivalent to believing that P.)

A Thought on Ryle

I would like to conclude this section with some remarks about Ryle, the intellectual forefather of dispositionalism about mental states. Although he is typically viewed as a behaviorist for whom appeal to phenomenal dispositions would be strictly out of court, his case may be more ambiguous than it first appears. Ryle certainly stresses the importance of behavioral dispositions and downplays the importance of phenomenal ones, sometimes even seeming to suggest that we could do without the latter entirely. Nevertheless, Ryle admits the relevance of such things as "silent colloquies" that others could not possibly overhear (1949, p. 184) and tunes in one's head consisting of "the ghosts of notes similar in all but loudness to the heard notes of the real tune" (1949, p. 269). For such reasons, Stuart Hampshire, one of Ryle's earliest critics and most careful readers, regards Ryle has having an "ambiguity of purpose" regarding the reduction of assertions about mental life entirely to statements about behavior (Hampshire 1950, p. 249). Despite his reputation, Ryle at times seems committed to the importance of internal, firstperson phenomenology.

In light of this possibility, Ryle's short discussion of belief is interesting:

ascriptions.

Certainly to believe that the ice is dangerously thin is to be unhesitant in telling oneself and others that it is thin, in acquiescing to other people's assertions to that effect, in objecting to statements of the contrary, in drawing consequences from the original proposition, and so forth. But it is also to be prone to skate warily, to shudder, to dwell in imagination on possible disasters and to warn other skaters. It is a propensity not only to make certain theoretical moves but also to make certain executive and imaginative moves as well as to have certain feelings (1949, p. 134-135).

If we set aside for a moment the standard picture of Ryle as bent on reducing all talk about mental life to talk about behavioral dispositions, this passage begins to look rather like an appeal to a mix of behavioral and phenomenal dispositions. Perhaps a bit optimistically, then, I would like to claim Ryle as the first (albeit wavering) advocate of phenomenal dispositionalism about belief.

2. Mixed Sets of Dispositions

The dispositional account of belief deals quite naturally with in-between cases of believing, cases in which it seems not quite appropriate to describe the subject as either fully believing or not believing the proposition in question. In this section, I provide a few examples of such mixed cases and sketch some of the patterns into which they tend to fall. One of the central advantages I want to claim for the dispositional account is its facility in handling such cases.

Two Examples

Ellen studied Spanish for three years in high school. On the basis of her studies and her exposure to such Spanish words as 'mesa,' 'niña,' 'oreja,' and 'vaca,' she is willing, sincerely and cheerfully, to assent to the claim that all Spanish nouns ending in 'a' are feminine. Ellen has, however, occasionally come across certain words ending in 'ista,' such as 'anarquista' and 'bolchevista,' that can be used either as masculine or feminine (depending on the gender of the anarchist or bolshevik), and she uses them correctly as masculine when the situation demands. She would not assent to the claim that all Spanish nouns ending in 'a' are feminine if an 'ista' word came to mind as a counterexample; nevertheless, in most circumstances she would not recall such counterexamples.

 $^{^4}$ Stich (1983) is a good source of further cases, though Stich does not endorse a dispositional account of belief.

Does Ellen believe that all Spanish nouns ending in 'a' are feminine? Some of her dispositions accord with that belief; others do not. Whether it seems right to ascribe that belief to her varies contextually, depending on what dispositions interest us most. If we are considering which side she might take in a debate on the subject, it seems acceptable to say that she does believe that all Spanish nouns ending in 'a' are feminine. the other hand, if we are interested in her skill as a speaker of Spanish and the likelihood of her making embarrassing gender errors in speech, it seems inappropriate to ascribe that belief to her. If we want to describe her cognitive state on the topic as carefully as possible, probably the best thing to do is to refuse to put the proposition "all Spanish nouns ending in 'a' are feminine" either simply in or simply out of some imaginary "belief box" in her head, and instead to sketch the mix of her dispositions as I have just done.

Geraldine's teenage son Adam smokes marijuana. Usually
Geraldine is unwilling to admit this to herself, and sometimes
she adamantly denies it. Eating lunch with a friend, Geraldine
can deplore her friend's parenting because of his daughter's drug
problems while denying in all sincerity that Adam has any similar
problems. Yet she feels afraid and suspicious when Adam slouches
home late at night with bloodshot eyes, and when she accuses him
of smoking pot, she sees through his denials. In a certain kind
of mood, she would tell her therapist that she thinks Adam smokes
marijuana, but in another kind of mood she would genuinely recant
such a confession. When Geraldine's husband voices concern on

the topic, Geraldine sincerely comes to her son's defense. What does Geraldine believe on the subject? Again, someone insisting on a simple "Yes, she believes he smokes marijuana" or "No, she doesn't" will be hard-pressed. Perhaps we could say that her beliefs on the subject change from situation to situation: When she is denying that her son smokes pot, she sincerely believes that he does not; when she is watching him creep in at 2:00 a.m., she sincerely believes that he does. But what does she believe now, while she's working intensely on a client's account and not giving the matter any thought? A simple yes-or-no answer seems misleading at best. Even if we want to describe her as self-deceived, she is at best only partially self-deceived, since there are conditions under which she would unhesitantly acknowledge that her son uses marijuana.

The cases of Ellen and Geraldine are not meant to depend on any lack of knowledge about their mental states, though lack of knowledge is a common source of hesitation in belief ascription. I do not want the reader to think I am putting forward an argument of the form: We cannot know what Ellen and Geraldine "really believe"; therefore, there is no fact about what they really believe. Rather, these examples are meant to be cases in which we know that the subject deviates partly from the stereotype for believing that P. I hope that, with these examples vividly before us, the reader will agree that in such cases, the person is in a state that cannot be quite accurately described as either simply believing or simply not believing that

P, and that a dispositional description of the subject's mental state adequately captures the facts.

Although some cases that are unmanageable on an all-ornothing, Simple-Question view of belief become manageable simply upon recognition of degrees of belief, cases such as those described above do not yield to this approach. It is not that Ellen and Geraldine simply have a low degree of confidence (say .6 on a scale from 0 to 1) on the topic in question. Rather, they are disposed to feel in some situations quite confident in asserting one thing, while at the same time they are disposed to feel in other situations quite confident in asserting its opposite. The doxastic situation is far from the kind of steady uncertainty that one might feel, for example, about the outcome of a sporting event or the turning of a card. In light of this fact, it may be helpful to introduce some new terminology. view of belief as simply an all-or-nothing matter we may call the digital view; the view of belief as always smoothly describable by particular degrees of confidence we may call the analog view. The cases on which I focus in this chapter are those unmanageable by either of these views. The dispositional account recommends handling these cases by describing in what ways the subject's dispositions conform to the stereotype for the belief in question and in what ways they deviate from it. Further questions may then be raised about the reasons for the match and mismatch of particular dispositions to the stereotype, opening avenues for both scientific research and everyday inquiry.

Normativity and Patterns of Deviation

The usefulness of classifying people's mental states by appeal to stereotypical dispositional patterns depends on the tendency of people to adhere to these patterns. If cases such as Ellen's and Geraldine's were the norm, the dispositional stereotypes of belief would have little purpose. As a general rule, however, people who conform to some parts of the stereotype are apt to conform to other parts also. Deviation from the stereotypes tends to fall into particular patterns as well, a few of which I will sketch briefly below.

The stereotypes capture more than merely statistical regularities, however. They capture something about how we think people ought to feel and behave. Something about Ellen's and Geraldine's phenomenology and behavior strikes us as normatively lacking, as incoherent or confused. We feel that if Ellen and Geraldine correctly reasoned things through, they wouldn't deviate from the dispositional stereotypes in the way they do. The conditional runs the other direction as well: Failures of reason will generally entrain failures to conform to the stereotypes.

This is not to say that conformity to all elements of the stereotypes is required by reason. For example, we can hardly convict someone of poor reasoning simply for not feeling disappointment upon suddenly learning that P, on which he had greatly counted, is false — strange though it may be in some

cases and contrary to the stereotype. At the same time, however, something about such cases leaves us uneasy. Our folk psychology and everyday dealings with other people are so thoroughly dependent on the accuracy of these stereotypes that perhaps there is a kind of social accountability to the stereotypes that pervades even those aspects of the stereotypes not shored up by the norms of reason. This, I think, is especially evident in the stereotypes associated with desires and personality traits, which are less thoroughly accountable to the strict demands of reason, and which consequently allow more room for social accountability to come undisguised into play. A person who is disposed greatly to enjoy ice cream on some occassions but to detest it on others, with no clear excusing conditions (such as detesting it only in times of grief), engenders a similar type of discomfort. We want to know whether, really, deep down, she likes ice cream or not. We want to fit her into our stereotypes, and there is some pressure on her actually to do so.⁵

Certain patterns of deviation, however, are pervasive enough that they don't at all strike us as strange, and in such cases we are much less likely to bring normative pressures to bear. A person's motor behavior and expectations might accord with a belief that P, but not most of her inward and outward verbal dispositions, as might be the case, for example, with a skier who always shifts his weight to the inside edge of the downhill ski X^o through a turn but who could not tell anyone that this is what

 $^{^5}$ This topic is pursued in greater detail in Schwitzgebel and McGeer, "Psychological Dispositions: Revising the Philosophical Stereotype," unpublished MS.

he does. Alternately, people are often disposed to recognize and agree with assertions that P and able to answer correctly a question like "P? Yes or no?" yet not able to come up with P as an answer to a more open-ended question or to act upon the truth of P when uncued. My dispostions regarding the last names of many of my acquaintances from college follow this pattern. As a general rule, the more closely a mixed dispositional set matches a familiar pattern of deviation, the less puzzling it appears to us. At the other end of the spectrum would be cases in which the subject's dispositions regarding P vary widely in no recognizable pattern at all. In the extreme, we would have to describe such cases as insanity.

A careful account of such in-between cases will describe exactly in what respects the subject deviates from the stereotype of the belief in question and in what respects the subject accords with that stereotype (and, if relevant, with what degree of frequency such deviations will occur); it will look for a recognizable pattern in these deviations; and it will indicate which dispositions should count, in the present context, as the most important ones to the assessment. It may or may not have a normative element of the sort described in this subsection.

Deviation and Developmental Psychology

The dispositional account set forward in this chapter is especially useful for those interested in developmental psychology, since children, even more than adults, are apt to

have mixed dispositional states. Recall from chapter two Smith's daughter Zoë and her developing belief that her father is a philosopher (Smith 1982), or think of any belief ascription to a child where the concepts invoked do not much resemble the child's own. Although I argued in chapter two that belief ascription in such cases is often necessary and useful, the match to the dispositional stereotype is less than might be desirable. In such cases, as is true generally, whether a particular belief ascription is appropriate depends on the degree of match between the subject's dispositions and those dispositions in the stereotype that are important in the context.

The question of how well a child's dispositions match a given stereotype becomes even more difficult in discussing the general - one might say "theoretical" - beliefs of young children. Do three-year-olds, for example, think that beliefs can be false? (We might want to say that without this belief the child cannot have the concept of belief at all; see my treatment of this issue in chapter two.) As discussed in chapters two and four, there are respects in which their phenomenal and behavioral dispositions fail to accord with the stereotypes for this belief (Gopnik and Astington 1988; Wimmer and Perner 1983; Perner 1991b). At the same time, there are respects in which their behavior does accord with the stereotype. Researchers have found precocious behavior on after-the-fact explanatory tasks (e.g. "Why did she look under the piano instead of under the table?"; Wellman 1990) as well as when the experimenter conspires with the child to "trick" someone (Sullivan and Winner 1993; disputably

Hala, Chandler, and Fritz 1991). Although the preponderance of three-year-olds' dispositions do not seem to accord with the belief that beliefs can be false, it could be misleading simply to deny them this knowledge without qualification.

Similar examples abound. Piaget (1954) has argued, on the basis of reaching behavior, that five-month-old children do not believe objects continue to exist outside their perceptual fields, while Baillargeon (1987) and Spelke et al. (1992) have argued the contrary on the basis of the infant's looking behavior. (I will examine this case in more detail in the next chapter.) Or consider: At what age do children understand the past tense, given that their ability to use it is gradually acquired and generalized? In fact, every genuine case of Piagetian décalage — difference in timing between the development of skills tapping the same fundamental knowledge — can be described as a case of mixed dispositions regarding that fundamental knowledge.

A temptation arises in such cases to think that there must be a moment at which the child genuinely understands the facts in question and thus to think that apparent earlier expressions of the knowledge must be artifactual and that lapses afterward must be due to inaccessibility of the belief or "performance" (as opposed to "competence") difficulties. While skeptical inquiry into such potential shortcomings of developmental research is a sine qua non of good scientific method, it is unwarranted to insist adamantly that there must be such failures of methodology

when different tests point to development at different ages of capacities tapping the "same knowledge." The latter insistence rests on the mistaken presupposition that such knowledge is unitary and acquired all at a moment rather than through a gradual, asynchronous shifting of a broad range of dispositions over a substantial span of development, as would seem on reflection to be the case, at least for the child's most general, theoretical beliefs. The dispositional view of belief recommends a willingness to give up finding a simple answer to the question, Does the child really believe that such-and-such?

Talking about beliefs is scientifically useful because people with some of the dispositions in a stereotype will tend to have many of the other dispositions in that stereotype. Because of this, we can make generalizations and inductions on the basis of these stereotypes, and it is enormously convenient, even indispensible, to appeal to stereotypes in describing our mental lives. Still, when the match between stereotype and dispositional set does break down, as will often happen with young children and in cases of self-deception, in cases where things are not fully thought-through, and in many more cases besides, simple belief talk may no longer be appropriate, and appeals to the stereotype may have to be replaced with more complicated appeals to specific dispositions and sets of dispositions. And once the phenomenal and behavioral dispositions are made clear, it is a mistake to think there is

still some further question to be answered, namely, What does the subject really believe?

A Short List of Patterns of Deviation

It may be helpful to conclude this section by describing at least a few common patterns of deviation. This list is by no means exhaustive. How irrational the deviations on this list appear to us seems to be at least roughly proportional to the extent to which the subject could, by simple reflection, bring himself into line with the stereotype. Thus, "modularized believing" does not tend to strike us as particularly irrational, while "unreflective inconsistency" is more likely to strike us that way.

Modularized believing: It is common for a subject's dispositional profile to match that of the stereotype in a narrow area (or "domain") of expertise, but to deviate from the stereotype in most other domains and particularly with respect to the disposition to assent to P in inner speech. The example of the skier's knowledge of when to turn is meant to be an instance of this. In some cases, the dispositional profile can be brought into line with the stereotype by practice and reflection (see Karmiloff-Smith 1992), but often this will not be the case.

Unconscious beliefs: The history of psychoanalysis suggests that a subject may match a stereotype for believing that P in being disposed to claim that P under hypnosis or in free-association or in other of the techniques of psychoanalysis; and

the subject may exhibit hysterical or destructive symptoms that seem somehow consonant with a belief that P, though distorted; yet that subject may not be willing under normal circumstances to assent to P, even privately, because there is something unpleasant to the subject about the thought that P (see, e.g., Freud 1977). This idea has been generalized into the popular notion of the unconscious, according to which a person may be disposed to act in a variety of ways in accordance with the stereotype for believing (or desiring) that P, yet because of the unacceptability of the thought that P, not be disposed to admit to herself that P is the case. Different people may assess differently the frequency of such cases, though it seems hard to deny that they at least sometimes occur.

Self-deception: Cases classified by folk psychology in the category of "self-deception" may be a subset of cases of unconscious believing. Geraldine's attitude toward her teenage son may fit, imperfectly, into this category of deviation. In chapter seven, I will examine the case of self-deception in more detail.

Unreflective inconsistency: A subject may deviate from a stereotype simply because she fails to put two and two together. Ellen's case fits into this pattern. She matches the stereotype for believing that all Spanish nouns ending in 'a' are feminine in just those cases in which she is not reminded of a few exceptional nouns, and she deviates in cases in which those nouns become salient to her. We might suppose that with sufficient

reflection, Ellen would soon come to match fairly exactly the stereotype for believing that not all Spanish nouns ending in 'a' are feminine. In cases of this sort, one would expect a match to the stereotype for believing that P in just those cases in which the reasons against believing P are not salient.

Peripheral ignorance: Sometimes a person may fail to match a stereotype due to ignorance of related topics. Examples of this include the child who is uncertain about who the Pilgrims were and the case in which Joe believes there is Budweiser in the fridge but does not believe that Budweiser is a type of beer. Everyday intuition seems to be fairly competent at determining what the dispositional effects of any particular type of peripheral ignorance might be.

Developing beliefs: This type of deviation would seem to be closely related to the previous two. Acquiring a network of knowledge in a particular domain and forging that knowledge into the kind of coherent structure necessary to match consistently the stereotype for various beliefs in that domain necessarily takes a certain amount of time. During this period of transition the subject cannot be expected to match completely the stereotype for the developing belief. This position finds support in Vygotsky's (1962, 1978) argument that children do not instantly acquire major new abilities and understandings, but rather must pass through a period during which they can exercise the knowledge or ability only with prompting or with proper structuring of the environment. As the child develops, less and

less of this external "scaffolding" is necessary for the child to meet with success, and the child passes to fully developed competency. In chapter seven I will examine two developmental cases in some detail.

Partial Forgetting: The process of forgetting or unlearning, in some ways the opposite of belief development, also does not take place all at once. I am in the midst, the reader will recall, of forgetting the last names of many of my college acquaintances. Some time ago, I could have rattled off their names easily; then it took more effort and sometimes the names did not come; now I can recall those names only with a prompt of some sort; perhaps later I will be able to pick them out in a forced-choice test; when I am eighty, I probably will not have any knowledge of them at all. The more demanding the recall situation and the fewer the prompts provided, the less likely someone in one of these intermediate stages of forgetting is to adhere to the stereotype of the belief that is being lost.

3. A Concern about Phenomenal Dispositionalism about Belief

Functionalists such as Lewis (1972, 1980) and Putnam (1966), as well as externalists about belief content such as Putnam (1975a), Burge (1979), and Davidson (1987), argue that the "content" of a belief is individuated not only in a forward-looking way, that is, by the phenomenology, behavior, and mental states it is apt to produce, but also at least in part in a backward-looking way, by how it came about (or at least how states of its type are apt to come about). In other words, both groups of philosophers highlight the importance of looking back at the causes of beliefs in determining their content. Won't the dispositionalist account run against the arguments invoked in favor of the backward-looking elements in these accounts?

Externalism and Phenomenal Dispositionalism

Externalists about belief hold that whether a subject believes that P, or whether the subject believes, instead, that Q, depends, at least sometimes, on facts about the world external to the subject herself. I will shortly describe an example. The dispositional account offered here is in fact compatible with our intuitions in the kinds of cases typically invoked to support externalism. In fact, the view comports more exactly with our intuitions in such cases than do the standard externalist views.

Consider Putnam's (1975a) example of Twin Earth, a planet identical to Earth in every respect except that where Earth has water, Twin Earth has twater, indistinguishable from water by any

of the tests available to inhabitants of Earth or Twin Earth but in fact a different chemical compound than H_2O . Wayne from Earth and Dwayne from from Twin Earth are molecule-for-molecule identical to each other (one might even suppose that Dwayne, through some freak occurrence, happens to be 90% genuine water). It seems intuitive to say that, despite the similarities between them, Wayne has beliefs about water, not twater, since that is what he interacts with on Earth, and Dwayne has beliefs about twater, not water (though both will, of course, use the word 'water' to describe what they see). If this is right, then it appears that the content of one's beliefs depends not only on what is in one's head, but also on one's environment and in particular on how one's beliefs were caused.

At first glance, it might seem that Wayne and Dwayne, being molecule-for-molecule identical to each other, could not possibly have different dispositions and thus must have the same beliefs on any dispositional account of belief. If this were so, then indeed the dispositional account of belief would run contrary to our intuitions in Twin-Earth-like cases. This would be unfortunate, perhaps, but not fatal: There is no guarantee that the most useful scientific or philosophical understandings of mind will accord with folk intuition in every respect. As it turns out, however, dispositionalism about believing is compatible with such externalist intuitions, since dispositional

 $^{^6}$ Fodor's (1981) position of "methodological solipsism" (expanded from Putnam 1975a) is interesting in this respect, though he later revises it (1994). Roughly, it is the view that something like the folk concepts of belief, desire, etc. are appropriate for psychological theorizing about the mind, but these concepts must be purged of any of their externalist consequences.

properties themselves may be defined in part "externally," i.e., with reference to the organism's past or its environment. Only Wayne has the disposition to regard a present instance of water as an instance of the same kind of stuff Wayne drank as a child. Only Dwayne has the disposition to use the word 'water' intending to refer to the same kind of stuff people in his community on Twin Earth refer to by using that word. Someone who believes that the meaning of a sentence is in part determined by factors external to the individual uttering those sentences has an additional pool of externally individuated dispositions to draw from in distinguishing Wayne from Dwayne. When Wayne utters the sentence 'water is clear and potable,' he is uttering a sentence that means water is clear and potable; when Dwayne makes exactly the same sounds, he is uttering a sentence that means twater is clear and potable. Thus, if sentence meaning is in part determined by external factors, Wayne will be disposed to say one kind of thing, while Dwayne will be disposed to say quite another.

So there are at least some dispositions Wayne and Dwayne do not share. The question about whether we should describe them as having the same belief, then, depends on whether these differences are regarded as important enough in the context of ascription to warrant differential treatment of Wayne and Dwayne. If one chooses to focus on utterance meanings, and if these are individuated externally, or if one focuses on dispositions invoking one's past or one's community, one can fairly readily be

drawn into regarding the two men as having different beliefs. If one focuses instead on what it is like from the inside, on phenomenology and motoric behavior, and especially if one is not an externalist about linguistic meaning, one may find oneself drawn in the internalist direction. An internalist dispositionalist would hold that externally individuated dispositions are never relevant, for the purposes of philosophy or science, to the assessment of belief.

Although Putnam makes a good case for the intuitiveness of describing Wayne's and Dwayne's beliefs differently (similarly for Burge and Davidson with respect to their examples), in some contexts the intuitions are not so clear. For instance, let us suppose that Wayne and Dwayne are both environmental engineers working on a large water-treatment project. Miraculously, Wayne and Dwayne are teleported to each other's worlds. Wayne's coworkers may be concerned about Dwayne's ability to continue with the project. Doesn't it seem right to say that they shouldn't worry because Dwayne's beliefs on the processes of water treatment are exactly the same as Wayne's?

Given that our intuitions on the Twin Earth and the other externalist cases are somewhat ambivalent and context dependent, as I think they are, then the dispositional account of belief I have offered has an advantage over standard externalist accounts of such cases, since it provides room for such ambivalence and allows us to predict contexts in which the intuitions may go one

 $^{^{7}\ \}mathrm{Dretske}\ (1995)\,,$ however, argues that even phenomenal experiences should be individuated externally.

direction or another. In the water-treatment case, the dispositions Wayne and Dwayne do share are the focus of concern, and so the dispositionalist account would predict an inclination to regard the two as having the same belief. In another case, perhaps where we are particularly concerned with what kind of stuff Wayne and Dwayne intend to pick out by means of their word 'water,' the dispositionalist account may pull in the externalist direction (depending on whether you think Wayne's and Dwayne's words do refer to different kinds of stuff). Whereas the dispositionalist account can accommodate intuitions pulling in both directions and to some extent predict on the basis of context in which direction our intuitions will be pulled, standard externalist accounts must stand fast with an unchangeable answer: that what Wayne and Dwayne believe really is different; thus externalists are forced to try to explain away internalist intuitions the dispositionalist account handles quite naturally.

Functionalism and Phenomenal Dispositionalism

What about functionalist arguments for the necessity of invoking backward-looking as well as forward-looking criteria for belief individuation? Functionalists hold that what makes a state a belief is its causal role in the system in which it takes a part, or the causal role that states of its type typically play in systems of the type in which it takes a part (Lewis 1980; Shoemaker 1981; Block 1978). A state's causal role has both

forward-looking and backward-looking components — it is both apt to be caused by certain kinds of events and apt to cause certain kinds of events. Pain is the favorite example: It is apt to be produced by, among other things, pinchings, pokings, fire, pressure, and bodily injury, and it is apt to produce, in turn, groaning, writhing, disrupted thoughts, and avoidance. Although it is common for functionalists considering the individuation of mental states to argue for the importance of causal role generally, it is not as common to find arguments for the importance of including the backward-looking elements of causal role as opposed to including only at the forward-looking elements.

Shoemaker is an exception. He begins his 1981 paper with an attack on behaviorism like Chisholm's (1957) attack discussed above: Because how one's beliefs dispose one to behave depends on one's desires and how one's desires dispose one to behave depends on one's beliefs, it will be impossible to reduce talk about mental states to any other kind of talk so long as one appeals only to behavioral dispositions. Shoemaker, however, does take as his aim the redefinition of mental predicates in terms of predicates containing no mental predicates. Shoemaker says,

Let us say that a state (mental or otherwise) is functionally definable in the strong sense just in case it is expressible by a functional predicate that contains no mental predicates (or mental terminology) whatever.... It is functional states in this sense which functionalism takes mental states to be (1981, p. 95).

So long as one's task is to provide for mental states functional definitions in this strong sense, post-Rylean, anti-behaviorist

arguments like Chisholm's show that mere appeal to forward-looking dispositions will not do. Functionalists appeal, therefore, not only to dispositions to behave but also to the typical physical causes of mental states and also to the causal relations between mental states, on the understanding that the whole bundle of mental states, taken together, can in principle be characterized wholly in terms of physically (or at least non-mentally) described inputs and outputs (Lewis 1972; Block 1978). Since it is not part of the project of phenomenal dispositionalism to characterize mental predicates by means of non-mental predicates, the functionalist's reasons for wanting to appeal to the backward-looking relations of mental states do not apply.

Perhaps, however, there is some warrant for a revised functionalism that characterizes and individuates mental states both dispositionally and in terms of how they are apt to come about, but at the same time does not require that mental predicates be in-principle characterizable by non-mental ones — a functionalist account, in other words, that does not treat phenomenology simply as falling out of the functional relations but rather treats phenomenology as itself one of the relata. I have no serious objections to such a view, although in the case of belief in particular I am inclined to make the stronger claim that once one takes phenomenal dispositions seriously, an adequate characterization of what it is for a subject to believe something does not require appeal beyond the dispositional

features of the subject's mental life. To argue otherwise would require quite a different set of objections than can readily be drawn from the functionalist literature.

4. Beliefs, Causation, and Explanation

Joe rises off the couch and heads for the fridge.

Intuitively, we explain this behavior by appealing to various mental states of his: He feels thirsty. He wants a beer. He thinks that there is a beer in the fridge. Moreover, we hold that these mental states are causally effective in getting him to the fridge. In general, it is supposed, mental states like belief both cause and explain much of our behavior.

Many philosophers of mind today accept something like this intuitive picture. Thus, for example, Fodor regards it as an essential feature of mental states like belief that they cause behavior and can be invoked to explain it (1987, p. 12-14). One of the primary tasks of Dretske's 1988 book is to show how states with indicative content, like beliefs (see above, chapter four), can cause and explain behavior. Searle (1984) also argues that beliefs play a crucial role in causing and explaining behavior.

I accept this picture of belief, although I would hasten to add that beliefs cause and explain phenomenology (and other internal changes) as well as behavior. Nevertheless, several people have objected that a dispositional account of belief leaves no room for belief to play such a causal and explanatory role. If believing just is being disposed towards certain behavior and phenomenology, the objection goes, it is illegitimate to say that beliefs cause or explain that behavior and phenomenology. The objection has even more bite if we take the explanandum to be itself a disposition. It seems natural,

for example, to explain the disposition to assent under certain circumstances to utterances of the form "P?" by appealing to the fact that the subject believes that P. But if believing that P just is a matter of having such dispositions, then seemingly the belief cannot be invoked to explain the presence of those same dispositions.

I will break my response to this objection into several parts. First, let us consider the question of whether a belief, regarded as a disposition to manifest certain phenomenology and behavior, should be thought of as causing that phenomenology and behavior when it is manifested. If a negative answer is urged to this question, presumably it is done so on the basis of a general commitment to the position that dispositional states do not cause their manifestations. Consider, then, the general question of whether dispositions can cause their manifestations. For concreteness, consider the case of solubility. (Solubility is indisputably regarded as dispositional: Something is soluble in water just in case it is disposed, under normal conditions, to dissolve in water.) Is something's solubility in water (the manifestation)?

Philosophers interested in the metaphysics of dispositions are, in fact, divided on the question of whether dispositions cause their manifestations. David Armstrong (1968, 1969) and William Rozeboom (1978) have argued that dispositions do cause their manifestations. They argue for the point in essentially

⁸ This point has been put to me most vividly by Max Deutsch and John Searle.

the same way, although Rozeboom adds several complications absent in Armstrong. The argument runs like this. For every dispositional property, there must be some categorical basis -- i.e., some non-dispositional property causally responsible for the dispositional manifestation when the triggering conditions are met. But, in fact, the dispositional property is nothing over and above its categorical basis; indeed, it is to be identified with it. Since categorical bases, by stipulation, cause dispositional manifestations, so also do dispositions. On this view, then, beliefs regarded as dispositions can cause their phenomenal and behavioral manifestations, and one version of the objection mounted two paragraphs back is defeated.

Another view of dispositions denies the existence of categorical bases for dispositions. Ryle (1949) is typically read as holding such a view (e.g., by Armstrong 1968; Mackie 1973; Prior 1985). A proponent of this view regards claims about dispositional properties as bare conditional claims, asserting a connection between trigger and manifestation, but requiring no commitment to the existence of an underlying property responsible for the maintenance of that connection. On this view, it would appear that dispositions do not cause their manifestations. If a disposition is simply a regularity or the obtaining of a conditional fact, it cannot be a cause, for although regularities and conditional facts may suggest the existence of causal relations, it seems that they are not the right sort of things themselves to be causes.

Armstrong (1969) and Elizabeth Prior (1985) have argued against the Rylean view, contending that it flies in the face of the common intuition that there must be something in the world that makes the dispositional claims true, some persisting feature of the object to which the dispositional property is ascribed that causes the manifestation when the triggering condition is I accept their argument on this point. In any case, the old Rylean view of dispositions without bases has something of a verificationist feel that sits at best uncomfortably with the realist talk of beliefs as causes of behavior that is presupposed by the objection I am addressing. After all, if dispositions can be manifested without the existence of some underlying cause in the object that has the dispositional property, then presumably human behavioral and phenomenological dispositions can operate the same way; and if they can, then the case for the existence of beliefs as causes of such behavior and phenomenology is on shaky ground. Either such behavioral and phenomenal dispositions have no categorical basis, in which case we ought not think that they are the causal result of some belief, or they do have a categorical basis, in which case the Rylean approach to these dispositions is out.

A third view of dispositions grants the existence of categorical bases for dispositions, but refuses to equate dispositions with those bases. Prior (1985), for example, advocates "functionalism" about dispositions, on which a dispositional property is a higher-order property -- the property of having one or another non-dispositional property, or basis,

that plays the causal role of producing the manifestation when the triggering conditions are met. On Prior's view, the categorical basis for any disposition is a sufficient cause of the manifestation, given the triggering condition, and therefore the dispositions themselves cannot cause their manifestations: There is no causal work left over for them to do, once the basis has done its business. So, for example, something about the ionic structure of salt causes it to dissolve when placed in water. That something is the categorical basis of its dissolving. The property of having some structure, ionic or otherwise, that results in dissolution when placed in water is the property of being disposed to dissolve in water. But this property does not cause the dissolution; rather the ionic structure of the salt does.

Note that neither on Armstrong's and Rozeboom's nor on Prior's view does having the categorical basis cause an object to have the dispositional property: Having the categorical basis causes the dispositional manifestation in the relevant circumstances. Having the categorical basis is either identified with having the dipositional property (Armstrong, Rozeboom) or having some basis or other of the right sort is identified with having the dispositional property (Prior).

I have no particular quarrel with either view of dispositions. But, if I accept Prior's view, does my view of belief then imply that beliefs cannot cause the behavior and phenomenology belonging to their dispositional stereotypes, since

dispositions on Prior's view do not cause their manifestations? It does, if beliefs are themselves seen as complicated dispositions, consisting of a conjunction of the individual dispositions in their stereotypes. The view I espouse, however, is not committed to treating belief in that way. So long as there is a categorical or causal basis for the phenomenology and behavior in question, the belief can be identified with that basis, regardless of whether dispositions themselves are so identified.

Let me clarify this point just a bit. In the first section of this chapter, I offered an account of what it is to believe something but no account of what a belief is. I do not think an account of the latter sort as useful as the former, in part because thinking too much in terms of beliefs and too little in terms of believing strengthens the container metaphor for belief, repudiated in chapter five. After all, beliefs seem to be things in the head (or at least locatable somewhere). Nevertheless, it is necessary from time to time to talk about beliefs, and so a good account of them is necessary. Here, then, is my idea: A belief is a state of a creature causally responsible for its responding in ways that match the appropriate dispositional stereotype. 9 Having a belief, then, is being in such a state (and in a causally rich world, as I suppose ours to be, anyone who believes that P -- i.e., anyone who matches to an appropriate degree and in appropriate respects the dispositional stereotype

 $^{^{9}}$ One might want to add further conditions to this definition, if that be thought necessary to get at the right part of the causal chain.

for believing that P -- will also have the belief that P). It is then trivially true that beliefs cause phenomenology and behavior.

So far I have talked a lot about causation and not at all about explanation, but the objection requires that the dispositional account allow not only for beliefs to cause phenomenology and behavior but also for beliefs to explain phenomenology and behavior. However, once we allow that beliefs cause phenomenology and behavior, it is a quick step to the conclusion they can be invoked to explain it. David Lewis (1986a; similarly, Humphreys 1989) argues that to explain an event simply is to cite information about its causal history. this account of explanation, surely, beliefs can explain behavior. But even on accounts of explanation that do not equate explanation with providing causal information, paradigmatic explanations of events cite the causes of those events. Why did the water boil? Because the stove was turned on. Even the appearance of 'cause' in 'because' suggests this connection between causes and explanations. If we explain why the child tripped by citing (a.) the rock's being in the trajectory of his foot and (b.) his not paying attention to where he was going, we have given a partially physical and a partially mental explanation of the event; and in both cases what we have done is cite causes.

I hope that I have dealt adequately with the objector's concern about the ability of beliefs, on my account, to cause and

explain phenomenology and behavior. I will now tackle the question of the causation and explanation of particular dispositions within the stereotype, beginning with the issue of explanation. It is important here to keep clear in one's mind the difference between the explanation of particular dispositional manifestations and the explanation of particular dispositions. My response to the first version of the objection turned on treating beliefs as the bases that cause, and thereby explain, their behavioral and phenomenal manifestations. We are now turning our attention to the question of whether beliefs, on my account, can explain the presence of particular dispositions. A similar response is not open to the this version of the objection: Categorical bases do not cause the dispositions for which they are the bases.

Intuitively, it seems plausible to say that Joe's believing that there is beer in the fridge explains his disposition to assent to the claim that there is beer in the fridge (ceteris paribus). The supposition of the objector is that we would have to reject this intuition on the dispositional account of belief: If to believe that P is simply to have a variety of dispositions of this sort, believing that P cannot explain the presence of those very dispositions.

Let me sort out what is right and what is wrong in this objection. Certainly we cannot explain the tendency of salt to dissolve in water by appealing to its disposition to dissolve in water; nor can we explain the presence of the entire range of

dispositions in the stereotype for a belief by appealing to the existence of that belief. However, it does seem intuitive to say that we can explain the tendency of salt to dissolve in holy water by appealing to its tendency to dissolve in water in general. This case is in important respects parallel to explaining Joe's disposition to assent by appeal to his belief. It is intuitively acceptable to explain the presence of one disposition by appealing to a larger set of dispositions that encompasses it.

Consider, as a similar case, Kepler's laws of planetary motion. Although these laws predict the position of the planets with substantial accuracy, they do not (by themselves) reveal any cause of the motions or in any way add to our knowledge of the planets, except in so far as they reveal a pattern in the planets' motions that had not before been noticed. Nevertheless, it seems right to say that we can explain the appearance of a planet in one part or another of the night sky by appealing to Kepler's laws. Fitting the planet's motions into an easily comprehensible pattern of regularities is a way of explaining it. The planet was at such-and-such a place three weeks ago, so according to these equations governing its regular motion, it ought to be in this place now. Even Newtonian mechanics might be thought to explain in the same way. Explanations of this sort work by fitting isolated facts or events into a larger pattern, even when no explanation is available as to why that pattern is one way rather than another. Similarly, then, one can also explain particular behavioral and phenomenal dispositions by

fitting them into the larger dispositional stereotypes of belief. So again, the objection fails.

Perhaps, however, it will seem necessary to offer an account of belief on which the presence of the belief is causally responsible for the individual dispositions in the stereotype and on which the whole pattern of those dispositions is to be explained by appeal to the presence of that belief. Here, finally, we have a pair of demands that the dispositional account cannot satisfy.

These demands do not have the intuitive appeal of the demands with which the dispositional account is compatible. While most of us would find it intuitive to say that Joe's belief causes and explains his trip to the fridge, and even that it explains his disposition to assent to certain statements, it is not equally intuitive to say that Joe's belief causes his disposition to assent to certain statements; nor is it very intuitive to say that Joe's belief explains the presence, not of each disposition considered individually, but of the entire range of the dispositions in the stereotype, considered as a whole. Even if we did have these intuitions, I see no reason to regard them as inviolate in the face of an otherwise appealing account of belief that contravenes them.

I believe there are also good independent reasons to reject these particular intuitions. If believing causes one to have all the dispositions in the stereotype associated with that belief (and thereby explains the match to that stereotype), then

believing must be a state distinct from matching the dispositional stereotype for P. When two states are not distinct, one cannot cause the other, just as something's being three-angled cannot cause it to be three-sided or something's being an election in 1996 cannot cause it to be an election full stop. (Those who hold that a disposition causes its manifestation hold that the disposition is distinct from its manifestation; the categorical basis, however, not being distinct from the disposition cannot cause it, as described above.) But surely it is fanciful to think that there is some distinct state of the mind, separate from having the range of dispositions in the stereotype for believing that P, that is the state of believing that P. How could we identify such a state, apart from appealing to the dispositions it is apt to produce? And what great benefit would there be in talking about such a state? Even if we supposed such a state to exist, I cannot but think that it would be more profitable to talk about a creature's overall dispositional make-up, and tie believing to that, than to single out such an elusive ghost as the proper referent of such an important word as 'belief.'

5. Conclusion

In this chapter, I have set out a novel account of belief. Like Ryle, I suggest that having a belief is nothing more or less than having a certain range of dispositions. Unlike Ryle, however, I emphasize the phenomenal dispositions involved in believing and see no reason to downplay or be reductivist regarding talk about our internal mental lives. I also go beyond Ryle in introducing the notion of a dispositional stereotype against which a person's dispositional profile can be matched, to help make sense of and provide a structure for talking about cases of what I have called in-between believing. I discussed some cases of in-between believing in more detail and outlined some common patterns of deviation from the dispositional stereotypes for belief. Finally, I addressed some concerns about the dispositional account that might naturally arise out of an externalist or functionalist view of belief or out of attention to issues of explanation and causation. I will close by addressing the question of how compatible my account is with the idea that beliefs are real, concrete states of the brain, discernible and classifiable, at least potentially, to an advanced science with substantial knowledge about how the brain works.

The relation between this view and my account of belief is perhaps best approached with the help of an analogy. I ask the reader to imagine a nineteenth-century understanding of disease before the advent of the germ theory. We will not imagine it as

the messy thing it actually was, but instead in a rather idealized fashion. To have a disease, on the empiricist view I am imagining, is simply to have some cluster of symptoms. symptoms tend to cluster together into general patterns, and we may label these patterns of symptoms with different names: dropsy, diphtheria, tuberculosis, etc. In diagnosing a patient, one examines that patient's symptoms and determines which of these named clusters she most closely approximates. (We will ignore the little complication of discovering new diseases.) The more closely a patient's symptoms match the cluster of symptoms associated with a certain disease, the more appropriate it is to describe the patient as having that disease. A patient whose symptoms deviate from all the known stereotypes of disease cannot be said simply to have one disease or another; to describe that patient's condition accurately, one can only give a list of particular symptoms.

Those holding this model of disease would know, of course, that there must be some set of causes for the tendency of symptoms to cluster together and for the clustering together of particular symptoms in particular cases. However, since they admit ignorance regarding what exactly these causes might be, they must make do with an account of disease that appeals only the patient's match to a stereotypical profile of symptoms. It may or it may not turn out that there is a single, simple cause, such as the possession of one single physical characteristic (e.g., infestation by a certain type of microbe the immune system cannot effectively suppress), at the root of any particular

clustering of symptoms. If it did turn out this way, then a restructuring of the understanding of disease would probably be desirable, and in the process of such a restructuring it may begin to look more like a simple yes-or-no question (or a simple analog matter of degree) whether a person has a disease. On the other hand, it may turn out that diseases in fact have no such simple causes, that symptoms are clustered together for reasons too complicated for us to reduce to a single, labeled cause, and the symptom-cluster account of disease is the best account available to human understanding. The pre-germ account of disease is justified in either case, since nothing better is to be had for the time being, despite the fact that it is reasonable to suppose that it may be replaced.

I would suggest that we are in a similar position with regard to beliefs. It may, or it may not, turn out that there are some fairly straightforward and scientifically scrutible bodily causes for the clustering together of dispositions into the stereotypes with which we are familiar. If this does turn out to be the case — if beliefs really are strongly concrete and observable in this way — then we may wish to restructure our understanding of belief around these causes. But until such causes are discovered, if ever they are, a symptom-based account of belief is fully warranted. Embrace, therefore, as robust and optimistic a realism about belief as you wish: It is not incompatible with accepting, at least for the time being, the dispositional account of belief offered here.