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Realism and Response-Dependence

PHILIP PETTIT

There are many different accounts of the distinction between primary quality and secondary quality concepts. But one thing is generally agreed. Secondary quality concepts implicate subjects in a way primary quality concepts do not. Consider the concepts of smoothness, blandness, and redness. They are tailor-made for creatures like us who are capable, as many intelligences may not be, of certain responses: capable of finding things smooth to the touch, bland to the taste, red to the eye. The concepts, as we may say, are response-dependent. They are fashioned for beings with a capacity for certain responses and it is hard to see how creatures which lacked that capacity could get a proper, first-hand grasp of the concepts.

The notion of response-dependence requires further definition, and this will be provided in §2.² But however it is understood, it enables us to identify a certain sort of doctrine about any range of concepts. This is the claim that the concepts in question, objective though they may at first seem, are really response-dependent notions: they conform in relevant respects to the general image of secondary quality concepts. That claim is meant to be descriptive of the concepts in question: to provide an analytical characterisation of how they function. (A variant on such a doctrine would argue, not that the concepts in ordinary use are response-dependent, but that the ordinary concepts should be given up in favour of response-dependent surrogates. The variant is a revisionary doctrine, where the original claim is descriptive.³)

Most philosophers will acknowledge that some concepts are response-dependent: most will go along with the general view and think of secondary quality concepts in that way; and many will add apparently more objective concepts to the response-dependent camp. These philosophers all make a distinction between response-independent concepts that have a tenure in nature and response-dependent concepts whose tenure is tied to our interests or sensibilities; they differ only in where they draw the line between tenured and non-tenured concepts. Other philosophers reject that distinction, or at least this way of making it, and hold that

¹ The phrase is introduced in Johnston (1989).

² My notion, as will appear, is somewhat broader than Johnston's. Both notions are closely related, as Johnston sees, to the notion of order-of-determination with which Crispin Wright has been working. See Wright (1987 and 1988). They are discussed further in §2 below. Johnston (forthcoming) and Wright (forthcoming) comment on the relation between their different notions.

³ Johnston (forthcoming) is well disposed to the revisionary doctrine for a number of areas; he calls the doctrine revisionary Protagoreanism.

response-dependence is a global phenomenon: that none of our concepts conform to the traditional image of primary quality concepts; all are contaminated with subjectivity in a manner that is thought to be distinctive of secondary quality concepts.⁴ Hilary Putnam (1981, p. 63) has suggested that global response-dependence is, approximately, the sort of doctrine that Kant defended. And I have argued that if we are to make sense of thinking, in particular if we are to resolve Kripke's version of the Wittgensteinian problem of rule-following, then we must acknowlege a global form of response-dependence (Pettit 1990a; 1990b; forthcoming, Chapters 2 and 4).

One of the most interesting issues raised by response-dependence is how far, if at all, it compromises realism. If we think of a discourse as response-dependent, does that mean that we have to retreat in some measure from a realist view of the discourse as telling us how things are? And if so, how radical is the retreat required? These questions are of particular interest from my perspective, given that I see response-dependence as a global feature of our modes of conceptualisation. But they ought to be interesting also for someone who admits only local response-dependence, for they bear on the nature of the divide between dependent and independent areas of discourse.

This paper attempts to explore the connections between response-dependence and realism. The first section deals with realism, the second with response-dependence and the third argues a line on how they connect with one another. The line is that response-dependence does not compromise realism in a serious manner, though it does require a compromise of sorts. The main claims of the paper are summarised in a short conclusion.

1. Realism

The issue of how realism should be defined is so contested that were I to try to defend any account I might offer, that would take me far afield. So let me just say what I shall mean by realism and offer some motivation for why I mean this. Readers are welcome to call the doctrine by another name, if they are so inclined.⁵

Realism in any area of thought is the doctrine that certain entities allegedly associated with that area are indeed real. Common sense realism—sometimes called "realism", without qualification—says that ordinary things like chairs and trees and people are real. Scientific realism says that theoretical posits like elec-

⁴ Such philosophers may wish to draw the distinction mentioned in a different way, or perhaps to put a continuum in its place: they can do this by distinguishing between those concepts that are tied to more subjective, standpoint-relative responses and those concepts that are tied to responses of a less species-specific kind. The point comes up again in the last section

⁵ Much of the material on realism appears in an entry on realism in Dancy and Sosa (forthcoming) and I gladly acknowledge helpful comments received from the editors of that volume.

trons and fields of force and quarks are equally real. And psychological realism says that mental states like pains and beliefs are real. Realism can be upheld and opposed—in all such areas, as it can with differently or more finely drawn provinces of discourse: for example, with discourse about colours, about the past, about possibility and necessity, or about matters of moral right and wrong. The realist in any such area insists on the reality of the entities in question in the dis-

If realism itself can be given a fairly quick characterisation, it is more difficult to chart the various forms of opposition, for they are legion. Some opponents deny that there are any distinctive posits associated with the area of discourse under dispute; a good example is the emotivist doctrine that moral discourse does not posit values but serves only, like applause and exclamation, to express feelings. Other opponents deny that the entities posited by the relevant discourse exist or at least exist independently of our thinking about them; here the standard example is idealism. And others again insist that the entities assocated with the discourse in question are so tailored to our human capacities and interests that they are as much a product of invention as a matter of discovery.

The variety of the opposition shows that realism about any area of discourse, any area of thought and talk, actually involves a number of distinct claims.⁶ I distinguish three, which I call respectively descriptivism, objectivism and cosmocentrism.

1. The descriptivist thesis

Participants in the discourse necessarily posit the existence of distinctive items, believing and asserting things about them. They purport to describe how things are in the world and their descriptions posit certain entities: that is to say, the descriptions fail in the absence of such entities, and this is necessarily knowable to anyone who understands the utterances;7 it is knowable a priori.8 The entities posited are distinctive in the sense that they are not a priori identifiable with, or otherwise replaceable by, entities independently posited; if they are so replaceable then the discourse is not really distinct from the discourse in which the replacing entities are posited: it reduces to it. Although realists about any discourse agree that it posits distinctive entities, they may differ about what sorts of things are involved. Berkeley differs from the rest of us about what common

⁶ How to demarcate discourses? The issue is addressed indirectly in the discussion of reductivism below.

⁷ I gesture here at a definition of what is it to posit x by asserting or believing that p. Two conditions need to be fulfilled, as I understand the notion. The proposition "p" is not true, or perhaps not even truth-valued, unless x exists. And this is knowable just on the basis of an understanding of "p", so that the person asserting or believing that p is in a position to recognise that if she asserts or believes truly, then x exists. On the notion of truth required, see the text below.

⁸ Here and henceforth the notion of the a priori is introduced without a commitment to any particular theory. As I see things, the notion may even be understood in a Quinean spirit. Quine (1974) admits a distinction, after all, between truths that are admitted, or that are derivable from truths that are admitted, by anyone who learns a language, and truths

of which that is not so.

sense posits and, less dramatically, colour realists differ about the nature of colours, mental realists about the status of psychological states, modal realists about the locus of possibility, and moral realists about the place of value.

2. The objectivist thesis

The objects posited exist and have their character fixed independently of the dispositions of participants in the discourse to assert and believe things about them. Thus the epistemic states of the participants have no causal influence on the existence or character of those objects, nor are the objects non-causally dependent—say, dependent in a supervenient way—on such epistemic states. In short, the entities posited in the discourse enjoy a substantial kind of objectivity.

3. The cosmocentric thesis

In order to avoid error and ignorance with regard to the substantive propositions of the discourse—in order to get at the truth—participants have to make suitable contact with the objects of the discourse and there is no guarantee that they will succeed in doing so.¹⁰ The human search for truth is a matter of discovery, not invention, and discovery is a matter of contingent success. Ignorance is possible, because normally it is possible that human subjects lack contact with certain regions of the independent reality in question. Error is possible, because normally it is possible that human subjects are only imperfectly attuned to the regions with which they do make contact.

The realist's first thesis puts him in conflict with at least three sorts of opponent: the reductivist, the instrumentalist and those quasi-instrumentalist theorists who explore sophisticated variations on instrumentalism. The reductivist says of a discourse A that there is an independently given discourse or set of discourses, B—a discourse or set of discourses which can be mastered without access to A— such that it is a priori knowable that the entities posited in A are identical with, or otherwise replaceable by, the entities posited in B. Despite appearances, despite in particular the fact that discourse B can be mastered independently of A, the discourses are not distinct. The reductivist may say in this vein that common sense discourse about physical objects, or scientific discourse about unobservable entities, reduces to talk about the purely phenomenal level; that moral discourse reduces to talk about the attitudinal; or that mental discourse reduces to talk about the purely behavioural level.

Where the reductivist says that a discourse does not posit distinctive entities, the instrumentalist and quasi-instrumentalist say that it does not posit anything at

¹⁰ As noted later, that there are the entities posited must be seen as a non-substantive proposition by the realist about any discourse, and so there is no challenge to the cosmocentric thesis in the fact that, for the realist, participants cannot be wrong in positing those entities.

⁹ It may be worth mentioning that if epistemic states and the objects of such states have a common cause, as in doctrines of pre-established harmony, that should not be understood as a vindication of idealism; it is compatible with the realist's belief in the causal independence of the objects from the states. The point may be of relevance in the case of sensations like that of pain, where it is possible that there is a common neurophysiological cause of a person's having such a sensation and having the belief that she has the sensation.

all, distinctive or otherwise. The instrumentalist says of the discourse that it is not assertoric: it does not involve assertions, only utterances with the force of imperatives, exclamations, or whatever. Thus she says that theoretical discourse in science is really just a way of generating appropriate laboratory dispositions— "that's fragile" has the imperative force of "Be careful!"—and that moral discourse is just a way of expressing emotions, a way of making exclamations of approval or disapproval: emotivism, on this account, is a variety of moral instrumentalism.

There are two currently influential varieties of quasi-instrumentalism, projectivism and constructive empiricism. The projectivist holds that the discourse in question serves the sort of role ascribed to it by the instrumentalist, and does not involve distinctive posits, but that it still has the marks of assertoric talk that impress—and mislead—the realist.11 The constructive empiricist—a sort of fictionalist-holds that while the discourse represents assertoric talk about the relevant sorts of objects, accepting what is said—participating in the discourse does not mean positing those objects; it may only mean treating the propositions involved as empirically adequate, treating them as adequate for the practical purposes on which instrumentalists focus.¹²

The realist's second thesis puts him in conflict with two main sorts of opponent: the error theorist or eliminativist, and the idealist. ¹³ The eliminativist denies that there are any objects of the kind that the discourse in question posits. While admitting that modal discourse posits the existence of possibilities, and moral discourse posits that of values, she denies that there are any such things; thus she says that assertions and beliefs within the area of discourse inevitably fail to be true. Unlike the eliminativist, the idealist admits that the objects posited do exist, as Berkeley admits the existence of the items he takes common sense to posit. What she denies is that the objects are independent of people's dispositions to believe and assert things about them. Such objects are held to depend in some way on people's dispositions; the dispositions invoked may be individual or shared, depending on whether the idealism involved is of the subjective or objective variety.

The realist's first two theses in any area of discourse can be run together into a straightforward claim, made within the discourse itself, that there are such and such entities and they are independent of our epistemic influence. On this representation, the realist about common sense says that there are independent chairs and tables and other such objects, the realist about science says that there are independent protons and electrons and things of that ordinarily unobservable kind (Devitt 1984, Devitt and Sterelny 1987). This is a perfectly accurate way of expressing the realist's first two claims, though it fails to make clear that there are

¹¹ For a general introduction to some different ways of denying the realist's first thesis, and for the development of the projectivist alternative, see Blackburn (1984).

¹³ See Mackie (1977) for the term "error theory".

¹² See van Fraassen (1980). Constructive empiricism is akin to what used to be described as fictionalism: the view that with some discourses, participation does not require believing the propositions involved but rather treating them as if they were true.

very different ways of rejecting his position: the ways that correspond with the denial of the descriptivist and objectivist theses, respectively.

The third, cosmocentric thesis is made central to realism by some writers but not by all.¹⁴ It puts the realist in conflict with an opponent that we can describe as the anthropocentric. The anthropocentric says that with substantive propositions within the discourse in question—with a certain number or with certain specific cases—there is no possibility that specified individuals or groups could be in ignorance or error. The anthropocentric may deny the possibility of a certain error or ignorance by taking the interpretationist line that the objects posited by a discourse are whatever objects participants are mostly right about; this will put limits on error.¹⁵ She may do it by going the verificationist or anti-realist way of refusing to acknowledge that propositions for which we lack adjudication procedures have a determinate truth-value; this will put limits on ignorance. ¹⁶ She may do it through becoming a relativist and increasing a group's chances of hitting the truth by moving the target nearer: by defining truth, in the relevant sense, as truth relative to that group. Or she may take any of a variety of other approaches (Goodman 1978; Price 1988; Putnam 1981; Rorty 1980). Whatever form the anthropocentric claim takes, however, the realist will deny it. He says of any discourse he judges favourably that error and ignorance are always possible with regard to the substantive propositions of the discourse. It is possible, as the cosmocentric thesis suggests, that participants are wrong about all and every substantive claim in the discourse.

The cosmocentric thesis is a very strong claim and it may need motivating. As I see it, and this is a controversial perspective, the ultimate motivation for being realist is the desire to represent the discourse in question as an area where there is scope for pushing back the frontiers of ignorance and error, an area where there is room for serious inquiry. The descriptivist and objectivist claims about the discourse are not free-wheeling assertions in metaphysics, they are propositions designed to underpin an instinct to take the discourse seriously in this fashion, to see it as an area where it is worth our while expending intellectual energy. But if this is the motivation for being realist then perhaps we can see why the realist adopts cosmocentrism as well as descriptivism and objectivism. He does so by

¹⁴ Many philosophers prefer not to see an epistemological thesis—a thesis bearing on possibilities of error and ignorance—as part of the realist credo. They include Devitt (1984). Lewis (1984, p. 231) admits the notion of a "realist semantics and epistemology" but suggests that it is "the metaphysics of realism" that is really distinctive of the doctrine. But in situating an epistemological thesis at the core of the realist credo, I have good company: for example Smart (1982) and Papineau (1987). Notice that it is more difficult, not less, to reconcile response-dependence with realism, under the conception of realism as involving the cosmocentric thesis. Thus, even if I thought the thesis was no part of realism, it would be good practice to assume for purposes of this paper that it was; those purposes include the reconciliation of response-dependence with realism, as will become clear in the last section.

¹⁵ This is a rather bald statement of the so-called principle of charity, defended by writers like Quine and Davidson. For further discussion see Macdonald and Pettit (1981).

¹⁶ On the compatibility of anti-realism with scientific realism—and presumably, by extension, with a defence of the first two realist theses about any area of discourse—see the useful discussion in Tennant (1987, Chapter 2).

way of emphasising that the discourse is one where there is room for discovery; there are things to be uncovered there which are not of our making or inventing.

But is the emphasis necessary? It may at first seem that there is going to be an inconsistency involved in agreeing to the first two realist theses and then denying the third. If there were, that would mean that anthropocentrism was not really an independent way of rejecting realism, and that cosmocentrism was not really an independent component in the doctrine. But there is no inconsistency involved in accepting the first two theses and rejecting the third. Consistently with thinking that a discourse introduces distinctive posits, and that the posited objects are suitably independent of people's epistemic states, we can hold that the posited objects are fixed—constitutively, not just heuristically, fixed—in such a way that error or ignorance is impossible at a certain limit. Consider the interpretationist view that the referents of any discourse, or at least any discourse that is genuine enough to be referential, are those entities which it is most flattering to the discourse to take as its referents: those entities such that participants can be held to say more true things about them than about anything else. On such a view it is a priori that the participants are correct in a large number of their claims: thus there are limits on error, and anthropocentrism holds.¹⁷ But the discourse may still posit distinctive entities and those entities may exist independently of the epistemic states of participants. Thus, despite the failure of the cosmocentric thesis, descriptivism and objectivism may both be vindicated by the discourse.

There are three things that need to be said in further commentary on the realist's cosmocentric thesis. The first is that while it invokes the notion of truth, the notion involved is just that which is given by the disquotational schema, "p' is true if and only if p". I assume that the notion of assertion is given, so that we understand what is involved in asserting that p, for any arbitrary "p"; for example, we understand that it is inconsistent with asserting that not p, that it is equivalent to denying that not p, and that it combines with the assertion that if p, then q to license the assertion that q. Given an understanding of assertion, the disquotational schema is sufficient to communicate an understanding of truth in the sense in which the realist's third thesis—or the anthropocentric's counter-thesis invokes the notion.

The second thing that needs to be said about the realist's third thesis bears on the question of what truths are sufficiently substantive to be relevant to the thesis. The realist says that error and ignorance are possible with regard to the substantive propositions in any area of discourse. So which propositions, if any, are nonsubstantive? My answer is brief: if a proposition is such that just to count as a proper participant in the discourse in question, just to count as someone who understands what is going on, you must accept the proposition or you must reject it, then it is non-substantive; otherwise it is substantive. By many accounts, there are truths in every area of discourse whose acceptance or whose rejection is cri-

¹⁷ Frederick Kroon (1988) dissolves various apparent tensions between realism and interpretationism or, as he calls it, "descriptivism". But he does not look at the tension considered here.

terial for counting as a proper participant there: you must accept them—they are so obviously true—or you must reject them—they are so obviously false—if you are going to be held as someone who genuinely asserts and believes things in the discourse, as someone who understands enough not to be seen as a mere mouther of words. If a realist accepts such an account, then he will naturally deny that error and ignorance are possible for proper participants in the discourse with such propositions. But that denial will not come of any faltering in his realist commitments; it will merely give expression to his view of what proper participation in the discourse presupposes. The realist will have to regard it as a non-substantive proposition of a discourse that there are the entities associated with the discourse since, by the descriptivist thesis, participants necessarily posit such items and by the objectivist thesis they cannot be wrong to do so. Otherwise he can be uncommitted: he may or may not acknowledge further non-substantive propositions. If further non-substantive propositions are countenanced, they will presumably be the platitudes and the howlers whose acceptance and rejection, respectively, are generally taken to reveal little more than an understanding of an area of discourse; these will overlap with the traditional analytic truths and falsehoods but the two categories may not be co-terminous.

The third thing I need to say about the realist's cosmocentric thesis is that it may come in any of a variety of strengths, depending on whether it is maintained vis-à-vis individuals or groups—at the limit, the community as a whole—and depending on how the circumstances of those individuals and groups are specified. It is one thing to say that an individual may fall into error or ignorance, it is something much stronger to say that the community as a whole may do so. It is one thing to say that an individual or community may, in their actual circumstances, fall into error or ignorance; it is something much stronger to say that they may do so in normal or even in ideal circumstances. Normal circumstances will be ones in which certain obstacles are lacking, ideal circumstances will be ones in which certain desirable facilities are present: say, all the relevant evidence is available. The strongest version of the realist thesis says that ignorance and error are possible for any of the epistemic combinations represented in these six boxes.

	actual	normal	ideal circumstances
Individual judgement in	1	2	3
Community consensus in	4	5	6

I hope that what I have said may be sufficient to give an idea of what I take realism to involve. The realist about any area of discourse asserts three theses, setting himself against three differents kinds of opponent. Marking his opposition to reductivists, instrumentalists and the like, he asserts that the discourse introduces distinctive posits; this is the descriptivist thesis. Marking his opposition to eliminativists and idealists, he holds that the objects posited exist and are independent of people's dispositions to assert and believe things about them; this is the objec-

tivist thesis. Finally, taking his stand against the many varieties of anthropocentric, he maintains the cosmocentric thesis that participants may be in error or ignorance with regard to any and all substantive propositions in the discourse.

2. Response-Dependence

Response-dependence is a property that may be associated, depending on theoretical preference, with different sorts of representations. I shall present it as a property of concepts, since the notion of a concept is in everyday use and is given currency on many sides. So what then are concepts? Or what are they, at any rate, in my use of the term? A concept is always a concept of something and it is something possessed or accessed by a subject: it is an intentional and accessible entity. So at least I shall assume. But what is it for a subject to possess a concept of something, what is it for the subject to access the concept? That is the crucial issue.

I take as given the fact that we human beings hold and form beliefs and that such beliefs bear on different sorts of items, depending on the different types of propositions believed. Every proposition involves a property or relation and so every belief bears on a property or relation. The singular proposition involves a particular object and the corresponding belief bears on that object. The truthfunctional proposition involves an operation like negation, conjunction, or disjunction and the belief that addresses that proposition bears on that operation. The quantified proposition involves the universal or existential quantifier and the corresponding, quantified belief bears on that mode of quantification. And so on.

I also take as given the fact that not only do we form beliefs bearing on such entities, we also have the capacity to try to form rational and true beliefs involving them. We have the capacity to think about what we should believe in relation to those entities; this is probably what distinguishes us from other animals that have beliefs (Pettit forthcoming, Chapter 2). In trying to form beliefs that are rational and true—in forming our beliefs thoughtfully—we fix on individuals and try to attribute to them only properties that they instantiate; we fix on properties and try to impute them only to individuals that belong to their extension; we fix on various operators and quantifiers and try to accept propositions constructed by means of such devices only when independent beliefs support the constructed claims.

With these matters given, I can say what it is to possess a concept of something. A person has a concept of something, I hold, if and only if she is able to try to form rational and true beliefs that bear on that thing. She must be able to fix on the object or property or operation in question with a view to forming rational and true beliefs about propositions that involve it; she must be able to try and respect the requirements of that entity for the truth of those propositions. She will need the capacity to track the object through time, as she tries to determine if it is still thus and so. She will need to have the capacity to identify the property across different bearers, as she tries to decide whether something hitherto unencountered also possesses it. And so on in other cases.¹⁸

To sum up these remarks then, a concept is an intentional and accessible entity and to possess a concept of something is to be able to think about what beliefs to form in regard to propositions involving that item. If this account is unusual, that is because it links a concept with the capacity to form beliefs thoughtfully about something, rather than just with the capacity to form beliefs, period, about the thing. But once we see the distinction between the two modes of belief-formation, this feature should not be surprising. I recognise Mary's children by their facial configuration, I recognise Wolf Blass Black Label 1988 by its taste, and I recognise the Christmas star that my child made by its shape. Presumably the configuration, the taste and the shape figure in my beliefs, at least on a generous conception of belief, since I react to them in a believing-desiring way. 19 But it may be that I have no words for those properties and, for that reason or not, that I cannot try to get the beliefs which involve such properties right; the beliefs I form may be beyond my control, appearing in the manner of subpersonal adjustments. It does not seem unreasonable to say that I fail to have concepts for such entities. This is a natural way of marking the distinction between my relation to them and the relation I enjoy with most of the common things about which I can form beliefs.

We should be getting on to what it is that makes a concept response-dependent. But there are some further, brief remarks to be made about what is involved in possessing a concept. First, it is possible to possess a concept parasitically on other individuals, as with the manner in which most of us possess the concepts of quarks, valencies and genes, but in what follows I will always have non-parasitic concept-possession in mind. Second, to possess a concept is inevitably to have certain beliefs about the item in question—the contents of these will presumably figure among the non-substantive propositions of the relevant discourse, which we mentioned in the last section—but there needn't be a sharp boundary between those beliefs about the item and other beliefs about it. Third, the words used by someone to express what a subject believes will presumably be fully appropriate only if they reflect the way in which she fixes on the items involved in the content. This last observation impacts on the relation between words and concepts. It means that two words or phrases may refer to the same object or property or whatever but reflect different ways of fixing on that item and so not express the same concept. If the concepts expressed are different—as presumably with the concepts expressed by "Cicero" and "Tully", "human" and "featherless biped" then there will be an obstacle to the intersubstitution of the phrases, salva veritate, in ascriptions of belief; if the concepts are the same, then this obstacle will disappear. (For more, see Peacocke forthcoming.)

¹⁹ On the generous conception of belief in question, see Jackson and Pettit (forthcoming).

¹⁸ This sort of capacity approach makes the ontology of concepts relatively unproblematic. There will be a certain concept of something just so far as there is a possibility of fixing on the item under consideration in the relevant manner. See Peacocke (forthcoming Chapter 4). For other examples of a capacity approach see Geach (1957) and McGinn (1984).

We can turn at last to the question of what it is for a concept to be responsedependent. The general idea from which we start is that response-dependent concepts implicate subjects in the manner traditionally associated with secondary quality concepts. But there are different ways in which secondary quality concepts are represented as subject-implicating and, depending on which of these is taken as relevant, we can develop different conceptions of response-dependence.20

Mark Johnston, who is responsible for the term "response-dependent", has developed one conception of the phenomenon, a conception that can be characterised by the more specific phrase that he has introduced: "response-dispositional" (Johnston forthcoming). As Johnston sees things, secondary quality concepts should be represented as response-dispositional—he thinks this is revisionary of some ordinary ideas—because the properties to which they direct us are dispositions which are manifested in certain familiar responses. Smoothness is a disposition to feel smooth to the touch, at least under what come to be taken as normal conditions; and similarly blandness is the disposition to seem bland to the taste, redness the disposition to look red to the eye. In each case, so the response-dispositional story goes, there is a familiar sort of response—in these cases, sensations—and the property has to be conceived as the disposition which is manifested under normal conditions by that sensation.

Even if secondary quality concepts should be taken as response-dispositional, I think we ought to focus on a more general feature in using such concepts to define response-dependence. With secondary quality concepts, as traditionally conceived, it is a priori that the responses which correspond to them leave no room for ignorance and error, at least under the appropriate conditions. It is a priori knowable that if something is red then it will look red in normal circumstances to normal observers, so ignorance is ruled out in that situation. And it is a priori knowable that if something looks red in normal circumstances to normal observers then it is red, so error is equally ruled out in that situation. The sensations are not judgments but they lead observers to make judgments, and the point is that in appropriate conditions they will neither fail to lead, as in allowing ignorance, nor mislead, as in generating error. Secondary quality concepts may require to be seen as response-dispositional, as Johnston alleges, and this revision may even fit with the traditional image; I say nothing about these matters for now. But on the traditional image the secondary quality concepts are certainly response-privileging. They are such that certain human responses, at least under suitable conditions, represent a privileged mode of access: a mode of access that rules out error and ignorance.

It is clear that response-dispositional concepts will be response-privileging. But response-privileging concepts need not be response-dispositional. Johnston (forthcoming) argues that if the concept of water is introduced to denote the stuff,

²⁰ The only alternative to mine that I mention here is Mark Johnston's. But perhaps we can also see Crispin Wright's notion of extension-determining concepts as reflecting another conception of response-dependence.

whatever it is intrinsically like, which accounts for certain liquid, colourless, and odourless appearances, then the concept of water is not response-dispositional. Specifically, he argues this on the grounds that according to such a story the responses water evokes in us—the appearances—do not "acquaint" us with "the nature of water". The responses may "indicate" water but water is not "characterised as a disposition" to evoke such responses. Now the concept of water will be response-privileging, on Johnston's account, at least if water is introduced as the stuff which accounts for the relevant appearances under appropriate conditions: it will be a priori knowable that under those conditions the appearances will not leave people in ignorance, or lead them into error. And so we see that a response-privileging concept need not be response-dispositional.

This argument should not be taken to suggest that only concepts introduced by the sort of definition envisaged for water mark the difference between the response-privileging and the response-dispositional categories. There are also other sorts of concepts that would count as response-privileging but not responsedispositional. A schematic example will serve to make the point.

Suppose that we form the concept of a property on the basis, first, of being presented with certain exemplars under certain conditions and on the basis, second, of finding it salient to extrapolate from those exemplars in a certain direction. Suppose in particular that we find it primitively salient to extrapolate in that direction—the cases look appropriately similar to us; suppose, that is, that we do not find it salient, because of a non-relational response to the exemplars: a response like having the exemplars look red or feel smooth. This scenario would make it a priori knowable that if something novel has the property in question then it will present itself as having that property to appropriate observers in appropriate circumstances—it will present itself as saliently similar to the exemplars—and so ignorance is ruled out in that situation. Again, the scenario described would make it a priori knowable that if the object presents itself as having the property to the appropriate observer in appropriate circumstances then it really has the property and error too is ruled out in that situation. Thus the concept envisaged would be response-privileging.

But, and this is the relevant point, such a concept would not be response-dispositional in Johnston's sense. The salient-similarity response, being a primitive response to a relationship between bearers of the property, cannot acquaint us with the non-relational property in question. We may be authoritative in appropriate circumstances for whether something has the property but we may be able to say little or nothing about the nature of the property itself: about what binds the bearers of the property together. We may only be able to say that it is *that* property, the one that makes this and that and the other thing saliently similar. Someone else may say about us that the property on which we are fixed is that property that is at the source—presumably the causal source—of our sense of relational similarity. But we will not think of it in that way. We will think of it simply as *that* property, where the demonstrative directs us to appropriate exemplars. If we did think of the property as whatever property is at the source of our

sense of relational similarity, then the concept would be one that we introduced by definition in the manner of Johnston's story about the concept of water.

This schematic example is important in my eyes, as I think that primitive similarity responses are at the basis of a lot of our most basic concepts (Pettit 1990a and 1990b). The thought will have an intuitive appeal for anyone who has puzzled over the rule-following problem, wondering about how we manage to form concepts of the most simple objects and properties: of games and greetings, shapes and sizes, numbers and operations, and so on through the battery of cases produced in Wittgensteinian discussions. But the schema envisaged may even apply to the notion of water. Perhaps that isn't a definitionally introduced concept, as under Johnston's representation. Perhaps the concept of water is introduced ostensively by reference to certain paradigms and is the concept of whatever stuff counts as similar to those paradigms; similar, of course, not just on the basis of a casual look or drink or dip, but on the basis of what is thought of as suitable information. Suitable information will be the sort available to someone who finds that any body of water can freeze or evaporate, for example; it is the sort of information that is fully available, so we will think, only in idealised chemistry.

This discussion of the difference between my conception of response-dependence and Johnston's conception should not distract us. The difference has to be noted, for the sake of clarity, but it has no further importance; it reflects a difference of interest, not a difference of doctrine, as indeed I shall be emphasising again. The important point is that I shall be concerned here with the allegedly response-privileging character of certain concepts and I shall have that sort of phenomenon in mind when I speak of response-dependence. The question with which we are concerned is how far realism about any area of discourse is undermined by an admission of response-dependence in this sense. I turn to that question in the next section.

But there is still some work to do before leaving this discussion of responsedependence. It is one thing to define response-dependence. It is quite another to generate a vivid sense of the possibility that some concepts are indeed responsedependent or response-privileging. I would like to address that task in the remainder of this section. Unless we have a good, concrete sense of how certain concepts might privilege human responses, we will not be able to get our minds clear about the issue of realism and response-dependence.

Let the concept of redness be our exemplar of a response-privileging concept. That is to say, let us assume that something like the traditional view holds, so that it is a priori knowable that something is red if and only if it is such as to look red to normal observers in normal circumstances.²¹ Thus for normal observers in normal circumstances it is a priori that they will not be in ignorance or error about

²¹ I assume here and henceforth that the disposition to find something red in suitable circumstances—or the disposition to produce any response of the kind involved in response-dependent concepts—is sure-fire, not probabilistic. If it were probabilistic, as Michael Tooley has reminded me, then response-dependence would not make ignorance and error strictly impossible. Thus it might be less inimical to at least the letter of the cosmocentric thesis.

the redness of something presented to them. The red sensation with which they respond to presentation of the object will be privileged as a basis for judging that it is red. How then could we ever get to possess and employ such a response-privileging concept?

Here is one extremely implausible story. The story would have it that most of us are immediately conscious in ourselves of red sensations—sensations that have a certain intrinsic feel or *quale* by which to identify them—and that we define the property of redness as the property possessed by something which produces red sensations in us, at least under certain specifiable conditions that we describe in shorthand as normal: conditions such as those that prevail in good sunlight for people who are not colour-blind, and so on. This story is extremely implausible, for a number of reasons. It requires us already to have the introspective, and relatively sophisticated, concept of red sensations. It makes the concept of red things—the concept of redness proper—a non-primitive concept. And it appears to be vitiated by the circularity involved in defining the concept of redness by reference to red sensations.

If I think that there are response-privileging concepts, if I think in particular that the concept of redness may be response-privileging, that is because I believe that there is a much better story available about the genealogy of such a concept. The story goes roughly like this (see Pettit 1990a). People have red sensations—things look red to them—as a matter of primitive experience of the world. Those sensations may not be the objects of introspective awareness but they will have an impact on what people find similar. They will make English postboxes, ripe tomatoes and heated metals similar in a salient respect. This enables people to use such examples then to indicate a certain property, viz. the common colour. What colour? All they can say is, *that* colour, pointing at relevant examples. The examples make the property in which they are interested salient and the concept is ostensively defined by reference to the examples.

Well to a certain extent anyhow. For it turns out that sometimes a ripe tomato looks different by their lights—and, no doubt, ours—from how it does at other times, and indeed that it looks different as between different people. This offends against a supposition that its colour is stable. The way people make sense of the variation, given the supposition of colour stability, is to find a feature of the occasions when it looks different, or of the individuals to whom it looks different, that marks them off as not counting. Thus the colour which they identify by reference to certain examples as *that* colour is not whatever colour property the objects present, but whatever property they present under conditions that can be allowed to count.

Is it reasonable to think that people make a supposition of colour stability? I believe so. There are two assumptions that we spontaneously and systematically make as participants in any area of discourse when we form and discuss our beliefs. These are assumptions, respectively, of intrapersonal and interpersonal constancy (Pettit 1990a; Craig 1982). The intrapersonal assumption is that something is amiss if I find myself reliably inclined to make different judgments at dif-

ferent times—in particular, judgments different by my own lights—without any justifying difference in collateral beliefs or whatever. The interpersonal assumption is that something is amiss if you and I find that we are reliably inclined to make different judgments—again, judgments different by our lights—without any such justifying difference. To say that people assume colour stability is simply to say that they apply these assumptions to discourse about colour.

Given our story about the concept of red we can see how it can come to be a priori knowable that something is red if and only if it is such as to look red to normal observers in normal circumstances. There is no suggestion that those who master the concept do so by learning and applying that biconditional, as in the implausible story that we rejected. The biconditional belongs to us theorists, not to the participants in the relevant practice. We theorists register how the participants fix on the property that they refer to as redness and, introducing the concept of normal conditions to identify the conditions that do not come to be discounted in their practice, we use the biconditional to capture an important implication of how they carry on. Although participants may have no notion of normal conditions in their repertoire, and although they may not even have reflected on the sensation of having something look red, their practice ensures that it is indeed a priori that something is red just in case it is such as to look red in normal conditions.

The sort of story I have told about how we might get the concept of redness going can be described as "ethocentric". It gives centre stage to habits of response and practices of self-correction, and both notions are captured in the Greek work ethos. The story does not claim to deliver the concept of redness into the hands or minds of us theorists, say through defining it by reference to what looks red in normal conditions. After all, the concept which it ascribes to participants is not introduced for them by such a definition; the concept is available, given their selfcorrective practice, in virtue of their responses to red things. What the ethocentric story does is to provide a sort of genealogy for the concept: an account of the conditions of response and practice under which it emerges and becomes accessible.²²

There are other stories, besides the ethocentric one, that would make more or less plausible sense of the traditional view that it is a priori knowable that something is red just in case it is such as to look red in normal circumstances. Here is one example. We do not conceive of redness as the property possessed by something which produces red sensations in us under favourable conditions; we do not access the concept of redness, as under the implausible story considered earlier, via the biconditional linking redness with red sensations. Rather, so this story says, we gain access to the concept of redness, as we gain access to any concept, through learning a set of platitudes that link redness with other things: a set of platitudes that give the concept its place in our web of belief. But the set of platitudes that support the concept of redness, the story continues, include propositions which entail that something is red just in case it looks red to certain

²² This sense of genealogy is close to that of Nietzsche (1956), though the genealogy provided is not a debunking one; unlike Nietzsche's genealogy of moral concepts, it does not put colour discourse in a bad light.

observers in certain situations. And so it is a matter of a priori knowledge, for anyone who understands the concept of redness, that that biconditional holds.

I prefer my ethocentric genealogy to this account of how we come to have a response-privileging concept like that of redness. Like the manifestly implausible story which we considered earlier, the platitudes narrative purports to tell us something about the application conditions of the concept of redness. It does not claim, in the manner of the implausible story, that that biconditional spells out the application conditions which guide those who use the concept. But it does say that the biconditional reflects the conditions in play among such people. My story, on the other hand, abstracts from any particular account of the application conditions which guide the users of the concept. It says that whatever the platitudes in play among the users, it is surely the case that they apply the concept on the basis of their sensations and that they correct the cues which their sensations give them in order to maintain intertemporal and interpersonal constancy. And that being so, it points out that we commentators are in a position to hold it to be a priori that something is red for the participants in a discourse if and only if it looks red to them under conditions that survive negotiation across times and persons: that is, under conditions that count as normal. The ethocentric genealogy derives the a priori biconditional from reflection on the possession conditions of the concept, not from any particular account of its application conditions.²³

I mentioned earlier that Mark Johnston conceives of response-dependent concepts in a different way from me: as response-dispositional rather than responseprivileging. The difference reflects the fact that he is interested in concepts for which the biconditional holds, not in virtue of their possession conditions— or not just in virtue of their possession conditions—but in virtue of their application conditions. The concepts with which he is concerned are ones for which a platitudes account is supposed to go through (Johnston 1989 and forthcoming). They are concepts such that we as participants think of them in a dispositional or at least quasi-dispositional way: we think of them, consistently or not, as concepts whose referents are manifested to us in certain responses. The concepts which are response-privileging in my sense need not be concepts of which we as participants think in this way; the point should be obvious from our earlier discussion of the concept of water. And so it is no surprise that Johnston focuses on a different and narrower category than that which interests me.

There are two problems raised by the a priori biconditional that is traditionally associated with redness: it is a priori that something is red if and only if it is such as to look red to normal observers in normal circumstances.²⁴ Perhaps the best way to highlight the merits of the ethocentric story is to show how well it deals with those problems.

First problem. It is agreed that normal conditions cannot be defined as whatever conditions are required to ensure that something looks red just in case it is

(1989, p. 145).

²³ I have benefitted from very useful conversations with Mark Johnston on this point. On possession conditions, see Peacocke (forthcoming).

24 For an excellent discussion of the response-dependent biconditional see Johnston

red. If the conditions were defined in that whatever-it-takes way, then the proposition would be entirely trivial (Wright forthcoming). But how then are normal conditions to be identified? Second problem. It is agreed that since the biconditional is circular, involving a use of closely related if not identical notions (of redness) on both sides, it cannot serve the purpose of reductively analysing the concept of redness in the traditional a priori way. It does not point us to reflectively salient, independent conditions that purport to be necessary and sufficient for the application of the concept. While the conditions may be reflectively salient, and necessary and sufficient, they are not suitably independent (McDowell 1983, p. 2). But what purpose is served by the biconditional, if not this traditional reductive-analytic goal?

First, then, the question about normal conditions. If normal conditions are not to be identified in a trivial way, it may seem that they should be specificed item by item. But that too would raise problems, for once we begin to specify normal conditions in such a fashion, it becomes more and more difficult to see how the biconditional could be knowable a priori. How could it be a priori knowable that something is red just in case it looks red to observers without ailment a, b, \ldots or n, in circumstances o, p,... and z? The approach suggested in my ethocentric account of the redness concept is to describe the practice of participants in discounting certain responses, and then to define normal conditions in a higher-level way as those conditions, whatever they are, which survive the relevant discounting practice. Under this definition of normal conditions, the biconditional tells us something substantial. It does not say that something is red if and only if it looks red in conditions which ensure that red things look red; it says that something is red if and only if it answers in a certain way to the sensations and practices of those who use the concept. But what the biconditional tells us is still plausibly a priori. Knowledge of the practices current among those who use the concept is sufficient to give knowledge of the truth of the proposition; we do not have to know in detail about which conditions actually pass the discounting test.

There are a number of additional benefits attaching to the ethocentric way I identify normal conditions. Not only does it make it possible to keep the biconditional in question at once substantial and a priori. It identifies normal conditions in a way that can be extended to any area of thought and discourse. It gives us a notion of normal conditions that can apply with subjects who have no such notion themselves. And it gives us an account of normal conditions such that, even if subjects have the notion, they are never in a position to know for certain that their conditions are normal. This is just as well, since subjects who knew that their conditions were normal would be in a position to apply the biconditional to themselves and to know something that surely no one ever actually knows: that they could not conceivably be in error or ignorance about the colour of the object in question.

But perhaps one of the most important benefits of our approach to normal conditions is that it suggests a similar line with ideal conditions. Imagine that the participants in a certain discourse find themselves sometimes inclined to give a response that is different by their lights—and ours—from the response given in an intuitively similar situation when a further feature of a certain category—further information of a certain kind—comes into view. Imagine that other things being equal, they always favour the response that is based on fuller information of that kind: they discount earlier or other responses. And imagine, finally, that with the sort of information in question, there seems to be more and more that could become available in any situation. In this case we theorists can introduce the notion of conditions that are not just normal but ideal: conditions that not only lack what the participants would put down as perturbing influences but conditions where they have all the information of relevant kinds that could ever be available.²⁵ Ideal conditions, conceived in that way, will have all the benefits associated with our way of conceiving of normal conditions. Thus we will be able to invoke ideal as well as normal conditions in alleging response-dependence in any area and in framing corresponding biconditionals.

So much for the ethocentric line on the question of how to define normal conditions. The second question that is raised by the sort of a priori biconditional associated with redness—the response-dependence biconditional—bears on what purpose it can serve, given it is circular and cannot provide a regular sort of reductive analysis. The natural answer is that even if circularity vitiates the reductive-analytic goal, still the biconditional may be useful in marking an interdependence of concepts: specifically, in making a connection between concepts of things in the world on the one hand, and concepts of subjective responses on the other. That answer associates use of the biconditional with the style of philosophy guided by E.M. Forster's motto "Only connect" (Strawson 1985, p. 22). It is hard to quarrel with the answer, since it is certainly worthwhile connecting up concepts. We should note, moreover, that the answer can be invoked by a defender of the platitudes story, who thinks that the biconditional for redness is a priori because it reflects—as distinct from spelling out—the application conditions of the concept (Johnston 1989). But the approach which we have adopted, with its emphasis on possession conditions rather than application conditions, identifies a much more specific goal that the response-dependence biconditional serves. On our approach, the biconditional will be interesting, not just because it connects up concepts, but because it points us towards an explanation of expertise in the concept to which it is addressed.²⁶

Consider the biconditional for the concept of redness. That biconditional is explanatory of our expertise so far as it directs us towards the ethocentric genealogy of the concept that was provided earlier. With an analytical biconditional —with a biconditional taken as providing a reductive analysis—we are presented with concepts on the right hand side such that a grasp of them yields all that is required for a proper grasp of the concept on which the biconditional is targetted: the concept, like that of redness, involved on the left hand side. With a genealogical biconditional—with a biconditional understood in the light of our ethocentric

²⁵ This is only meant to be illustrative. The concept of ideal conditions may require an account that refers to matters other than those of the information available.

²⁶ On explanation versus analysis of a concept see Price (1988) and Pettit (1990a and 1990b). The contrast is introduced in Blackburn (1984, p. 210).

story—we are presented with concepts on the right hand side such that it is not so much a grasp of those concepts, but rather a capacity to display the responses and follow the practices to which the concepts refer us, that yields all that is required for a proper grasp of the target concept. In order to grasp the concept of redness, at least in the proper sense in which ordinary participants in colour discourse grasp it, it is not sufficient to understand what it is to have red sensations and what it is for conditions to count as normal. In order to have a proper grasp of the concept of redness it is necessary to be able to undergo red sensations and to use them, according to the practice that yields the distinction between normal and abnormal conditions, in making judgments about the colour of things.

On this story about the role of the response-dependence biconditional, the biconditional does not enable us to gain the proper mode of access to the target concept. Its role is rather to explain how people who have the target concept ourselves, no doubt, included—gain such access. It points us towards causal preconditions of getting the concept going and having proper access to it: preconditions like possession of the relevant response-capacities, and involvement in the practice of standardising responses across times and people. A biconditional can serve in this sense to explain mastery of a certain concept, even when we ourselves lack the requirements of proper access to that concept. The genealogy provided above may adequately explain the concept of redness for a colour-blind person, even if such a person does not have proper access to that concept. And the anthropological genealogy of an exotic concept—say, the taboo—can explain the concept adequately for us without giving us proper access to it; we may lack some necessary preconditions of access.

Having defined response-dependent concepts as response-privileging, I had moved on to the task of showing how a concept can plausibly get to be responseprivileging. I have now completed that task, having shown how the concept of redness, as traditionally understood, can privilege the sensations of redness that we experience in normal conditions. By generalising from the ethocentric story told about the concept of redness, we can give a more or less plausible cast to any response-dependence claim. Thus we need not be shocked at the variety of response-dependence claims that have been advanced, and that can be envisaged. Here is a quick check-list.

Most theories of perception admit secondary concepts in general—concepts of taste and smell and warmth, for example—as response-dependent. Many theories of value cast the concepts of what is good or right as response-dependent in a parallel manner: it is a priori knowable, according to these theories, that something is good or right if and only if it evokes certain responses of approval, under ideal information, in a suitable audience.²⁷ Some theories make belief-desire concepts and other intentional concepts response-dependent, so that it is a priori true that someone believes or desires something if and only if she displays a suitable profile, under normal or ideal conditions, from the viewpoint of what Dan Dennett

²⁷ Johnston (1989) makes this clear and indeed offers such a theory himself. See also McDowell (1985) and Wiggins (1976).

calls the intentional stance.²⁸ There are also theories which represent causality as response-dependent, linking the ascription of a causal relation in an a priori way to the fact that the alleged cause shows up as in principle the sort of thing that could have been manipulated to produce the alleged effect.²⁹ And we can see lots of other possibilities on the horizon, even if they have not been fully explored. Someone might claim that it is a priori that there is a certain chance of a given sort of event occurring if and only if the rational subject would give that event the corresponding degree of credence under suitable conditions.³⁰ Someone might hold that it is a priori that certain temporal slices are stages of one and the same object if and only if they show up as the same object under suitably idealised response-tests.³¹ And so on for an open-ended range of cases.

The response-dependence claims mentioned are all claims about local response-dependence. Elsewhere, as already mentioned, I have provided an argument that response-dependence is a global phenomenon (Pettit 1990a, 1990b, forthcoming). This global thesis would not deprive the local claims of interest. It is a thesis to the effect that with any basic concept that we finite minds master there is bound to be a certain sort of response-dependence. Unlike the local claims, it is not a thesis about the precise kind of dependence relevant in any particular case. The idea is that we each identify the basic items of which we have concepts—items potentially as different as the property of redness and the plus function—via the similarity-responses elicited in us by exemplars; that we treat these similarity-responses as reliable only in cases that come out as normal or ideal; and that in forming our beliefs we are thereby enabled to commit ourselves to respect the truth-relevant demands of those entities: we are enabled to identify the entities as constraints that we can fallibly try to honour.

I do not itemise response-dependence claims here with a view to defending them. I mention them only to indicate that the notion of response-dependence which we have generated is relevant to a broad range of philosophical claims. We turn in the next section to the question of how far the admission of response-dependence compromises a commitment to realism. The range of response-dependence claims makes that question an important issue.

3. Realism meets response-dependence

3.1 The nature of the conflict

We saw in the first section that full-blooded realism about any area of thought and discourse involves three broadly distinct claims: descriptivism, objectivism and cosmocentrism. The realist defends the descriptivist view that the discourse pos-

²⁸ The point is made in McCulloch (1986) and Pettit (1986, p. 58).

²⁹ See Menzies and Price (forthcoming) for an approach along these general lines.
³⁰ This is meant only to be indicative of a style of theory, not to put forward a particular

thesis.

³¹ I take Mark Johnston (1987a and 1987b) to be mooting a theory of this kind.

its distinctive sorts of entities; the objectivist view that those entities exist, and exist independently of their recognition in the discourse; and the cosmocentric view that learning about those entities is a project of discovery, not invention, so that error and ignorance are always possible. The question to which we now turn is how far realism in this sense is undermined by the recognition that a discourse is response-dependent. In this sub-section I argue that the only inevitable conflict involves the cosmocentric thesis. Then in the remaining two parts of the section I argue, first, that the retreat from realism involved in admitting response-dependence need not be dramatic and, second, that nevertheless it does bring its surprises: it does impact on some traditional realist assumptions.

Would a response-dependence thesis about the concepts of a discourse have to compromise descriptivism? Would the traditional view of colours force us to say that thought and discourse about colours does not posit distinctive items? Would it force us to think, in reductivist fashion, that assertions about colours are a priori reducible to assertions involving only familiar things? Or would it force us to see utterances about colour, in instrumentalist or quasi-instrumentalist mode, as nonassertoric: as utterances like "Wow!" or "Ouch!" that do not serve to say anything about the things to which they are apparently addressed?

There is no pressure from the traditional response-dependent thesis to go towards an instrumentalist or quasi-instrumentalist theory. There may seem to be a pressure towards reductivism. After all, it looks as if we can reduce discourse about colour to discourse about colour-sensations and the properties responsible for such sensations. But even this suggestion is misleading.

The problem with the suggestion is that it supposes that we can master the discourse of colour-sensations independently of access to discourse about colour; it supposes that the sensational discourse is independently given as a mode of thought and talk to which we might think of reducing colour-discourse. And that, to say the least, is a controversial assumption. On the ethocentric story told, we form the concept of redness in things independently of having any concept of redness in sensations: the sensations serve to highlight similarity-classes of colour but without necessarily becoming objects of awareness themselves. A natural extension of the story would be to say that we form the concept of red sensations derivatively from the concept of red things: red sensations present themselves as the sensations occasioned in normal conditions by red things. And in such a case there could be no question of reducing colour-discourse to discourse about colour sensations.

So much for the compatibility of a response-dependence thesis with descriptivism. The next question is whether such a thesis is also likely to be compatible with objectivism about an area of thought. Is it likely to lead to an error theory about the discourse: an eliminativist view, according to which the discourse is fundamentally wrong to posit the entities that distinguish it? Or is it likely to support an idealist picture under which the entities posited exist but exist only in virtue of the recognition they receive in the discourse?

I see no likely connection between a response-dependence thesis and eliminativism. To be response-dependent about a discourse is, on the face of it, to increase the chances of the discourse positing things that really exist, not to lessen them. After all, it is to interpret the posits of the discourse in a more or less familiar or homely way; it is to characterise them in terms of certain familiar responses. But though the admission of response-dependence does not particularly favour an error theory, neither is it inconsistent with such a theory. Thus an ethocentric account of colour-concepts might lead us to think that there are no such things as colours, on the grounds that the normal conditions required for their identification are a chimera: people do not necessarily achieve the convergence essayed in the practice of participants, even if they think they achieve it; reflection reveals that in various circumstances they face blunt, non-negotiable disagreements.³²

What of a connection between a response-dependence thesis and idealism? Is there a plausible linkage to be found here? I do not think so, but there is at least an argument to consider, which suggests such a linkage. The argument goes as follows. According to a response-dependent thesis, say about colour, people's responses make it the case that the concept of redness applies to something; their presence, under normal conditions, ensures that the concept fits the object. But the concept of redness applies to something if and only if it is red. So, according to the thesis, people's responses make it the case that the thing is red. To say that, however, is to support nothing less than idealism: it is to hold that redness and the other colours posited in colour discourse are properties which depend for their instantiation, and in that sense for their existence, on the epistemic responses of human beings.³³

In response to this argument, I distinguish. There are two quite different readings of the claim that people's responses make it the case that the concept of redness applies to certain things. And equally there are different readings of the conclusion derived from it, that people's responses make it the case that certain things are red. The claim may be that people's responses shape those things in such a way that they fall under the pre-existing concept of redness. This proposition would certainly involve something like idealism. Or the claim may be that people's reponses shape the concept of redness in such a way that it falls upon

³² See Price (1988) on no-fault disagreements. And see the discussion of the possibility of an error theory about ethics in Smith (forthcoming).

³³ Michael Devitt drew my attention to this sort of argument. Related matters are discussed in Chapter 13—on what he calls constructivism, rather than idealism—of a new, forthcoming edition of Devitt (1984). Devitt's own view is that a belief in global response-dependence, but not in local response-dependence, involves constructivism. On a global view even the concept of causality is response-dependent, or definable in response-dependent terms, and his thought seems to be that it cannot therefore be used to vindicate the realist intuition that various properties and other entities are at the causal source of our responses. I see no problem. We may think that the type of relation picked out by the concept of causality is at the causal source of the responses with which it is linked, and we may therefore take a realist view of the relation; we may allow a sort of self-subsumption whereby the concept of causality applies to the relations between the relation it picks out and the responses with which it is associated.

those pre-existing things. And that proposition has nothing of idealism in it. The first proposition represents the things to which the concept of redness applies as being moulded by our responses. The second represents the things as independent, given entities; the role of our responses is merely to determine which of them will fall within the extension of the concept of redness.

The second reading is implicit in the ethocentric genealogy of colour-concepts presented in the last section. The story as to how we get the concept of redness going is, quite clearly, not an idealist narrative. We essay thoughts and assertions involving a property that we identify on the basis of certain exemplars. What property do we manage to engage with? What property do we fix upon as the referent of our concept? The genealogy provided directs attention to the red sensations that we experience under normal conditions: under conditions where there is no obstacle to intertemporal and interpersonal constancy of response. According to the story developed, the property that we fix upon, the property that provides the referent of our concept of redness, is that property whose instances evoke red sensations in normal observers under normal circumstances. And there is no reason to think of that property as constituted by our recognition of it.

Take the world as populated, independently of us, by a great range of objective properties; we may think of these in any of a variety of ways. With a concept like that of redness, the question arises as to what determines that the concept will hook onto this property rather than that: say, on to this reflectance property, to take a plausible sort of candidate, rather than some other. In maintaining that the concept is response-dependent, so our genealogy shows, all that we may mean is that that question is to be answered in a particular fashion: the concept hooks on to that property, whichever it is, that evokes red sensations under normal conditions.

There is another way of emphasising the non-idealist character of the sort of response-dependence claim illustrated in the case of redness. This is to point out that on our approach the assertion that a concept is response-dependent is, precisly, an assertion about the concept, not an assertion about that of which it is a concept: not an assertion about the property or object or operation in question. It is to say that the reference of the concept is determined in such a way that our responses are privileged under certain conditions: they are not capable of leading us into ignorance or error. It is not to say anything about the property or object or operation in itself, and so a fortiori it is not to say that that entity is dependent on us in the fashion envisaged by the idealist. (See Peacocke forthcoming, Chapter 1.)

If someone who defends response-dependence is making a point about how our concepts get their referents determined, equally someone who denies that a concept is response-dependent will be making a point in the theory of reference. She will be claiming that the concept has its reference fixed in a manner which leaves open the possibility that even normalised or idealised responses can lead us astray. She may say that the reference of the concept is fixed in a more or less Platonic fashion, by no known naturalistic device. Or she may say that it is fixed in a way that relies only on response-indifferent, natural connections, connections that are not reflected in our dispositions to make judgments. She may say, for example, that the concept of redness is the concept of a property that is causally connected with us in a certain manner: specifically, in a manner that does not affect our sensations of redness. This will allow her to think that the referent of the concept can be fixed in such a way that our red sensations, even our red sensations under normal conditions, may lead us astray as to what is red and what isn't.

We have seen that both descriptivism and objectivism are compatible with maintaining a response-dependence thesis about some area of thought and discourse. In particular we have seen that this is so if we defend the response-dependence thesis along the ethocentric lines illustrated for the concept of redness in the last section. Under the ethocentric approach, colour-discourse posits distinctive entities, in the manner required by the descriptivist; and those entities exist, and exist independently of their recognition by us, in the way envisaged by the objectivist.

But by our account realism about any area of discourse involves cosmocentrism as well as descriptivism and objectivism. It involves the claim that learning about the entities posited in the discourse is a matter of discovery, not invention, so that human beings may be in error or ignorance about all and every substantive proposition. The admission of response-dependence, on the other hand, involves an anthropocentrism; in the form illustrated in the last section, it involves the particular species of anthropocentrism that we describe as ethocentrism. It means that people's responses, at least under normal or ideal conditions, cannot lead them astray. People may never be able to know that their conditions are normal or ideal—certainly they will not be able to know this under the ethocentric account of such conditions—and so they may never be able to know that they are beyond the threat of ignorance or error. But it remains the case, nevertheless, that people in such conditions are not vulnerable to those failures; they are not liable to be misled by their responses. How seriously then does such an anthropocentric belief compromise realism?

The anthropocentric compromise may not be wide, in the sense that the immunity from ignorance and error will only extend to a limited set of propositions. Normal subjects may be immune from ignorance and error about whether an observationally presented item is red but they will certainly not have any such immunity on the question of whether there are red kangaroos in Tasmania. But, however narrow in its impact, does the anthropocentric compromise of realism cut deep? Does it undermine characteristic realist commitments?

I shall argue in the next sub-section that it does not. I concede that there are forms of anthropocentrism which do undermine realism fairly radically. But I argue that the ethocentric admission of response-dependence, the recognition of response-dependence in the manner illustrated with the concept of redness, is not one of these. Whereas radical forms of anthropocentrism would represent the relevant discourse as a more or less inventive process, ethocentrism portrays it as an enterprise of discovery. It keeps the realist motivation, and the realist vision, fundamentally intact.

3.2 Realists reassured

There are two points that I shall make in defence of the claim that ethocentrism does not radically undermine realism. The first is that it is compatible with epistemic servility, the second that it is compatible with ontic neutrality. To assert epistemic servility is to say that in seeking out knowledge in a given area we have to strive to attune ourselves to an independent reality. To assert ontic neutrality is to say that the kinds of things which we succeed in identifying may be kinds that are of more than parochial interest: they may be of enduring interest across distinct cultures and traditions, even across different species.

The most radical form of anthropocentrism would represent participants in a discourse as dictators about what is the case and would make them, on that basis, immune to ignorance and error. It would free participants from epistemic servility. What they say goes. They do not discover facts, they invent them.

Take the concept of U-ness that used to be in vogue—courtesy of Nancy Mitford—among what we might describe as the Sloane Square set or, for short, Sloanes. To speak of lavatories is U, of bathrooms non-U; to lay cloth napkins at table is U, to lay paper napkins non-U; and so on through a myriad of equally trivial examples. I assume that there is something distinctively collusive in the way Sloanes use the U-concept: that as they individually decide whether something is U or non-U they look over their shoulders to make sure they stay in step—the community is the authority—rather than looking to the thing itself to see what profile it displays. In other words I think that whether something is U or not is a matter of the say-so of those in the appropriate set; the members of that set have an authoritative, dictating role in regard to the concept. That they have this role is borne out by the fact that as the regular bourgeoisie try to get in on the game, Sloanes are notorious—at least in the oral tradition—for shifting the extension of the U-concept.

The most radical form of anthropocentrism would hold that immunity from ignorance and error comes from the fact that with the relevant concepts, people have the dictatorial role that Sloanes have with the concept of U-ness. It would undermine the idea that getting at the truth in relevant discourse is a matter of discovery, not invention. The first thing I want to argue about the ethocentric admission of response-dependence is that while it privileges certain responses by participants in a discourse, it does not invest those participants with this sort of dictatorial authority. It leaves untouched the ordinary view that in seeking true beliefs in a relevant area, even true beliefs formed in normal or ideal conditions, we have to try to get in tune with an independent authority: a reality that dictates whether the beliefs we form are in fact true. In a phrase, it leaves epistemic servility in place.

The most striking way of establishing this result would be to establish that under the ethocentric admission of response-dependence, even normally functioning and normally or ideally positioned subjects have to be seen as getting things right in virtue of their access to an independent realm, not in virtue of their say-so. This would be to say that even with subjects for whom there is an a priori assurance against ignorance and error about certain propositions, getting things right is not a matter of dictating how they shall be. As it happens, I believe that something like this can be established.

There is an intuitive contrast in respect of the dictatorial dimension between U-ness and ordinary response-dependent concepts such as that of redness. The contrast, I maintain, testifies to the fact that we can accept a response-dependent story about ordinary concepts and still think of ourselves, still think even of normalised or idealised subjects, as occupying an epistemically servile position: we can still think of ourselves and of normalised or idealised subjects as having to strive to get in tune with an independent authority. The Sloane Square set, or at least those in normal mode, do not face any task of attuning themselves to an independent authority. What they say goes. Not so with those of us who make judgments of colour and the like; not so, even if it is assumed that we are normally functioning and normally or ideally positioned. Or so I say.

How are we to mark this alleged distinction between U-ness and redness: in particular, redness on the ethocentric sort of account sketched in the last section? It may strike some that here would be a good place to introduce a distinction that I have ignored up to now, a distinction that is frequently discussed in the literature. Given that it is a priori that something is red if and only if it looks red to certain observers, there is a question as to whether that means that in those possible worlds where it looks green rather than red, it is green rather than red. The answer to this question depends on whether we interpret the biconditional in rigid or non-rigid mode. Rigid mode: something is red at a world if and only if in the actual world it looks or would look red to the relevant observers. Non-rigid mode: something is red at a world if and only if at that world it looks red to relevant observers. The rigid reading rigid, because it keeps the observers involved the same at all possible worlds—appeals to realists on the grounds that it expands the possibility of ignorance and error. It makes it possible for various observers at other worlds—for various possible observers—to be wrong about the colours of things. And it makes this possible, even if the observers are normally functioning and normally or even ideally positioned.³⁴

I prefer the rigid reading of response-dependent biconditionals (Pettit 1990a).³⁵ A natural suggestion then is that the availability of that reading marks the intuitive contrast between an ordinary response-dependent concept like redness and the concept of U-ness. But the suggestion comes unfortunately to nothing. Even with the biconditional linking U-ness with Sloanes, it is possible to offer a rigid reading that expands the possibilities of error. It is possible to under-

³⁴ The paper which opened up the possibility of the rigid reading is Davies and Humberstone (1980).

³⁵ Should the biconditionals be rigidly tied to times as well as worlds? Not on my account. But is there a problem, then, about what happens if different responses are forthcoming at different times? No. On my account, there is a single concept associated with those responses only if intertemporal constancy can be vindicated: only if suitable perturbing factors can be found at the source of the variations. (I am grateful to Brian Garrett for raising this issue with me.)

stand the biconditional so that what matters for U-ness at any world is what the Sloane Square set say in the actual world, not what they say at the world in question. We can set things up, just as we could with redness, so that even normal Sloanes would get things wrong if they broke with the responses found in the actual world. The point is worth emphasising because it shows that the differences generated by the rigid and non-rigid readings may not be very intimately connected with the realist problematic.³⁶

So how then are we to mark the distinction between redness and U-ness? That normal observers judge that something is red establishes that it is red, that normal Sloanes judge that something is U establishes that it is U. So where is the alleged difference between redness and U-ness? Where does the exercise of a dictatorial role show up in the U-ness case, if it is present only there?

Given that red sensations determine the referent of the redness concept, Uresponses the referent of the concept of U-ness, the only place for a systematic difference between the two cases is in the things that in turn determine those responses. And when we look to what determines the responses then we do indeed find a significant difference. U-responses are determined, under my characterisation of the case, by the efforts of Sloanes to keep in step with one another in their classification of things. But clearly red sensations do not generally spring from such collusive machinations, even if people sometimes succumb inappropriately to group pressure.

When subjects see something as red, even when normally functioning and normally positioned subjects see something as red, they do so, or so we generally assume, because the thing presents itself—and, if there is no mispresentation, because it is—a certain way. What way is it such that it is the thing's being that way which leads them to see it as red? The only plausible answer is: its being such as to merit the description "red"—in short, its being red—leads them to see it as red. As the preferred rigid reading of the biconditional would have us frame the point: the thing's being the particular way that is contingently linked in the actual world—not in all others—with red sensations, that is what leads people to see it as red. Nothing of the kind can be said in the case of U-ness. It may be because of exposure to an instance of the property that Sloanes judge something to be U but the causally relevant property of the instance in eliciting that response is not the U-ness itself; it is rather the fact that this is a type of case which Sloane rangers generally regard as U.

Someone may baulk at the claim that a property like redness can be causally efficacious in producing sensations.³⁷ But this would be a mistake. Consistently with the ethocentric genealogy for the colour-concepts, it is possible to think of

³⁶ Here I may differ from Johnston (1989, p. 148). I certainly find congenial the

remarks made by David Lewis (1989, pp. 132–33) on this topic.

37 Johnston (forthcoming) and Wright (forthcoming) may provide examples. Wright speaks of "causally efficacious kinds" in a way which suggests that he would not take the point I go on to make here. And Johnston suggests that only a "strange pre-established harmony" would explain how colours and lower-level properties could be simultaneously implicated in the causal explanation of our sensations.

the colours of things in a variety of ways.³⁸ But no matter how we think of them, we can make sense of the claim that they are causally relevant to people's sensations. For any sensation that a colour produces, it is true that that sensation will be attributable to more basic, microphysical properties of the object and of the light that falls on the object. But we can think of the colour as having a higherlevel causal relevance to the sensation, provided that the object's having that colour more or less ensures that no matter how things are disposed at the microphysical level, they will be disposed so as to produce the sensation. The colour may not "produce" the sensation in the most basic sense available for that term but it will be causally relevant provided that it "programs" for a process of basic production.³⁹ An analogy may help to make the point. A square peg is blocked as I try to push it through a hole. What produces the blocking in the most basic sense is this or that overlapping part. But the squareness is still causally relevant. Given the dimensions of peg and hole, the squareness ensures that there will be some overlapping part—maybe this, maybe that—which blocks the peg; it programs for the production of the blocking, even if it does not produce it itself.

The contrast between U-ness and redness, or between U-ness and other response-dependent concepts in general, is that U-ness fails a certain test which redness passes. In Plato's *Euthyphro* Socrates asks whether something is holy because the gods love it, or whether the gods love it because it is holy. We might ask in parallel whether something evokes the U/red-response in normal subjects because it is U/red or whether it is U/red because it evokes the U/red-response. We know that in one sense it is true that something is red or U because it evokes the U- or the red-response among normal subjects: that it evokes the appropriate response ensures that the property in question is the redness or the U-ness property. But we see now that there is another sense in which the converse is also true for redness—it is true that something evokes the red-response in normal subjects because it is red—while there is no sense in which the converse holds for the U-ness case. The sense in which the converse holds for redness is that the property of being red can be thought of as something common to red things which ensures

³⁹ On the programmatic sense of causal relevance see Jackson and Pettit (1988 and 1990). John Campbell (forthcoming) applies the notion of programming to the case of colour.

⁴⁰ This test is deployed in Pettit (1990a), following the immediate lead of Johnston (1989). Ihad deployed it earlier Pettit (1982). See also Kukathas and Pettit (1990, Chapter 2).

³⁸ For example: if to be red is to be such as to look red in suitable circumstances, then we may take the redness of a thing to be the higher-level state of having a lower-level state that produces the required effect on observers; we may take it as the lower-level state operative in the thing; or we may take it as the disjunction of the lower-level states that do the job required.

⁴¹ The test may not always apply smoothly, as Peter Menzies has persuaded me. Take the concept of singular chance and assume that a response-dependent account—an account on the lines suggested in the last section—can do just as well for realism as an account of the concept of red. An event's being such as to merit the ascription of a certain chance may be responsible for the subjective probability formed in ideal conditions by rational subjects: this, in the sense that the information on which that chance supervenes elicits the response. But we would not naturally say that the chance itself elicits the response

that normal observers will have a certain experience.⁴² Ask the Euthyphro question with U-ness and the unambiguous answer is that something is U because it evokes the U-response in suitable subjects. Ask the question with redness, and the answer is less straightforward: in one sense something is red because it looks red to normal observers, in another sense it looks red to normal observers because it is red (Wiggins 1976, p. 348).

There is nothing very anomalous about the claim that the "because" runs in both directions in these cases. An eraser is elastic and bends. Does it bend because it is elastic, or is it elastic because it bends? In one sense—if you like, a criterial sense—it is elastic because it bends: the capacity to bend is what marks off elastic things. In a parallel sense something is red because it looks red to normal observers: the capacity to look red to such observers is what marks off red things. But in another sense—if you like, a causal sense—the eraser bends because it is elastic: the elasticity is responsible, in part, for the bending. And in a parallel sense something looks red to normal observers because it is red: the redness is responsible, in part, for the thing's looking red. Something is U because it looks U to appropriate subjects, since being U is defined by reference to that U-response. But it is not the case that something looks U to such subjects because it is U; it is not the case that its U-ness is responsible in any part for evoking the U-response: the U-response is driven by different pressures.

I want to make one further comment on the red-U contrast. Those who use the U-concept exercise their will in determining the things to which it will apply, the property to which it will refer. But things would be just as inappropriate were they to be guided by causal pressures that emanated from sources other than the nature of the things and property in question.⁴³ Take the concept of things that are ping as distinct from pong and assume that there is, as psychologists report, a surprising degree of convergence in what people regard as ping-things rather than pongthings: ice-cream is ping, soup is pong, and so on. I presume that what produces the pressure responsible for the convergence is often something as irrelevant as

⁴² Notice that though it is true that something evokes the red-response because it is red, this does not mean that that is a very interesting explanation of the response. Thus we should not be surprised that, substituting in accordance with the a priori biconditional, we get the dramatically uninteresting explanation that certain things look red to observers in normal conditions because they are such as to look red to such observers. Certainly we should not be led, like Mark Johnston (1989, pp. 171–3), to think that the response-dependence biconditional for the concept of redness (or whatever) cannot therefore reflect our ordinary concept. Johnston uses the Euthyphro test in a different way from me, for perhaps three reasons. First, he attends to the question of whether something provides an interesting causal explanation rather than to the issue of whether a causal relation obtains in the case on hand. Second, he tends to focus, not on the intuitively causal relation between something's being red and looking red, but on the surely non-causal relation between its being red and being such as to look red; this becomes explicit in the appendix to Johnston (forthcoming). And third, to return to themes broached in the second section of this paper, he is raising the Euthyphro question in relation to concepts whose very application conditions link them, allegedly, to subjective responses; there may be a better case to be made for his line with such response-dispositional concepts—though we may deny that the concept of redness is an example—than there is with the response-privileging concepts that

⁴³ A similar point is emphasised by Christopher Peacocke (1989 and 1990).

the sound of the name for the thing in question and it should be clear that if that is so, there is no more epistemic servility with the concept of what is ping—though there is a servility of sorts—than there is with the concept of what is U.

There were two things I promised to say in support of the claim that the ethocentric admission of response-dependence in an area of discourse does not seriously compromise realism. The first was that it leaves in place the view that in trying to get things right in that area of discourse, even if we are normally functioning and normally or ideally positioned subjects, we have to strive to get in tune with an independent authority: we have to do the sort of thing that would make no sense with trying to get U-characterisations straight. The admission of response-dependence does not make us dictators as to what is the case in the relevant area; it preserves the epistemic servility which allows us to say that we discover facts, we do not invent them. The second thing I want to add now is that the ethocentric admission of response-dependence also leaves in place the view that there are certain kinds of entity we recognise that are, as we might put it, intrinsically important kinds, not just kinds that are important for the way they engage with us. The sort of anthropocentrism that it involves preserves an ontic neutrality vis-à-vis different cultures and species in the kinds that we can countenance. Not only does it allow us to speak of discovering independent facts, it also lets us speak of discovering independent kinds. In neither case is the language of invention appropriate.

The property of redness is an example of an entity that may fail to display the required neutrality. It is a species-relative property, in the sense that the things that it gathers together in its extension may form a homogeneous class only from a species-specific point of view or, at any rate, only from the point of view of creatures with our particular sensitivity to frequencies of light and to the other components of colour. But the concept of redness is not necessarily typical of response-dependent concepts in this failure of neutrality. There are a number of features that make it special, features that it probably shares with all the qualities that are described traditionally as secondary. First, there is only one sort of response associated with the concept. Secondly, the response involves one sense modality only. And thirdly, the response is a purely observational one, involving the effect of a stimulus on a sense organ. It is not going to be surprising if a concept whose referent is picked out on such a narrow basis refers us to a property that is of no significance for creatures who lack the appropriate sensory responses or indeed for theories which abstract away from such responses. We would not be surprised to find that Martians found the category of red things as shapeless and uninteresting as most of us find the category of U things. And we should not be surprised that the sciences which abstract away from sensory responses have no use for the concept of redness in their accounts of the world.

The concept of redness need not be typical of response-dependent concepts in this way, and that is the second point that I want to make. Response-dependence allows for a considerable degree of neutrality in the kinds of entities recognised. Thus, to mark the contrast with the colour case, there is no reason why there

should be only one response involved in identifying a certain sort of entity; there is no reason why only one sense modality should be involved; and there is no reason why the responses should be purely observational, as distinct from responses that presuppose certain practical dispositions. Consider the sort of Wittgensteinian story that might be told about how we get the concept of being pear-shaped going (Wright 1988). Certain examples serve to identify the property in question but they do so only so far as people find it natural or salient to go on in a certain way from those examples. It will be a priori on this kind of approach that something is pear-shaped if and only if it is saliently similar, for human beings, to uncontroversial cases of pear-shaped things. Such a response-dependent account of the property will invoke a much richer array of responses than the responsedependent account of redness. A figure will be saliently similar to uncontroversial examples of pear-shaped things in virtue not just of looking a certain way but also of lending itself to certain measurements or superimpositions. Thus there will be a number of responses involved in finding things saliently similar, they will involve a number of sense-modalities and they will involve practical as well as observational dispositions.

The difference between the property of redness and that of being pear-shaped could mean that the latter property is less tied to our species and our everyday standpoint for the interest it has. It could mean, though it probably doesn't, that the property would also represent a natural way of grouping things for Martians and that it has some role to play in the scientific view of the world that abstracts away from sensory responses. The point to notice is that as we move away from the narrow base of responses by reference to which the referents of colour-concepts are distinguished, we may be picking out kinds which have a more robust identity: an identity which, salient as it remains under variations in sensory and related perspectives, can be thought of as more objectively anchored than the identity of a colour-property. Response-dependence does not rule out the possibility of our tracking kinds that are more or less species-neutral and standpointneutral: kinds that we can describe as not just conventional categorisations, not just artificial ways of putting things together. It does not rule out the possibility that we can think of ourselves as discovering certain independent kinds, as distinct from in some sense inventing them.

There is one further point worth adding to this. Not only does response-dependence allow us still to make contact with more or less neutral kinds of things; it is also consistent with the practice, as it is often described nowadays, of recognising certain kinds as natural kinds. When we identify the kind of stuff that we call "water", then by the sort of account mooted in the last section, we mean to identify whatever stuff proves to be similar under a certain ideal of information to certain examples. We may think that the similarity amounts to having an H₂O composition but we allow that we could be wrong about that. The kind to which we are directed in this way is much more likely than redness to be of more or less neutral significance.

I argue then that the compromise to realism that is involved in the admission of response-dependence in any area is not necessarily as serious as it may look at first. Consistently with admitting response-dependence, we can recognise epistemic servility and ontic neutrality. We can hold that getting things right in the discourse is a matter of getting in tune with an independent authority and that the kinds of things countenanced when people get things right may be of more than a standpoint-specific or species-specific interest. That, plausibly, picks up most of what the realist wants to say, for it means that what participants are to hold is a matter of discovery, not invention. It connects with the realist desire to represent the discourse in question as an area where there is scope for pushing back the frontiers of ignorance and error. But though the compromise to realism need not be serious, still there is a compromise involved. In order to make it vivid, I would like in conclusion to mention two corollaries of response-dependence which may surprise some realists.

3.3 Realists surprised

The first corollary of response-dependence is a certain sort of indeterminacy. This will be surprising for those who assume that realism about any discourse means that no propositions in the discourse are inherently vague or borderline in character: vague or borderline in the fashion of certain judgments of baldness. It is usually thought that to admit vagueness in a discourse is to think that the principle of bivalence—the principle that every meaningful proposition is true or false—does not apply there.⁴⁴ The assumption that realism rules out vaguenees often goes then, rightly or wrongly, with the assumption that realism requires the assertion of the principle of bivalence; this latter assumption is explicitly ascribed to realists by many of their opponents (Dummett 1973; but see McDowell 1976). But whether or not vagueness undermines the principle of bivalence, the admission of response-dependence certainly introduces new possibilities of vagueness. And on this count response-dependence may surprise some realists.

Suppose that there is a substance such that when it is exposed to a photon of light it changes in a manner that affects how it appears, even appears to normal subjects. Before exposure, as we might incautiously say, it was disposed to look green; after exposure, it is disposed to look red.⁴⁵ Is the object really green or really red? Someone who adopts a response-dependence line will naturally take the view that this is a borderline case, a case of a kind with the question as to whether someone losing hair is bald, someone of middling waistline is thin. If he thinks the issue has to be resolved, he will recognise that resolving it is not a matter of looking deeper into the nature of things. In the example imagined the response that is associated with colour is not forthcoming in the ordinary way; the regular practice of determining colour is systematically thwarted. The response-dependence theorist will see that the thing to say is that this is a borderline case or that the practice extends or should be extended, more or less arbitarily, in this or that manner. He will not be foolish enough to think that there is

⁴⁴ This view is well described and criticised in Williamson (1992).

⁴⁵ The case is due to Mark Johnston.

a fact of the matter already established in the bowels of things which clearly fixes whether the object is green or red. Relative to our unreconstructed practice, reality is as silent on this matter as it is on borderline cases of baldness or thinness.

The vagueness illustrated in the example may be available with any responsedependent concept. In order to see how it might arise, all we have to do is imagine a case where the response that is associated with the concept is frustrated and the practice of applying the concept thwarted. If we can imagine a case where the associated response is frustrated, then we will have a case where the proper application of the concept is not clearly fixed and reality is relatively silent as to what is what. Thus any response-dependent concept, no matter how exact it seems to be, may turn out to be vague in certain regards; there may be cases where reality—unaided reality—fails to dictate clearly how the concept should apply. We may prefer to leave the concepts vague at such limits or we may decide to stipulate on how they should be extended to cover the problematic cases. But either way we must acknowledge that, tested against the unamended concept, reality is relatively unforthcoming.

Should realists be troubled by this corollary of response-dependence? I do not think so. It should be no great scandal that concepts which look quite exact may turn out to be vague at certain margins. But I believe that the corollary will still surprise many realists. It will force them to revise their intuitions about various concepts, and to revise them in a way that would be unnecessary if the concepts were response-independent. Thus I mention it as a corollary of response-dependence that compromises realism in a certain measure.

The second corollary I would like to mention is going to be equally surprising for realists. It is that under various response-dependent accounts of concepts it is possible for the bare recognition of a certain fact to necessitate a subject-involving sort of response. This result will be surprising for realists so far as they spontaneously think that if the world we make epistemic contact with is suitably independent, then there can only be contingent connections between our recognition of how that world is and subject-involving responses. In particular, realists tend to go with Hume in thinking that the recognition of facts cannot in itself have the subject-involving property of disposing people to action; any such disposition must be the product of non-cognitive as well as cognitive states.⁴⁶

On the response-dependent account of a concept, the referent of the concept is determined by certain responses of ours and these responses will be present in what we may describe as primary cases of applying the concept. With a colour like redness the primary cases will be the normal situations where things actually look red to us. They contrast with secondary cases where we may be able to make judgments of redness but where the thing judged does not actually look red to us: cases where we judge that the tomato must be red because it tastes good, because it looks yellow in a certain lighting, because an authority tells us it is, and so on.

⁴⁶ That is why they have a problem, for example, in being moral realists. For a succinct account of the problem see Smith (1991).

These secondary cases will be parasitic: judgments of redness in such situations are possible only so far as there are also primary cases of judgement.

Suppose now that the responses associated with a concept are tied up with our being subjectively involved in a certain way: say, with our experiencing certain sensations, emotions, motivations or compulsions. Under this supposition, the recognition of something in a primary case as an instance of the concept will necessitate the presence of the sensation, emotion, motivation or compulsion. There will be a necessary connection between the passive state of countenancing the object and one of those more or less subject-involving dispositions. The common realist picture of how subject-involving dispositions get going is that first we passively register the presence of an instance of the concept and then—as a contingency of our make-up—we experience the subject-involving state. The alternative picture forthcoming from the response-dependent line is that we may undergo the subject-involving disposition as part of the very process of recognising the object, at least in primary cases, so that in those cases the connection between the passive recognition and the subject-involving state is not contingent.⁴⁷

This alternative picture would explain the necessity of the connections between recognising colours and certain phenomenological experiences, on a certain response-dependent account of colours. The looks-red response is tied up with the having of a sensation that has a variety of features: it is a relatively bright sensation, it is a sensation that is closer to the looks-orange sensation than the looks-blue sensation, and so on. That response is the basis for recognising that something is red in a primary case of applying the concept. And so our recognising something as red in such a case goes necessarily with our experiencing sensations of a certain kind: in a phrase, with our experiencing red sensations.⁴⁸

By analogy with this sensation case, it is also going to be possible on a response-dependent account, that the recognition of certain properties, at least in primary cases, necessitates the experience of an affection or emotion of a suitable sort. Thus it might be that something's being a happy-looking face more or less necessarily goes with its evoking a certain sort of pleasure in us, or that something's being a hostile-looking glance goes in the same way with our experiencing a certain alienation. The pleasure may be part of our way of recognising happiness in a face, the alienation may be part of our way of recognising the hostility of the glance. I say this, on the assumption that it is appropriate to think realistically of the happiness and the hostility as objective properties, respectively, of the face and the glance; but I do not pretend to argue that that assumption is sound.

⁴⁷ The alternative is meant to be an alternative, not just to the standard picture, but also to the various developments of the standard picture that are associated with, for example, non-realist theories of modality and value. The most sophisticated of these is probably Simon Blackburn's projectivism. See Blackburn (1984 and 1986).

⁴⁸ Thus this fact about sensation does not motivate the opposition to realism about colour found, for example, in Boghassian and Velleman (1989). For a critique of other grounds adduced in support of that opposition see Bigelow, Collins and Pargetter (1990).

The picture in play here has ramifications also in even more contested areas. Consider the feeling of compulsion induced in most of us by the recognition of an entailment: for example, the compulsion to conclude that q, given the recognition that "p" entails "q" and that p. Or consider the feeling of pro tanto motivation to which we are prone, at least under certain conditions, given the recognition that an option we confront would be fun, or would enhance our status, or perhaps would answer to our duty. The connection between the act of recognition on the one side and the feeling of compulsion or motivation on the other has led many thinkers to question the possibility of realism in the corresponding areas: the possibility of realism about modality or value. But what response-dependence ought to make clear is that that sort of necessary connection is not anomalous, even on an otherwise realistic account of the area of discourse. I do not argue here that it is appropriate to be a realist about modality or value. But I do say that if the realist countenances the possibility of response-dependence, then the holding of that kind of connection ought not to pose a further problem for him.

This second corollary of response-dependence marks a connection between ethocentrism and Kantian doctrine, since the subject-involving responses are what Kant would have called subjective conditions for the possibility of objective experience, whether of colour or of other matters. The Kantian connection is interesting, because it points to a further aspect of the corollary, an aspect with an exact Kantian parallel. If the recognition of something as red goes necessarily with its evoking certain sensations in primary cases, it is a priori knowable that what is red evokes such sensations in such cases; and this, despite the fact that, because the biconditional for redness is taken in rigid mode, the truth is contingent: it fails to hold at every possible world. That the colour red evokes such sensations in such cases is an a priori, contingent truth on a par with the a priori synthetic truths to which Kant gave such importance. And similarly for corresponding truths in the other sorts of cases mentioned.

These last remarks may make clear why I think that the second corollary of response-dependence represents, like the corollary of indeterminacy, a certain surprise for realist doctrine. Together the two corollaries show that although response-dependence may not compromise realism about an area of discourse in any serious way, still it does compromise it in some measure. It does mean that some traditional, realist attitudes have got to be revised. There is no longer reason to think that reality is always determinate in regard to the propositions of a realistically construed discourse; at a certain limit we may have to fall back on stipulation or learn to tolerate vagueness. And equally there is no longer reason with such a discourse to think that the recognition of how things are is always only contingently connected with subject-involving responses; the recognition of certain facts, at least in primary cases, may intrinsically involve a sensation, emotion, motivation or compulsion.

Conclusion

This has been a fairly extended discussion and it may be useful in conclusion to give a summary of the main claims that I have defended.

- 1. Realism about any area of discourse involves three distinct theses: the descriptivist claim that participants in the discourse necessarily posit certain distinctive entities; the objectivist claim that those entities exist, and exist independently of recognition in the discourse; and the cosmocentric claim that learning about those entities is a matter of discovery, not invention, so that we may be in ignorance or error about all and any of the substantive propositions of the discourse.
- 2. To assert a response-dependence thesis about any area of discourse is to say that the concepts which figure there are of a kind in some way with secondary quality concepts, under the traditional image of such concepts: the concepts are tailor-made for subjects with certain responses in the way in which the concept of redness is fashioned for subjects who can experience red sensations. (A person possesses a concept of something, I say, just in case she can try to form rational and true beliefs relative to propositions involving that thing.)
- 3. There are different conceptions of response-dependence but under the approach adopted here response-dependent concepts privilege certain responses on the part of subjects; they ensure that as an observer under normal conditions cannot be in ignorance or error about the colour of something—under the traditional view—so the responses involved in any response-dependent area of discourse cannot lead subjects astray under suitable conditions. (Response-dependent concepts, under this approach, are a broader category than those that Mark Johnston describes as response-dispositional.)
- 4. The most plausible way of taking a concept—say, the concept of redness—to be response-dependent is to adopt an "ethocentric" view of its genealogy. This is to think that the concept becomes accessible to people in virtue of their satisfying two conditions: first, they have responses—red sensations—which make certain objects saliently similar and which highlight the property of redness as something directly ostensible in those objects; and second, they discount some of those responses in order to maintain intertemporal or interpersonal constancy in the property revealed. (The ethocentric approach enables us to give a satisfactory account of the normal and ideal conditions relevant to any responses, and by reference to such responses and conditions it explains how certain concepts come to be accessible; it does this, in particular, without making the concepts available to us theorists.)
- 5. The ethocentric admission of response-dependence in any discourse, say in colour-discourse, does not compromise descriptivism or objectivism. Thus, to mention a specific threat, it does not entail the anti-descriptivist view that the discourse posits only colour-sensations, not colours. And, going on to a further threat, it does not entail the anti-objectivist view that people's responses make things red or yellow or whatever; people's responses do not shape certain things

so that they fall under the concept of redness, they shape the concept of redness so that it falls upon those things.

- 6. But the ethocentric admission of response-dependence does challenge the cosmocentric view that people can be in ignorance or error about all and any of the substantive propositions in a discourse. It introduces a sort of anthropocentrism. It means that ignorance and error do not threaten the basic judgments that people make under normal or ideal conditions, even if it allows that people may never know that they are definitely operating under such conditions.
- 7. Still, realists can be reassured, for the anthropocentrism involved is of a moderate kind. It allows realists to think of learning about the entities posited in the disourse as a matter of discovery, not invention. In particular, it allows them to acknowledge epistemic servility and ontic neutrality: they can think of subjects, even subjects in normal and ideal conditions, as having to bow to the authority of an independent reality in determining what is what; and they can expect such subjects sometimes to identify kinds that are of more than speciesrelative or standpoint-relative interest.
- 8. But, reassured or not, realists will be surprised by the concessions which the recognition of response-dependence may wring from them. If the concepts in a discourse are response-dependent, and if there are cases where the relevant responses are systematically thwarted, then reality may not rule clearly on how the concepts should apply in those cases; at that limit the concepts may be inherently vague. Again, if the concepts are response-dependent, and if the responses are subject-involving—if they involve sensations, emotions, motivations or compulsions—then there may be a necessary linkage between applying the concepts in certain cases and undergoing that sort of experience. Reality may be indeterminate, and the cognition of reality may be subject-involving, in certain surprising ways.49

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