

## *Introduction*

The essays in this volume center on philosophical issues about mind, and about language insofar as it is an indication of mind. The volume includes most of the essays in which I defend anti-individualism. It also includes discussion of other aspects of mind—mind–body causation, the mind–body problem, and consciousness. In this introduction I sketch some background. I also comment on the individual essays and how they relate to one another.

Before I explain what anti-individualism is, I want to explicate some terminology briefly. Anti-individualism is a view about the *natures* of representational mental states and events. ‘Nature’ is a relaxed, semi-technical term. The traditional term is ‘essence’. I do not have anything against essences. To begin uncontentiously, however, I take as little stand as possible on traditional metaphysical issues about essences. Something’s nature remains with it as other properties or relations come and go. Insofar as there are more or less basic ways of categorizing things, natures are more basic ways. In the background, I hold a stronger view: Something’s nature constitutes what it is, without which it could not be. I do not assume that there is always a sharp answer to the question what the nature of a thing is. Usually, however, at an initial level of inquiry, the nature of something is unsurprising. The nature of the tree is being a tree—it is not being thirty feet tall, or being an ornament in the garden, or being covered with green leaves. Less obviously, the nature of the tree might be: being a certain type of realization of a certain genetic profile.

I will be discussing what *constitutively* determines the natures of mental states. What constitutively determines a nature is not always just the nature itself. What constitutively determine a nature are conditions that are necessary (or sufficient, or necessary and sufficient) for something to have the nature it has and that help explain the nature. Having a certain DNA profile and having certain further properties may be the nature of a tree. Certain topological properties of space may help constitutively determine the nature. Being a shovel might be the nature of a given instrument. The nature may be partly constitutively determined by someone’s intentionally making a tool out of certain material, or using it with a certain purpose. The line between nature and constitutive determining conditions is not always clear or important. Sometimes it is, however. The

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distinction sometimes corresponds to different types of explanations. I will refine this point later.

Anti-individualism is a view about the natures of *representational mental states and events*. Examples of representational mental states or events are thoughts, beliefs, intentions, desires, perceptions, hallucinations, misperceptions, imaginings. An aspect of their function is to be about something—to present a subject matter as being a certain way. Such states can represent veridically or non-veridically.

Representational states and events have *representational content*. Representational content is a structured abstraction that can be evaluated for truth or falsity, or for perceptual correctness or incorrectness. A propositional attitude, like a belief that not all that glisters is gold, has a propositional representational content. The representational content is that not all that glisters is gold. A perceptual state, like a perception of a particular body as being a body and as glittering, has another sort of representational content. What sort is a matter that would require more detailed specification than I want to go into here. But roughly, if someone perceives a particular body as a glittering body, the perception's content makes singular reference to the body and involves a perceptual grouping or perceptual attributive that presents it as a body and as glittering. The belief's content is true or false, depending on whether or not all that glitters (glisters) *is* gold. The perception's content is accurate or inaccurate, depending on whether the perception singles out a body that glitters.

Representational content is not only evaluable for veridicality. It helps type-identify the mental state with that content. Or, to put it another way, it is part of the psychological kind that the associated mental state is an instance of. Thus the above cited belief is a not-all-that-glisters-is-gold belief. Psychological kinds typed partly by representational content are cited in psychological explanations. The representational content has a structure that corresponds to different aspects of the mental ability or mental state that it type-identifies. Thus the representational content of the belief cited above is made up of *concepts*, certain types of sub-propositional contents—for example, the relevant gold concept. There are other kinds of components of full representational contents besides concepts—*applications* and *perceptual attributives*.<sup>1</sup> These components, in turn, type-identify aspects of representational states that have the representational contents, or are of the representational kinds.

The foregoing should give some handle on some of the terminology that I will be using. I now want to explain the key view that dominates this volume—anti-individualism.

<sup>1</sup> Applications will be discussed later in some detail, especially in 'Belief *De Re*' (Ch. 3) and its Postscript. Perceptual attributives will not come in for much discussion in this volume. They are the perceptual analogs of predicative concepts. Thus, in a perception of something as a *body*, the perceptual grouping *body* (or some specific version of this grouping) is a perceptual attributive.

*Individualism* is the view that all of an individual's representational mental kinds are constitutively independent of any relation to a wider reality. *Anti-individualism* maintains that many representational mental states and events are constitutively what they are partly by virtue of relations between the individual in those states and a wider reality. More specifically, anti-individualism holds that the natures of many such states and events constitutively depend for being the natures that they are on non-representational relations between the individual and a wider environment or world. Such relations are constitutively necessary for the states and events to be the specific kinds of states or events that they are.

The intuitive idea of anti-individualism is that representational states cannot occur in a vacuum. One cannot have conceptual or perceptual abilities to represent matters beyond the mind unless they are associated with supplementary or collateral connections between the individual's psychology and some aspects of the subject matter. The specific representational content that these abilities have—the specific kinds of representational abilities that they are—is partly determined by specific aspects of the subject matter that those abilities relate to. Most commonly, the subject matter is the physical environment. Representational abilities are possible only by being supplemented by systematic non-representational relations between the individual and a subject matter. Most commonly, the non-representational relation is causation.

To illustrate the point in the crudest way: an ability to believe something about aluminum *as aluminum* requires some collateral causal connections between aluminum and the individual's cognitive system. A collateral causal connection might be light's bouncing off the aluminum and impacting the visual system of the individual, ultimately engendering perceptions of aluminum. An ability to perceive a rigid body as red and spherical depends on similar causal connections to relevant shapes and rigid bodies, and to red surfaces or red light.

The point is not merely developmental. It is not just that individuals acquire their beliefs by being in causal contact with relevant features of the environment, perhaps through the teaching of others. The point is constitutive. It is that, in many cases, a belief or perception is the kind of psychological state it is through being embedded in a network of collateral non-representational relations to aspects of the wider environment.

The illustrations just given are exaggerations for effect. They are not quite correct as stated. The relevant collateral relations do not have to be as simple as the examples suggest. They can be quite complex and indirect. For one thing, they need not occur in the individual's own life. The relations to the environment can route through other people, or through the evolution of an individual's perceptual system.

Moreover, the relevant constitutive relations need not be relations to the thing represented. One can think about aluminum as aluminum even though one's cognitive system never interacts with aluminum. For example, a Martian scientist could theorize about the structure of aluminum and imagine its macro-properties.

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That would be enough to have a concept of aluminum—to be able to think about something *as aluminum*—even though there is no aluminum in the scientist's environment. Light from aluminum never entered the scientist's visual system. The scientist's perceptual systems never evolved from perceptual interaction with aluminum. The scientist never had any other indirect causal transactions with aluminum. It never caused anything that the scientist did perceive. And the scientist never communicated with anyone who had such causal relations to aluminum in perception. The scientist's capacity to think about aluminum depends, however, on this capacity's being linked to other cognitive capacities that are causally affected by matters that the scientist thinks about. For example, to theorize about the structure of aluminum, the scientist might have thought about hydrogen and about chemical bonding. These aspects of reality do bear (complex, indirect) causal relations to the scientist's psychological systems.

One can also have concepts that apply to nothing. Such capacities are not causally related to anything that they apply to. For example, in a conjecture that phlogiston is contained in combustible bodies, or a thought that Vulcan's orbit is close to Neptune's, or a belief that Santa Claus lives at the north pole, the representational contents phlogiston, Vulcan, and Santa Claus do not apply to anything in reality. It is possible to think these thoughts only because these representational contents are connected in the individual's psychology to other mental states that do have relevant constitutive connections to subject matters that they apply to.

There are many ways in which a thought content can be about a property, kind, relation, or object as such, even though the individual does not bear causal relations to it. Representational states may be products of inference, perceptual or conceptual composition, or various forms of unconscious amalgamation or association. In all these ways, thoughts need not bear a causal relation to what they represent. A representational ability must, however, be grounded in some systematic, non-representational relations to some subject matter.

So the general idea is that what kinds of representational mental states one can be in are limited by what relations one bears to one's environment. Minds bear constitutive relations to matters beyond them. This basic idea is spelled out in more detail in the essays.

A corollary of the basic idea is that representational mental kinds are individuated in an explanatory context that is wider than that of the individual's mind or body. For example, a belief that aluminum makes foil is a specific kind of belief. Its being the kind that it is, is fixed by a representational content suggested by the words 'that aluminum makes foil'. The belief is an aluminum-makes-foil kind of belief. Explanations of an individual's activity that make reference to this kind of belief connect it not only to other mental states and to bodily movements by the believer, but also to perceptual, practical, or communicative relations to a wider environment. In actual fact the environment includes relations between believers and aluminum itself. But even if aluminum did not occur in the environment in which the belief was constitutively formed,

explanations that appeal to the belief connect it to a background that includes an environment wider than that of the individual's mind or body.

The ramifications of these points are considerable. They touch the natures of representation, thought, perception, action, communication, apriori knowledge, self-knowledge, empirical knowledge, psychological explanation, and personal identity; the relations between persons and animals; the mind-body problem; and the problem of scepticism. Some of these ramifications are suggested in these essays. Others will be developed in subsequent volumes of essays, or in subsequent work.

The origins of anti-individualism lie in Greek philosophy. Aristotle took the form of perceptual and other psychological states to be systematically and non-accidentally related to the forms of physical entities which they represent. Aristotle's notion of form here is closely related to our notion of kind. Mental forms or kinds are what they are through systematic relation to physical forms or kinds that they represent and on which they are causally dependent.<sup>2</sup>

This Aristotelian view dominated the Middle Ages. I once believed that Descartes rejected anti-individualism. I no longer believe this to be true. 'Descartes on Anti-Individualism' (Chapter 19) explains my current view. I think that Descartes carried on and deepened the Aristotelian tradition in this respect. The empiricists constitute complex cases, as do Leibniz and Kant. Hegel and Frege are, I believe, clearly anti-individualists.<sup>3</sup> These issues are ripe for treatment by historians of philosophy. Anti-individualism is a prominent, even dominant, view in the history of philosophy.

During the twentieth century a number of philosophical currents conspired to encourage individualism. One such current was a focus on qualitative aspects of the mind in theories of perception in the first half of the century. Both sense-data views, in the British tradition growing out of the work of Russell and Moore, and phenomenological views, in the Continental tradition growing out of the work of Husserl, encouraged the idea that one can construct mental reality (and sometimes physical reality as well) from introspectable, qualitative, intrinsic aspects of consciousness. Indeed, any position that gives the first-person point of view uncritical hegemony in philosophical reasoning will be tempted to forget some of the necessary constraints on representation or intentionality.

Behaviorist and neo-behaviorist movements encouraged individualism in a different way. Thinking that one can reduce attribution of mental states to

<sup>2</sup> Aristotle, *De anima* II, 5–12; III, 4–5; *On Generation and Corruption* I, 7. Plato took the mind to be capable of representing reality only by being in relation to abstract, objective forms that are certainly individual-independent. I believe it plausible that Plato as well as Aristotle was an anti-individualist, but I regard this case as more complex than I can confidently advocate.

<sup>3</sup> These assessments constitute more caution about the empiricists than is present in the historical remarks at the beginning of 'Cartesian Error and the Objectivity of Perception' (Ch. 7). Kant's 'Refutation of Idealism' has definite anti-individualist elements, but his idealism greatly complicates the historical issue that I am sketching. For remarks on Hegel, see the beginning of 'Individualism and the Mental' (Ch. 5). For remarks on Frege, see my *Truth, Thought, Reason: Essays on Frege* (Oxford: Clarendon Press, 2005), Introduction, pp. 54–63.

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attribution of dispositions to bodily responses, or to networks of causal relations that mediate surface stimulation and bodily movement, proponents of these movements thought that mental states can be individuated and accounted for entirely in terms of dispositions or functions of the individual's body.

Early materialist movements in philosophy also provided impetus to individualism. Several prominent philosophers thought that mental kinds are reducible to physical kinds. Insofar as the relevant physical kinds seemed to be neural, there seemed to be no role for relations to a wider reality, in determining conditions for being particular kinds of mental states.

Most of these movements were waning by the time I developed arguments for anti-individualism. But all of them left residual inclinations that tempted philosophers to neglect the anti-individualist tradition. So when it re-emerged, anti-individualism had a feel of being a new view.

There were, to be sure, immediately antecedent currents in philosophy. One was Wittgenstein's emphasis on social practice and social use. I have no question that Wittgenstein was an anti-individualist. However, the tradition flowing from Wittgenstein's work harbored a broad suspicion of psychological explanation. It flirted with a social behaviorism about representational states that leaves the environmental and social emphases of the tradition only tenuously related to mind—because it leaves mind tenuously related to anything.<sup>4</sup>

The more important immediate antecedent was the major change in the theory of linguistic reference brought about in work by Donnellan, Kripke, and Putnam. This work showed that the reference of various linguistic terms, especially names and natural kind terms, depends on causal and other not purely representational relations to the environment, sometimes through the mediation of other language-users. Apart from these relations, even descriptive abilities of the individual were shown to be incapable of accounting for definite reference carried out in the individual's language.<sup>5</sup>

Although my work was strongly influenced by these antecedents, it took a new direction. Anti-individualism concerns not just language but mind, not just reference but mode of representation, and not just a few types of representation but nearly all types.

Let me turn from the broader history to some narrower, autobiographical remarks. In my work, three lines seem to me to have been the main antecedents

<sup>4</sup> Saul Kripke's exposition, in *Wittgenstein on Rules and Private Language* (Cambridge, Mass.: Harvard University Press, 1982), evinces the ambivalent bearing of Wittgenstein's views on the individuation of psychological states. The solution is a sceptical solution to a sceptical problem. Some of the scepticism is, in effect, about the full reality of representational mental states. Such a view is at least suggested in Wittgenstein's work, and is explicit in the work of many of his followers.

<sup>5</sup> Saul Kripke, *Naming and Necessity* (Cambridge, Mass.: Harvard University Press, 1972); Keith Donnellan, 'Reference and Definite Descriptions', *The Philosophical Review*, 75 (1966), 281–304; *idem*, 'Proper Names and Identifying Descriptions', *Synthese*, 21 (1970), 335–358; Hilary Putnam, 'Is Semantics Possible?' (1970) and 'Explanation and Reference' (1973), in *Philosophical Papers*, ii (Cambridge: Cambridge University Press, 1975).

of anti-individualism. One line is my early work on linguistic reference.<sup>6</sup> Here I was certainly influenced by the revolution in the theory of reference mentioned above. My focus was somewhat different, in that I was mainly concerned with the logical form of the relevant linguistic devices.<sup>7</sup> This concern was an early instance of my interest in mode of reference and mode of presentation. The way the reference is carried out, within a representational system—in this case, within a language—was as important to me as the causal and contextual factors that make successful reference possible.

The second line is represented by 'On Knowledge and Convention' (Chapter 1 in this volume). This article criticizes David Lewis's theory of convention.<sup>8</sup> What seems to me interesting about the article now is not the particular critical point. It is the article's caution against hyper-intellectualized accounts of meaning and representational practice. Language functions quite well even if individual speakers misunderstand basic facts about its functioning. A language can be conventional even though its users do not know that it is conventional. They may disbelieve that it is conventional. These facts leave room for the determination of the nature of the practice by facts about it that are beyond the ken of the practitioners.

This point is broadly parallel to a point driven home by the theory of linguistic reference: Reference can be definite even though the language-users who carry out the reference may not know enough to be able to describe the referent or fix it in a knowledgeable way. The point about convention, made in 'On Knowledge and Convention', bears not only on linguistic reference, but also on cognitive implications of acts of reference, and on the nature of the language itself.

The third line is represented by 'Kaplan, Quine, and Suspended Belief' and 'Belief *De Re*' (Chapters 2 and 3). The former article makes some technical points about an issue in the logical form of belief attributions. The interest of the article to me now is its insistence on the priority of *de re* belief over *de dicto* belief—a point that is elaborated in the latter article. 'Belief *De Re*' is the closest antecedent in my work to the articles on anti-individualism.<sup>9</sup> This article begins my shift in focus from pure philosophy of language to issues regarding thought and mind.

<sup>6</sup> Burge, 'Reference and Proper Names', *The Journal of Philosophy*, 70 (1973), 425–439; and *idem*, 'Demonstrative Constructions, Reference, and Truth', *The Journal of Philosophy*, 71 (1974), pp. 205–223. These articles are not reprinted here. I hope to have them collected later in a further volume.

<sup>7</sup> This angle on reference was influenced by the work of Donald Davidson. A focus on logical form of demonstrative devices is also present in David Kaplan, 'Dthat', in P. Cole (ed.), *Syntax and Semantics*, ix (New York: Academic Press, 1978).

<sup>8</sup> David Lewis, *Convention: A Philosophical Study* (Cambridge, Mass.: Harvard University Press, 1969).

<sup>9</sup> For further discussion of this article, see my Postscript to it in this volume. Cf. also my 'Davidson and Forms of Anti-Individualism: Reply to Hahn', in Martin Hahn and Bjorn Ramberg (eds.) *Reflections and Replies: Essays on the Philosophy of Tyler Burge* (Cambridge, Mass.: MIT Press, 2003), 347–350.



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I make two primary claims in 'Belief *De Re*' that are relevant to anti-individualism. First, I argue that there is an irreducible occurrence-based, non-conceptual element in thought.<sup>10</sup> Such thoughts are not to be understood purely in terms of representational contents that mark abilities that can be individuated independently of specific contextual psychological occurrences. Second, I argue that having any thought at all requires having thoughts whose representational contents include such occurrence-based, non-conceptual elements—specifically *de re* thoughts whose contents contain such elements. The idea is that for a being to have representational capacities, it must be able to apply or connect those capacities to particulars in a subject matter. To have definite thoughts, it must have some thoughts that are actually applied in a way that depends on occurrence-based representational elements that are supported by non-representational relations (for example, causal relations) to a subject matter. That is a constitutive condition on the capacities' and thoughts' being representational.<sup>11</sup>

These points are closely connected to key elements of anti-individualism. For anti-individualism maintains that the *specific* natures of many representational states and events (including capacities type-identified by perceptions and concepts) are constitutively derivative from specific aspects of the environment to which those states and events are related in non-representational ways. 'Belief *De Re*' does not make this claim. It does postulate occurrence-based representational contents (applications) that depend for their identities in subtle, partial ways on relations to the environment.<sup>12</sup> It says nothing about individuation of ability-general, non-occurrence-based psychological abilities, particularly those marked by concepts or perceptual attributives.

The claim of 'Belief *De Re*' is more general. It bears on conditions for representation itself. It indicates that *de re* representation is necessary for having any representation at all. It indicates that a particular type of non-conceptual representational capacity is necessarily the vehicle that capitalizes on supplementary non-representational relations to make other representational contents and capacities possible—by connecting them to a subject matter.

<sup>10</sup> A similar point applies to perception, as I indicate in 'Five Theses on *De Re* States and Attitudes', forthcoming in a volume edited by Paolo Leonardi, honoring David Kaplan (Oxford University Press). In some respects, this article belongs in the present volume. It contains, in its last section, a conception of the *de re/de dicto* distinction that improves on that in 'Belief *De Re*'. It confronts somewhat more fully issues about *de re* attitudes in mathematics. It also develops, much more deeply than 'Belief *De Re*' does, an account of the essential elements in *de re* attitudes. On the other hand, much of the work in 'Five Theses' centers on issues about representation in perception, and on epistemic issues. In this respect, the article is better grouped with discussions of epistemology or perception. I have gone with this latter consideration.

<sup>11</sup> In subsequent work, I recognized the need to liberalize this claim somewhat. The being can rely on applications in a progenitor. It need not carry out the applications autonomously. Here I allow for innate capacities that are dependent for their meaning on applications of ancestors. Cf. 'Davidson and Forms of Anti-Individualism: Reply to Hahn'.

<sup>12</sup> I discuss this matter in some detail both in 'Five Theses on *De Re* States and Attitudes' and in 'Disjunctivism and Perceptual Psychology', forthcoming in *Philosophical Topics*.



In a Postscript to 'Belief *De Re*', I discuss four elements of the article. One is the inadequate sorting out of linguistic considerations from considerations bearing directly on mind. A second is the relation between my two epistemic accounts of the *de re/de dicto* distinction. I explain that the accounts are not equivalent. I discuss how the difference bears on possible *de re* thought regarding mathematical objects and objects of understanding. A third element is the notion of an occurrent application of incompletely conceptualized representational contents. I explain why I take such application to be an element in the representational contents of *de re* mental states. I believe that this notion is fundamental to understanding mind in general, and *de re* thought and perception in particular. A fourth feature is the argument that for an individual to have any propositional attitudes at all, the individual must have *de re* states or attitudes. This argument provides the immediate background in my work for development of anti-individualism.

The arguments for anti-individualism in these essays are laid out in four stages, dealing with four different aspects of anti-individualism. Each stage is associated with a different type of thought experiment. The third stage, centering on perception, couples its thought experiment with independent scientific considerations. Most of the articles in this volume either articulate the arguments in these four stages or refine them.

The article that provides the best entry into the series, although not the first one written, is 'Other Bodies' (Chapter 4). The thought experiment in this article is the simplest and the one most closely related to earlier work on linguistic reference. The relevant earlier work is that of Kripke and Putnam on reference by natural kind terms in language. The thought experiment in 'Other Bodies' uses Putnam's twin-earth methodology and centers on thoughts that use natural kind concepts.

Putnam considers an individual using language to represent instances of natural kinds. He then imagines a physically similar *doppelganger* in a mostly 'twin' environment, except that certain natural kinds in it are different. I use Putnam's illustrative device. The point of my thought experiment is to elicit a recognition that the representational natures of mental states vary with the differences in the individuals' relations to their environments, even though psychologically relevant physical aspects of the individual, considered in isolation from relations to the environment, are more or less constant. My thought experiment, and the basic conclusions that I draw from it, are importantly different from Putnam's superficially similar use of the twin-earth methodology. Bringing out these differences is the main point of the article. The differences signal how anti-individualism differs from the view that Putnam sought to establish.

Two main innovations mark 'Other Bodies'. (The innovations were present in the earlier 'Individualism and the Mental'.) One is a shift of focus from

<sup>13</sup> Hilary Putnam, 'The Meaning of "Meaning"', in his *Philosophical Papers*, ii.

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language to mind. The other is a shift of focus from reference, in language or in thought, to representational content. Putnam and Kripke discussed the reference of natural kind terms. Their focus was very strongly on language, with, I think, little direct insight into mind.<sup>14</sup> In 'Other Bodies' and 'Individualism and the Mental' I argue that not just the referents of natural kind terms but the specific natures of mental states about natural kinds, as marked by their representational (conceptual) contents, depend constitutively on causal relations to specific aspects of the environment.<sup>15</sup> These relations may not be specifiable by the individual thinker.

A key aim of 'Other Bodies' is to show that natural kind concepts are not indexical. They do not shift reference from context to context. The concept aluminum is true of the same stuff, aluminum, no matter in what context it is used in thought. I made this point against Putnam's view. The mistake underlies the key difference between his view of linguistic reference and meaning and my view of mind.<sup>16</sup>

<sup>14</sup> There is an astonishing lack of reflection on perception among many of the main philosophers of language in this group, even though perception clearly lies at the base of the relations that establish linguistic reference, in most of the cases that they discuss. The methodology of the time was to consider language more or less independently of any developed account of mind. Donnellan does give an account of referential use of language in terms of having an object 'in mind' and in terms of intended reference. But there is no elaboration of either of these notions. Putnam offers more on mind in "The Meaning of 'Meaning'". Putnam's account of non-factive thought in that article is basically individualist. Some of his account of mind contains fundamental errors that stem from thinking of some aspects of mental states too much in terms of linguistic reference. I discuss the specifics of Putnam's views in more detail below in this Introduction (cf. note 16), in 'Other Bodies', and in the Postscript to 'Individualism and the Mental'. All three philosophers failed in their work on language, I think, to see that the linguistic facts that they uncovered are derivative from more pervasive and deeper facts about the representational nature of mind. Despite these critical remarks, I think that the work of all three philosophers was ground-breaking and brilliant. I depended on their insights about language in my development of anti-individualism about mind.

<sup>15</sup> Throughout this Introduction I use 'referent' in a very broad sense. I mean it to apply to what singular terms denote, refer to, or apply to. I also mean it to apply to the semantical values of predicative and functional expressions—what they denote, indicate, or attribute. I sometimes also write of the referents of components of thought. Again, the relevant components can be singular, predicative, or functional.

<sup>16</sup> Cf. Putnam's "The Meaning of 'Meaning'". Putnam concedes the point in Andrew Pessin and Sanford Goldberg (eds.), *The Twin Earth Chronicles*, (London: M. E. Sharpe, 1996), p. xxi. I do not want to discuss Putnam's 1975 account of meaning in any detail here, but I will make a few remarks. I think that there are various legitimate conceptions of linguistic meaning, including meaning of natural kind terms. I regard Putnam's tendency simply to count the reference of a natural kind term as its meaning, on one conception of the meaning, as not particularly illuminating for any conception, much less as an account of representational mental states.

I think that his conception of a stereotype does illuminate one aspect of meaning. His use of the notion of stereotype is, however, a part of his mistake in regarding natural kind terms as indexical. The stereotype is supposed to be the constant element whose referent shifts with context. None of these ideas illumines the way an individual thinks of a referent. Individuals think of water as water. The referent itself does not illuminate this 'way', because in normal cases the referent does not represent anything, and because no thinker can think of ordinary referents in non-perspectival, non-representational ways. The stereotype does not illuminate this 'way', because individuals can think of the referent in using a natural kind term (can think of water as water) while wondering whether the stereotype applies, or even believing that it does not apply; and they can think of the referent

The reason why this point is important is that it forces recognition that my thought experiment cannot be taken to bear only on reference. Since relevant natural kind concepts are not indexical, it would be incorrect to construe the thoughts as containing a single concept or 'meaning' or representational content which simply undergoes a contextual shift of referent. The concepts or representational contents are different. This difference marks a difference in the kinds of thought, or the kinds of mental state or event, that occur in the two individuals. It marks a difference in the representative perspectives and epistemic standpoints of the individuals. The difference is ultimately attributable to differences in the causal relations to specific elements in the two environments. Differences in causal relations yield differences in conceptual perspectives on what the causal relations are relations to.

Anti-individualism, often called 'externalism', is commonly misunderstood by philosophers who have some sense of the major changes in linguistic reference, but have not much reflected on my work. It is still common to make the mistake that I criticized in 'Other Bodies' and that Putnam made in "The Meaning of 'Meaning' ". A common line that depends partly on this mistake begins by holding that there are two types of 'content'. Traditional descriptivists are supposed to be right about so-called narrow psychological states or narrow contents, which are supposed to be marked purely by descriptive representational content.<sup>17</sup> Millians are supposed to be right about 'wide psychological states'. These are supposed to be type-identified by relations between the descriptive content and elements in the environment—objects, properties, relations. In effect, 'wide content' is supposed to be simply the referents of the purely descriptive contents. Many people who think rather cursorily about these matters rely mainly on concepts from the philosophy of language. Many even now understand anti-individualism as a thesis that referents go 'into the proposition' expressed by names and natural kind terms.<sup>18</sup>

Much is wrong with this way of thinking. In fact, it completely misconstrues what anti-individualism is, or seriously underestimates its force. 'Other Bodies' was written partly to refute views like this one. The key point is that the relevant concepts (perspectival, representational elements) discussed in its

even when the stereotype fails to apply. The view that natural kind terms are indexical is incorrect, for the reasons given in 'Other Bodies'.

From about 1983 onward, Putnam's work becomes genuinely anti-individualist. Cf. 'Computational Psychology and Interpretation Theory', in his *Philosophical Papers*, iii (Cambridge: Cambridge University Press, 1983).

<sup>17</sup> I discussed the notion of narrow content in 'Individualism and the Mental' (Ch. 5). A small industry has emerged elaborating one or another conception. Not all such conceptions insist on narrow content's being descriptive. In some cases the proposed notion does not seem to me to be representational at all. I believe that no one has shown the relevance to psychological explanation of any 'content' that escapes anti-individualist arguments and yet remains representational. Much of the work in this area seems to me to have the status of philosophical game playing without genuine cognitive application.

<sup>18</sup> I was prompted to make these points by Peter Graham.

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thought experiment are not context-dependent for their referents. So the idea that there is a constant element that shifts its referent with environmental 'context' does not account for the nature of the mental states or their representational behavior.

Views of this sort tend to have other difficulties. I will mention four. First, they frequently fail to show that the descriptive concepts that are supposed to replace the concepts that the thought experiments deal with are always psychologically available to individuals in the relevant cases. So the descriptive concepts do not in general mark cognitive abilities, as they should. Second, the descriptive concepts (or other supposed narrow contents) are not rationally, psychologically, or epistemically equivalent to the concepts that they are supposed to account for (or replace). This equivalence is not achieved by adverting to the 'wide' contents. For example, it is sometimes thought that the way a thinker thinks of water is fully captured or apriori equivalent to something like *the stuff that occurs in lakes and rivers*. To the contrary, a thinker thinks of water as water, and it is an empirical matter for the thinker whether water is the stuff that occurs in lakes and rivers. Third, these ways of thinking tend not to recognize that the descriptive or supposedly neutral notions in terms of which 'narrow content' is specified are themselves constitutively dependent on relations to a wider environment. Finally, logical, mathematical, and other apriori aspects of thought which are simply assumed to be 'narrow' are themselves dependent on relations to matters beyond the mind of the individual. So 'internal determination' does not correspond to those elements of thought that *are* normally constant among empirically different or contingent 'twin' environments. (I will discuss this matter further below.)

The 'wide' aspects of the view have difficulties as well. No representational content that marks a representational state kind has a non-representational component. Environmental referents of representational states do not by themselves suffice to type-identify any of representational state kinds that are fundamental in psychological explanation or epistemology. Individuals necessarily think about subject matters in certain ways or from certain conceptual perspectives. For example, individuals think about aluminum as aluminum. There are many ways of thinking about aluminum.<sup>19</sup> In fact, there are many ways of thinking about aluminum as aluminum. It will not do to take the referent as capturing any sort of psychological content. Representational content needs to explain or indicate how referents are thought about. Descriptions or other allegedly narrow contents available to the thinker do not suffice to determine the way the individual thinks about aluminum, since they do not determine in themselves (as opposed to contextually or contingently) that they apply to aluminum—as thinking of aluminum as aluminum does. In many of the

<sup>19</sup> Thinking about aluminum as aluminum is thinking about aluminum in a way that entails that its denotation or referent is aluminum, if there is any denotation or referent at all. There can be many ways of thinking about aluminum as aluminum that meet these conditions.

relevant cases, indexical devices are demonstrably not how we think about the referents.<sup>20</sup>

As far as I can see, representational content, anti-individualistically individuated, fills the semantical, psychological-explanatory, and epistemic roles that mental-state kinds are supposed to fill. I have seen no grounds to believe in a further sort of representational content, or in a division of representational contents into wide and narrow kinds. Even now, because of compartmentalization in much of philosophy, many philosophers lump the important changes in theory of reference with anti-individualism, failing to appreciate the enormity of the differences, and their implications for our understanding of knowledge and mind.

Although I am emphasizing the fact that relations to entities in the environment play an indispensable role in determining the content of many mental states, I want firmly to insist that these relations are not the only factor in determining mental kinds. There is a large role for the ways that the individual and his cognitive subsystems process information. Different perceptual perspectives on a given property, relation, or kind are at the heart of perceptual representation. These perspectives involve not simply types of causal routes to a represented entity. They involve different ways of processing the information, or different information processed. These help determine different modes of presentation, different types of representational contents.

For example, a given distance can be computed in the visual system in many ways. Each computation utilizes different inputs and yields a different representation, or mode of presentation, of the distance. A given method of computation might compute the same distance from very different angles and with very different proximal stimulation. Each computation that is different in these ways will yield perceptual states with different representational contents. Further, there are different methods for computing distance—different distance cues—in the visual system. These different methods also commonly yield different perceptual representational contents or modes of presentation. Yet further, different perceptual modalities (say, hearing and vision) can represent the same distal property. Again, these differences normally correspond to different representational contents specifying the same property.

What holds for perception holds for other types of representation. Different representational contents referring to a given object, property, kind, or relation can have different inferential potentials, or be affected in different ways by

<sup>20</sup> There are a few views that carry over Millian views on linguistic reference to the account of reference in thought. Millian conceptions have some plausibility in accounting for a restricted aspect of language use, though insofar as they omit any meaning or mode of presentation over and above a referent, I am unconvinced that they are correct, even as applied to language. They have no grip on psychological explanation, perceptual theory, or on a reasonable philosophy of mind. It is psychologically incoherent to imagine that we think of referents, but in no way at all—from no representational perspective at all. Anti-individualism specifies representational ways in which relevant referents are thought about, and shows those ways commonly to depend on patterns of relations to the environment.

priming or habituation, or may connect to different files or memories. Thus the individuation of psychological representational kinds does not hinge purely on relations to aspects of the distal environment. Such relations nonetheless anchor individuation and provide a necessary element in it.

I noted that 'Other Bodies' is the best introduction to the series of four thought experiments. But 'Individualism and the Mental' was written first.<sup>21</sup> Both articles show that individual-environment relations constitutively bear on mind as well as language. Both show that those relations help constitutively determine not just reference but the representational natures of mental states and events. That is, each brings its thought experiment to bear on aspects of mind type-identified by representational contents—particularly concepts—not simply referents.

A third primary contribution of 'Individualism and the Mental', not present in 'Other Bodies', concerns the range of concepts that constitutively depend on an individual's non-representational relations to a wider reality. The article shows that the range comprises vastly more representational types than those that correspond to names and natural kind terms. 'Other Bodies' concentrates on natural kind concepts in order to highlight ways in which my anti-individualism differs from Putnam's treatment of the reference and 'meaning' of natural kind terms. 'Individualism and the Mental' brings out how pervasively a wider environment enters into the individuation of mental states. Mental states type-identified by nearly every type of representational content are affected.

I invoke two phenomena to elicit the role of a wider reality in constituting the natures of mental states marked by such a wide range of representational contents. One is incomplete understanding. The other is the role of social relations in mediating between an individual and aspects of the wider reality.<sup>22</sup>

The role of the social in attitude determination seems to me to affect an even wider variety of concepts or terms than are discussed in 'Individualism and the Mental'. For example, I believe that there is a social role for attitude determination in the cases of attitudes marked by certain logical and mathematical concepts.

The standards for understanding vary with the case. A community-wide standard does not apply willy-nilly to all members of the community. There are conditions for minimum mastery, and for dependence or reliance on others. There are various ways of opting out. There are cells of sub-communal interaction that can determine standards for understanding that need not accord with some wider communal practice or understanding.

<sup>21</sup> For further discussion of this article, see the Postscript in this volume and 'Davidson and Forms of Anti-Individualism: Reply to Hahn', 'The Thought Experiments: Reply to Donnellan', 'Psychology and the Environment: Reply to Chomsky', all in Hahn and Ramberg (eds.), *Reflections and Replies the Philosophy of Tyler Burge*, *op. cit.*

<sup>22</sup> Further discussion of incomplete understanding occurs in 'Intellectual Norms and Foundations of Mind' (Ch. 10), and in 'Frege on Extensions of Concepts, From 1884 to 1903' and 'Frege on Sense and Linguistic Meaning', Chs. 7 and 6 in *Truth, Thought, Reason*.



Actual best understanding in a community may not be complete understanding. Since a role of the social relations is to connect individuals to the referent of a word or concept, the nature of the referent can trump explicational understanding. (This is a primary point of 'Intellectual Norms and Foundations of Mind' Chapter 10.) Standards for understanding are set by a combination of the nature of the referent, the existence of a chain of speakers in connection to the referent, and elements of explicational understanding by participants in the chain.

As I have mentioned, there are opportunities for variations in the ways people conceive a referent, even when they are linked in a communicative chain to it. Nevertheless, there are also strong sources of preservation of representational content among people who communicate with one another. Such communication occurs among people with widely varying linguistic competence, background knowledge, and perspective. One such source of content preservation lies in our common world and our common perceptual equipment. We are molded by the same world; and we have similar perceptual equipment, which yields the first and most dominant base for representing the world. Another source of content preservation lies in the social and normative conditions for agreement, for mutual evaluation, for sharing information, and for relying on one another for knowledge and warrant. Serious reflection on how little knowledge, warrant, agreement, and shared culture would be left if we did not, despite deep differences in understanding and background knowledge, routinely share thoughts will elicit, I think, the pervasiveness of shared representational content. Content preservation lies at the base of a network of conditions that makes a continuous and shared culture possible.<sup>23</sup>

There is still much to be gained from reflecting on mechanisms and norms of social dependence of human language and thought. There remain many interesting questions that I think my initial and subsequent work made progress upon, but which invite further exploration. What types of reliance on others allow a place for social factors in individuation of mental states? What sorts of psychological conditions and attitudes can block or cancel such reliance in individual cases? How do such factors illuminate the nature of language, knowledge, warrant, cooperation, and communication? How do they bear on the transmission of knowledge and culture? In what ways are the relevant social factors distinctive of human beings? In what ways are these factors refinements of social interactions in other animals? What aspects of mind are social conditions necessary to, and in what ways are social conditions merely psychologically, as opposed to constitutively, fundamental? Confronting such questions may

<sup>23</sup> I explore aspects of this network in several papers not printed in this volume—particularly, 'Russell's Problem and Intentional Identity', in James Tomberlin (ed.), *Agent, Language, and Structure of the World* (Indianapolis: Hackett Publishing Company, 1983); 'Content Preservation', *The Philosophical Review*, 103 (1993), 457–488; and 'Comprehension and Interpretation', in Lewis Hahn (ed.), *The Philosophy of Donald Davidson* (Chicago: Open Court Publishers, 1999). In these matters, I think, I have hardly scratched the surface.



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help carry us beyond the true but overworked bromide that humans are social animals.

In a Postscript to 'Individualism and the Mental', I discuss two main deficiencies in the article that have caused misunderstanding. One is an instability in my early explications of what individualism is. The other is an insufficiently clear distinction between linguistic considerations and considerations regarding the nature of thought. The problem is similar to the unclarity discussed with respect to 'Belief *De Re*'. I try to sort out secondary from primary arguments for anti-individualism by keeping this distinction clearly to the fore. In the latter, more progressive sections of the Postscript, I discuss the implications of the paper for a new sort of rationalism, the nature of incomplete understanding, and the role of norms in our understanding of mind.

'Two Thought Experiments Reviewed' (Chapter 6) is a minor piece that responds to a variety of criticisms by Jerry Fodor of the first two thought experiments. My response sets the first two primary contributions, mentioned earlier, in sharper relief.

For all the importance of the social in our understanding of language and mind, anti-individualism has a deeper root. Environment–individual relations determined the nature of some psychological states before language evolved. Constitutive dependence of perceptual states on the environment is pervasive and inevitable in perception. Environmental relations help constitutively determine the representational content of psychological states in animals that lack language. Here, the mechanisms of content determination do not involve language or other social phenomena.

The phylogenetic priority of perception points toward a more fundamental root of anti-individualism. The basic root lies in the determination of conditions for objectivity. Only through being allied with non-representational relations to a mind-independent reality can an individual have mental or psychological states that represent such a mind-independent reality. The relations not only make intentionality or representation possible. They ground and help establish the specific representational content, or 'meaning', of those states. Having a representational mind requires being embedded in a system of relations to some of the kinds of entities that are represented. Representing mind-independent reality requires bearing further, non-representational relations to that wider reality. Such relations are necessary for having the relevant representative abilities and are partly constitutive of what those abilities are.

The third and fourth thought experiments that helped establish anti-individualism explicitly invoke this connection to objectivity. The third of these thought experiments attempts to elicit the role of individual–environment relations in the determination of the representational nature of *perceptual* states and abilities. Two articles propose this thought experiment, against very different philosophical backgrounds.

One of these articles is 'Cartesian Error and the Objectivity of Perception' (Chapter 7). There I gesture at setting anti-individualism in a larger historical

setting. I sketch ways in which anti-individualism is compatible with authoritative self-knowledge and with the thinkability of the Cartesian demon hypothesis. Like Descartes, I think that the hypothesis is ultimately flawed. It assumes an intentionality or representationality some of whose necessary conditions it denies.<sup>24</sup>

The ideas in the article are further articulated in response to a comment on the article by Robert Matthews. In 'Authoritative Self-Knowledge and Perceptual Individualism' (Chapter 8) I reflect on how we might be misled into thinking that the authoritative character of self-knowledge is incompatible with anti-individualism. I also discuss details of the thought experiment that I use to support anti-individualism about perception.

The relevant thought experiment is set out not only in 'Cartesian Error and the Objectivity of Perception', but also in 'Individualism and Psychology' (Chapter 9). Both articles center on showing that anti-individualism applies to perceptual states. In 'Individualism and Psychology' I embed the discussion of anti-individualism regarding perception in a discussion of the method and presuppositions of the science of vision.

Both articles offer an argument that I misleadingly characterize, in two places, as an argument against individualism. The third premise of the argument already entails the positive thesis of anti-individualism—that the natures of perceptual states are partly fixed by relations to the environment. So if this positive thesis was what the thought experiment was trying to establish, the argument would beg the question. What the argument actually attempts to show is that individualist considerations cannot equally fix or co-fix those natures. It thus attempts to block reduction of anti-individualism to individualism.<sup>25</sup> In this respect the point of the thought experiment is different from that of the other three thought experiments in the series.

Even given its limited objective, I believe that the thought experiment is less powerful than the other three, although I continue to stand by it. Unlike the other thought experiments, this one is presented as an instance of general principles. Principles, not examples, lead. The thought experiment is intuitively less powerful because of two features of the example it presents. First, the example centers on a somewhat peripheral type of perceptual state. It does so for reasons that I will soon discuss. Second, the example involves a counterfactual environment in which the laws of optics differ from actual laws. I believe that invoking a case that is incompatible with physical law is legitimate. The point of the thought experiment is to bring out how relations, including lawful relations, between individual and environment help determine what representational

<sup>24</sup> This part of the discussion anticipates later work to be reprinted in a future volume, in particular 'Individualism and Self-knowledge', *The Journal of Philosophy*, 85 (1988), 649–663.

<sup>25</sup> These matters are discussed further in sec. III and note 13 of 'Descartes and Anti-Individualism: Reply to Normore', in Hahn and Ramberg (eds.), *Reflections and Replies*. As the discussion there indicates, my handling of the argument involves some conflation of issues about supervenience with issues about how representational natures of mental states are fixed.

content a perceptual state can have. So imagining those relations co-varying with variations of representational content can help elicit recognition of the role of such relations in determining a perception's content. Nevertheless, these features of the example lessen its intuitive power.

There are two reasons why examples that use twin-earth methodology to support perceptual anti-individualism have these features. One is that an individual's basic perceptual states bear strong law-like relations to proximal stimulation and ultimately, under normal conditions, to distal objects of perception—at least in veridical cases. The other is that an individual's dispositions to bodily movement (for example, in grasping an object of perception, or in tracing its shape) are normally tightly correlated with the perceived properties. Surface stimulation and bodily movement bear close relations to the distal sources or objectives of these movements, at least those guided by basic perceptual states. By contrast, there are no psychologically relevant bodily movements or surface stimulations that normally correlate well, by a relatively circumscribable set of physical laws, with other distal macro-properties. The very tightness of the dependence of perceptual content on relations of one's body to aspects of the environment makes it harder to produce cases in which one varies relations to the environment while holding 'individualist' aspects of the individual's body constant. Thus the very depth of anti-individualism about perception impedes the use of twin-earth methodology to demonstrate it.

Almost inevitably, in applying twin-earth methodology to perceptual cases, one must imagine differences in physical law, not just differences in the kinds of things that occur in the environment. For the effects on an individual's body and the individual's dispositions to bodily movement will be closely tied to the distal objects of perception, if physical law is held constant. These facts make it difficult to hold kinds of bodily states constant in actual and counterfactual circumstances, while varying relevant individual–environment relations. The difficulty of running straightforward twin-earth thought experiments on perceptual cases derives from the fact that the non-representational individual–environment relations that help constitutively to determine the representational nature of perceptual states include physical laws.

The twin-earth method is geared to showing that the psychologically relevant aspects of an individual's body could be constant while associated mental states vary counterfactually, because of variations in individual–environment relations. In some cases, many mental-state kinds could have been different even as the underlying internal physical states and processes remained the same. This latter situation is called a failure of local supervenience of mental states on underlying physical states. Anti-individualism is invoked as explanation of this failure of supervenience.<sup>26</sup> The explanation of the failure lies in the fact that the relevant mental-state kinds are constitutively dependent on relations to the environment

<sup>26</sup> The sub-argument for supervenience failure is, I think, relatively powerful in the particular sorts of cases discussed in 'Individualism and the Mental' and 'Other Bodies'. But even in these

beyond the individual's body. The fundamental point of the thought experiments is to argue for anti-individualism, not for local supervenience failure.<sup>27</sup>

So anti-individualism is not rejection of local supervenience of representational states on the individual's underlying bodily physical states.<sup>28</sup> Anti-individualism is constitutive explanation of the representational natures of mental states. Supervenience is a mere modal notion. Failures of local supervenience (supervenience of a representational state on an individual's body) can point toward constitutive explanations. Local supervenience failure, however, is neither constitutive of anti-individualism nor necessary for it.

If one is to apply twin-earth methodology in perceptual cases, one must confine the cases to non-central perceptual states. And one must almost inevitably vary the physical laws in the two environments. The method can invite recognition that laws governing relations to the environment are among the basic factors in understanding the natures of the perceptual states. But the sub-argument for local supervenience is intuitively less powerful.

For these reasons, it came to seem to me that twin-earth thought experiments are not the best basis for arguing for *perceptual* anti-individualism. There are two better bases. One is inference to the best explanation. I think that there is no equally good explanation of the natures and possibility of perceptual representation than one that includes anti-individualism. (I think that this type of argument is sound for nearly all types of representation, not merely perceptual types.) This conclusion derives from reflecting on alternatives and finding them to be patently inadequate or confused. Thus invocations of similarity between perception and

cases, one must be willing to discount small gravitational differences on the individual's body caused by remote physical differences in the actual and twin environments.

<sup>27</sup> Putnam's original thought experiment took two people's beliefs about water to differ even as their bodies are type-identical. Putnam assumed he was dealing with living bodies. One of the person's environments is Earth and contains water. The other's environment is Twin-Earth except that it contains no water. Obviously, this set of conditions is not possible. No living body on Earth lacks water. So a duplicate body must contain water. So the twin-earth environment cannot lack water. This infelicity was always recognized to be unimportant. It is unimportant because the main point of the thought experiment was not to establish that local supervenience fails, but to establish that reference and 'meaning' depend not on the character of an individual's body but on relations to the wider environment. It is obvious that what liquid is in an individual's body is not relevant to explaining what the individual's terms 'mean' or what the individual's terms are referring to. Given the thought experiment, it is clear that causal relations between the individual and specific aspects of the wider environment are what matter. So some twin-earth thought experiments might be taken to support rejection of local supervenience, while others need not be. The key point in the use of such experiments is that whatever differences (for example, gravitational differences) there may be in the bodies of the individuals in the respective twin worlds are not relevant to the constitutive determination of the individuals' mental state kinds.

<sup>28</sup> In my early work there are places where this distinction is blurred, though the specific explications of what anti-individualism is tended get the point right. I certainly always thought of anti-individualism as a thesis about the constitutive conditions for being in mental states—about the natures of mental states in this broad sense—and not mainly about supervenience failure. For discussion of reasons for distinguishing the views, see my "The Indexical Strategy: Reply to Owens", in *Reflections and Replies*, Hahn and Ramberg (eds.), 371–372; see also "Postscript to 'Individualism and the Mental'", note 2.

perceptual object, appeals to narrow content, postulations of intrinsic intentionality, claims that representation derives purely from phenomenality, and so on, can all be shown to be completely inadequate as explanations of perceptual content, or even accounts of its possibility, insofar as they deny anti-individualism. As far as I can see, the basic reasoning underlying this best-explanation justification is *a priori*. It is supplemented by empirical reflection on cases.

The other basis for arguing for anti-individualism about perception is reflection on ways that it is presupposed, filled in, and developed, in empirical science. Such reflection is the main business of 'Individualism and Psychology'.

I was fortunate to visit MIT in the early 1980s when the approach to the empirical psychology of vision by the then recently deceased psychologist David Marr was being taught and developed by his colleagues. I immediately saw this work as of higher quality, in empirical and methodological respects, than any psychology that I had been exposed to. The work seemed to be the beginning of a mathematically rigorous and empirically well-supported theoretical psychology, not just a compendium of experimental results. I also found that not only Marr's methodological remarks in his book, *Vision*,<sup>29</sup> but the entire approach to the subject in the classes and labs that I attended presupposes and develops anti-individualism. The fundamental theoretical representational kinds postulated by the theory are generically individuated in terms of computational methods for capitalizing on information deriving from causal relations to distal properties and distal regularities in the environment.

In 'Individualism and Psychology' I try to show not only that anti-individualism implicitly guides the empirical psychology of vision. I also try to bring home that the psychological theory indicates *specific* ways in which *specific* perceptual representational states are individuated in terms of relations to *specific* aspects of the distal environment. Of course, the theory is not fundamentally about individuation. It is about how vision works. Nevertheless, it assumes or presupposes anti-individualism at numerous points, and its empirical accounts of how perceptual states work constitute an empirical realization of anti-individualism.

Marr's approach fructified mainstream visual psychology. The psychology of vision surpasses other areas of cognitive psychology in the depth of its empirical support and the mathematical sophistication of its theorizing. Details of Marr's theory have been superseded. The shape of its explanatory strategy and its relation to anti-individualism have remained broadly the same in later empirical developments.

'Individualism and Psychology' was the start, for me, of a long-standing engagement with philosophical issues centered on psychology, especially the psychology of perception.<sup>30</sup> My time at MIT benefited from interaction with

<sup>29</sup> David Marr, *Vision* (San Francisco: W. H. Freeman, 1982).

<sup>30</sup> Apart from 'Individualism and Psychology' (Ch. 9) and 'Wherein is Language Social?' (Ch. 11), most of my work in this area is not included in this volume.

the linguist-philosopher Noam Chomsky, the philosophers Ned Block, Jerry Fodor, and Jim Higginbotham, and the psychologists Whitman Richards, Merrill Garrett, and, at greater distance, Shimon Ullman. These engagements sparked an interest in empirical psychology, and philosophy of psychology, that I have maintained ever since.

I believe that there are issues in philosophy of mind that can be fruitfully confronted through reflection on ordinary non-scientific matters. In some areas of philosophy of mind, however, fruitful reflection requires knowing something about empirical science. For the most part, philosophizing about perception seems to me to require such background knowledge. Too much is known about perception that is relevant to nearly any philosophical issue for it to be possible to carry on reasonable philosophical reflection in isolation from science. Unfortunately, quite a lot of philosophical work on perception still does so.

The bulk of the discussion in 'Individualism and Psychology' centers on how anti-individualism is woven into the fabric of the best empirical theory of vision, and indeed best theories of hearing and touch, that we have. It seems to me that its integration into empirical knowledge is strong ground to accept the philosophical doctrine. I believe that this consideration and more general inference-to-the-best-explanation considerations are the main support for anti-individualism about perception.

I said in first introducing the articles on perception that they evoke a connection between objectivity and anti-individualism. This evocation occurs in the general thought experiment whose role in supporting perceptual anti-individualism I have been downplaying. The ideas in the argument seem to me to have a further point. They suggest the fundamental and motivating role of objectivity in a comprehensive understanding of anti-individualism. As the last sentence of 'Cartesian Error and the Objectivity of Perception' indicates, anti-individualism seems to be a necessary condition of representation of an objective mind-independent world.<sup>31</sup>

The thought experiment uses three principles. I want to comment on the relation among these principles, abstracting from the argument that they are used to produce. The principles are:

- (1) Our perceptual experience represents or is about objects, properties, and relations that are objective, in the sense that their natures are public—*independent of anyone's acts, dispositions, or mental phenomena.*

Physical objects, properties, and relations are paradigm cases of objective mind-independent subject matters.

- (2) Our perceptual representational contents (and perceptual states with representational contents) specify particular objective types of objects, properties, or relations as such.

<sup>31</sup> Essentially the same point is made in the third to last paragraph of 'Individualism and Psychology'.



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That is, the representational contents of perceptual states specify such properties or kinds as solidity, color, motion, shape, rigid body, in a way that entails that if the perceptual content is veridical, there are instances of such physical properties or kinds.

- (3) As a constitutive matter, such perceptual representational contents (and perceptual states with representational contents) specify as they do (or are the perceptual states with the representational contents that they have) partly because of non-representational relations that hold between the perceiver, or instances of the type of perceptual system that the perceiver has, and instances of some of the objective properties, relations, and object-kinds that are specified.

Anti-individualism describes the constitutive conditions determining what representational contents our perceptual states have, what our perceptual states are.

I believe that the three premises are not independent. I think that (2) and (3) are consequences of (1).<sup>32</sup> I do not mean that they are logical consequences of (1). I mean that the truth of (2) and (3) are constitutive necessary conditions for the truth of (1).

I will not develop these points in detail here. I will just sketch the ideas. The idea that (1), reference to a mind-independent subject matter, requires (3), the truth of anti-individualism, is outlined in the third paragraph of this Introduction.

The idea that (1), reference in perception to a mind-independent subject matter, requires (2), that perception specify objective properties as the properties that they are, is more complex. It derives from the following considerations. Perceptual reference requires perceptual grouping or attribution of perceivable properties. Such attribution must sometimes be veridical: it must succeed in attributing properties that the subject matter has. The representational content of the attributions sometimes must partly derive from the nature of the relevant perceptible subject matter. So, for example, if perception represents shapes, colors, motion, its content must specify those properties as shapes, colors, motion. Since its subject matter is objective, perceptual reference must be guided by veridical attributive representational contents that derive from objective elements of the subject matter.<sup>33</sup>

The fourth main thought experiment that supports anti-individualism is set out in 'Intellectual Norms and Foundations of Mind' (Chapter 10). This article, too, locates the source of anti-individualism in conditions of objectivity. The thought experiment has an extremely general range of applicability. It centers on the possibility of questioning commonly held explicational beliefs. It exploits the lack of omniscience that is the inevitable consequence of objective reference to

<sup>32</sup> In 'Cartesian Error and the Objectivity of Perception' I asserted without argument that (2) is a consequence of (1) in the sixth paragraph of sec. II. As noted, I asserted that (3) is a consequence of (1) in the last sentence of the article and in the last section of 'Individualism and Psychology'.

<sup>33</sup> The first two premises in this argument sketch are discussed in considerable detail in sec. II and III of 'Five Theses on *De Re* States and Attitudes'.



an empirical subject matter. The exploitation of this cognitive distance between thought and subject matter shows, I think, that the first and second thought experiments in the series that I have been discussing are special cases of the phenomena elicited by the fourth, at least with respect to representation of empirical subject matters.<sup>34</sup>

The thought experiment in 'Other Bodies' centers on thinking about natural kinds. It depends on the thinker's having some sensitivity to a distinction between superficial appearances and underlying natures. With respect to natural kinds, the objectivity of empirical reference is at its most dramatic. Still, the distinction between superficial features, which we know easily, and deeper features, which may be harder to know, is just a special case of our lack of omniscience with respect to any objective empirical subject matter, even the superficial features.

The mechanisms driving the thought experiment in 'Individualism and the Mental' are special cases of cognitive distance between individual standpoint and objective subject matter. With regard to empirically accessed subject matters, the cognitive distance between individual and subject matter that is marked by incomplete understanding (and exploited in 'Individualism and the Mental') is again a special case of incomplete knowledge. It is a failure of knowledge mediated by incomplete mastery of one's own cognitive perspective on the world.

'Intellectual Norms and Foundations of Mind' shows that the relevant cognitive distance can be elicited without appeal to incomplete understanding, at least in an ordinary, everyday sense of 'incomplete understanding'. The thought experiment can be made to work for essentially the whole range of concepts applicable to objective, empirically accessible subject matters. The thought experiment both elicits and depends on the fact that most common sense explications of empirically applicable concepts involve empirical commitments. Thus 'sofas are furniture of such and such a size made or meant for sitting' has empirical commitments, even though these commitments seem to be completely safe. The commitments are meant to have constitutive implications. This one is meant to indicate what sofas *are*. They are also summations of empirical belief about the concepts' (or terms') referents. Such summations are fallible and open to question. The natures of the concepts are, in most instances, constrained by the objective referents. These referents are not fixed by the explications. We have partly independent referential access to the referents. We access sofas through perception.

The thought experiment shows that if individuals had never perceived sofas, there are circumstances in which they would not have had beliefs about anything as a sofa. The referent of the individual's concept is not in general fixed by a

<sup>34</sup> The thought experiment in 'Individualism and the Mental' (Ch. 5) seems to me to have applications to thought about logic, mathematics, and other apriori accessible subjects that are independent of the applications of this fourth thought experiment. So the relations among the thought experiments are not as simple as the line I am sketching might suggest. Still, I think that this line casts some light on the first two thought experiments.

particular individual's explication, by what the individual believes about the nature of the referent. It is often fixed by causal, perceptual, experimental, or practical relations that the thinker bears to the world.

The relevant concepts would be different if their referents were different. The concepts help type-identify mental states. The referents are partly fixed by non-representational relations between individual and world. So the mental states partly type-identified by the concepts (or representational contents) are partly determined by non-representational relations between individual and world. Thus the thought experiment supports anti-individualism. Of course, the force of the thought experiment lies in its concrete detail, not in this meta-description. For the detail, the reader must reflect on the article 'Intellectual Norms and Foundations of Mind' itself.

The individuals with incomplete understanding, in the thought experiment of 'Individualism and the Mental', are disposed to rely on others with superior understanding. Those with superior understanding have explicational beliefs with fallible commitments.<sup>35</sup> The thought experiment of 'Intellectual Norms and Foundations of Mind' indicates that these commitments commonly do not fix the concepts of the people with superior understanding. The ultimate source of anti-individualism, even in cases of social dependence, is the cognitive distance between individual and subject matter in any objective representation. This distance must be bridged by non-representational relations between individual and objective subject matter. Intellectual norms for application of representational contents are partly grounded on and must accord with these non-representational relations to the subject matter.

Three further articles elaborate ideas in 'Individualism and the Mental' and 'Intellectual Norms and Foundations of Mind'. All give special attention to the status of explicational beliefs, the sorts that have traditionally been thought to give definitions of terms or concepts.

One of these articles is 'Wherein is Language Social?' (Chapter 11) published in a volume on Noam Chomsky.<sup>36</sup> In it I discuss relations between my work on anti-individualism and the sciences of linguistics and cognitive psychology. One of the points of the article is to show that my arguments in 'Individualism and the Mental' do not rely essentially on a generalized notion of a communal language. The social interactions that the arguments cite are much more individualized and fine-grained. I accept Chomsky's conception of linguistics as the study of idiolects and as a part of individual psychology. The article shows how social interaction can bear on the representational contents and structures that occur in idiolects and individual psychologies.

<sup>35</sup> Here again, I confine this part of the discussion to cases of beliefs involving empirical commitments. These are the sorts of cases I center on in 'Individualism and the Mental', even though I believe that the basic form of argumentation in that paper applies more widely, to certain cases of beliefs in logic, mathematics, and other apriori disciplines.

<sup>36</sup> Relevant to this article is the exchange between Chomsky and me in Hahn and Ramberg (eds.), *Reflections and Replies*.

The article also shows that even the thought experiments of 'Individualism and the Mental' do not hinge entirely on whether an individual has the same concepts as experts on whom the individual depends. I believe that in the arthritis case, the individual does (or can) have the same concept as his more knowledgeable doctor. But the main point of the argument does not depend on this belief. What is important is that the individual has a non-indexical concept, for whose referent the individual depends on the mediation of others. As long as the individual can share a referent with others, a point that I regard as overwhelmingly plausible, the conclusion of the thought experiment still holds. The root of anti-individualism lies not in the sharing of concepts and transmission of belief or knowledge, but in the objective reference of our thought. Sharing of concepts and transmission of belief are further aspects of this basic phenomenon.

The key idea of 'Wherein is Language Social?' lies in this reasoning: Psychological states involve representational commitments that can be corrected. Individuals often take themselves to be correctable in their explicational beliefs. They are often right to take themselves to be correctable because they have relied on others for being connected to the referents of their concepts—the referents that the explicational beliefs are committed to correctly characterizing. (They have also relied on others for many of their other beliefs about the referents.) Explicational beliefs express individuals' understanding of their own concepts. Others sometimes have better access to or knowledge about the subject matter by reference to which the beliefs can be corrected. So individuals are often beholden to others for refining their understanding of their own idiolects. These points underlie my argument that individual psychology and the study of the semantics of idiolects cannot treat individuals in full isolation from their interactions with others.

A second article that elaborates ideas in 'Individualism and the Mental' and 'Intellectual Norms and Foundations of Mind' is 'Concepts, Definitions, and Meanings' (Chapter 12).<sup>37</sup> This article is less concerned with the impact of the ideas on our understanding of the sciences. It is more concerned with the relation of the ideas to the history of philosophy. I am specifically interested in how the ideas bear on historical conceptions of concepts.

In this article I support some of the traditional assumptions about concepts. I regard concepts as certain components in representational thought contents. I hold that mental abilities are type-identified partly in terms of such contents. Thus concepts are aspects of mental kinds. Concepts are, constitutively, aspects of a thinker's perspective on, or way of representing, a subject matter. Non-indexical, non-demonstrative concepts semantically determine the range of entities that they are about, *modulo* vagueness. All these principles must be

<sup>37</sup> In fact, the article also contains a further perspective on Putnam's work and the critical distinctions drawn in 'Other Bodies'. So it presents a more historical angle on ideas in all of the key foundational articles except the ones on perception.

understood in specific ways, but all seem to me to be true and at the heart of traditional conceptions of concepts.

The impact of anti-individualism on traditional conceptions centers on relations among concepts, definitions, and meanings. This impact adds to the impact of other philosophical developments, particularly holism about confirmation and the causal theory of linguistic reference. These developments changed our conceptions of definition and relegated definitions to a lesser place in theories of knowledge and meaning. They also brought out the complexity of relations between thought and various notions of linguistic meaning.

The third article that elaborates issues regarding conceptual explication and social dependence is 'Social Anti-Individualism, Objective Reference' (Chapter 13). This article was written for a symposium on work of Donald Davidson. In it I characterize differences in our approaches regarding the role of the social in language and thought. I hold that dependence on others is more empirical than apriori. I hold that applications of the apriori elements in my thought experiments take various empirical starting points for granted. I also discuss minimal conditions for objective representation and thought. I maintain, contrary to Davidson, that these conditions are fulfilled independently of language use. In fact, the conditions for objective representation are fulfilled by the perceptual systems of numerous animals that are incapable of language. Such representation provides a basis for propositional thought in a smaller group of higher animals that also lack language. This part of the article applies ideas that derive from anti-individualism about perception. The issues about minimal conditions for objective representation are the basis for a substantial body of work that does not appear in this volume. Some of this work will be collected in a further volume of essays.<sup>38</sup> Some of it is yet to be published.

The shape of anti-individualism as mapped by the four basic thought experiments, and associated arguments, is roughly as follows. In cases of nearly all empirically applicable thoughts, the nature of the thoughts is partly determined by non-representational relations to the physical environment.<sup>39</sup> Sometimes these relations are mediated through social relations carried by linguistic communication. However, social relations are not necessary to the basic phenomenon. The fundamental ground for the constitutive dependence of individual thought on a wider environment lies in the distance or 'play' involved in a thinker's relation to a mind-independent reality. In cases of empirical thoughts that do not include the most primitive perceptual concepts, this phenomenon is established through the first, second, and fourth thought experiments. In cases of perception and perceptual belief, anti-individualism still holds. Because of the tight,

<sup>38</sup> Cf. e.g. my 'Perception', *International Journal of Psychoanalysis*, 84 (2003), 157–167; 'Perceptual Entitlement', *Philosophy and Phenomenological Research*, 67 (2003), 503–548; 'Five Theses on *De Re* States and Attitudes'.

<sup>39</sup> The 'nearly' allows for certain beliefs about pain and other sensations. There may be other cases.

near law-like connections between the distal properties that are perceived, the operations of the perceptual system, and an individual's dispositions to behavior, twin-earth-based thought experiments do not elicit the point as forcefully with respect to the more primitive types of perception and perceptual belief as they do in other cases of empirical thought. Anti-individualism about perception is supported primarily by general explanatory considerations and by empirical psychology.

I have not much discussed cases of apriori thought in the essays reprinted in this volume. I think that anti-individualism holds in these cases also. For apriori thought, the relevant environment is not the physical environment—at least, not its contingent aspects. Causal relations are not in general the relevant non-representational relations to the subject matter. Despite these differences from the case of empirical thought, I believe that the role of objectivity in our understanding of apriori thought necessarily yields a place for anti-individualism.

The twin-earth methodology does not apply easily in the more basic cases of apriori thought. The reason is that it is often plausible that the relevant (basic, apriori) concepts are universal. At least they can be expected to be shared by individuals that are relevantly twin-like. I believe that social twin-earth thought experiments can evoke the truth of anti-individualism with respect to some types of apriori thoughts—those that are less fundamental and more technical. The main support for anti-individualism in cases of apriori thought lies, however, in more general explanatory considerations and considerations from history. I have sketched some of these considerations elsewhere.<sup>40</sup> The issue invites further development.

Before commenting on other essays in the volume, I want to make some general remarks on the use of thought experiments.<sup>41</sup> Some philosophers deplore the use of thought experiments as a recrudescence of non-scientific, apriori philosophizing that can yield no genuine knowledge. Other philosophers embrace thought experiments as examples of virtually the only sort of contribution that philosophy can make. I think that both positions are extreme.

As regards the negative position, thought experiments have frequently been used in science. Their use in philosophy often contributes to understanding scientific notions, as well as ordinary non-scientific notions. The twin-earth thought experiments have certainly contributed in deep ways to understanding semantics and psychology. Moreover, all the thought experiments that I have used are shot through with broad empirical assumptions. So the simple association of

<sup>40</sup> Cf. 'Frege on Extensions of Concepts, from 1884 to 1903', 'Frege on Truth', 'Frege on Sense and Linguistic Meaning', 'Frege on Knowing the Foundation', collected in *Truth, Thought, Reason*; the Introduction of *ibid.* 54–68; 'Logic and Analyticity', *Grazer Philosophische Studien*, 66 (2003), 199–249, and 'Concepts, Conceptions, Reflective Understanding: Reply to Peacocke', in Hahn and Ramberg (eds.), *Reflections and Replies*. See also Postscript to 'Individualism and the Mental' in this volume, the section entitled 'Methodology and Epistemic Implications'.

<sup>41</sup> In the Postscript to 'Individualism and the Mental', I discuss the epistemological implications of the thought experiments in much more detail.

thought experiments with apriori reasoning is a mistake. I do believe that there are apriori elements in the thought experiments. Extracting these elements is, however, neither easy nor straightforward.

The main advantage of thought experiments is that they provide concrete cases that indicate possibilities or relationships that might otherwise go unnoticed, and that either suggest or defeat principles. I think that our judgments about cases tend to be more reliable than our judgments about principles, especially when we get beyond relatively well-known principles. So thought experiments can be evidentially valuable in thinking about abstract, difficult matters. It is true that counterfactual cases can be misleading. It is nonetheless certain that counterfactual cases can be a source of illumination, even new knowledge, if used effectively. Moreover, nearly all the twin-earth cases point toward analogous actual cases that illustrate similar points.

The enthusiast position on thought experiments is often accompanied by injudicious use of them. Thought experiments inevitably leave certain aspects of a case undescribed. Judgment is required to note what matters to a case. Judgment is required to find implicit lessons and project from one case to others. Sometimes arguments from thought experiments are inconclusive or unpersuasive because of under-description. A more common problem is overgeneralization. Since thought experiments are case-based, they do not make evident exactly what principles underlie them. Further considerations, perhaps other thought experiments, are often needed to indicate that the generalizations to be drawn from a case are less neat than one might have hoped. The world is a rich and complicated place.

Anti-individualism seemed at first to some philosophers to conflict with reasonable conceptions of causation or scientific explanation. Many such reactions rested on the simplest of misunderstandings. For example, anti-individualism was accused of invoking action at a distance. Jerry Fodor issued a more interesting type of challenge. Fodor argued that anti-individualism does not individuate psychological states in terms of their causal powers. He held that the causal powers of psychological states cannot differ if the underlying brain states do not differ in their causal powers. Psychological states, anti-individualistically individuated, can be different even though their underlying brain states do not relevantly differ. Psychology, he held, must individuate psychological states in terms of their causal powers. So, he concluded, psychological states must be individuated in 'narrower' ways than those indicated by anti-individualism.<sup>42</sup>

I regard this argument as a virtual *reductio* of its premises. Psychology does individuate many of its explanatory kinds non-individualistically. Any argument that is not itself a piece of science that purports to show that psychology should

<sup>42</sup> Fodor would, I think, no longer give this argument, and would no longer support its conclusion. I believe that his current view is clearly anti-individualistic. It should be noted that the argument makes ordinary thoughts causally epiphenomenal on brain states. As further articles in the present volume indicate, this view is, I think, unacceptable on its face.



use different explanatory kinds than those it actually uses has no virtually no chance of being justified. In fact, this argument has a number of difficulties. The most interesting ones center on the notion of causal power.

'Individuation and Causation in Psychology' and 'Intentional Properties and Causation' (Chapters 14 and 15) discuss the notion of causal power in some detail. I argue that the notion must be understood in a way that allows for variations in types of power that the various special sciences are concerned with. I also warn against conflating the non-representational relations that play a constitutive role in determining psychological kinds with the kinds themselves. The former relations are usually not a scientifically recognized kind, and they yield no law-like explanations. The psychological kinds with representational content are, for the most part, not relations at all. They are fitted to causal explanation and causal, law-like explanatory principles. I believe that once one reflects carefully on how to understand causal power in interpreting the special sciences, the idea that anti-individualism is subject to some general difficulty regarding mental causation dissolves.

A third article on mental causation is 'Mind-Body Causation and Explanatory Practice' (Chapter 16). This article raises doubts about how the metaphysics of the mind-body problem and the discussion of mind-body causation have been discussed in much philosophy over the last half-century. These doubts apply to a very wide range of philosophical views. I hold that most mainstream materialist discussion of these issues has relied too much on metaphysical intuitions corrupted by ideology, and not enough on reflecting on the actual explanatory practice of the relevant sciences.

The article uses materialist discussions of epiphenomenalism to illustrate the trend that I deplore. Epiphenomenalism is the view that mental states and their properties have no causal power: all causation in psychology is non-psychological (say, neural) causation; all causal power goes purely through non-psychological events and non-psychological aspects of those events. I think that epiphenomenalism is clearly false. Reflection on explanation in psychology shows it to be. Moreover, epiphenomenalism would make hash of our understanding of ourselves as agents. Nearly all philosophers purport to reject epiphenomenalism.

My complaint is that often both the concern about epiphenomenalism and arguments that purport to disarm it work off metaphysical assumptions that have little genuine justification.<sup>43</sup> Such discussions largely ignore the strongest ground to reject epiphenomenalism—the fact that it is incompatible with actual causal explanations, both in science and in common sense. The metaphysical assumptions lack the epistemic credentials to override or displace these sources of knowledge. More generally, I criticize over-reliance on metaphysical intuitions in discussion of this aspect of the mind-body problem. In a Postscript

<sup>43</sup> Also relevant to this work is 'Epiphenomenalism: Reply to Dretske', in Hahn and Ramberg (eds.), *Reflections and Replies*.



### 30 Introduction

I discuss a response to this article by Jaegwon Kim. I take the response to illustrate further the points just outlined.

In my view, the mind–body problem remains difficult, even for representational aspects of the mind. I think that the strong coalescence among American philosophers around materialist solutions—albeit incompatible ones—does not correspond to any epistemic strength in the solutions. I advocate a more modest, more exploratory attitude toward understanding relations between mind and body in general, and toward understanding mind–body causation in particular.

An aspect of mind that I have discussed less than representational states is consciousness. Quite a lot of philosophical discussion over the past two decades has centered on consciousness. Much of the discussion seems to me to have made little progress. Much of it replays issues in other areas—for example, philosophy of language—in only slightly different forms. The first article on consciousness in this volume develops some issues close to work of Ned Block. Block's work does make progress. He develops a distinction between phenomenal consciousness and access consciousness. The former is the sort of consciousness associated with qualitative feel—with the 'what it is like' character of experience.<sup>44</sup> The latter has to do with consciousness that involves the individual's cognitively accessing information of one sort or another.

My article 'Two Kinds of Consciousness' (Chapter 17) makes three points. First, I claim that phenomenal consciousness is the basic type of consciousness. It must be present in an individual for any other type to be present. Second, I hold that Block does not correctly characterize access consciousness. Consciousness is an occurrent feature of mental states or events. Block's characterization leaves it dispositional. I explore ways in which this error might be rectified. Third, I conjecture that phenomenal consciousness might be distinguished from qualitative aspects of mind, which may or may not be conscious. For example, I conjecture that there may be room to distinguish between having a pain and being phenomenally conscious of a pain. Some pain, a qualitative aspect of mind, may not be phenomenally conscious. This is a delicate distinction on which I place no great weight. The allowance for unconscious sensation is, however, a recurrent feature of some traditional psychology. I think that such allowance should not be blocked a priori.

In 'Reflections on Two Kinds of Consciousness', I say more about the second and third issues. I conjecture that there is an important, qualified, constitutive relation between rational-access consciousness and direct cognitive control. I explore some ideas about the form of phenomenal consciousness. I believe that this article provides a unified framework for thinking about all types of phenomenal consciousness.

<sup>44</sup> The classic article on this notion is Thomas Nagel's 'What is it Like to Be a Bat?', *Philosophical Review*, 83 (1974), 435–450. Block's original article on the distinction is 'On a Confusion about a Function of Consciousness', *The Behavioral and Brain Sciences*, 18 (1995), 227–247.

The collection concludes with two historical articles. In 'Descartes on Anti-Individualism' (Chapter 19), mentioned earlier, I engage with one of the philosophers I most admire. I discuss how Descartes came to grips with constitutive conditions on representational mind which are broadly parallel to issues I discuss in my own development of anti-individualism.

'Philosophy of Mind: 1950–2000' (Chapter 20) reviews some of the most significant work in philosophy of mind over the last half-century. The article locates anti-individualism in the context of its immediate historical surroundings, and provides an overview of other work in the area.

It will be apparent from these essays that my interest lies in foundations. The foundations that I reflect upon in these essays are not basic truths of a system. I share with traditional philosophers the ideal of finding such truths. But what I have focused on here is more modest—less deductive, less systematic, more preliminary. The foundations I reflect on are broad conditions in the individual or in the wider world that make mental states or events possible—mental states or events in general or ranges of kinds of mental states or events—and that are constitutively associated with them. The conditions include particular sorts of causal conditions, social conditions, psychological conditions, conditions of phenomenal consciousness. I am interested in constitutive conditions under which both representation in general and specific types of representational capacity are possible. Since I believe that mental representation is basic to all representation, I focus on representational mental states, acts, and events. Some of the constitutive conditions that I discuss are certainly among basic conditions under which minds are possible.

I use various methods for understanding such conditions—common sense, general reflection, historical investigation, reflection on scientific theory and practice. The basic impulses are exploratory and constructive, not deflationary or reductionistic. The work in this volume does not constitute a system, either methodologically or doctrinally. The issues are too complex to admit of one method of investigation or to yield a simple set of principles. The work does strive toward whatever principles and system the subject matter allows. I see the articles as pointing toward more systematic work on constitutive conditions for representational and epistemic capacities—on foundations of mind.