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HOW KNOWLEDGE WORKS

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I

I shall be mainly concerned with the question ‘What is personal propositional knowledge?’. This question is obviously quite narrowly focused, in three respects. In the first place, there is impersonal as well as personal knowledge. Second, a distinction is often drawn between propositional knowledge and practical knowledge. And third, as well as asking what knowledge is, it is also possible to ask whether and how knowledge of various kinds can be acquired: causal knowledge, *a priori* knowledge, moral knowledge, and so on. I shall dwell briefly on each of these three points.

First, there is the distinction between personal and impersonal knowledge – in other words, between the psychological concept of knowledge and the social one.¹ We use the concept of knowledge to describe the cognitive condition of individuals; but we also use it to describe the progress of scientific and historical research. So for example we can speak or enquire about the state of knowledge in a particular field of biology or history. And if we do so, we are evidently not concerned with what anyone in particular knows about, say, the genetics of fruit flies or the career of Charlemagne, but rather with what the scientific or academic community knows. Needless to say, there is a close connection between personal and impersonal knowledge. But ‘It is known that *p*’ does not simply mean ‘Someone or other

¹ On this topic, see B.A.O. Williams, ‘Knowledge and Reasons’, in G.H. von Wright (ed.), *Problems in the Theory of Knowledge* (The Hague: Nijhoff, 1972), p. 3.

knows that p '. To suppose that it does is to ignore the role of documents, archives and libraries in the economy of knowledge. The invention of writing means that each of us can cease to remember without all of us, collectively, ceasing to know. That is why Thamus, the mythical king of Egypt about whom Socrates talks in *Phaedrus*, was right to say that writing is a recipe for reminder, and not for memory, but wrong to infer that it cannot extend knowledge, but only a semblance of it.

Second, there is often said to be a distinction between practical knowledge and propositional knowledge – a distinction which Ryle wrote about under the rubric 'knowing how and knowing that'.² As many commentators have pointed out, these labels are misleading, since 'A knows that ...' is not the only construction which can be used to ascribe propositional knowledge to someone. For example, 'A knows whether it will rain tomorrow', 'A knows when and where Alexander was born' and 'A knows how sponges reproduce' all ascribe propositional knowledge to A. The moot questions are, first, whether knowing how to do something is the same as being able to do it, or being skilled at doing it; and second, whether knowing how to do something and knowing that something is the case are essentially different kinds of knowledge. Sceptics will not find it difficult to muster examples. For Penelope will still know how to weave a tapestry long after she has lost the strength in her fingers to do it. (Of course, if she knows how to weave a tapestry without being able to do so, what prevents her from being able to weave a tapestry may be weakness or blindness, but cannot be ignorance.) And 'Victor knows how to skin a rabbit' can be paraphrased as 'For some ϕ , Victor knows that the way to skin a rabbit is to ϕ '. But these examples do not provide conclusive arguments; and the questions deserve more patient treatment than I can give them here. Fortunately they have received it.³

Third, the theory of knowledge is concerned not only with the question of what knowledge is but also with the questions of whether and how knowledge of various kinds can be acquired. Of course this quick formulation embraces many difficult and contentious matters. The point which I should like to emphasize is that the question of what knowledge is and the question of how it can be acquired are distinct, even though they are connected. It is one thing to say how knowledge can or cannot be acquired, and hence how knowledge-claims can be tested, and quite another to say what knowledge is. Just as it is one thing to say how a right or a duty can be

² G. Ryle, 'Knowing How and Knowing That', in *Collected Papers*, Vol. II (Bristol: Thoemmes, 1990), pp. 212–25; *The Concept of Mind* (London: Hutchinson, 1949), ch. 2.

³ Detailed and sceptical treatments of the distinction, to which I am indebted in this paragraph, can be found in D.G. Brown, 'Knowing How and Knowing That, What', in O.P. Wood and G. Pitcher (eds), *Ryle* (London: Macmillan, 1971), pp. 213–48; and A.R. White, *The Nature of Knowledge* (Tatowa: Rowman & Littlefield, 1982), ch. 2.

acquired, and hence how it is possible to decide whether someone has such and such a right or duty, and quite another to say what a right or a duty is.

There is a tendency in the literature to blur the distinction between these two questions, for two principal reasons. In the first place, one of the traditional aims of epistemology is to address the sceptical question of whether we do in fact know various things that we commonly and unreflectingly take ourselves to know. But the claim that we do know these things – about causes, about the past, about each other's thoughts, etc. – can only be justified by showing that there is a satisfactory answer to the question of how we know them. So if a definition of knowledge is intended to rebut the sceptic, it will have to explain not only what knowledge is, but also how it can be acquired. Second, it is widely assumed that knowledge is a species of belief. But if we make this assumption, deciding whether *A* knows that *p* or merely believes that *p* is likely to seem as if it is a matter of deciding whether *A*'s belief that *p* was acquired in a way which entitles it to be called knowledge. And we are therefore likely to regard the question of how knowledge can be acquired as part of the larger question of what it is.

For these reasons, and perhaps others, there is a tendency in epistemology for what the press corps calls mission creep. We start out wanting to say what knowledge is; but we quickly find ourselves embroiled in the question of how it can be acquired. And before long we have to evacuate by helicopter, leaving chaos behind us. I shall address only the question of what knowledge is. The questions of how knowledge of various sorts can be acquired, and whether, and if so how, scepticism of one sort or another can be rebutted, will not be attempted.

II

What is personal propositional knowledge? (With the preliminaries in place, I shall drop the qualifying words, and speak simply of knowledge.) The doctrine which continues to predominate is that knowledge is a species of belief; but in recent years a less influential view has received attention and won adherents. According to the minority view, knowledge is not a species of belief: it is a species of ability.⁴

Dissatisfaction with the predominant view is understandable. Since the publication of Gettier's much cited article there has been a broad consensus

⁴ The negative doctrine, although not the positive one, seems to be implied by Socrates' conclusion at Plato's *Theaetetus* 210a–b; see also *Republic* 476–9. Some writers who argue that '*A* knows that *p*' implies that *A* believes that *p* nevertheless concede that knowledge is not a species of belief. No inconsistency is involved in this position. See, e.g., R.M. Chisholm, *Perceiving* (Cornell UP, 1957), pp. 17–18.

among philosophers that knowledge cannot be defined as justified true belief;⁵ but even among those who maintain that knowledge is a species of belief, the consensus ends there. Despite a formidable quantity of work, no definition of knowledge in terms of belief has commanded general assent; the construction of counter-examples seems barely to have stretched the critics' ingenuity;⁶ and inevitably, the more complex the definitions have become, the more likely it appears that even if one were devised which seemed able to survive every imaginable assault by counter-example, it would be too flagrantly *ad hoc* to count for much. In other words, it would be hard to understand what the point of using such a complicated concept could be, or why it matters whether someone knows something. Unsurprisingly, a sceptical view of the prospects for a definition of knowledge in terms of belief has recently become quite common;⁷ and the view that knowledge, as opposed to justified belief, does not matter has also been aired.⁸ Time, one might think, to give the minority a more attentive hearing.

If knowledge is a species of belief, it remains uncertain what the species is. But the minority view has not been successfully elaborated either. Wittgenstein remarks that "The grammar of the word "knows" is evidently closely related to that of "can", "is able to";"⁹ and examines this relationship carefully in the particular case of understanding, that is, knowledge of meaning. Ryle says that "'know" is of the same family as skill words'.¹⁰ But little progress has been made in defining the species of ability that knowledge is supposed to be.

One reason for this is a tendency on the part of philosophers influenced by Wittgenstein and Ryle to associate knowledge too closely with the use of language to answer questions or to provide information.¹¹ For example, Alan White argues that knowledge is 'the ability to produce the correct answer to a possible question'.¹² But, on the most natural interpretation, to produce the correct answer to a question is to state it; and in this sense, it is possible to know that *p* without being able to produce the correct answer to

⁵ E.L. Gettier, 'Is Justified True Belief Knowledge?', *Analysis*, 23 (1963), pp. 121–3.

⁶ R.K. Shope's *The Analysis of Knowing* (Princeton UP, 1983) is a Herculean confirmation that work on Gettier's problem was, at the time of publication, inconclusive at best.

⁷ See, e.g., E. Craig, *Knowledge and the State of Nature* (Oxford UP, 1990); T. Williamson, 'Is Knowing a State of Mind?', *Mind*, 104 (1995), pp. 533–63.

⁸ See, e.g., M. Kaplan, 'It's Not What You Know That Counts', *Journal of Philosophy*, 82 (1985), pp. 354–6.

⁹ L. Wittgenstein, *Philosophical Investigations* (Oxford: Blackwell, 1958), §150.

¹⁰ *The Concept of Mind* p. 129. The minority view can also trace its pedigree to Plato, *Theaetetus* 196c–199c; cf. Aristotle, *De Anima* 417a 21–b 2.

¹¹ J. Margolis, 'Knowledge, Belief and Thought', *Ratio*, 14 (1972), pp. 74–82; White, *The Nature of Knowledge* ch. 6; Craig, *Knowledge and the State of Nature*, *passim*.

¹² White, *The Nature of Knowledge* p. 119. Cf. Wittgenstein, *On Certainty* (Oxford: Blackwell, 1969), §586.

the question whether p . There may, for instance, be circumstances in which we would want to say that a dog knows that it is time for a walk; but it cannot say so. White explicitly acknowledges (p. 121) that ‘there is no reason why young children and animals should not be said to know many things ... [e.g.] that it is time for a walk’, and denies that having the ability to produce the right answer to a possible question ‘implies ... manifesting it [or, presumably, being able to manifest it] in any verbal way’; but he does not explain how exactly the exercise of this ability is to be defined.

Perhaps what White had in mind is that to produce the correct answer to a possible question is merely to enable someone to state it; for a dog certainly can make its owner aware of the fact that it is time for a walk, and thereby enable her to state it. But this definition would be too liberal; for in this sense, a piece of litmus paper, which cannot know anything, can produce the correct answer to the question whether a solution is acidic. Alternatively, it may be that to produce a correct answer is *intentionally* to enable someone to state it (cf. White p. 120). But this would be too stringent. For even if it is plausible that a dog intends, by leaping towards the door, to get a walk under way, or to get someone to get a walk under way, it is surely *not* plausible that it intends to enable anyone to state that it is time for a walk. White’s definition of knowledge therefore seems to be unhappily poised between tautology and falsehood: to know whether p is, tautologically, to know the answer to the question whether p ; but it is not to be able to answer the question whether p .

It may be objected that what we are inclined to say about animals should not be our principal reason for rejecting a theory of knowledge. Animals without language have, at best, an attenuated awareness of facts, so we should philosophize about knowledge with competent speakers in mind, and allow our conception of the cognitive powers of animals to be decided by our epistemology, and not *vice versa*. I grant that this objection has considerable force – notwithstanding the fact, noted above, that White’s theory of knowledge was meant to be consistent with attributing knowledge to animals. But in any case, knowledge has a far more extensive role in our lives than the ability to provide answers to questions has, and a satisfactory definition will have to reflect this. The doctrine that knowledge is justified true belief was too narrowly tailored to what Bernard Williams (‘Knowledge and Reasons’ p. 3) has called the examiner’s situation – ‘the situation in which informed questioners are concerned with A ’s credentials with regard to a piece of knowledge’ – which, as Williams points out, is far from typical in practice. White’s theory of knowledge, on the other hand, is tailored to what might be called the expert witness situation – the situation in which uninformed questioners are concerned to establish whether p from someone

who is presumed to know. Of course both of these situations arise; but it is difficult to see why either should be thought capable of providing the key to the nature of knowledge.

Writers belonging to the minority tradition have argued persuasively that knowledge is a species of ability (e.g., White ch. 6). But either they have said too little about the specific kind of ability that knowledge is supposed to be, or, if they have said enough, what they have said is unsatisfactory. This is the point on which I should like to air a proposal. If those in the minority are right, we cannot claim to understand what knowledge is unless we can explain how it gets expressed in thought and behaviour; but this is where they have faltered. Fortunately, an explanation can be given, in relatively simple terms. Or so I shall argue.

III

I shall begin by considering a definition of knowledge proposed by Anthony Kenny, another philosopher whose conception of knowledge is influenced by Wittgenstein and Ryle. Knowledge, Kenny says, is 'an ability of a unique kind'; but he doubts whether it is possible to say anything very definite about what it is an ability to do:

there is no simple way of specifying how knowledge gets expressed in behaviour, and indeed some pieces of knowledge may never affect behaviour at all. The most that we can say is that to know is to have the ability to modify one's behaviour in indefinite ways relevant to the pursuit of one's goals.¹³

Two things are right about this definition, and two things are wrong with it. The first point in its favour is that if knowledge is an ability, then defining knowledge will, as Kenny implies, be a matter of specifying how it is expressed, or manifested, or actualized. This is a perfectly general point about powers and potentialities of every sort. Dispositions, faculties, abilities, tendencies and liabilities are all powers; and powers are defined in terms of their actualization or exercise: in other words, by saying what they are powers to do. Second, Kenny is right to emphasize the peculiar flexibility of knowledge. Knowledge can be expressed in indefinitely many ways. For example, Tom's awareness of the fact that the rouble has collapsed can be expressed in his booking a holiday in Russia, buying shares in Gazprom, or sending dollars to a friend in Moscow.

On the other hand, Kenny appears to equate the question of how knowledge gets expressed in behaviour with the question of what knowledge is an

¹³ A.J.P. Kenny, *The Metaphysics of Mind* (Oxford UP, 1989), pp. 108–9.

ability to do. But this is a mistake. For if knowledge is an ability, it is an ability whose exercise can consist in thought, just as well as speech or behaviour. Making a decision or an inference, performing a calculation in one's head, doubting or believing or hoping something, conceiving a desire or forming an intention, all of these things can express or evince knowledge just as much as behaviour can. For example, Tom's awareness of the fact that the rouble has collapsed can be expressed in his deciding to book a holiday in Russia, whether or not he actually does so; or hoping that his friend in Moscow has his savings in dollars, instead of supplementing them.

The second weakness in Kenny's account of knowledge is that he fails to explain what unites the heterogeneous variety of things which can express the knowledge that p , as distinct from the knowledge that q . To know, he says, is to have the ability to modify one's behaviour in indefinite ways relevant to the pursuit of one's goals. But if knowledge is a species of ability, and this is the most we can say about how it is exercised, the difference between knowing one thing and knowing another is bound to remain obscure.

But is this a weakness? Naturally, the answer depends on what form an explanation of the difference between knowing that p and knowing that q is supposed to take. But if what is being sought is a formula connecting specific actions and mental acts with the possession of specific pieces of knowledge, it may be objected that this is demonstrably unfeasible. Admittedly, there is a trivial sense in which the various modifications to one's behaviour which express a piece of knowledge have something in common, for they are all *influenced* or *informed* by that piece of knowledge. Hence if (for example) Tom's knowledge that the rouble has collapsed is an ability, there can be nothing wrong with saying that its exercise will consist in actions and mental acts which are influenced or informed by the knowledge that the rouble has collapsed. But this is not very illuminating. And it becomes misleading if it makes us think that we can say specifically what actions and mental acts Tom is able to perform if and only if Tom knows that the rouble has collapsed. For if A knows that p , it does not follow that A is able to do *all* of the things which could be influenced or informed by the knowledge that p . For example, if Tom knows that the rouble has collapsed, it does not follow that he is able to arrange a loan from the World Bank or sack the Russian prime minister. And if A is able to do *at least one* of the things which could be influenced or informed by the knowledge that p , it does not follow that A knows that p . For example, an investment in Gazprom may be influenced or informed by the knowledge that the rouble has collapsed, but there is no need for Tom to know that the rouble has collapsed in order to buy shares in Gazprom.

The reply to this objection is that the difference between knowing one thing and knowing another cannot be explained by saying what specific actions and mental acts could express the knowledge that p . But it does not follow that we cannot explain what knowing that p is an ability to do. Compare the question 'What is enthusiasm?'. Enthusiasm is evidently a trait or disposition or tendency; but it is not a tendency to do anything in particular. Enthusiastic sportsmen do not invariably hop from foot to foot and punch the air; and enthusiastic philosophers rarely twitch with excitement and tell one another how much fun it is. Enthusiasm is (in part) a tendency or disposition to do the things one does, across a sufficiently broad range, in an enthusiastic manner. It is, if the phrase is an acceptable one, an *adverbial* tendency, a tendency to do things enthusiastically. Again, being unpunctual is a tendency to do a broad range of things, such as arrive for meetings, submit tax returns and answer correspondence, later than the appointed time. But (as an anonymous referee helpfully put it) there is no other way of classifying unpunctual actions except by saying that they are done late, which is about how they are related to clocks, not about which actions they are. So being unpunctual can also be described as an adverbial tendency, although in this case the adverb is an adverb of time, rather than of manner.

The lesson of these examples is that although there are no specific actions or mental acts such that enthusiasm or unpunctuality is a tendency to perform some or all of them, this does not prevent us from providing a specific answer to the question of what enthusiasm and unpunctuality are tendencies to do. But is it possible to formulate an analogous answer to the question of what knowing that p is an ability to do? If it is possible, then knowledge is an adverbial ability, in the sense in which enthusiasm and unpunctuality are adverbial tendencies or dispositions. In other words, knowledge is not the ability to do such and such things: it is the ability to do things —ly, in the same way as unpunctuality is the tendency to do things late. If it is not, then the objection stands, and the most that can be said about how knowledge gets expressed in thought and behaviour fails to explain the difference between one piece of knowledge and another.

This is where we stand: the various modifications to one's thought or behaviour which express a piece of knowledge are those which are influenced or informed by that piece of knowledge. But we cannot explain how Tom's knowledge that the rouble has collapsed can get expressed by saying what actions and mental acts can be influenced or informed by Tom's knowledge that the rouble has collapsed. The question is whether we can explain it instead by devising an adverbial paraphrase of the second conjunct in

1. Tom ϕ ed and Tom's ϕ ing was influenced or informed by the knowledge that the rouble had collapsed.

As it happens, this is not a particularly difficult thing to do. For we can convey exactly the same information by saying either that Tom's ϕ ing was informed or influenced by the knowledge that the rouble had collapsed, or that the fact that the rouble had collapsed is one of the facts in view of which, or in the light of which, Tom ϕ ed. But a fact in view of which, or in the light of which, Tom ϕ ed is a fact because of which Tom ϕ ed, in the sense of 'because' which introduces a reason for doing or not doing, or for believing, wanting or doubting something. Hence (1) can be paraphrased as

2. Tom ϕ ed because of the fact that the rouble had collapsed.

The adverbial phrase in (2) is not, of course, an adverb of manner or time, but what is called a thematic adverb, comparable to 'reluctantly' and 'intentionally'. If Tom is said to have done something reluctantly there need not be an implication that he did it in a reluctant manner; and if he is said to have done something intentionally there cannot be an implication that he did it in an intentional manner, because there is no such manner. 'Tom agreed reluctantly' normally means that Tom agreed, and was reluctant to do so; and 'Tom coughed intentionally' means that Tom coughed, and did so for a reason. (2) implies that Tom ϕ ed intentionally; but in addition it identifies his reason for ϕ ing, namely, the fact that the rouble had collapsed.

IV

If the argument so far is correct, it is plausible that knowledge is the ability to do things, or refrain from doing things, or believe, or want, or doubt things, for reasons that are facts. It is plausible, that is, if we allow our conception of knowledge to be formed by reflecting on how knowledge gets expressed in our mental lives and in our conduct, rather than by considering how it can be acquired; and if we therefore bear in mind that the list – doing, refraining from doing, believing, wanting or doubting – is not exhaustive. Any verb can be added which can occur in a sentence of the form '*A*'s reason for ϕ ing was that *p*'.

If this is the right approach, a definition of knowledge can be based on the notion that the facts of which we are aware are the facts by which our thoughts and deeds can be guided. And the resulting definition provides the combination of flexibility and precision that we need. It is flexible, to the right degree, because the variety of things which *A* can do for the reason

that p is exactly as heterogeneous as the variety of things A can do, the doing of which can be influenced or informed by the knowledge that p . And it is precise, in the sense that it reveals precisely what the difference is between knowing that p and knowing that q . A knows that p if and only if the fact that p can be A 's reason for doing, refraining from doing, believing, wanting or doubting something; and A knows that q if and only if the fact that q can be A 's reason for doing, refraining from doing, believing, wanting or doubting something.

In the remainder of this paper I shall say something about the terms in which I am proposing that knowledge be defined – that is, about facts and reasons; I shall consider some possible objections; and I shall comment briefly on Wittgenstein's doctrine that I cannot be said to know that I am in pain.

V

Evidently, something has to be said about facts and reasons – something, but not everything. I have not said what facts are, and I do not propose to. Facts are neither events nor concatenations of objects, since they have no location in space and time. (Anyone inclined to doubt this should begin by considering negative and conditional facts.) We do sometimes speak as if facts have a location in space and time, as when we ask where a certain fact can be found, or when a certain fact emerged. But what these idioms show is only that a fact can be recorded in a particular place, or be discovered at a particular time. Facts are not states of affairs, since facts can be stated, unlike states of affairs; and states of affairs have a beginning and go on for a certain amount of time, unlike facts. Perhaps, as Strawson suggests, a fact is simply what a true statement states;¹⁴ but there is no need for us to decide here whether this formula is acceptable, for empirical knowledge is the awareness of facts, whatever facts may be. If Strawson's formula is correct, and if there are moral and aesthetic truths, then there are also moral and aesthetic facts, and moral and aesthetic knowledge is the awareness of these facts. If on the other hand the formula is incorrect, then the analysis of knowledge defended here may need to be extended to embrace moral and aesthetic matters; but this would be a relatively simple task.

Whatever facts may be, facts can be reasons. This is something I have so far taken for granted; but it is something which I am willing to defend. If we survey the literature in the theory of action, there appears to be some confusion about what reasons are. For example, Davidson says that reasons

¹⁴ P.F. Strawson, 'Truth', repr. in his *Logico-Linguistic Papers* (London: Methuen, 1971), pp. 190–213, at p. 196.

consist of mental states and dispositions; von Wright says that a request can be a reason; and Kenny and Audi both claim that goals are reasons. (Audi adds that a goal is ‘the content of a want and [is] expressed by the infinitive phrase typically used to specify what the want is for, for example “to promote philosophical thinking”’.¹⁵) But all of these claims are false.

To see why, consider three fundamental facts about reasons. First, as Raz points out, reasons figure in practical reasoning;¹⁶ and they figure in theoretical reasoning too: *A*’s reason for doing something may be *B*’s reason for believing something. For example, Arthur’s reason for believing the soil is limey may be Audrey’s reason for firing the gardener, namely, that the azalea wilted. In short, reasons can be premises. Second, reasons can be stated or given; and the canonical form of a sentence stating or giving a person’s reason for doing or believing something is ‘*A* ϕ ed because *p*’ or ‘*B* believes that *q* because *p*’. Since ‘because’ is a connective, it follows that the canonical form of words in which a reason is expressed is a sentential clause in the indicative mood, although gerundial and some other constructions are also common – for example, ‘Angela’s raising her voice was the reason why Peter walked out’, or ‘Angela’s arrival was Peter’s reason for leaving’. Third, explanations are factive – and so also *a fortiori* are explanations which give a person’s reason for doing or believing something: ‘*A* ϕ ed because *p*’ implies that *p*; and so does ‘*B* believes that *q* because *p*’.

These three facts preclude mental states, requests and goals from being reasons. If Sybil fed James oysters because she believed that oysters are aphrodisiac, her believing this can be loosely described as a mental state; but ‘Sybil’s believing that oysters are aphrodisiac’ cannot complete a sentence which begins ‘Sybil fed James oysters because ...’ or ‘It is true that ...’. Sybil’s reason was not her believing that oysters are aphrodisiac; it was *that she believed* that oysters are aphrodisiac. The same tests will confirm that requests and goals cannot be reasons either. If Paul passed Jeremy the salt because Jeremy asked him to, his reason was *that* Jeremy had asked him to pass the salt: not Jeremy’s request, namely, that Paul pass him the salt, but that he had made it. And if Martin coughed to attract Pauline’s attention, his reason was not his goal, namely, to attract Pauline’s attention: it was *that* coughing would attract Pauline’s attention, or that he believed it would.

The upshot is that although we can often explain intentional actions by reference to mental states or dispositions, or requests or goals, these are not reasons. Reasons are facts or truths.

¹⁵ D. Davidson, *Essays on Actions and Events* (Oxford UP, 1980), p. 12; G.H. von Wright, *Practical Reason* (Oxford: Blackwell, 1983), p. 54, but cf. his ‘Of Human Freedom’, in *In the Shadow of Descartes* (Dordrecht: Kluwer, 1998), pp. 10–11; R. Audi, *Action, Intention and Reason* (Cornell UP, 1993), pp. 15–16.

¹⁶ J. Raz, *Practical Reason and Norms*, 2nd edn (Princeton UP, 1990), p. 17.

VI

It is an axiom that beliefs can explain actions. But if, as I have claimed, the fact that p cannot be A 's reason for doing something if A does not know that p , what was Martin's reason for coughing if Martin did not know that coughing would attract Pauline's attention, but if he coughed because he believed that it would? The answer, which I gave implicitly a moment ago, is that Martin's reason was that he believed that coughing would attract Pauline's attention. But it is important to notice that the fact that A believes that p only occasionally stands in exactly the same relation to A 's action as that in which the fact that the rouble had collapsed stood to Tom's investment in Gazprom. Let me explain this.

Suppose Roger believes he is being pursued by the Security Services. There are various things he may do. For example, he may fly to Brazil, or burn his correspondence, or complain to his MP. But suppose instead that he sees his doctor. If we explain that Roger saw his doctor because he believed that he was being pursued by the Security Services, we are probably envisaging a different sort of connection between the belief and the action from the sort of connection we would be envisaging if we said that this was his reason for burning his correspondence. One way of explaining the difference, as a first approximation, would be to say that the fact, or the supposed fact, that he was being pursued by the Security Services was not the fact, or the supposed fact, in view of which Roger saw his doctor, since it was not *what* Roger believed that informed Roger's decision or guided his action, but the fact that he believed it. Again, suppose Ruth reasons as follows:

I believe that property is theft

People who believe that property is theft should join the Workers' Party
So I should join.

And so she joins. The fact that she believes that property is theft is among her reasons, but the fact, or the supposed fact, that property is theft is not.

In these examples, the fact that Roger believes that he was being pursued by the Security Services and the fact that Ruth believes that property is theft stand in exactly the same relation to their actions as the fact that the rouble had collapsed stood to Tom's investment. But these are unusual cases. So, in more ordinary circumstances, what sort of connection do we envisage, between the belief and the action, if we say that someone's reason for doing something was that he believed that p ? For example, what sort of connection

do we envisage between Martin's belief that coughing would attract Pauline's attention and his actually coughing, if we say that his reason for coughing was that he believed that it would attract Pauline's attention?

We can arrive at an answer by noting two key points about the relationship between belief and knowledge. First, 'I believed ...' is the place we retreat to when 'I know ...' is defeated by the facts. Second, to the extent that *A*'s believing that *p* influences or affects *A*'s behaviour (or his other beliefs and attitudes), it will tend to do so in the same manner as *A*'s knowing that *p* would. Of course, *A*'s believing that *p* may influence him less if, for example, he is aware of the fact that he is affected by prejudice or that his evidence is inconclusive. In these circumstances, the extent to which he is influenced by it will depend on the extent to which he can control what he believes or feels or does, by reminding himself of such facts. But even so, if *A* would ϕ (or believe that *q*, or admire *B*) if he knew that *p*, then *A* will tend to ϕ (or believe that *q*, or admire *B*) if he believes that *p*.

So suppose that Helen, speaking honestly, says that her reason for leaving in a hurry was that she was late, or that she left in a hurry because she was late, but it transpires that she was not late at all. If Helen acknowledges that she was mistaken in believing that she was late, she can be expected to modify her explanation, since in saying 'My reason for leaving in a hurry was that I was late' or 'I left in a hurry because I was late', she implies that she *was* late, just as she would if she said 'I knew that I was late'. So, barring inconsistency, Helen will retreat to an explanation which, in Strawson's phrase, 'sheds all that heavy load of commitment to propositions about the world', *viz.*, 'I left in a hurry because I believed (thought, assumed, etc.) that I was late'.¹⁷ (The commitment is shed, of course, in respect of the explanation, not the action.) Notice that the revised explanation identifies the reason for which, *as it seemed to her then*, she left in a hurry, namely, that she was late. But it does not say that this *was* her reason: on the contrary.

In sum, if we explain why Helen left in a hurry by saying that her reason was that she believed she was late, this, I take it, is the force of the explanation: it does not cite the fact in view of which Helen acted, but by citing the fact that she believed she was late, it identifies the answer that she would have given, had she been asked at the time for her reason, and had she answered the question honestly. Both

3. *A*'s reason for ϕ ing was that he believed that *p*
- and
4. *A*'s reason for ϕ ing was that *p*

¹⁷ Strawson, 'Perception and its Objects', repr. in J. Dancy (ed.), *Perceptual Knowledge* (Oxford UP, 1988), pp. 92–112, at p. 94.

purport to explain why A ϕ ed. But (4) purports to cite the fact in view of which A ϕ ed, whereas (3) – in the great majority of cases – does not. And although both (3) and (4) purport to identify the reason A would have given for ϕ ing, (4) says that *was* his reason, whereas (3) – in the great majority of cases – does not. Ryle (*The Concept of Mind* pp. 129–30) says

to say that [someone] keeps to the edge because he knows that the ice is thin, is ... to give quite a different sort of ‘explanation’, from that conveyed by saying that he keeps to the edge because he believes that the ice is thin.

Exactly so. In the first case, the man’s reason is that the ice is thin; in the second case, it is that he believes that the ice is thin. But the man’s reason stands to his action in a different relation in the two cases, and the sort of explanation given by identifying his reason differs commensurately.

VII

One objection which needs to be considered is this. I have argued that the fact that p cannot be A ’s reason for doing something unless A knows that p ; and that if Martin did not know that coughing would attract Pauline’s attention, but coughed because he believed that it would, his reason for coughing was that he believed that doing so would attract Pauline’s attention. But the example I discussed in detail involved a false belief, namely, Helen’s belief that she was late. So perhaps the truth is that the fact that p cannot be A ’s reason for doing something unless A either knows or believes truly that p . For example, if the fact that Mary loves truffles was Jim’s reason for making truffles, does it follow that Jim knew that Mary loves truffles, as I have argued, or does it only follow that he *either* knew *or* believed truly that Mary loves truffles?

We can begin to address this question by conceding that the fact that p may explain the fact that A ϕ ed, although A did not know that p . For example, if some pepper in the soup made Sally sneeze, then the fact that there was pepper in the soup explains the fact that Sally sneezed whether or not Sally knew that there was pepper in the soup. But this is not the sort of case which concerns us, because the fact that there was pepper in the soup was not Sally’s reason for sneezing; it was simply the reason why Sally sneezed. Our question is whether the fact that p can be A ’s reason for doing something, if A does not know that p . And the answer must surely be no. For suppose it is agreed that Jim did not know whether Mary loves truffles, but made them because he believed that she does. His reason for making truffles

cannot vary according to whether his belief was true or false, because we have already said enough to know exactly what his reason was, without deciding whether Mary loves truffles. But if his belief was false, the fact that Mary loves truffles cannot have been Jim's reason for making them, since there was no such fact. Hence the fact that Mary loves them was not his reason, even if his belief was true.

Thus the objection fails. If A does not know that p , his reason for doing something may be that he believes that p ; or it may be that p is probable, or even that p is possible. But the fact that p cannot be A 's reason for doing something unless A knows that p ; and *pari passu* it cannot be A 's reason for refraining from doing something, or for believing or wanting or doubting something either.

The insufficiency of true belief is made especially plain if we consider a case in which there can be no question of somebody's knowing something, because it is not a thing which can be known. For example, nobody can know who will win the Grand National – it is just too chancy. But suppose that one year Fred believes that Pegasus is going to win. Perhaps he has a hunch; perhaps he has studied the form. In any event, Fred calls his bookie and backs Pegasus, because he believes that Pegasus is going to win. Now suppose that in fact Pegasus *is* going to win, although of course nobody can know this yet. Is the fact that Pegasus is going to win Fred's reason for backing him? Evidently not. And after the event, can we truthfully say that Fred backed Pegasus because Pegasus was going to win? Again, evidently not.

Finally, consider a well known example of justified true belief which falls short of knowledge.

Henry is watching the television on a June afternoon. It is Wimbledon men's finals day, and the television shows McEnroe beating Connors; the score is two sets to love and match point to McEnroe in the third. McEnroe wins the point. Henry believes justifiably that

1. I have just seen McEnroe win this year's Wimbledon final and reasonably infers that
2. McEnroe is this year's Wimbledon champion.

Actually, however, the cameras at Wimbledon have ceased to function, and the television is showing a recording of last year's match. But while it does so McEnroe is in the process of repeating last year's slaughter. So Henry's belief (2) is true, and surely he is justified in believing (2). But we would hardly allow that Henry knows (2).¹⁸

Suppose that Henry, recalling that his brother backed McEnroe and stood to win £100, infers that his brother has won £100. Is the fact that McEnroe

¹⁸J. Dancy, *Introduction to Contemporary Epistemology* (Oxford: Blackwell, 1985), p. 25. The example is attributed to Brian Garrett.

is this year's champion Henry's reason for believing that his brother has won £100? Evidently not. His reason is that he *believes* that McEnroe is this year's champion. We can truthfully say that Henry believes that his brother has won £100 because he believes that McEnroe is this year's champion, but not that he believes that his brother has won £100 because McEnroe *is* this year's champion.

These examples support my rebuttal of the objection: I accept, of course, that the fact that p can explain the fact that A ϕ ed, whether or not A knew that p ; but if the explanation purports that the fact that p was A 's reason for ϕ ing, and thereby implies that it may have been reasonable or unreasonable of A to ϕ , then it also implies that A knew that p . Incidentally, the same is true where perceptual awareness, rather than awareness of facts, is concerned. The presence of a certain sort of stuff or thing in A 's vicinity may explain why A ϕ ed, without implying that A perceived the stuff or thing. If the pepper in Mark's soup made him sneeze, or a gas made him laugh or yawn, it does not follow that Mark saw or smelt the pepper or the gas. And if a chemical in his food made him angry or afraid, it does not follow that he tasted the chemical. But if the explanation implies that it may have been reasonable or unreasonable of A to ϕ , then it also implies that A perceived the stuff or thing which made him ϕ . For example, if a speech made Joe angry, then he heard or read the speech; and if a ceremony made him feel proud or afraid, then he saw or heard the ceremony.

VIII

For these reasons, it appears that the fact that p cannot be A 's reason for doing something if A does not know that p . Should this conclusion come as a surprise? I do not believe so.¹⁹ For if A does not know that p , then A is not aware of the fact that p , and if A is not aware of a fact, how can the fact be his reason?

But the claim that if A knows that p then the fact that p can be A 's reason for doing something may also seem objectionable. For I conceded earlier that there may be circumstances in which we would want to say that a dog knows that it is time for a walk. But, it may be objected, since dogs cannot

¹⁹ It has appeared obvious to some. Prichard, for example, saw no need to argue for it: '[according to a certain view about duties] we can never, strictly speaking, do a duty, if we have one, because it is a duty, i.e., really in consequence of knowing it to be a duty.... At best, if we have a duty, we may do it because we think without question, or else believe, or again think it possible that the act is a duty': 'Duty and Ignorance of Fact', repr. in H. Prichard, *Moral Obligation* (Oxford: Clarendon Press, 1949), pp. 18–39, at p. 24.

give reasons for their actions, they cannot act for reasons; and so the fact that it is time for a walk cannot be a dog's reason for doing anything.²⁰

Evidently, dogs cannot give reasons for their actions, because they have no language. But the objection is a weak one, for two reasons. In the first place, it is doubtful whether a creature cannot do something for a reason unless it can give a reason for doing something; and as a matter of fact there are well known examples of animals doing things which seem to depend on reasoning, such as the story about Chrysippus' hunting dog. In hot pursuit, it reached a place where the path branched into three; sniffed one path, but did not detect its quarry's scent; sniffed the second, but drew a blank again; and took the third path *without sniffing*. Annas and Barnes comment on the story as follows:

How is its action to be explained? Chrysippus argues that it must have engaged in some simple reasoning; it said to itself, in effect: 'Either *A* or *B* or *C*; but not *A*, and not *B*: therefore *C*'.... It is the fact that the dog selects the third track without further experiment which requires explanation – and the explanation which Chrysippus offers is highly plausible.²¹

If so, then the syllogism sets out the dog's reason for taking the third path, despite the fact that the dog could not have given this or any other reason, for this or any other action.

Annas and Barnes are unusual for philosophers. For although the ethological literature is widely believed to provide copious evidence of reasoning by dogs and primates, philosophers have tended to be more sceptical than non-philosophers about the intellectual abilities of animals without language. But – and this is the second reason why the objection is a weak one – suppose there are compelling arguments to show that the evidence has been widely misinterpreted, and that Chrysippus' dog only engaged in some *quasi*-reasoning, and only *quasi*-acted for the reason set out in the syllogism. Still, the objection will not have been made out if these arguments (or other ones) also prove that it was only *quasi*-aware of the fact that its quarry had taken the third path. Certainly the terms we use to describe the exercise of rational powers by human beings apply only in an attenuated or analogical sense to many animals. Which animals these are is a matter of dispute, but the general proposition is not. But the same is true where cognition is concerned. Hence if the objection is to bite, it needs to be shown that at the point at which acting for a reason has become attrited, knowledge remains intact. But the arguments which have persuaded philosophers that only

²⁰ See, for example, Kenny, *The Metaphysics of Mind* pp. 37–8.

²¹ J. Annas and J. Barnes, *The Modes of Scepticism* (Cambridge UP, 1985), pp. 47–8. Cf. R. Sorabji, *Animal Minds and Human Morals* (London: Duckworth, 1993), ch. 7. The story is told by Philo, *On Animals* 45–6, and by Sextus Empiricus, *Outlines of Pyrrhonism* I §69.

human beings can act for reasons do not show this. They do not drive a wedge between the awareness of facts and the ability to act for reasons. On the contrary. Davidson, for example, has argued that only members of a speech community can act for a reason, because a creature cannot act for a reason if it cannot have beliefs, and only a member of a speech community can have beliefs.²² But a creature cannot be incapable of having beliefs and yet be capable of knowledge.

Davidson's reason for claiming that only a member of a speech community can have beliefs is that a creature cannot have a belief 'unless it understands the possibility of being mistaken'; but this 'requires grasping the contrast between truth and error' – a contrast which, he argues (p. 170), can only emerge within a speech community. The diehard canophilist will be undismayed; for it is not self-evident that a creature cannot have a belief unless it understands the possibility of being mistaken. A dog (she will argue) can be hungry, or lustful, or want to bury a bone, whether or not it can understand the possibility of being frustrated or disappointed, and whether or not it can grasp the contrast between success and failure; and if the analogy is misjudged, Davidson does not say why. But the cogency of Davidson's argument is beside the point. What matters for present purposes is that Davidson's sceptical conclusion about animals does not cast doubt on the proposition that if *A* knows that *p* then the fact that *p* can be *A*'s reason for doing something. Indeed, far from weakening the link between cognition and reason, Davidson reinforces it, for he argues explicitly (p. 159) that attributing beliefs and desires to a creature – or, by implication, knowledge – only makes sense to the extent that doing so reveals a broadly rational pattern in its behaviour.

The argument in this paper neither supports nor contradicts the sceptical view about animals which Davidson and, for different reasons, Aristotle, Aquinas and Descartes all recommend. But it does support the proposition, on which their arguments converge, that the awareness of facts and the ability to do things for reasons that are facts are co-present or co-absent. If the conception of knowledge I have defended is correct, the reason for this could not be simpler: they are identical.

IX

Wittgenstein remarked that 'the grammar of the word "knows" is evidently closely related to that of "can", "is able to"'. The argument I have advanced

²² D. Davidson, 'Thought and Talk', in *Inquiries into Truth and Interpretation* (Oxford UP, 1984), pp. 155–70.

confirms this. But it contradicts Wittgenstein's famous remark 'It can't be said of me at all (except perhaps as a joke) that I know I am in pain'.²³ For the fact that I am in pain can certainly be my reason for doing, wanting or believing something – e.g., for taking an aspirin, for wanting to lie down or for believing that I have been in the sun for too long. Hence if the conception of knowledge I have defended is correct, it can be said of me, significantly and truly, that I know I am in pain.

I believe that this is a reason for disputing Wittgenstein's doctrine, rather than for rejecting or modifying the definition of knowledge I have proposed. We are inclined to say that in normal circumstances an adult human being knows whether or not he is in pain, but that a rabbit or a new-born baby does not. The conception of knowledge I have argued for explains why. A rabbit or a new-born baby cannot be aware of the fact that it is in pain – although it can of course be in pain – because the fact that a rabbit or a baby is in pain cannot be its reason for doing anything. But in the case of an adult human being, a fact about her present conscious state can be put to work, by serving as her reason, as readily as any other fact; and that is all we need in order to talk of knowledge. Still, Wittgenstein's doctrine, and the arguments he offers in support of it, are challenging and important, and I hope to amplify these remarks on another occasion.

X

The conception of knowledge I have defended is a simple one: personal propositional knowledge is the ability to act, to refrain from acting, to believe, desire or doubt for reasons that are facts. I have not argued that we cannot explain why an agent acted as he did, or believed this or desired that, except by citing facts of which he was aware. On the contrary. Nor have I argued that only facts can be reasons. What I have argued is that the facts we are aware of are the facts we can take into consideration, or better, since that way of putting it intellectualizes knowledge too much, the facts that can be our reasons. Hence, if one is aware of a fact, it can be one's reason; and if not, not.²⁴

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²³ *Philosophical Investigations* §246; cf. *On Certainty* §§502, 504.

²⁴ I am grateful to friends and colleagues in Munich, Oxford and Tel Aviv, and to an anonymous referee of *The Philosophical Quarterly*, for their comments on earlier drafts.