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Healthy Scepticism

JAMES FRANKLIN

Like Platonism in the philosophy of mathematics, or Communism in California, scepticism about the external world is a doctrine that maintains its health not by being held by many, but by being attacked often. Though there were actual sceptics in ancient times, in various degrees, the history of scepticism in medieval and modern times has been entirely a history of arguments, not of schools.

This means that attacks on 'the sceptic' as if he were a real live person, having to live in the world, and obliged to have a coherent set of beliefs, are likely to be misplaced. An argument, like a moral counsel of perfection, has whatever power it has irrespective of who holds it.

Arguments should be distinguished not only from arguers but also from their conclusions. If no-one believes in scepticism, then the conclusion of the sceptical arguments is not the real focus of interest. Herbert of Cherbury begins his *On Truth* with the remark:

Truth exists. The sole purpose of this proposition is to assert the existence of truth against imbeciles and sceptics.¹

and says nothing further about scepticism at all. This has panache, undeniably, but does not pretend to do anything about the sceptical arguments. Likewise, the street theatre that a sceptic would be inclined to call 'ostrich dogmatism'—the kicking of stones to show they are there, the waggling of hands to prove their existence, and so on—is not a reaction to the sceptical arguments at all, but to their conclusion. That is why it is beside the point, as it has always been felt to be.

Reactions to the *arguments* fall into two kinds. The first, dominant in modern philosophy in English, has been to find something wrong with the arguments, for example that they are incoherent, or transgress some standard of rationality. The second is to accept the arguments as basically correct, and to avoid their conclusion by some large premise. Thus Descartes used the existence of God to guarantee the veracity of the senses (strictly speaking the existence of God is not for him a premise, since he claims to prove it, but it is external to the issue of scepticism). In recent times, Richard Taylor has advocated something similar, on the basis of the need for an author of the 'message' of sensory

¹ E. Herbert, Herbert of Cherbury, *De Veritate* trans. M. H. Carré (Bristol: Arrowsmith, 1937), 83.

perception,² and there is a school which promotes a hermeneutical approach to the 'text' of perception.³ The Thomists had a powerful premise in the 'ordering of the intellect to truth', and in their strong interpretation of the Aristotelian dictum that 'the soul is in a way all things'.⁴ Malebranche, Leibniz and Bradley, in their different ways, had answers to scepticism as consequences of larger theories; Kant and Husserl (and also Nozick) spoke as if they did too, though many of their readers have wondered if they did not concede so much to scepticism as to be unable to be truly free of it.

It is the contention of this article that the second, large-premise, reaction to the sceptical arguments is the correct one. The ground for this is that the alternative, of showing there is something wrong with the sceptical arguments, cannot be made to work.

After the complaints above about talk of 'the sceptic', it will seem perverse to reintroduce him. Nevertheless, it is hardly possible, so long after scholastic habits of debate have died out, to communicate solely in terms of arguments. 'There is no thinking without an image', as Aristotle says, and equally, there is no argument without at least a pretended opponent. So let us bring back a sceptic—but one with closely defined qualities. In particular, let him be equipped with what will make the job hardest for himself (but most interesting for everyone else):

- (1) Let him deploy only one line of argument, that from symmetry.
- (2) Let him make maximum concession to his opponents by being maximally rational.

The reasons for this particular choice of sceptic, and what exactly this choice consists in, are as follows.

When there were real sceptics, they naturally used any arguments available; Sextus Empiricus notoriously mixes strong arguments with ones even he cannot help laughing at, and he cares neither about this nor about whether some of his arguments contradict others (on the principle that two alibis are better than one). But since *our* interest in scepticism is in argument, it is natural for us to concentrate on the good arguments. One argument stands out from the rest, and always has: the argument from symmetry. The sceptic says, in Cicero's words, 'there is

² R. Taylor, *Metaphysics* (Englewood Cliffs, N.J.: Prentice Hall, 2nd ed., 1974), 114–9.

³ References in J. J. Compton, 'Some contributions of existential phenomenology to the philosophy of natural science', *American Philosophical Quarterly* **25** (1988), 99–113; also J. Franklin, 'Natural sciences as textual interpretation', *Philosophy and Phenomenological Research* **44** (1984), 509–520

⁴ A. Kenny, Aquinas (Oxford University Press, 1980), ch. 3.

no mark to distinguish the true and the false. '5 Arguments from perceptual illusions and from deceitful demons are in this category, since they aim to show that false appearances (if that is an allowable phrase; in any case, appearances that lead to false judgments) are indistinguishable from true ones. On the other hand, infinite regress arguments, which keep asking, 'How do you know?' of any fact or supporting reason, are not in this category. Nor, strictly speaking, are those arguments that rely on analysis of the concept of knowledge, or of justification or warrantedness, because the sceptic here does not frame his argument in those terms. He is not saying, for example, that our ordinary claims to knowledge fall short of some standard of knowledge or justification. (Nevertheless, some arguments raised under the heading of knowledge are relevant, and will be considered).

It is necessary to divide symmetry arguments into two kinds, and consider which the sceptic should principally rely on. The symmetry argument arises either from actual sensory errors and illusions, or from the mere possibility of them. The ancient sceptics preferred actual illusion, such as the tropes of Aenesidemus (the oar appearing bent in water, the tower appearing round at a distance but square from close by). It was hard work collecting these, especially as there was a good deal less illusion about in ancient times than now, since the ancients had little in the way of 'realist' (i.e. illusionist) painting, and no photographs or sound recordings (how entertaining it would be to take Aenesidemus to the cinema). We have become inured to illusion, in life, and also in science. The reinterpretation of secondary qualities in science as complicated functions of the primary qualities does not make the secondary qualities illusory, strictly speaking, but it must be admitted that the atomic structure of a surface is as unlike the perceived colour it supports, as are the deceitful demons which have been imagined to do the same. Now the actual is always to be preferred on one's side to the possible. Should the imagined sceptic then rely on these actual illusions, or go for deceitful demons and merely possible illusions?

The disadvantage of actual illusions is that they tend to be better at supporting local scepticism than global (the latter being what the sceptic is aiming for). After all, the bent oar is only known not to be bent because the impression is corrected by a wider context of knowledge. The suspicion therefore arises that the very notion of perceptual illusion is parasitic on a core of *correct* knowledge. There is a sceptical strategy still available, to the effect that a sense once convicted of error can no longer be trusted anywhere. But even then the believer in knowledge is right to try to find what actual illusions have in common,

⁵ Cicero, Academica II.84.

to see if mistakes are found only in some sub-class of sense perceptions. This project seems to have a prospect of success, since we do in fact understand what conditions tend to cause deceptions—fog and sensory deprivation, for example.⁶

So the idealized sceptic being considered here will be conceived of as relying on mere possibilities of error, not on actual errors. Mere possibilities have many disadvantages, of course, such as there being so many of them that any favoured one may have difficulty claiming its share of the limelight, and a special susceptibility to onus of proof arguments. Of this more later.

Our idealized sceptic will be rational (indeed, perfectly rational, as only idealizations can be). Real sceptics have been happy enough to let logic confute itself. But if it is agreed that the real interest of scepticism lies in its (strongest) argument, then of course we want to look at what consequences really do follow from what the sceptic says. So the possibility that a sceptic should dig in and refuse to accept logic is irrelevant, as are the psychological questions as to whether it is possible to convert a determined sceptic, whether he can live his scepticism, or whether Descartes could really have doubted the existence of the external world. We are dealing in logic only, so the sceptic will be a model of reasonableness. This means at a minimum that he will accept all deductive consequences. But much anti-sceptical argument has dealt in non-deductive considerations like onus of proof arguments. So we will suppose our sceptic is happy to accept all kinds of logic statistical arguments, coherence arguments, simplicity arguments, Ockham's razor, and 'arguments to the best explanation'. Let him be prepared to consider, for what they are worth, arguments from presumption, or onus of proof arguments. Let it be supposed, even, that he agrees with the Williams-Stove line that inductive arguments are sample-to-population inferences of a logically completely justified kind.⁷ (Of course, it is quite implausible that someone with a genuinely sceptical mentality would not also be an inductive sceptic, so that he could say, 'Even if you knew how the world is, or was a millisecond ago, how do you know it will stay that way?' So it must be reiterated that what is at issue here is a single *logical* issue—how symmetry arguments for scepticism stand up against attempts at refutations.)

So the sceptic puts forward his argument: Firstly, it is *possible* that what we perceive is entirely an illusion created by a deceitful demon. Second, there is *no reason* to prefer the realist hypothesis to this one.

⁶ B. Stroud, *The Significance of Philosophical Scepticism* (Oxford: Clarendon, 1984), 8–9.

⁷ D. C. Williams, *The Ground of Induction* (N.Y.: Russell & Russell, 1963); D. C. Stove, *The Rationality of Induction* (Oxford: Clarendon, 1986).

The two aspects of the argument are clear in Berkeley's elegant expression of it:

Suppose—what no one can deny possible—an intelligence, without the help of external bodies, to be affected with the same train of sensations or ideas that you are, imprinted in the same order and with like vividness in his mind. I ask whether that intelligence hath not all the reason to believe the existence of Corporeal Substances, represented by his ideas, and exciting them in his mind, that you can possibly have for believing the same thing? Of this there can be no question. Which one consideration were enough to make any reasonable person suspect the strength of whatever arguments he may think himself to have for the existence of bodies without the mind.⁸

Opponents of scepticism generally concede the bare possibility of a deceitful demon, but argue that there are reasons for preferring the realist hypothesis. Since a 'no reason to prefer' statement asserts a symmetry, the only answer to it must be to break the symmetry. The attempts to do so, and consideration of how well the sceptic can defend the symmetry argument against them, now follow. Note that the aim is not to refute all possible arguments against scepticism with a few well-chosen words. It is, less ambitiously, to see how well the best argument for scepticism, the symmetry argument, stands up against the various things that have been said against scepticism.

First attempt: One does not believe in bare possibilities, unless there is some reason for doing so. Any number of things are logically possible, such as that philosophers will be invited to host chat shows, but I do not believe any one of them unless there are positive reasons in its favour.

The sceptic's answer: The principle is admitted, but it is claimed that the argument fails because it does not even attempt to break the symmetry between the realist and the illusionist hypotheses. The realist hypothesis is a bare possibility, too. What reason is there to believe in it; or rather, what reason is there to prefer it to the illusionist possibility? Until one has been provided, both theses are bare possibilities, and there is no reason to believe either, or one more than the other.

Second attempt: There is at least one obvious asymmetry between the realist and the illusionist hypotheses, namely, that we believe the first and disbelieve the second.

Answer: This is indeed an asymmetry, but not as it stands, an asymmetry of reasons, since no reasons have been given, so far, why our believing something is a reason why it should be believed.

Also, who are the 'we'? The fact is that there were people who believed the illusionist hypothesis; people, indeed, who gave sufficient

⁸ G. Berkeley, *Principles of Human Knowledge*, sec. 20.

evidence of their rationality in their writings. Some more detail on this fact and its significance will appear in the Appendix.

If it is argued that to speak of 'we' at all implies a public and hence realist world, it may be remarked, as usual, that the debate can be regarded as carried on by a single Cartesian ego; but it may also be noted that the illusionist hypothesis is compatible with a plurality of monads whose interactions are mediated by a demon instead of through physical processes.

Third attempt: The fact that we believe something is a reason in its favour, since evolutionary considerations show that, in general, true beliefs will be selected for.

Answer: Philosophers have sometimes been so captivated by the intellectual elegance and explanatory power of the theory of evolution that they have spoken of it as if it were almost a necessary truth. But of course it is not. Even its best confirmed part, the theory of descent from pre-existing forms, depends on the realist world view, being an attempt to account for observations of fossils, homologies and so on. So to use the theory of evolution as a reason in favour of epistemological realism is simply circular—unless all that is meant is a coherence argument: realism plus evolutionary theory gives a coherent world view. Coherence arguments will be dealt with below (fifth attempt).

It must be doubted also how far evolution really does select for true beliefs. A belief that one's own person, or tribe, or species, is of supreme importance, is a belief likely to be selected for, as is a belief that God is on one's side. An arbitrarily distorted belief system whose onset coincided with the end of fertility would possibly not be selected against. Perhaps it is true that a belief system, to have favourable evolutionary consequences, must have some fairly consistent functional relation to reality. But that is not a very restrictive requirement—Berkeley's belief system about the world certainly possessed this sufficiently to secure him not only survival, but preferment.

The relation of evolution to belief is more like that which the military censor of a totalitarian state has to the press. The citizen can read in the official newspaper that the rebels have all been disposed of, and can confirm this in any other newspaper. If he values his survival, he will take care to act in accordance with this belief at all times.

But none of these objections are important, compared to the fact that the evolution argument has still not broken the symmetry. If realism, and some naturalist world view, are correct, then evolution is selecting belief systems. But if the illusionist hypothesis is true, then the deceitful demon, who is obviously rather powerful, is doing the selecting instead. And to call the sensations the demon has devised for us 'illusions' is to say that the demon has caused false beliefs. So the realist

and the illusionist hypotheses can each explain its own causal underpinnings, and there is still no reason for preferring one to the other.

While speaking about how the world would be if the demon hypothesis were true, one thing is to be noted. None of what has been said here involves relying on the argument, which has sometimes been thought to be the essence of demon scepticism, "There would be no way you could tell that you were being deceived by a demon if you were being deceived by a demon. Therefore, there is no way you can know that you are not being deceived by a demon. This argument by itself is weak, since a reason for belief may be strong, given the evidence in the actual world, irrespective of what is the case in some other world. The argument lacks the power of the symmetry argument.

Similar remarks apply to Nozick's discussion of scepticism.¹⁰ He argues that I may regard a proposition as known if my belief in it varies *locally* with its actual truth or falsity: in possible worlds close to the actual one, I hold the proposition true if and only if it is true. The connection need not still hold in distant possible worlds, such as demon worlds. Further, Nozick says, I do not know that I am not in one of those distant worlds. Such speculations have no relevance to the present symmetry argument, which concerns only the logical relation which holds between the evidence we have in the actual world and two competing theories about the constitution of that world.

Fourth attempt: The fact that we believe something is a reason in its favour, since, even without evolution but considering the life of a single individual, true beliefs lead to pragmatic success. The realist hypothesis leads to predictions, about actions, future events and so on, which turn out to be true, and hence confirm the original theory.

Answer: The correlation between true beliefs and pragmatic success can be doubted. A paranoid belief system can be successful up to a point; and it finds itself confirmed by almost everything. That is precisely the problem with it.

Nevertheless, the correct answer to this attempt is an admission that successful predictions do confirm realism, but an insistence that successful predictions equally confirm illusionism.

Inductive arguments in the simplest sense are from experience to *experience*, and the debate began with the admission that experience was the same whichever hypothesis was true. So future experience can be inferred from past experience by simple inductive projection just as well on the illusionist as on the realist theory, since the theory does not

⁹ D. Odegard, 'Demon Scepticism', American Philosophical Quarterly 23 (1986), 209-216.

¹⁰ R. Nozick, *Philosophical Explanations* (Oxford: Clarendon, 1981), especially 240–243.

come into it at all. As for inductive arguments in the wider sense, that in which individual facts confirm a theory which implies or explains them, these are as available to the illusionist as to the realist. The demon has shown in the past a preference for a consistent and uniform cinematic narrative (if that is the correct phrase), so can be expected to continue doing so.

Fifth attempt: The realist theory has the (logical) virtue of coherence, which the illusionist one lacks, since on the illusionist account the world is a mere heap of unexplained acts of the will on the part of the supposed demon.

Answer: As just noted, the demon keeps confirming that it adheres to a remarkably coherent aesthetic—for which there is no doubt a reason, which may be speculated on or not according to taste, but is in any case irrelevant. (Perhaps the demon was powerful enough to create the realist scenario, but rejected it on the grounds that even under the best of all possible versions of it, too many people got hurt.) One can get about successfully with expectations of coherence and inductive principles just as well in a demon-driven world as in an atoms-and-void one, if not more so. If a sudden extinction of the race stands to humankind as Christmas stands to an inductive turkey, then that event is probably less likely to happen with a demon in control than in a real world with loose asteroids and randomly mutating viruses.

Sixth attempt: The realist hypothesis has the (logical) virtue of simplicity, which the illusionist one lacks. One should not postulate entities, such as the demon and its acts of will, without necessity (or at least without some positive reason). 'Even if these competing propositions answer the same why-questions about my subjective contents, only the Cartesian proposition posits a gratuitous item in answering those questions.'11

Answer: The realist hypothesis requires you to postulate a new entity the moment you have an experience which does not seem to be caused by an old entity. And you must postulate as well entities within and previous to these new entities. Astronomers think nothing of positing new suns, even new kinds of suns, to cause the faintest pinpoints of light. The illusionist hypothesis requires the postulation of acts of the demon's will in the same circumstances, but not so many, since the demon does not need to bother with the unobserved, the past, the submicroscopic and so on.

It is hard to see how the realist hypothesis has an advantage on any other way of evaluating simplicity, either: it has neither fewer things, nor fewer kinds of things, nor fewer principles or methods of explana-

¹¹ P. K. Moser, 'Two roads to skepticism', in *Doubting*, M. D. Roth and G. Ross (eds) (Dordrecht: Kluwer, 1990), 127–139, at 133.

tion. ¹² It does postulate brains with remarkable computational powers, which makes for a rich theory, by explaining many phenomena in terms of computation. But if computational power is what one admires in entities, the demon has plenty of it, and deserves admiration just as much (unless one thinks perfections are more admirable in oneself, or one's own tribe or species, than in others).

The equal simplicity of the illusionist hypothesis will be confirmed if we try to name explicitly one circumstance in which it postulates something while the realist hypothesis postulates nothing. One of the few such suggestions has been that the realist hypothesis explains the fact that two objects cannot be at the same place at the same time by invoking a necessary principle about space, while the demon hypothesis must invoke a contingent (hence genuinely extra) principle that the as-if-things the demon creates cannot occupy the same as-if-place.¹³ This is, indeed, the kind of argument the realist must advance if he wishes to show his hypothesis is simpler. The particular suggestion, however, is mistaken, as there are no as-if-things in the demon hypothesis, but only patterned experience sustained by the demon. If experience does have spatial structure, of a kind, then two experiences apparently cannot occupy the same 'place' in it, and the necessity for this is the same sort of necessity that prevents two physical bodies occupying the same part of real space.

In any case, on what kind of world picture is simplicity in theories a virtue? 'Nature is pleased with simplicity, and affects not the pomp of superfluous causes', Newton says. The verbs in this sentence make sense when the subject is a demon, but not when 'Nature' is a cluster of galaxies.

Seventh attempt: The illusionist hypothesis offends against scientific rationality by being too swift and ad hoc. Like the postulation of a 'soporific virtue' to explain the action of a sleeping potion, or of an élan vital in living things, it is an 'inquiry-limiting' hypothesis, 'whose acceptance ensures the impossibility of one's giving certain sorts of warranted true explanations for the nature and behaviour of things'. That is, the physical world hypothesis allows us to give a finely detailed and quantitative explanation where the demon hypothesis does not, or does so only by being totally parasitic on the physicalist hypothesis.

Answer: Firstly, the tone of this attempt is uncannily reminiscent of the logical positivists' claims that various ways of thinking of which they

¹² M. A. Slote, *Reason and Scepticism* (London: Allen & Unwin, 1970), 62, with further references.

¹³ J. Vogel, 'Cartesian skepticism and inference to the best explanation', *Journal of Philosophy* **87** (1990), 658–666.

¹⁴ Slote, 66.

disapproved were 'unscientific'. It is now rightly agreed that they were being two swift in their dismissals, and that if metaphysical or mathematical thinking is different from scientific thinking, that merely shows that 'scientific rationality' is not co-extensive with rationality. The hypotheses that, say, mathematics is analytic, or that all reality is material, may well be inquiry-limiting, in discouraging the search for further explanations, but that fact does not seem in itself a reason for doubting them.

Nevertheless, it may be that in many contexts 'inquiry-limiting' hypotheses do offend against some general canon of rationality. In that case it must be asked to what extent the illusionist hypothesis is in fact inquiry-limiting. The assertion that it is is reminiscent of another old and discarded thesis, that of the inevitable conflict of religion and science. Darwinist converts were once in the habit of producing large volumes on the theme that belief in divine governance of the world always led to the suppression of free scientific inquiry by the priestly caste. Subsequent historical study has shown that, on the contrary, Christian scientists from Newton down regarded it as an act of piety to reveal the 'laws' God had laid down for the world. Science can proceed also perfectly well under the illusionist hypothesis; the flow of perception is perfectly law-like, so its regularities may be discovered, arranged in hierarchies, and explained one in terms of the other. Certainly one will not reach ultimate explanations, since everything depends on the demon's will. But neither will one reach them in (realist) science, since the properties of the most fundamental particles or most general laws remain unexplained. One who thinks the earth is held up by an infinite tower of elephants and tortoises cannot convincingly accuse of irrationality another who proposes to replace the tower with a single demon.

If 'inquiry-limiting' means 'tending to limit actual scientific inquiry', one can ask whether the demon hypothesis would in fact limit scientists' inquiry. It is in the same position as instrumentalism in the philosophy of science, which also allows scientists to use realist language, but reinterprets it. And there have been a number of successful scientists who have held an instrumentalist philosophy. Perhaps the philosophy of mathematics provides a closer parallel to demon science. Mathematicians use a great number of nouns, and are as finely detailed and quantitative as it is possible to be about the relations between the objects or 'objects' named or 'named' by these nouns. Yet very few mathematicians are Platonists; they do not object to philosophical reinterpretations of the objects of mathematics as, say, rule-governed fictions created by themselves. No limiting of anyone's inquiry by such views has been observed.

The claim that the sceptical hypothesis is 'parasitic' on the realist one is an illusion of language. Of course our *description* of the demon's activities uses our ordinary realism-infected language. But our using such language is the effect of the regularities in our experience since before birth, which regularities are, it is being maintained, equally well explained on the two hypotheses.

Eighth attempt: We understand what it is for a belief to be false by finding that it disagrees with a context of true belief. It is simply incoherent, and contrary to our standards of rationality, that all beliefs should be false, just as it is possible for this or that baby to be exceptionally advanced for its age, but impossible for all of them to be so. As Quine says, 'illusions are illusions only relative to a prior acceptance of genuine bodies with which to contrast them'. There is no place whereon to stand to move the whole world, since that place is part of the world.

Answer: The question still is, why the presumption is in favour of the world view that we happen to have been born with; and no reason for such a presumption has been given. Why must we labour to rebuild plank by plank the leaky ship we have been on for as long as we can remember, when an attractive vessel floats by, inviting the mutinous crew to jump across? (Of course, we may find the company on the Marie Céleste disappointing, and pine for the sweaty camaraderie of the fo'c'sle.) Quine expresses the thought in the eighth attempt in a way which neatly shows why it makes no impact on a sceptic of the kind we have been considering, who relies solely on a symmetry argument:

There is no such cosmic exile. He cannot study and revise the fundamental conceptual scheme of science and commonsense without having some conceptual scheme, the same or another no less in need of philosophical scrutiny, in which to work.¹⁶

Indeed. The illusionist admits his position is no less in need of scrutiny, but suggests it is no more in need of it either.

Ninth attempt: 'I am appeared to redly' is a prima facie reason to believe 'There is something red before me', and I draw this conclusion unless I have positive reason to do otherwise. 'Therely possible alternative scenarios are not to be taken into account unless they are relevant alternatives. 'Thus I know that the animals I see in the cage at the zoo

¹⁵ W. V. Quine, 'The nature of natural knowledge', in *Mind and Language*, S. Guttenplan, (ed.), (Oxford: Clarendon, 1975), 67.

¹⁶ W. V. Quine, *Word and Object* (Cambridge, Mass: Technology Press, 1960), 275–276.

¹⁷ J. Pollock, *Knowledge and Justification* (Princeton University Press, 1975), 65.

are zebras, even though I have no grounds for rejecting the alternative hypothesis that they are mules painted to look like zebras, and I know that I am typing, even though I have no grounds for rejecting the alternative hypothesis that I am being deceived by an Evil Demon into falsely believing that I am.'18

Answer: Again there has been no explanation given of why 'I am appeared to redly' is a prima facie reason for believing 'There is something red before me' rather than for believing 'The demon has stimulated me redly'. The only apparent asymmetry is that I in fact draw the former conclusion, not the latter, and this is not an asymmetry of reasons, as noted in answering the second attempt. In the case of the zebras, we can explain why the possibility of painted mules is not relevant: the frequency of such deceptions in my experience of similar situations has been low (if it were not, because, say, I had experience of the lengths to which zoo administrators would go under financial pressure, the mule alternative would be relevant). But that is an ordinary inductive argument. A similar argument is not available in the demon case, since the frequency with which red experiences are caused by demons instead of red surfaces is not available for independent checking.

Tenth attempt: No conceptual scheme other than one that contains continuing physical things is even possible. For a conceptual scheme is essentially linguistic, and we could not translate into our language, or even recognize as a language, something which did not contain adequate devices for reference and predication. Reference and predication are impossible without a common world of objects to refer to. So, 'if the beliefs in question are necessarily presupposed by our conceptual scheme, and if our conceptual scheme is the only conceivable one, then the beliefs in question are more than justified; we are shown to be unable to do without them. And that is enough to defeat scepticism'.¹⁹

Answer: Again, our being forced to believe something at gene-point is not evidence for its truth. And again, if I must think in terms of physical objects in order to live life and communicate, then likewise I am forced to think in terms of numbers and Hilbert spaces to get around in mathematics, but reinterpretations of the talk are possible. And yet again, the demon can make reference and predication in different people adequately similar by forcing them to believe similar things about what appear to be physical objects.

¹⁸ B. C. Johnsen, 'Relevant alternatives and demon scepticism', in *Doubting*, M. D. Roth and G. Ross (eds), (Dordrecht: Kluwer, 1990), 29–37, at 31. ¹⁹ A. C. Grayling, *The Refutation of Scepticism* (London: Duckworth, 1985), 91.

Thus, even if it is true that 'in order for our experience (and thus our discourse) to be coherent or intelligible, we are bound to assume that physical objects exist', ²⁰ it is the assumption itself that does the work of ensuring the coherence, not the *truth* of the assumption. Since the existence of the assumption is explained equally well by the realist and the illusionist hypotheses, it does not favour either.

The claim that we all *must* believe in physical objects is, in any case, on the whole not supported by the relevant scientific evidence. According to recent research, the world of the neonate, while rather more structured than the 'blooming, buzzing confusion' imagined by William James, is not obviously organized in terms of continuing physical objects. An infant a few months old is certainly very ready to connect similar pieces of experience,²¹ but it would be rash, at the very least, to assert that belief in a physical world is a necessary precondition of experience.

Eleventh attempt: Just as we trust the testimony of other people unless there is reason to doubt them, so we trust the 'testimony' of the senses unless there is reason otherwise. These are the ground-rules, 'given the nature of language as an instrument of communication'.²²

Answer: Are we perhaps being a little too culture-specific, or Boys' Own, with these principles of trust? News reports on some countries, into which reporters are not admitted, consist almost entirely of the contents of telexes, by means of which the governments of those countries take advantage of the Western presumption for truth. According to many novels written by those in a position to know, even the conversation at the vicarage tea party has a less than direct relation to the truth; certainly, if I go into a traditional Eastern bazaar and inquire about the price and quality of this and that, I will receive not one true answer. That is how the bazaar works. An habitué of bazaars can perhaps explain to me the relationship that holds between what I am told and what is the case. That is all that is needed to make language work; and to 'work' is, as the pragmatists say, not exactly the same thing as to communicate truth. Further, as explained earlier, the illusionist hypothesis provides a consistent relationship between what is conveyed by the senses and what is, and explains why belief in the veracity of the senses 'works'.

²⁰ Grayling, 3.

²¹ E. S. Spelke, 'Perception of unity, persistence, and identity: Thoughts on infants' conceptions of objects', in *Neonate Cognition*, J. Mehler and R. Fox (ed.) (Hillsdale, N.J.: Erlbaum, 1985), ch. 6; R. Baillargeon *et al.*, 'Why do young infants fail to search for hidden objects?', *Cognition* **36** (1990), 255–284; P. L. Harris, 'Object permanence in infants', in *The Psychology of Infancy*, A. Slater and J. G. Bremmer, (ed.), in press.

²² N. Rescher, *Scepticism*, Oxford: Blackwell, 1980), 163-4.

In any case, that 'language is an instrument of communication' is not 'given', in this debate, since one of the points at issue is whether there are distinct persons affecting one another causally, and hence able to communicate. It has not been explained why there is a presumption in favour of the veracity of the senses, when both hypotheses explain the appearance of veracity, and, for all that has been said so far, explain it equally well.

Twelfth attempt: The sceptic makes impossible demands, such as for a sure foundation of knowledge, or a criterion outside knowledge by which to judge the truth of all knowledge, including itself. 'He sets up a standard of "knowledge" so hyperbolic that he systematically denies evidential weight to those considerations which alone could be brought to bear in making a case to the contrary.'²³ In general, his requirements are in principle impossible to attain. Ultra posse nemo obligatur.²⁴

Answer: The sceptic being considered here has demanded nothing of the kind. His demands were, on the contrary, exceedingly minimal. Namely, he requested merely to be shown some reason for preferring the realist over the illusionist hypothesis. It was the anti-sceptic who made a great deal of noise about not accepting anything without some positive reason for it. Let this principle be applied to the question of the preferability of realism. The sceptic asked for some positive reason for it, and this has not been supplied. So the sceptic is not prepared to accept the bare possibility that realism may be preferable. As Bredo Johnsen well says,

there is no reason whatever to suppose that such a Demon exists. But what has seldom if ever been noticed is that neither is there any reason to think there is a physical universe which we inhabit. Relative only to the existence of my subjective states, there is an infinity of hypotheses about what else reality may comprise, and each of them has the same standing: there is no reason whatever to accept any of them. The relevance of the Demon hypothesis stems not from the application of some extreme standard of probability, but from its membership in an infinite set of hypotheses all of which are equally and completely devoid of support.²⁵

Thirteenth attempt: The sceptic proves too much, since he will be able to make the same move wherever there is some causal separation between the thing perceived and the perception. Thus any project for naturalizing epistemology would be not just mistaken, but doomed a priori. So the sceptic is again making demands that could not possibly be satisfied, and which must therefore be accounted unreasonable.

²³ Rescher, 169.

²⁴ Rescher, 79.

²⁵ Johnsen, 35.

Answer: Knowledge could be such that error was impossible—if 'the knower became the known' in some very full sense, by, somehow, going out and digesting it. ('The separated soul understands singulars through the influx of species from the divine light, which light is indifferent to closeness or distance. Whence spatial distance in no way impedes the cognition of the separated soul.'26) So it is not true that a demand for incorrigible knowledge is impossible. But if perception is anything like what we take it to be, according to the model of naturalized epistemology or 'direct' realism (though what is 'direct' about perception in this theory is impossible to discern) then there is always scope for a deceitful demon argument. The comparison of the brain to a computer, and of natural intelligence to artificial, has cleared the air here, as it has elsewhere. If a computer is to perceive, it must do so in the fashion of 'representative realism': there must be inside the computer representations (which are physical, of course) which are functions only of the input at the sensory apparatus (and of the internal program). That is, the representations are independent of anything beyond the senses. The defender of 'direct' realism, D. M. Armstrong, argues against the Cartesian 'representative' theory of perception thus:

There must be *some* basis in experience, some immediate perception of certain connections between things, before we can have any warrant for believing in the existence of mediate objects of perception . . . Now, if the Representative theory of perception is correct, we have no evidence at all for passing from the immediate perception of sense-impressions to the mediate perception of physical objects.²⁷

It is irrelevant to this argument whether the sense-impressions are mental or physical, spiritual, biochemical or electronic. And the problem is not solved by calling the basic sensory beliefs we have 'immediate' or 'uninferred'. If cognition is computation, it is inference. This is borne out by the central place occupied by the topic of representations and inference in work on Artificial Intelligence.²⁸ So if the computer ever acquires sufficient intelligence to enrol in Philosophy I, it will have

²⁶ Thomas Aquinas, Summa Theologiae Part I q. 89 art. 7.

²⁷ D. M. Armstrong, *Perception and the Physical World* (London: Routledge, 1961), 29.

²⁸ A. Barr and E. A. Feigenbaum, (eds.), The Handbook of Artificial Intelligence (Stanford: Heuris Tech, 1981), vol. I section III A and vol. III section XIII D; D. Marr, Vision: A Computational Investigation into the Human Representation and Processing of Visual Information (San Francisco: Freeman, 1982); A. P. Pentland, editor's introduction to From Pixels to Predicates (Norwood, N.J.: Ablex, 1986); D. E. Rumelhart, G. E. Hinton & R. J. Williams, 'Learning internal representations by back-propagating errors', Nature 323 (1986), 533–536.

everything needed to ponder the problem of the external world, and the argument from the deceitful programmer.

The computer comparison also weighs against attempts to question the language in which the sceptical problem is posed, or the meaningfulness of the illusionist alternative. It has often been felt that as soon as one begins to speak about the 'external' world, and of the 'contents' of or 'in' the mind, one is inevitably trapped by the question, 'How do I get out?', a question to which the answer will never appear. In the computer's case, it is clear that 'external' really means 'outside' and 'in' really means 'inside'. So the problem of the external world is genuine, not an artifact of speech.

The sceptic, then, will say that any project for naturalizing epistemology (as distinct from cognitive science) is doomed to failure, in that it has still not attempted to break the symmetry between the realist and illusionist hypotheses. He graciously admits that any attempt at 'demonizing' epistemology is likewise doomed.

These attempts cover all the moves standardly made against scepticism of the sort here being considered. It can be confidently predicted, indeed, that the reader thinks that the above attempts have not got to the bottom of the 'real' trouble with scepticism, and that he, the reader, could work his objection up into a coherent argument but for the press of other business. Nevertheless, the above thirteen attempts summarize what has actually been worked up, and the dogmatist can hardly rely on merely possible arguments, under the circumstances.

It is concluded, then, that it is appropriate to search for some large premise to break the deadlock between the (true) realist hypothesis and the (false) deceitful demon hypothesis.

Not that all problems are instantly solved thereby. If something sufficiently powerful is postulated—for example, an aptitude of the intellect for truth, perhaps divinely supported—it is hard to see why such a magical instrument is not sufficient to exclude all sensory error.

Appendix: History and Applications

Here are presented a few not very well known examples of theses closely related to the deceitful demon hypothesis, which have actually been believed by rational persons. There are two reasons for describing these. Firstly, in a political climate which requires philosophy to show its relation to 'national priorities', on pain of the sack for philosophers, it is well to state any relation philosophical speculation actually has to real life. If at the present stage in western history deceitful demons are purely matters of abstract argument, and the question, 'How do you know the world is there?' is a paradigm of the 'unreal' questions

philosophers ask themselves, it is good to remember that this has not always been so. That it is now so may be attributed to the spread of healthy philosophy. It is plainly in the national interest that it should continue to be so.

The second reason for mentioning history is that, as suggested more than once above, there is a suspicion that some anti-sceptics have rushed to defend their cause with too-easy arguments, because they cannot really take the illusionist hypothesis seriously. The old reply that scepticism destroys itself directly ('Is the thesis that nothing is known, known, or not?') is obviously of this kind, since it is clear that the sceptic can simply answer 'No'. But some of the newer replies alleging that scepticism is incoherent in one way or another would also seem impossible to hold if even the possibility of the illusionist hypothesis were taken seriously. To fail to think about some opinion is a psychological rather than a strictly logical failing, so the answer to it is not argument but therapy. Exhibiting some people who actually believed in the opinion which the patient has failed to consider may assist his concentration.

To know where to look for these people, let us recall which religion was most inclined to attribute absolute power to its God, while not seeing him as constrained by moral requirements, like truthfulness. 'He's a good felllow, and 'twill all be well', is purportedly a translation of Omar Khayyam, but the thought is completely un-Islamic, since Islam has precisely the view of God just mentioned. A book on the subject of Islamic occasionalism describes the early Islamic thinker Salih Qubba, who held that God might create 'perception together with blindness and knowledge together with death'. When asked, 'Would you deny that you might be in Mecca at the present moment sitting under a tent, but be unaware of it, because God did not create in you the knowledge thereof?', he replied, 'I would not deny it'.29 It is true that to say God has the power to deceive us is not say that he actually does. But this view is very close to illusionism, if it is only preserved from it by the quite extraneous consideration of what God would choose to decree. In any case, some of the deeds attributed to God by the Islamic occasionalists are, in ordinary language, systematic deceits. Things do not change, but are annihilated and recreated by God continually: 'the millstone disintegrates during its revolution, despite the evidence of the senses to the contrary, since the senses frequently deceive us.'30

²⁹ M. Fakhry, *Islamic Occasionalism* (London: Allen & Unwin, 1958), 46; cf. J. van Ess, 'Skepticism in Islamic religious thought', *Al-Abhath* **21** (1968), 1–18.

³⁰ Fakhry, 28.

History revealed this line of thought in Islam to be not peripheral, but absolutely central. Al-Ghazali, the 'renewer of Islam', who was as responsible as anyone for the anti-intellectual turn of Islam after 1200, writes at length on the power of God to create, for example, burning without fire or decapitation without death. To the objection that this implies we would be forever wondering about far-fetched possibilities ('I only know that I left a book in my house, but perhaps by now it is a horse which has soiled the library with its excrement') al-Ghazali replies simply, and consistently, 'God has created in us the knowledge that he will not do these possible things.'31 So let us be a little less ready to agree with claims like Quine's, that the hypothesis of physical objects with their own causal powers 'has proved more efficacious than other myths as a device for working a manageable structure into the flux of experience'.'32

In the West the question of God's absolute power remained, fortunately, confined to philosophy. Unfortunately, it was otherwise with the power of lesser agents, the deceitful demons, of whom there were conceived to be a great number. In the thousand years after its writing, there were few books as influential as Augustine's *City of God*, which says:

It is merely in appearance that they [demons] change beings that are created by the true God, so that they seem to be what they are not. Therefore I should by no means believe that the soul, or even the body, can be really changed by the craft or power of demons into the members and features of beasts. I hold instead that a man's phantom—which also in his thoughts and dreams is changed by the countless variety of objects it receives, and though it is not a body, still with astonishing swiftness receives shapes that are like material bodies—this phantom, I hold, can in some inexplicable way present itself to the senses of others in bodily form, when their physical senses are dulled and blocked out.³³

Admittedly, the scepticism here is not explicitly global in the way illusionism is, but if the senses are 'dulled and blocked out', what limit is there to the demons' powers? Views of this kind are not without serious consequences. Perhaps the most significant book, in terms of practical impact, written in the first fifty years of printing is the *Malleus*

³¹ Averroes' 'Tahafut al-Tahafut', trans. S. van den Bergh (London: Luzac, 1954), vol. I, 316–317.

³² W. V. Quine, From a Logical Point of View (Cambridge, Mass: Harvard University Press, 1953), 44.

³³ Augustine, City of God bk 18 ch. 18; cf. Thomas Aquinas, Quaestiones Disputatae de Malo q. 16 art. 11.

Maleficarum, by the witch inquisitors Kramer and Sprenger. They write:

There is no doubt that certain witches can do marvellous things with regard to male organs, for this agrees with what has been seen and heard by many, and with the general account of what has been known concerning that member through the senses of sight and touch. And as to how this thing is possible, it is to be said that it can be done in two ways, either actually and in fact, as the first arguments have said, or through some prestige or glamour. But when it is performed by witches, it is only a matter of glamour; although it is no illusion in the opinion of the sufferer. For his imagination can really and actually believe that something is not present, since by none of his exterior senses, such as sight or touch, can he perceive that it is present.

From this it may be said that there is a true abstraction of the member in imagination, although not in fact; and several things are to be noted as to how this happens. And first as to two methods by which it can be done. It is no wonder that the devil can deceive the outer humans senses, since, as has been treated of above, he can illude the inner senses, by bringing to actual perception ideas that are stored in the imagination. Moreover, he deceives men in their natural functions, causing that which is visible to be invisible to them and that which is tangible to be intangible, and the audible inaudible, and so with the other senses. But such things are not true in actual fact, since they are caused through some defect introduced in the senses, such as the eyes or the ears, or the touch, by reason of which defect a man's judgment is deceived.

And we can illustrate this from certain natural phenomena. For sweet wine appears bitter on the tongue of the fevered, his taste being deceived not by the actual fact, but through his disease. So also in the case under consideration, the deception is not due to fact, since the member is still actually in its place; but it is an illusion of the senses with regard to it.

Again, as has been said above concerning the generative powers, the devil can obstruct that action by imposing some other body of the same colour and appearance, in such a way that some smoothly fashioned body in the colour of flesh is interposed between the sight and touch, and the true body of the sufferer, so that it seems to him that he can see and feel nothing but a smooth body with its surface interrupted by no genital organ. See the sayings of S. Thomas (2 dist. 8 artic. 5) concerning glamours and illusions, and also in the second of the second, 91, and in his questions concerning Sin; where he frequently quotes that of S. Augustine in Book LXXXIII: This evil of the devil creeps in through all the sensual approaches; he

gives himself to figures, he adapts himself to colours, he abides in sounds, he lurks in smells, he infuses himself into flavours.³⁴

The most abstract philosophical speculations can have very direct consequences. Kramer and Sprenger burned people on the basis of these views. The inquisitors were not beyond using anti-sceptical arguments, too. Sylvester Prierias, inquisitor in Lombardy, argued that witches really do sometimes fly from place to place, 'for otherwise the nearly infinite processes of the inquisitors would necessarily be false, and it would deny the evidence of the senses, for much has been found out concerning this which can no more be rationally denied than that I am writing—which some one might deny and say I am deluded in seeming to myself and others to be writing'. 35 Is this not the equal of any modern anti-sceptic for unbearable smugness?

But these authors, powerful though they were, possessed less power than a later writer of similar opinions, King James VI of Scotland. His *Daemonologie*, of 1597, is based on personal experience of interrogating the North Berwick witches. In this, as in any witch scare, an important part of the evidence was that provided (under torture) by one witch against others. James considers the objection that perhaps those whom a witch claims to have seen at a Sabbath were not really there in person, but were only appearances. The evidence is good against them anyway:

For the Devil durst never have borrowed their shadow or similitude to that turn, if their consent had not been at it . . . And this is likewise proved by the confession of a young lass, troubled with spirits, laid on her by witchcraft. That although she saw the shapes of divers men and women troubling her, and naming the persons whom these shadows represent: yet never one of them are found to be innocent, but all clearly tried to be most guilty, and the most part of them confessing the same.³⁶

If a truly contemporary problem is sought to which deceitful demon type symmetry arguments are relevant, one might consider the question of how to distinguish between a (total) anaesthetic and a combination of a paralysing drug with a memory eraser.

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³⁴ H. Kramer and J. Sprenger, *Malleus Maleficarum*, trans. M. Summers, (London: Rodker, 1928, repr. N.Y.: Dover, 1971), 58–59; cf. 119, 125.

³⁵ H. C. Lea, Materials Towards a History of Witchcraft (N.Y.: Yoseloff, 1957), vol. 1, 356–357.

³⁶ James VI and I, *Daemonologie* (Edinburgh, 1597, repr. Edinburgh: Edinburgh University Press, 1966), 79–80.