

## Mind Association

---

Scepticism and Dreaming: Imploding the Demon

Author(s): Crispin Wright

Source: *Mind*, New Series, Vol. 100, No. 1 (Jan., 1991), pp. 87-116

Published by: Oxford University Press on behalf of the Mind Association

Stable URL: <http://www.jstor.org/stable/2254985>

Accessed: 22-11-2017 09:45 UTC

---

JSTOR is a not-for-profit service that helps scholars, researchers, and students discover, use, and build upon a wide range of content in a trusted digital archive. We use information technology and tools to increase productivity and facilitate new forms of scholarship. For more information about JSTOR, please contact [support@jstor.org](mailto:support@jstor.org).

Your use of the JSTOR archive indicates your acceptance of the Terms & Conditions of Use, available at <http://about.jstor.org/terms>



*Mind Association, Oxford University Press* are collaborating with JSTOR to digitize, preserve and extend access to *Mind*

# *Scepticism and Dreaming: Imploding the Demon*

CRISPIN WRIGHT

Much literature on the topic of external world scepticism proceeds as if there were a single general form of problem that has to be confronted. In fact, however arguments for epistemological scepticism come in a variety of significantly different forms and, while generality is of course a merit in a response, there is no reason to expect that they should succumb to a uniform treatment. My concern here is with the large but not comprehensive group of sceptical arguments that make play with a purportedly undetectable but cognitively disabling state—dreaming, pervasive hallucination, victimisation by the Cartesian demon, Brain-in-a-vathood, etc. I believe these arguments do share a best—most challenging—form, which I shall delineate below.<sup>1</sup> I also believe that, so delineated, they can be made to succumb to a head-on, rational response—something of which a substantial amount of distinguished recent commentary has despaired.<sup>2</sup> I shall focus on the example of dreaming; but it will be possible to substitute throughout any of the other familiar fantasies without important change.

<sup>1</sup> The form of argument in question was, near enough, the first of two highlighted in my “Facts and Certainty” (1985). But the overall approach adopted there—of arguing that successful sceptical argument should be seen not as calling into question our right to accept such propositions as “There is a material world”, “There are many minds”, “The world did not first come into being less than five minutes ago”, etc., but rather as showing their “unfactuality”, i.e. as disclosing that the notion of truth for which they qualify allows that claiming truth for them need not demand support with reasons—this approach was never entirely comfortable in cases, like “I am not now dreaming”, “I am not a brain in a vat”, etc., where the thrust of the sceptical doubt is not that the thought expressed is beyond *anyone’s* justified appraisal but concerns a predicament peculiar to the subject concerned. How can what I now express by “I am not now dreaming” be a “hinge proposition”, beyond the need for justification, if it coincides in its truth-conditions with what you can now express by “Wright is not now dreaming” and the latter is a perfectly ordinary empirical proposition?

The difficulty is that being a “hinge”, on the account of “Facts and Certainty”, is a function of a statement’s place in *our* scheme of thought. No provision is made for the idea of a “personal” hinge, of the kind which “I am not now dreaming” would seemingly have to be. To be sure, the problem is not immediately lethal for the approach to the first class of sceptical arguments described in “Facts and Certainty”. (And it does not bear at all on the prospects of so approaching the other class of arguments, on which in any case the lecture concentrated.) But maintaining the approach is going to require some radical moves: one way or another, sufficient distance will have to be put between the contents of our respective affirmations of “I am not now dreaming” and “Wright is not now dreaming” to allow the former justifiably to assume a status in my thought which the latter cannot assume in yours. (A step in this direction would be to argue that what I now express by “I am not now dreaming” cannot be an object of *your* thought at all.)

In any case, the proposal sketched below is independent and may nicely complement the “Facts and Certainty” treatment of the second form of sceptical argument highlighted in the lecture.

<sup>2</sup> For instance, Sir Peter Strawson (1985) provides an eloquent expression of pessimism about the powers of reason in the face of sceptical doubt. And Barry Stroud (1984, p. 20) grants that the Cartesian Challenge is unanswerable if we let ourselves accept the terms in which it is framed.

## I

The despair may seem only too understandable if we reflect that an effective such response has to be given within the confines of three constraints, two relatively obvious, the third less so, and their combined effect exigent in the extreme.

The first derives from the consideration that, odd as it might at first seem to say so, knowledge is not really the proper central concern of epistemologico-sceptical enquiry. There is not necessarily any lasting discomfort in the claim that, contrary to our preconceptions, we have no genuine knowledge in some broad area of our thought—say in the area of theoretical science. We can live with the concession that we do not, strictly, *know* some of the things we believed ourselves to know, provided we can retain the thought that we are fully justified in accepting them. That concession is what we might call the Russellian Retreat. For Russell (1912, Chs. I and II) proposed that such is exactly the message which philosophical epistemology generally has for us: we must content ourselves with probability, defeasibility and inconclusive justifications where standardly we had wanted to claim more. What, however, is not tolerable is the thesis that, among propositions about, for instance, the material world, other minds, or the past, we never actually attain to genuinely justified opinion; that no real distinction corresponds to that which we are accustomed to draw between grounded and ungrounded beliefs, earned information and mere prejudice or dogma. But just this claim is what the best—*radical*—sceptical arguments purport to deliver (cf. Dancy 1985, pp. 8-9).

The first constraint, then, is that one must not, in responding to a sceptical argument, be content to rely on points which are specific to knowledge and have no evident analogue for the weaker epistemic notions attacked by radical scepticism. One is obliged, more specifically, to attempt to reformulate sceptical arguments antagonistic to knowledge in terms of such weaker notions; only if it emerges that no such attempt succeeds is it germane to marshal a theory of *knowledge* in one's response.<sup>3</sup>

The second constraint is motivated by the thought that sceptical arguments are

<sup>3</sup> So formulated, the constraint may well seem too obvious to be worth stating. But some widely debated discussions violate it. Robert Nozick's (1981) attempt, for instance, to cast doubt on the cogency of certain sceptical arguments by questioning the principle that knowledge is transmissible from known premisses via known entailments, depends entirely on his claim that knowledge is subject to a *tracking* condition; to wit, roughly, *X*'s knowing that *P* requires that her believing that *P* and the fact of *P*'s truth be covariant across nearby possible worlds. Well, whether or not knowledge is indeed subject to such a condition, no *non-factive* epistemic notion can be so subject, since the application of such a notion does not so much as require the truth of the proposition in question in the actual world, let alone in all sufficiently similar counterfactual ones. But the sceptical arguments which Nozick had in mind can all run unhampered if re-tooled in terms of non-factive notions. (That is actually a more substantial claim than it may seem. It is implicitly justified, I suggest, by the discussion in §III below.) Of course, there are philosophers who have wanted to query transmissibility in the case of e.g. reasonable belief also (see footnote 13 below). But that proposal, if it can be well motivated at all, needs the support of considerations quite outwith the sphere of Nozick's diagnosis.

not properly rebutted by considerations whose force depends on the assumption of an *adversarial stance*: a scenario in which the object is to defeat a real philosophical opponent, the Sceptic, in rational debate. There are no real such opponents. That generations of philosophers have felt impelled to grapple with sceptical arguments is not attributable to a courtesy due to an historically distinguished sponsorship but to the fact that these arguments are *paradoxes*: seemingly valid derivations from seemingly well supported premisses of utterly unacceptable consequences. And, of course, not every kind of situation in which one could properly claim to have won a debate with a sponsor is one in which one would have disposed of the paradox which the sponsored argument presented. Consider the mythical glass-chinned sceptic who claims that there is no reason to believe anything at all. Nothing easier than to confound such an opponent in debate. But if you yourself are led, in camera, as it were, to that absurd conclusion by a seemingly well-motivated route, it is no intellectual comfort to reflect that the position is self-defeating; on the contrary, that simply intensifies the embarrassment. The question is rather, what specifically and in detail should be concluded about the illusion of cogency which the reasoning somehow was able to conjure?

The second constraint, then, is that one must not, in responding to a sceptical argument, be content to rely on attacks on the stability of the conclusion, or on the mutual coherence of the premisses which are used to support it. That is good strategy against an opponent; but defusing a paradox demands a properly detailed diagnosis and exposé of its power to seduce.

The third constraint is imposed by the reflection that—to revert harmlessly to the ordinary adversarial rhetoric—the Sceptic does not need to win but only to draw. That is: the conclusion of a sceptical argument which purports to show not indeed that none of our cherished beliefs about some subject matter is justified but merely that there is no justification for thinking otherwise, loses little in disquieting power to the stronger claim. If I find it totally unacceptable to think that none of my opinions about the external world, for instance, has any ground, it is hardly a comfort to be told that the case has been overstated—that it is merely that I have no justification for thinking that the situation is any better than that.

To see how this reflection imposes a definite constraint, suppose we are presented with a valid entailment,  $\{A_1, \dots, A_n\} \vdash B$ , where  $B$  is an unacceptable conclusion—say, precisely, that there is no justification for believing anything about the external world. Then, as just remarked, “There is no justification for believing that  $B$  is false” is hardly a more palatable result. But we will have that result provided that  $\{A_1, \dots, A_n\}$  are such that, even if not each positively justified, there is at least no justification for denying their conjunction.<sup>4</sup> Result: the premisses of

<sup>4</sup> The point assumes that justification, reasonable belief, etc., are transmissible across entailment. The thought then is simply that, where  $\{A_1, \dots, A_n\} \vdash B$ ,

(i) not:  $B \vdash$  not:  $\{A_1 \& \dots \& A_n\}$ ;

hence,

(ii) justified [not:  $B$ ]  $\vdash$  justified [not:  $\{A_1 \& \dots \& A_n\}$ ], by transmissibility of justification;

hence,

(iii) not justified [not:  $\{A_1 \& \dots \& A_n\}] \vdash$  not justified [not:  $B$ ].

an interesting sceptical argument—one there is no living with—do not stand in need of justification; it is enough that we lack any justification for the denial that they are all true.

The consequential—at first blush, surprising—constraint is, accordingly, that one must not, in responding to a sceptical argument, be content to rely on considerations that tend to show that its premisses have not been convincingly supported. For even if that is true, the fact is that interesting sceptical arguments do not need to support their premisses, but can fall back on the thesis that we have no convincing case for their conjoint denial. More generally: a satisfactory response to scepticism must deal with scepticism at both first- and second-order.<sup>5</sup>

The constraints are indeed demanding, especially the third. But, as I said, I think we can play by them and still win.

## II

Descartes wrote:

Nevertheless, I must remember that I am a man, and that consequently I am accustomed to sleep and in my dreams to imagine the same things that lunatics imagine when awake, or sometimes things which are even less plausible. How many times has it occurred that the quiet of the night made me dream of my usual habits: that I was here, clothed in a dressing gown, and sitting by the fire, although I was in fact lying undressed in bed! It seems apparent to me now, that I am not looking at this paper with my eyes closed, that this head that I shake is not drugged with sleep, that it is with design and deliberate intent that I stretch out this hand and perceive it. What happens in sleep seems not at all as clear and distinct as all this. But I am speaking as though I never recall having been misled, while asleep, by similar illusions. When I consider these matters carefully, I realise so clearly that *there are no conclusive indications by which waking life can be distinguished from sleep* that I am quite astonished, and my bewilderment is such that it is almost able to convince me that I am sleeping. (First Meditation, 1968, pp. 145-6; my italics)

That “there are no conclusive indications” to distinguish waking from dreaming does not impress, at first sight, as a particularly damaging sceptical thought. Why should we want *conclusive* indications? The Cartesian quest for certainty, no doubt, cannot be satisfied by less than conclusiveness; but there seems no good cause why a quest for justification should demand so much.

That is a pointer to the fact that some work will be wanted to massage the quoted thought into a *radical* sceptical argument. We will come to that in §IV. First, though, it is as well to emphasise how strong is the basis for the claim that Descartes is making. His claim is that ordinary waking—perceptual—experience is in no essential way *phenomenologically* distinguished from dream experi-

<sup>5</sup> And indeed, with scepticism of arbitrary order.

ence—that, notwithstanding the variety of contingent marks of the distinction which we are in practice content to rely on, the content and quality of an episode of experience is never *logically* sufficient to classify it as dream or perception. This is true, and fundamental to our concerns. It is true because the distinction is *aetiological*: it is characteristic of the concept of dreaming that the manifest content of dream experience is dominantly caused in ways appropriately dissociated from current events in the subject's perceptible environment. By contrast, experience counts as perceptual only if its manifest content is dominantly caused by events in the perceptible environment in ways which ensure that there is a substantial measure of congruence between them. This does not preclude examples where aspects of the content of a dream do seem best explained as responsive to elements in the subject's contemporary environment (cf. Wittgenstein *On Certainty*, 1969, concluding paragraph). But to come to think that enough, sustained detail of a dream was so responsive would be to come to have reason to think of it not as a dream at all but as some form of dormitory perception.

Dreaming, then, is marked off from perceptual experience by considerations which concern its causal origin. There is a lot more detail to fill in about the distinction so drawn, but this is enough for Descartes' purpose. Dreaming only counts as dreaming because caused in ways in which perceiving, necessarily, is not caused. But it is a completely compelling thought that experience cannot disclose its own causal provenance as part of its proper content. Knowledge of the *aetiology* of an experience has to be the product of *inference*, for which that experience can at best supply a datum. Experience thus has no ingress into the territory in which the distinction between dreaming and perceptual experience is made.

Descartes' italicised claim is thus secure. But how exactly does it lead to a generalised sceptical doubt? Barry Stroud's analysis (1984, pp. 9-24) involves granting Descartes that

- (a) At no time does anyone know that they are not dreaming at that time, is a consequence of the italicised claim, and granting also
- (b) Only if he is not dreaming does Descartes know that he is clothed in a dressing gown, and sitting by the fire, etc.

The latter is plausible enough if we take it that, in the scenario depicted, Descartes could know that he is clothed in a dressing gown, etc., only by perceiving, and reflect once more that dreaming and perceiving are governed by incompatible causal constraints. But still, how is sceptical damage to be done with (a) and (b)? Suppose we credit Descartes himself with the knowledge that (b) is true, and proceed to invoke what we may call

*Descartes' Principle:*

In order to know any proposition *P*, one must know to be satisfied any condition which one knows to be necessary for one's knowing *P*.

Then it immediately follows that

- (c) Descartes knows that he is clothed in a dressing gown, and sitting by the fire, etc., only if *he knows* that he is not dreaming.

And now (a) and (c) set up a modus tollens to the conclusion that Descartes does

not know that he is clothed in a dressing gown, and sitting by the fire, etc.

That conclusion may still seem to be wanting in generality. But reflect that Descartes may reasonably claim to have chosen his situation as a putative best case—a situation in which the credentials of the claim to have perceptual knowledge of certain matters could not be improved. When might one more reasonably claim to be garnering perceptual knowledge than in such sober, lucid and reflective circumstances? So, according to the argument, the best case is not good enough; and all others fall with it in consequence.

The argument as formulated may seem to come close to crystallising the sceptical thought in the offing here. But it may also seem to have two salient points of vulnerability. One is its use of Descartes' Principle. Stroud (1984, p. 29) says nothing to motivate the principle beyond the suggestion that it is something to which we may easily be led by reflection on "uncontroversial everyday examples". That might seem rather weak justification in a context of paradox—until we remember our third governing constraint. But an objector of "externalist" inclination may want to claim more, that there is positive reason to reject the principle. For if we assume the transmissibility of knowledge across known entailments, and make harmless assumptions about which such entailments are known, the principle emerges as merely a variant formulation of the iterativity of knowledge.<sup>6</sup> And iterativity is often regarded as suspect when knowledge is regarded as a matter of (possibly uncertified) reliable external connection, since one might be appropriately "hooked up" to some region of reality without knowing it.

I suspect that there has seemed to many to be an *obvious* problem with iterativity from such a standpoint only because they lapse, illicitly, into internalism at the second "K", as it were—so that the driving thought is that one might be appropriately "hooked up" to some region of reality *without having any reason to think so*. If each occurrence of "K" is interpreted in the favoured externalist way—as a matter of de facto reliable connection—it is far from immediately clear that a subject's second-order beliefs about his knowledge of some subject matter will not be reliable whenever his beliefs about that subject matter are.<sup>7</sup> But we don't need to chase the point down. For once a treatment of second-order scepticism is on our agenda, it is quite unclear that externalism has the resources

<sup>6</sup> Proof:

- (i) Iterativity entails Descartes' Principle. The Principle says that if  $K(Kp \rightarrow q)$ , then  $Kp \rightarrow Kq$ . Suppose  $Kp$ ; then, by iterativity,  $KKp$ . Suppose the antecedent of the Principle, and that it is known that  $\{Kp, Kp \rightarrow q\} \vdash q$ . Then both premisses of that entailment, and the entailment itself are known. So, by transmissibility, its consequent is known:  $Kq$ . Two applications of conditional proof then yield the Principle.
- (ii) Descartes' Principle entails iterativity. Take " $q$ " as " $Kp$ ".

<sup>7</sup> It is, by the way, not a relevant objection to iterativity that the knowing subject might simply lack the appropriate second-order belief. Likewise, it is no objection to transmissibility that a subject who knew the premisses of an entailment, and knew that the entailment was good, might simply not have formed any belief in the conclusion. The acceptability of proof-theoretic rules for knowledge, and indeed for epistemic operators in general, does not hold out hostages to psychological contingency. The germane question is rather whether satisfaction of the premisses for an application of the rule ensures the availability to the subject of the epistemic state depicted in the conclusion.

for a satisfactory response to scepticism in any case. The whole drift of the externalist response is to seek a constitutive account of knowledge which allows the *possibility* that we know to be unimpugned by our inability, under sceptical pressure, to make a case that we do.<sup>8</sup> If iterativity indeed fails as a consequence of this aspect of the account, then its failure is bought at the cost of laying our aspirations to knowledge wide open to second-order scepticism. And if it does not fail, the objection lapses.

A better objection to Stroud's Cartesian argument has, in effect, already been noted. It concerns premise (a). Why should the lack of "conclusive indications" in the content of experience—the fact that it is always consistent with the content of an experiential episode that it be dream or waking—be thought sufficient for the thesis that no-one ever knows that they are not then dreaming? The premise is either unjustified or—if knowledge is deemed to demand such conclusive grounds—the weaker claim, that we very often are certain, with ample justification, that we are not then dreaming and are very often right, is left untouched by the argument, whose sting is consequently drawn.

Our task, then, is to find a version of the argument which can warrant (at least agnosticism about) its analogue of premise (a) while simultaneously keeping its sting—working with a type of epistemic claim which we are simply not prepared, in the relevant cases, to forgo.

### III

It is much more difficult to accomplish such an argument than has been generally acknowledged. A formulation in terms of knowledge, however internally impressive, merely invites evasion by Russellian Retreat. But an evident difficulty in trying to run the sort of argument sketched in terms of *reasonable belief* is how any analogue of premise (b) is to survive. Granted, if Descartes actually were dreaming as he seemingly sits in front of his fire, etc., he would not *know* the propositions whose truth he then takes himself to perceive. But might he not still reasonably believe them—precisely because, in circumstances of such focussed phenomenological lucidity, he reasonably (but wrongly) takes himself to be awake? It appears that neither knowledge nor reasonable belief can serve the construction of a radical sceptical argument along the lines considered.

One response, as far as premise (b) is concerned, would be to restrict attention to appropriate *demonstrative* beliefs—beliefs *de re* concerning perceptually presented items. For these are beliefs, according to currently influential orthodoxy, the very entertaining of whose content demands concurrent perceptual contact with the objects they concern; they are hence simply unavailable to a dreaming subject, and thus provide secure cases for an analogue of premise (b) in terms of reasonable belief. It is unclear, moreover, that the restriction

<sup>8</sup> Nozick, for instance, is very clear about this (1981, n. 5, p. 197 and following).



would in any way emasculate the resulting sceptical argument. For it is far from clear that the reasonableness of other putatively perceptually based beliefs could survive a demonstration that no such demonstrative beliefs can be reasonably held.

But the problem recurs with premise (a)—now the premise that I cannot reasonably believe that I am not now dreaming. Even though my recent and current experience bears no feature to mark it with certainty as waking experience, it is surely perfectly reasonable for me to take it to be so. A number of factors make it so. The experience is seemingly of very familiar things: my desk, the other furnishings in my office, the view from the window of familiar landmarks in the physical environment in which I live and work. The contribution of my different senses to the experience is internally orderly: the coffee I recall making a short while ago looks, smells and tastes like coffee. And manifold features of my current experience are perfectly intelligible to me, in the light of what I (apparently) recollect of my actions over the last hour or so—switching on the computer, opening my mail, hanging up my coat. In sum: a complex structure of beliefs I hold about my physical environment, about the patterns that will be manifest in perceptual experience of it, and about my own recent history—all these beliefs bed smoothly down around the thought that I am not now dreaming. It would be mere legislation to insist that there is no notion of reasonable belief which is entrained in such considerations. And no such notion, however best characterised in detail, can be at the service of the sort of sceptical paradox envisaged.

However, it is now clear in what direction the attempt to generate such a paradox should proceed. The kind of epistemic bill of health which the supposition that I am not now dreaming acquires from my reflections above has to be one bestowed purely by features of my consciousness and system of beliefs. The relevant sense of reasonableness is thus one generated by the satisfaction of *internalist* standards. So a radical Argument from Dreaming must work with a notion which, like knowledge, is answerable to non-internalist standards but, unlike knowledge, allows no space for Russellian Retreat. Is any such notion to hand? If not, then fully to explain why not would be, it seems, to dispose of the problem. All that would remain would be a mopping-up operation: further scrutiny of versions of the argument which proceed in terms of knowledge, in order to determine whether even so much as a Russellian Retreat is really called for. In fact, however, so anti-climactic an outcome is not, I think, in prospect. It is plausible that there *are* epistemic notions fit for the radical sceptical purpose.

Let me sketch the shape of one such. Any belief which is not conclusively grounded can suffer defeat in two ways: evidence may come to light which, without in any way compromising the original credentials of the belief, generates a total state of information which no longer supports it; or evidence may come to light which does compromise the original credentials—suggests that that evidence was gathered in ways marred by error, or slipshod practice, or deceit, for example, or calls into question the cognitive fitness of the subject, or queries the

conduciveness of the circumstances in which the belief was formed.<sup>9</sup> Let the *pedigree* of a belief embrace its holder's grounds if any, her cognitive condition as she forms it and the circumstances surrounding its formation. Consider the situation of a belief, whether true or false, and whatever the character of evidence bearing on it which has not yet been gathered, which is as a matter of fact infeasible in the second way—a belief whose pedigree is flawless. For such a belief there will no feature of its pedigree such that it would be rational, if one knew of that feature, to regard the probability of the belief's being true as unenhanced by the fact of the subject's holding it. That will be a key feature of the sort of notion we want.

Let us say that the holding by a subject, *x*, of a particular belief at a particular time is *warranted* just in case the following two conditions are met:

- (i) *x* has sufficient reason, all things considered which she is in a position to consider, to hold the belief; and
- (ii) one who knew of all features of its pedigree in *x*'s thought would not be placed in a position where, independently of any reason bestowed thereby to regard the belief as false,<sup>10</sup> it would be rational to view the probability of its truth as being unimproved by the fact of *x*'s holding it.

Warranted belief is an interesting notion. Unlike knowledge but like reasonable belief, it is not factive—does not require the truth of propositions to which it applies. (Though only consistent sets of beliefs can be simultaneously warranted.<sup>11</sup>) Like knowledge, however, but unlike reasonable belief, warrant is sensitive to real, as opposed to reasonably supposed, aspects of pedigree. Suppose I believe quite reasonably that a proposition is true—for instance, “It is raining outside”—which merely reflects the content of a vivid and unusually coherent dream. Suppose, even, that the proposition in question is actually true. Anyone's intuition will be that the way my belief is arrived at prevents, in ordinary circumstances, its counting as knowledge. But it also prevents its counting as warranted; for if you know that my belief is inspired by a dream, you will certainly be rationally entitled, *ceteris paribus*, to regard my holding it as doing nothing to probabilify its truth. That warranted belief is analogous to knowledge in this respect suggests that there should be no insuperable difficulty in motivating an analogue for premise (b) in terms of it. More on that in a moment.

But the crucial point, of course, is whether warranted belief is at the service of *radical* sceptical arguments—whether, in contrast with knowledge, strictly regarded, the warrantedness of our beliefs is something we cannot tolerably sim-

<sup>9</sup> Stephen Yablo has suggested the two types of defeat might memorably be called *overriding* and *undercutting* respectively. “Undercutting” is John Pollock's term (1986).

<sup>10</sup> The qualification is, of course, essential if, as we are, we are in search of a notion which contrasts with knowledge in the clearest possible way, i.e. a non-factive notion. Without it, no false belief could be warranted; for that a belief is false is certainly a feature of the circumstances in which it is formed which, if one knew of it, would confer reason to regard the probability of the belief's being true as being unimproved... etc.

<sup>11</sup> Since there is no having *sufficient* reason, all things considered which one is in a position to consider, both to believe a proposition and to believe its negation. Either one set of reasons dominates the other, or neither is, in context, sufficient.

ply forswear in deference to sceptical pressure. I think it is clear that this is so. To have reason to think that a belief we hold is unwarranted entails having reason to think that either we do not have sufficient reason to hold it or there are credibility-destroying features of the way it originates in our thought—that a full knowledge of its pedigree would be persuasive that our holding it does nothing for the probability of its truth. So a successful sceptical argument concerning warrant—an argument which showed, *a priori*, that all our beliefs about the external world are unwarranted—would impose the following dilemma: that, for any particular such belief, no matter what pains have been taken in arriving at it, *either* we do not, all things considered which we are in position to consider, have sufficient reason to hold it; *or* it is, from a God's eye point of view as it were, no more likely on that account that it is true than if we had simply guessed—that, in point of enhancing the likelihood of our arriving at the truth, whatever procedures we followed were merely a charade. That is an intolerable conclusion on either alternative; and its second-order counterpart, that there is no reason to discount it, would hardly be any better.

#### IV

It is plausible, then, that a radical version of Stroud's Cartesian paradox need not founder for want of a suitable epistemic notion on which to build. And warranted belief does indeed generate a version of the Dreaming Argument which is not merely arresting but has, it seems to me, a good case to be the distillate of the best sceptical thought in the vicinity. Let us set it up.

We read "*Rxt [P]*" as: *x* has *available* a warrant to believe *P* at *t*. So read, "*Rxt [P]*" does not imply that *x* actually warrantably believes *P*. The notion that best serves the sceptical purpose is rather, roughly, that of *x*'s being in position to acquire a warrant by the best exercise of cognitive abilities which he actually possesses at *t* and whose exercise will not involve significant change in his actual mode of cognitive functioning at the time. So moderate inebriation, for instance, to a degree consistent with a measure of normal perceptual, intellectual and recollective function, will not limit the class of propositions such that *Rxt [P]*, since we are permitted to idealise to *best* performance involving those faculties; but deafness, ignorance of any but the most elementary mathematics, dreaming and unconsciousness all will, since each is a state which either places limits on the cognitive abilities which *x* actually has or whose discontinuation will involve significant change in his current mode of cognitive functioning.

Characterised only to this extent, the idea of available warrant—of information being there for *x*'s taking, as it were—while it may seem intuitive enough, is unquestionably vague. You should decide whether you think that matters after you have reviewed the sceptical argument to follow. The argument has two premisses, and deploys two inference rules specific to warranted belief. The first premise is that no-one ever has available a warrant for the supposition that they

are not then dreaming; that is, for arbitrary  $x$  and  $t$ , where “ $Dxt$ ” expresses that  $x$  is dreaming at  $t$ :

(P1) Not:  $Rxt$  [not:  $Dxt$ ].

This is the counterpart of Stroud’s premise (a) above. More about it shortly.

In order to obtain the second premise, we consider a counterpart of Stroud’s premise (b). Restricting attention to propositions,  $P$ , which  $x$  had no grounds for believing before  $t$  and, such is her situation, can come warrantably to believe at  $t$  only by then perceiving, we can affirm

(2) If  $Rxt$  [ $P$ ], then not:  $Dxt$ .

Obviously, countless propositions come into the relevant category for any perceiving subject at any particular time—all propositions, in fact, which encode new information for her at that stage of her life which, in the light of their content and her epistemic history, is accessible to her only if she perceives. Bearing the restriction in mind, claim (2) should seem entirely uncontroversial. For if  $P$  is a proposition which  $x$  can acquire warrant to believe at  $t$  only by then perceiving, then, granted—for the reasons earlier rehearsed—that perceiving necessarily excludes dreaming, and that the shift from dreaming to perceiving is a significant change in mode of cognitive function, the availability to  $x$  at  $t$  of warrant to believe  $P$  must enjoin that she is not then dreaming.

But now, having rehearsed that reasoning, there seems no reason so to restrict  $x$ ’s capacities or situation at  $t$  that she is not then in position to do the same; in which case

(P2)  $Rxt$  [If  $Rxt$  [ $P$ ], then not:  $Dxt$ ].

So much for the premisses. The first rule for “ $R\_$ ” is the following version of *Transmission*:

$$\frac{Rxt \{A, \dots, A_n\}; \{A, \dots, A_n\} \vdash B}{Rxt [B]},$$

where “ $Rxt \{A, \dots, A_n\}$ ” says that  $x$  has available warrant to believe each of  $A, \dots, A_n$ , (and “ $\vdash$ ”, as throughout, expresses entailment).

We can suppose that  $x$  is a normally rationally reflective subject who, via best exercise of ordinary inferential abilities, can come to see that  $\{A, \dots, A_n\} \vdash B$ . The rule then avers that such a subject who warrantably believes a particular set of propositions can always get a warrant for any of their consequences. Well, obviously, something like that must be generally true if, as we ordinarily suppose, it is possible to extend the class of beliefs which we are justified in holding—a *fortiori* those which we are *flawlessly* justified in holding—by valid inference. But is it obvious that the generality has to be exceptionless? Surely, at any rate, there is space for an enquiry; or so it has seemed to some.<sup>12</sup>

<sup>12</sup> Any view according to which, for instance, the reasonableness of a belief is a matter of reasonableness relative to a framework of “relevant alternatives”, is going to have a motive for denying that reasons are invariably transmissible across entailment; merely take a case where consistency with the consequent of the entailment in question is a condition on an alternative’s counting as “relevant”. Suppose, for example, a theorist attracted to such a view holds that, in any context in which others’ behaviour is being treated as making par-

But we can prescind from this concern. For the worst that can result from doing so is that the treatment to follow takes on a provisional character—a treatment which we can fall back on *if*, as seems likely enough in any case, there turns out to be no cogent objection to this version of transmission.

Similar remarks apply to the second rule for “ $R\_$ ”, simple *Iterativity*:

$$\frac{Rxt [A]}{Rxt [Rxt [A]]}.$$

A strong motive for the rule is provided by the reflection that possession of a warrant ought to be an at least weakly decidable matter: that if  $x$  has a warrant for  $P$  at  $t$ , that ought to be something for which she can accumulate good though perhaps defeasible evidence—which, naturally, need involve no flaw of pedigree—without significant change in mode of cognitive function.<sup>13</sup> And the thought that there should be weak decidability in this sense is in turn encouraged by the idea that warrant is to be a *normative* notion, guiding our practices of belief formation—a role it can hardly discharge if we cannot tell, even weakly, when beliefs are warranted and when they are not. Once again, one would not have to refuse all force to these considerations in order to wonder whether the rule, so motivated, would have to be exceptionless. But once again, we can for our purposes cut off the debate with the reflection that, at worst, we thereby bestow a provisional character on the treatment to follow.

The derivation of the paradox is immediate. Suppose

(i)  $Rxt [P]$ ;

then

(ii)  $Rxt [Rxt [P]]$ ,

by (i) and Iterativity. Since  $\{Rxt [P], \text{If } Rxt [P], \text{ then not: } Dxt\} \vdash \text{not: } Dxt$ , it follows from (ii) and (P2) by Transmission that

(iii)  $Rxt [\text{not: } Dxt]$ ,

contrary to (P1). So, from (P1) and (P2)

(iv)  $\text{Not: } Rxt [P]$ .

This conclusion is, evidently, intolerable. It says that, no matter when and who you are, no warrant is available to you for any proposition getting a warrant for which

ticular beliefs about their mental states reasonable, the assumption that there are other minds besides mine incorporates such a condition on relevant alternatives. Others' behaviour, that is to say, is apt to make such beliefs reasonable only in a context in which the idea that I am the only mind abroad is already dismissed as an irrelevant possibility. Plainly, on such a view, my reasons to regard you as hoping for a 'phone call are not transmissible down to the thesis that there are other minds besides mine.

The earliest statement of this point known to me is in Fred Dretske's (1970). But the central claim—that sometimes the truth of the consequent of an entailment is a presupposition of the evidential force of data standardly taken to support one of the premisses—is independent of any contextualism about justification, and provides the basis of one of the most arresting yet simple sceptical strategies: precisely that which took centre stage in my (1985).

<sup>13</sup> For example, if it is possible by a mixture of perception and rational reflection to get grounds for  $A$ , then it should be possible, by a mixture of perception and rational reflection, to recognise that that is so.

would, in your epistemic circumstances, require perceptual function. So perception is never a source of warrants for so far unwarranted beliefs that, in the circumstances, cannot be warranted any other way. Crudely, perception cannot get you anything you cannot get without it. But that is just to say that almost all our worldly beliefs—which are warranted by means essentially reliant on perception if warranted at all—are unwarrantable.

Hardly less intolerable, as I have stressed, would be the second-order version, that there is no warrant to discount this conclusion. It merits notice, therefore, that, assuming there is warrant for (P1), just that will be the result if, rather than work with Transmission and Iterativity as rules, we take appropriate formulations of them as premisses which, the sceptical contention will be, there is at least no warrant to deny.<sup>14</sup> There would therefore seem to be no point, in this context, in developing any reservation about Transmission or Iterativity conceived as rules unless it also provides warrant to reject even mere agnosticism about the truth of the corresponding premisses. Mere misgivings about their validity as rules, unsupported by counterexample, will not be to the purpose, so it seems.

With Transmission and Iterativity as rules, and (P2) accepted, it is likewise enough for a sceptical paradox that there be no warrant available for denial of (P1). But more can be done to justify (P1) directly than we have so far reviewed. The Cartesian idea was merely the “no conclusive indications” point, which, on the face of it, simply fails to engage the claim that I might have a genuine but *inconclusive* justification for thinking that I am not now dreaming. A better line, to be found, perhaps, in Stroud (1984, pp. 21-3), would reflect that, assuming warrants have to be *earned* as the produce of cognitive procedures, there is a difficulty in seeing how any such procedure could lead one from a state in which one so far had no warrant for the supposition that one was not then dreaming to possession of a warrant for that claim. And only if that transition is possible in at least some epistemic circumstances will it ever be true, for some  $x$  and  $t$ , that  $Rxt$  [not:  $Dxt$ ].

What is the difficulty? That the following principle seems compelling:

*Proper Execution Principle (PEP):*

If the acquisition of warrant to believe a proposition depends on the proper execution of some procedure, then executing the procedure cannot give you any stronger a warrant to believe the proposition in question than you have independently for believing that you have executed the procedure properly.

(PEP) is apt to impress as barely more than a platitude. For example, if getting a warrant—flawless justification—to believe that a skirting board is twelve feet long depends, in my circumstances, on measuring it, then I cannot get a stronger warrant for that belief by measuring up than I have independently for thinking that the measuring was done with appropriate care. If I (warrantedly) think that the measuring was slipshod, I ought to regard the result as vitiated in proportion, unless I have independent warrant to regard it as correct—in which case, acqui-

<sup>14</sup> The point depends on the principle established in footnote 28 below.

sition of the latter did not after all depend on the execution of the relevant procedure.

But the problem is obvious. Suppose I set myself to acquire a warrant to believe that I am not now dreaming by some procedure, of whatever sort—pinching myself, or testing the belief that I am not now dreaming for overall coherence with my system of beliefs in general, or whatever you like. By (*PEP*), the result cannot be better warranted than the belief that I have properly executed the procedure is independently warranted; and that belief cannot be independently warranted at all unless I have independent warrant for its component, that I really did execute the procedure and *did not merely dream its execution*. But then it appears that I must already have the warrant which I have set myself to acquire—only if so does execution of the procedure have any probative force. There can thus be no route from a state in which one has no warrant for the supposition one is not dreaming to the acquisition of a warrant for that belief; hence, it seems, the belief is unwarrantable, just as (P1) says.<sup>15</sup>

<sup>15</sup> In view of the fact that a version of (*PEP*) which replaces all references to warrant with references to reasonable belief—

If the acquisition of reason to believe a proposition depends on the proper execution of some procedure, then executing the procedure cannot give you any stronger reason to believe the proposition in question than you have independently for believing that you have executed the procedure properly—

generates something no less plausible, one might wonder why, contrary to the sort of considerations sketched earlier, an analogous argument would not support the conclusion that there is no getting even reason to believe that one is not now dreaming. There would then be the prospect, with a counterpart of premise (*b*) supported by the considerations about demonstrative thought I adverted to, of running a radical sceptical argument in terms of mere reasonable belief after all.

The trouble with this is that, since reflection on the sort of considerations which, according to the earlier train of thought, make it reasonable to believe that I am not now dreaming—essentially, the coherence of the course of my current, apparently perceptual experience with beliefs I hold about my physical environment, about the patterns that will be manifest in perceptual experience of it, and about my own recent history;—since such reflection is supposed only to provide an inconclusive reason to think I am not now dreaming, the “procedure” involved is presumably one which *could* be accomplished in a dream. But then there isn’t the contrast between running the procedure and merely dreaming that one has done so which an analogue for reasonable belief of the argument in the text would need.

But now it may be wondered why the argument in the text doesn’t trip up over the same point. Why cannot I get a *warrant* for the belief that I am not now dreaming by *de facto* flawless execution of the same reflective internal procedure? Properly to explore the question would demand more detail about the notion(s) of warrant best suited to the sceptical purpose. But remember (*i*) that the general intention is that having a warrant is to enhance the probability of being right; and (*ii*) that the kind of dreams which are germane to the sceptical purpose are, as I express the matter below, *phenomenologically smooth*—they are dreams which have all the phenomenological trappings of ordinary reflective, perceptual consciousness. So suppose I faultlessly run the sort of reflective procedure envisaged, and decide with every justification that, relative to my background beliefs, my experience is in all details as it ought to be if I am awake and perceiving the interior of my study—how could doing so enhance the probability of the supposition that I am not having the kind of super-phenomenologically smooth dream in which it is possible to do just that? On the other hand, the *reasonableness* of my thinking that I am not now dreaming remains unimpugned: it is the reasonableness of thinking that, when things seem in all respects as if I am perceiving familiar surroundings, the explanation is that I am, rather than that cir-

That completes the layout of the paradox. It has rather a lot of moving parts. Still, we have done a reasonable job of motivating the various components, and there is the third constraint to fall back on where complete cogency might seem to be wanting. But the principal claim I want to make on behalf of the analysis proposed is that it captures the essentials of this particular group of sceptical arguments: specifically, that if you reflect on how precisely any of the hypotheses in question—the Demon, Brain-in-a-Vat, etc.—is supposed to generate a ramified sceptical doubt, you will find yourself relying on analogues of our two premisses—that the hypothesis is first-person undecidable, and that its truth may be taken to put one out of the perceptual market, as it were—and on analogues of our two rules—that the relevant epistemic notion is transmissible and iterative. The details may differ. Descartes' Principle, for instance, packs Transmission and Iterativity into one.<sup>16</sup> But there are no essentially simpler ways of doing the job; our analysis does not open the paradox to "resolutions" which a more skilful formulation could obviate.<sup>17</sup>

In what follows, I present the scenario for the worst case—that in which we come to the view that there is no relevant objection to the use made in the paradox of either Transmission or Iterativity. Should either or both turn out to be objectionable, *tant mieux*; the argument will be that the paradox founders in any case.

## V

Anyone encountering Cartesian scepticism for the first time is likely to feel that there is something dubiously eclectic about it—that, by comparison with his treatment of perception, Descartes goes suspiciously easy on the faculties essen-

cumstances are otherwise but somehow so fashioned as deceptively to sustain the appearance that I am. (This is not to endorse an inference-to-the-best-explanation response to scepticism, the main problem with which is precisely to make the needed connection with probability—to explain why what we count as best explanations are more likely to be true. All that I am granting is that the acceptance of best explanations had better be, in at least one legitimate sense of the word, reasonable.)

Obviously there is much more to say about the (*PEP*) argument for (P1), and I shall try to say some of it below.

<sup>16</sup> Albeit transmission not as above but in the form that requires the bridging entailments to be known, or reasonably believed, etc.

<sup>17</sup> I do not know how to prove this to a reader who, having worked through the Stroud discussion and the development of the above from it, remains unconvinced. Such a reader will not, presumably, regard the following as the essential intuitive sequence:

(1) I have no way of determining that not: *H*;

(2) If *H*, then I am not perceiving;

hence,

(3) I have no way of determining that I am perceiving;

hence,

(4) I am not entitled to any of what I normally regard as perceptually grounded beliefs.

On the other hand, a reader who accepts that this is the intuitive sequence will find that, on analysis, it takes on essentially the shape described. And if such is not the intuitive sequence, how exactly does the paradox work?



tially involved in his reflective project. One might naturally think that we merely stand to generalise the scope of the scepticism by pursuing the matter. But the fact is, on the contrary, that therein lies the key to the dissolution of the Dreaming Argument and all its ilk.

The paradox presented leans on the incompatibility between dreaming and perceiving. But is dreaming any less antithetical to proper *intellectual* function—to reasoning and comprehension? Mathematicians and logicians sometimes report dreams in which they have hit on “proofs” of outstanding problems, only to realise on waking that they had done nothing of the sort—and sometimes even that their dreamed constructions were not so much as well-formed. Surely, dreams can produce illusions of cogent thought no less than of perception. But then, can we not construct another paradox? Specifically, cannot we generate a paradox isomorphic to the above, and differing only in that (P2) is replaced by a premise concerning the relation between dreaming and the harvest not of perception but of intellection? Thus, if dreaming excludes competent intellectual function as it excludes perception, then, for any  $x$  and  $t$ , if  $Q$  is any proposition which  $x$  had no grounds for believing before  $t$  and can acquire warrant to believe at  $t$  only by competent intellection, surely we may affirm

(2\*) If  $Rxt [Q]$ , then not:  $Dxt$ .

Bearing in mind the restriction on the range of “ $Q$ ”, (2\*) is apt to seem acceptable for reasons exactly analogous to those supporting (2) above. For if  $Q$  is a proposition which  $x$  can acquire warrant to believe at  $t$  only by intellection, then, granted that, like perceiving, genuine intellection excludes dreaming, and that the shift from dreaming to intellection is a significant change in mode of cognitive function, the availability to  $x$  at  $t$  of warrant to believe  $Q$  must enjoin that she is not then dreaming. And then, as before, there seems no justification for refusing this train of thought to  $x$  at  $t$ , and thereby generating

(P2\*)  $Rxt$  [If  $Rxt [Q]$ , then not:  $Dxt$ ].

The upshot, accordingly, will be a sceptical argument differing from the Dreaming Argument only in that (P2\*) replaces (P2), whose conclusion—Not:  $Rxt [Q]$ —claims about our intellect just what its precursor claimed about perception: it cannot get you anything you cannot get without it—generates no warrants that cannot be generated any other way.

Once again, countless propositions come within the scope of the argument for any intellectual subject at any particular time—all propositions, in fact, which encode new information for him at that stage of his life which, in the light of their content and his epistemic history, is accessible to him only if he reasons and reflects. But the key thought is that (2\*) above is itself an admissible substituent for “ $Q$ ” so restricted: a proposition warranted acceptance of which can only be based on intellectual function. The second paradox accordingly yields

Not:  $Rxt$  [If  $Rxt [Q]$ , then not:  $Dxt$ ];

the negation of its own premise (P2\*).

How is this any help? In the presence of a result—Not:  $Rxt [Q]$ , interpreted as

above—which is totally destructive of our ability to justify any belief at all by means reliant on rational reflection, how can we so much as proceed to address the sceptical problem—how do any of our thoughts, about anything at all, retain any credibility? Well, but we do *not* have that result. That would require the premisses to remain in force. But since the conclusion of the second paradox is inconsistent with its premise, (P2\*), the “paradox” is merely a *reductio* of the conjunction of its premisses. All it shows is that (P1) and (P2\*) cannot be simultaneously true.

Now reflect that (P1) is common to both paradoxes; and that (P2) and (P2\*) are established, or so it was argued, by exactly parallel considerations—the case for (P2) is cogent if and only if that for (P2\*) is. That would seem to enjoy that if (P1) and (P2) were simultaneously true, so would be (P1) and (P2\*). But, as just noted, (P1) and (P2\*) cannot be simultaneously true. It follows that (P1) and (P2) cannot be simultaneously true either—the Dreaming Argument proceeds from unsatisfiable premisses.

The thought may persist: if there is a standing sceptical doubt about my reason, how can I avail myself of any of this? And the answer is: there *isn't* a standing sceptical doubt about your reason—only the self-defeating second paradox which, rather than generating any such doubt, issues in a perfectly stable *reductio* of its premisses. (And if there were a standing sceptical doubt about your reason, you would not be in the market even for the reasoning which goes into the *construction* of sceptical paradoxes, let alone their resolution.)

## VI

Suppose, then, that this train of thought demonstrates the simultaneous unsatisfiability of (P1) and (P2). Ought that to count as a resolution of the paradox by the lights of the three constraints? Well, we have worked hard to comply with the first—to ensure that our response is not knowledge-parochial. And we have the best possible line open in connection with the third. A demonstration that (P1) and (P2) are not simultaneously satisfiable confers a warrant for the negation of their conjunction. And that directly contradicts the premise—Not: *Rx* [not: ((P1) & (P2))]—of the second-order sceptical argument. But further work will be needed to comply with the second constraint, that we not content ourselves with refuting “The Sceptic” but develop a properly diagnostic dissolution of the paradox.

However it seems clear in what direction the diagnosis would best proceed. For (P2) was, surely, *established*: it is, simply, a consequence of the incompatible ætiologies demanded by the concepts of perceiving and dreaming respectively, the interpretation of “*Rx* [...]”, and the restriction on the range of “*P*”. So (P1) would have to be *false*: it is not true that no-one is ever warranted in believing that they are not then dreaming. But the argument from the (*PEP*), that no-one could ever *acquire* warrant for that belief—could work from a position in which

the belief was unwarranted to one in which it was not—remains impressive. Perhaps it can be punctured. But if not, the conclusion is clear: we have to drop the assumption that the availability of a warrant consists in the possibility of acquiring it. Warrants—at least some warrants—can be *unearned*.

This is an intriguing twist. The prospect is of a sharp vindication, using the very apparatus of the sceptical argument itself, of one of the central themes of Wittgenstein's notes *On Certainty*: the idea that among our beliefs there are some which we are warranted in accepting not as a result of some specific cognitive accomplishment but rather as a product of a special place they hold in our framework of thought and enquiry. I believe that Wittgenstein's point here is logical<sup>18</sup>—that there have to be such beliefs—and that it covers a variety of cases of which the present sort of example—that I am not now dreaming, not now a brain-in-a-vat, not now the dupe of Descartes' demon, etc.—is only one.<sup>19</sup> The fascinating possibility is that the paradox we generalised is in effect a demonstration that we are committed to an important class of examples of this idea by the other characteristics assigned to the notion of warrant in the sceptical reasoning.

We should not lightly let go of this prospect. But, as the perceptive reader will have been wanting to object, the “demonstration” of the simultaneous unsatisfiability of (P1) and (P2) on which it is based was flawed. The fact is that it simply isn't true that the cases made for (P2) and (P2\*) stand or fall together. The reason is that dreaming—arguably—does *not* exclude competent intellectual function as it excludes perception. Dreaming is, it was claimed, necessarily exclusive of perception because the two modes of consciousness impose different, incompatible constraints on the causal provenance of their ingredient experiences. By contrast, all that was remarked in the case of dreaming and intellection is that dreams can produce an illusion of the light of reason; that in dreams we *sometimes* succumb, in complete conviction, to inferential monstrosities and other solecisms of thought. But this is an empirical claim. And it lacks generality.<sup>20</sup> It thus falls far short of what the alleged parallel demands, that dreaming should necessarily and generally preclude the acquisition of warrants earned by operations of the intellect, just as it precludes warrants earned by perception.

And, with hindsight, perhaps we should not have expected anything else. We are intuitively quite clear that, when dreaming, we do not perceive, even if not about the exact nature of the exclusion. Surely, if according to our ordinary thought intellectual function was excluded by dreaming in just the same way, there would be a strong intuitive sense of absurdity in the attempt to construct a sceptical argument around the supposition that, for all I know, I could be dreaming now. The reply would leap to mind: “Well, if so, you are in no condition to

<sup>18</sup> This aspect of the interpretation of *On Certainty* is well emphasised in Williams (1991).

<sup>19</sup> The main focus of “Facts and Certainty” (Wright 1985) is on another important type of example, typified by “There is an external world”, “There are other centres of consciousness”, “The world did not first come into being five minutes ago, replete with apparent traces of a much more ancient history”.

<sup>20</sup> The importance of this point was urged on me by Gideon Rosen.

reflect on the consequences.”<sup>21</sup> But that reply does not leap to mind; we sense no incoherence in supposing simultaneously both that we are now dreaming and that we remain competent to explore what follows from supposing so.

## VII

However, though flawed in detail, the response to the Dreaming Argument just rejected still exemplifies a sound basic strategy. Let me try to put the pieces together somewhat differently.

First, reflect that, whether or not dreaming as ordinarily conceived suspends them, sound intellection—understanding, inference and reflection—is, like perceiving, subject to ætiological constraints. Suppose I follow a proof, to my full satisfaction. Then in doing so I will have a certain sequence of thoughts, culminating in a certain set of beliefs. But this is not something in which following the proof could wholly consist. One familiar, Wittgensteinian reason for saying so is that following a proof is a specific form of understanding, and the claim to have done so is consequently answerable to what the subject is subsequently able to do in the way that any claim to understand is. But the reason more germane to our present concerns is that, however appropriate in *content* the sequence of my thoughts may have been, they will not betoken comprehension unless there are certain appropriate *causal* relations among them: roughly, when one line is validly derived from others, my following the derivation requires that my acknowledging the availability of that line at that particular point in the proof includes, among its causal antecedents, those of my beliefs which register the inferentially relevant characteristics of the parent lines.

The point is absolutely crucial, so worth emphasis: on any occasion where I correctly follow, or comprehendingly construct a chain of inference, it is possible that the train of my thought in so doing should have occurred in exactly the same detail yet my performance have involved no genuine understanding of the reasoning. There is, for example, no absurdity in the idea of a subject who, while capable of grasping each of the ingredient thoughts involved in ratifying a sophisticated proof, lacks the ability to follow the reasoning involved; yet can nevertheless rehearse it, with every confidence and a strong sense of familiarity, as a result of hypnotic suggestion. Such a subject does not, under hypnosis, mysteriously acquire a local intellectual penetration which generally and elsewhere eludes him. And the reason why not is that the succession of his thoughts, as he rehearses the proof, is causally sustained not by his apprehension of inferentially-relevant characteristics but by the original hypnotic episode. Thinking through a chain of inference is no more a purely phenomenological notion than is, say, remembering how a tune sounded—where, however vivid and accurate the mental impression, and however confident the subject that she thereby recalls the

<sup>21</sup> Though this is, in effect, a response of Wittgenstein’s. See *On Certainty* §383.

tune, it counts for nothing unless there is an appropriate causal relation between the phenomenological episode and a relevant prior experience of the tune.

The same goes for certain sub-inferential accomplishments of the intellect which are always implicated in the acquisition of *a priori* knowledge—for instance, the ratification of principles of inference as “primitively obvious”, in Christopher Peacocke’s (1987) terminology, and of judgements generally a clear-headed grasp of whose content is sufficient, without inference, to persuade us of their truth. Having the relevant principle or judgement in mind, and being appropriately smitten with conviction, counts as an accomplishment of the appropriate kind only if the aetiology of the conviction depends on one’s apprehension of germane features of content and structure.

Earlier, in sustaining Descartes’ claim that “...there are no conclusive indications by which waking life can be distinguished from sleep...”, we appealed to what I described as the “completely compelling thought that experience cannot disclose its own causal provenance as part of its proper content”. But the idea is no less compelling for episodes of thought. That, as a train of thought develops, the ingredients are caused in certain ways cannot itself be *manifested* by their collective content (though it may, of course, be part of it). Descartes, when he ventured to regard cogent intellection as marked off by phenomenological characteristics of clarity and distinctness—whatever exactly they are—missed an insight whose counterpart in the case of perceiving he seemingly did not miss. For the fact is that episodes of apparently cogent intellection, no less than episodes of apparent perceptual experience, may, for all that is phenomenologically evident to the subject, have an aetiology inconsistent with their being genuinely *intellective/perceptual*.

Say that a state or series of states of consciousness is *phenomenologically smooth* (cf. footnote 15 above) just in case any normally experienced and reflective subject would find no cause therein to suspect that he was not perceiving and thinking perfectly normally. Dreams, even phenomenologically smooth ones, always and necessarily exclude perceiving. But our first response to the sceptical argument foundered on the realisation that—at least for all that has been shown—dreaming does not, always and necessarily, exclude cogent intellection, though it may sometimes do so. However, it now seems that it is merely a work of definition to restore the response, at least in essentials. Say that

*x* is *maundering* at *t*

just in case *x* is then in a phenomenologically smooth state which, like dreaming, necessarily precludes the causal conditions for perception but, in addition, likewise precludes the causal conditions of competent intellection. To stress: I do not know whether and am not claiming that any of our actual dreams are also maunderings. (Of course, as noted, they not infrequently involve disruption of the aetiology of sound intellection.) But it does not seem unlikely. In any case, any phenomenologically smooth episode *may*, as far as the phenomenology is concerned, be a case of maundering. The crucial thought, now, is that there is no basis for accepting (P1) of the Dreaming Argument, supported via the (PEP), but,

where “ $Mxt$ ” expresses that  $x$  is maundering at  $t$ , refusing

(P1\*\*) not:  $Rxt$  [not:  $Mxt$ ].

For an absolutely analogous line of supportive argument is available. If I set myself to acquire a warrant to believe that I am not now maundering, by whatever procedure, the result cannot, in accordance with the (*PEP*), be better warranted than the belief that I have properly executed the procedure is independently warranted; and that belief cannot be independently warranted at all unless I am independently warranted in thinking that I really did execute the procedure and *was not merely maundering through its apparent execution*. So, as in the case of dreaming, it appears that I must already have the warrant which I have set myself to acquire—only if so does execution of the procedure have any probative force. There can thus be no route from a state in which one has no warrant for the supposition one is not maundering to the acquisition of a warrant for that belief; hence, it seems, the belief is unwarrantable, just as (P1\*\*) says.

What about (P2) and

(P2\*\*)  $Rxt$  [If  $Rxt$  [ $Q$ ], then not:  $Mxt$ ],

where the range of admissible substituends for “ $Q$ ” is restricted as in (2\*)? May we affirm the same: that there can be no basis for accepting (P2) but refusing (P2\*\*)? Surely so. For maundering has been *defined* in such a way that it excludes competent intellectual function in just the way that dreaming excludes perceiving. Given the relevant restriction on the range of “ $Q$ ”, there is accordingly, in contrast with the situation of (2\*), no difficulty in justifying

(2\*\*) If  $Rxt$  [ $Q$ ], then not:  $Mxt$

in a fashion exactly analogous to that whereby (2) was earlier justified; at which point, once again, there seems no justification for refusing the justifying train of thought to  $x$  at  $t$ , and thereby generating (P2\*\*).

So now we can proceed more or less as in §V. (P1\*\*) and (P2\*\*) generate a sceptical argument, formally exactly analogous to the Dreaming Argument, whose conclusion—Not:  $Rxt$  [ $Q$ —includes (2\*\*) within its range. Hence (P1\*\*) and (P2\*\*) cannot be simultaneously true. But (P1) and (P1\*\*), and (P2) and (P2\*\*) are established, so we have argued, by, respectively, exactly parallel sets of considerations; so the case for the premisses of the Dreaming Argument is cogent if and only if that for (P1\*\*) and (P2\*\*) is. That would seem to enjoin that if (P1) and (P2) were simultaneously true, so would be (P1\*\*) and (P2\*\*). But, as just noted, (P1\*\*) and (P2\*\*) cannot be simultaneously true. We may be tempted to conclude as before that (P1) and (P2) cannot be simultaneously true either—that the Dreaming Argument proceeds from unsatisfiable premisses. And it is once again open to us to respond to the requirements of the third constraint by laying this conclusion alongside our confidence that (P2) was actually demonstrated by the considerations advanced in its favour. We thereby conclude that (P1) is false: that it is not true that  $x$  has no warrant at  $t$  to believe that she is not then dreaming, and hence that the impossibility of *earning* a warrant to believe

that one is not now dreaming—if that is what the (*PEP*) argument showed—does not imply that no such warrant is ever *possessed*.

## VIII

But there is, of course, a further objection. Our second response involves the following claims:

- (i) If (P1) and (P2) were established by the case made for them, then (P1\*\*) and (P2\*\*) would be established by the precisely analogous case which can be made for them.
- (ii) But (P1\*\*) and (P2\*\*) are jointly unsatisfiable, so could not be so established.
- (iii) (P1) and (P2) are also jointly unsatisfiable.

We may be satisfied of the correctness of (i) and (ii), but how exactly is (iii) supposed to follow? Ought not the conclusion to be merely that (P1) and (P2) were *not established* by the case made for them? That is not what (iii) says.

The trouble is that we need the stronger conclusion, it seems, to carry through the canvassed response to the second-order sceptic. A proof that (P1) and (P2) are jointly unsatisfiable entitles us, as noted above, to dismiss agnosticism about their truth; but a proof merely that—necessarily—they were not established by the considerations advanced to support them is quite consistent with such agnosticism. Not, of course, that it is no progress to have shown that (P1) and (P2) cannot convincingly be so supported. Our finding is that the concept of warranted belief, if transmissible and iterative, cannot, on pain of contradiction, be such that the premisses of the Dreaming Argument are simultaneously warranted on the grounds deployed. No warrant has been provided, therefore, for its conclusion; and if warranted belief is not transmissible and iterative, there is in any case no warrant for the conclusion. This is a telling line of thought against the ordinary, *first-order* scepticism which the Dreaming Argument purports to impose: a scepticism according to which there is warrant to repudiate the idea that perception is a source of warrants. But no-one who is mindful of the third constraint can contentedly leave matters there. How now, if it has not been shown that the premisses of the Dreaming Argument are jointly unsatisfiable, do we resist the claim that there is at least no warrant to reject them—that they may be true for all we are warranted in believing—and that the same goes, accordingly, for the conclusion too?

In order directly to reinstate the response, we would need as a lemma that (P1) and (P2) are true *only if* established by the case made for them. It is not out of the question that that might be argued. Alternatively, we might try to argue that *any* cogent considerations supporting (P1) and (P2) would have to have analogues equally supportive of (P1\*\*) and (P2\*\*), and that (P1) and (P2) could not be true in the absence of all supporting considerations. But I shall review a different, and I think better, range of manoeuvres.

Let us write “ $Axt [P]$ ” as an abbreviation for “Not:  $Rxt$  [not:  $P$ ]”. Correspondingly, let “ $Axt \{A_1, \dots, A_n\}$ ” express that  $x$  has no warrant at  $t$  to deny the conjunction of  $A_1, \dots, A_n$ . “ $Axt [P]$ ” will accordingly be read as “Agnosticism is warranted about  $P$  for  $x$  at  $t$ ”—although a trifle misleadingly, since possession of warrant to believe  $P$  will entail “agnosticism” about it in this sense.<sup>22</sup>

In these terms, the second-order Dreaming Argument proceeds from

$Axt \{(P1), (P2)\}$

—the claim that there is no warrant to deny that (P1) and (P2) are both true—to the conclusion that

$Axt$  [not:  $Rxt [P]$ ]

—the claim that there is no warrant to deny that there is no warrant for any perceptually based belief. And notice that, assuming classical logic and in the presence of the original rules for “ $Rxt$  [...]”, there is no difficulty in advancing from this second-order sceptical conclusion to the original. For the conclusion, expanded and harmlessly re-bracketed, is that

Not:  $Rxt$  [not: not:  $Rxt [P]$ ].

And this, via double negation elimination and contraposing on Iterativity, entails

Not:  $Rxt [P]$ .

Thus the second-order sceptic, despite his weakened premisses, is in position to argue for the very same conclusion as his first-order counterpart!

That reflection hardly seems to help. (In fact, though, it draws on something which we will later put to service against the sceptic.<sup>23</sup>) But the crucial question now concerns the status of the material conditional

(I)  $Axt [(P1)] \rightarrow Axt [(P1^{**})]$ .

In order to see why, reflect, to begin with, that the earlier demonstration of the inconsistency of  $\{(P1^{**}), (P2^{**})\}$  may be presumed available to  $x$  at  $t$ , so that we may affirm

(II)  $Rxt$  [not:  $\{(P1^{**}), (P2^{**})\}$ ].

Granted, then, that  $(P2^{**})$  is, as argued above, true, and reflecting that it has “ $Rxt$ ” in initial position, we can secure by Iterativity that

(III)  $Rxt [(P2^{**})]$

and hence that

(IV)  $Rxt$  [not:  $(P1^{**})$ ]

from (II) and (III) by Transmission. (IV), of course, yields

(V) Not:  $Axt [(P1^{**})]$ ,

and from (V) and (I) we may infer

(VI) Not:  $Axt [(P1)]$ ,

whence, since “ $Axt$ ” is transmissible across entailment,

(VII) Not:  $Axt [(P1), (P2)]$ .

<sup>22</sup> Remember that  $Rxt [A]$  precludes  $Rxt$  [not:  $A$ ].

<sup>23</sup> See the text annotated by footnote 27.



But (VII) is precisely the denial of the second-order Dreaming Argument's premise. And, by the principles that inform the construction of all the sceptical arguments—first- and second-order, from dreaming and from maundering—with which we have been concerned, (II) and (III) are uncontroversial. So, could we but secure (I), we would have the best possible rejoinder to the second-order Dreaming Argument: refutation of its premise, and thereby decisive pre-emption of the retreat to agnosticism which second-order scepticism exploits.

So, what can be said for (I)? Well, under what circumstances would it fail? Can it be coherently envisaged that  $Rxt [(P1)]$  and Not:  $Axt [(P1^{**})]$  might hold at the same time? The latter, fully expanded, comes to

Not: not  $Rxt$  [not: not:  $Rxt$  [not:  $Mxt$ ]],

whence via DNE

$Rxt$  [ $Rxt$  [not:  $Mxt$ ]]

—the claim that  $x$  has available a second-order warrant at  $t$ : a warrant to believe that the belief that she is not then maundering is warrantable. But now the evident difficulty is to understand how such a warrant could indeed be available to a subject without a corresponding second-order warrant being simultaneously available with respect to the supposition that she is not dreaming. What could explain the difference? Dreams—at least those on which scepticism seeks to capitalise—and maunderings are alike in being phenomenologically smooth states, distinguished from genuinely perceptual or intellective modes of consciousness by ætiological considerations of which the reflective subject on whom the sceptical arguments are targeted can have no direct awareness. How then can the thought that I am not now maundering possibly fare better, in point of warrantability of whatever level, than the thought that I am not now dreaming—what further disanalogy is there which a counterexample to (I) could exploit?

Those considerations give (I) at least some plausibility. And anyone who considers (I) demonstrated thereby can conclude the discussion at this point. But perhaps we can further strengthen the case. One possible way proceeds via consideration whether a Thinning rule for “ $R\_$ ”,

$$\frac{Rxt [Rxt [A]]}{Rxt [A]},$$

should be regarded as valid. Of course, “ $Rxt$ ” is not factive, so the entailment from  $Rxt [A]$  to  $A$  will not go through in general. But Thinning for “ $Rxt$ ” seems plausible enough. At least, there ought, presumably, to be no objection to the corresponding rule for sufficiency of reason, intuitively understood. For to have sufficient reason to believe that sufficient reason to believe  $A$  is available *constitutes*, surely, already having sufficient reason to believe  $A$ . And a warrant is just a sufficiency of reason which satisfies certain constraints of pedigree. How could there be a problem for the rule under the imposition of those additional constraints if there were none before?<sup>24</sup>

<sup>24</sup> The thought is this. Suppose  $Rxt [Rxt [A]]$ , and write “ $Jxt [A]$ ” for:  $x$  has at  $t$  sufficient reason—(though perhaps not a warrant)—to believe  $A$ . Since  $Rxt [A]$  entails  $Jxt [A]$ , we can

Suppose we have Thinning; what follows? Precisely that “*Axt*” is likewise subject to Iterativity and Thinning.<sup>25</sup> But in that case, since (P1) and (P1\*\*) each effectively has “*Axt*” in initial position, they are respectively *equivalent* to *Axt* [(P1)] and *Axt* [(P1\*\*)]. The failure of (I) would therefore require the possibility that (P1) be true while (P1\*\*) was false. And in that case, the argument from the Proper Execution Principle cannot have been cogent in both cases. Perhaps it was cogent in neither. But then what reason will remain to accept (P1) or—what is, crucially, the same thing on the present supposition—its agnosticisation?<sup>26</sup> So if Thinning is valid for “*Rxt*”, any attempt to protect the Dreaming Argument against the implausible train of thought described by contending that (I) allows of counterexample must face the extremely awkward task of explaining how the argument from the Proper Execution Principle fails to accomplish for (P1\*\*) what it accomplishes—according to scepticism—for (P1). We may doubt that the task is feasible.

But I think it is possible to administer a decisive blow without reliance on Thinning, and indeed without attempting to establish (I). Above we derived (VII), the denial of the second-order Dreaming Argument’s premise, from the set consisting of (I), (II) and (III). Now (VII) simplifies via double negation elimination to

$$Rxt \text{ [not: [(P1), (P2)]]}.$$

So we may affirm

$$[(I) \ \& \ (II) \ \& \ (III)] \vdash Rxt \text{ [not: [(P1), (P2)]]}.$$

Hence, by transmission for “*Axt*”,

$$Axt \text{ [(I) \ \& \ (II) \ \& \ (III)]} \vdash Axt \text{ [Rxt \text{ [not: [(P1), (P2)]]}]}.$$

But the consequent of that may be rewritten as

$$\text{Not: } Rxt[Axt \text{ [(P1), (P2)]]},$$

—the claim that the premise for the second-order Dreaming Argument is unwarrantable. And surely, however matters stand with the arguments for (I), we are at least fully entitled to affirm *Axt* [(I) & (II) & (III)]?

obtain *Jxt* [*Jxt* [A]] from the supposition. This statement depicts a state of justified belief which, in the circumstances, meets all the conditions on warrant. But according to the thought in the text, the state depicted *constitutes* a form of sufficient reason for A, so may be as well depicted by “*Jxt* [A]”. Whence “*Jxt* [A]” likewise depicts a state meeting all the conditions on warrant. So there ought to be no objection to depicting that state by “*Rxt* [A]”.

<sup>25</sup> Proof:

- (i) “*Axt*” thins. Suppose *Axt* [*Axt* [B]]; i.e. Not: *Rxt* [not: not: *Rxt* [not: B]]. Then we eliminate the double negation and contrapose on Iterativity for “*Rxt*” to obtain Not: *Rxt* [not: B], = *Axt* [B].
- (ii) “*Axt*” iterates. We have that if *Rxt* [not: not: *Rxt* [not: B]], then *Rxt* [*Rxt* [not: B]]. So Thinning will give that if *Rxt* [not: not: *Rxt* [not: B]], then *Rxt* [not: B]. So, contraposing, if Not: *Rxt* [not: B], that is: *Axt* [B], then Not: *Rxt* [not: not: *Rxt* [not: B]], that is, *Axt* [*Axt* [B]].

<sup>26</sup> Someone might wonder whether this question doesn’t implicitly shift the goal posts. Of what concern is it if (P1), or *Axt* [(P1)], is unjustified—was not the gist of the original third constraint precisely that a sceptical argument can proceed without justification of its premisses? Not at all; read on.

I'll come to that in a minute. For someone might in any case be unpersuaded of the destructiveness of Not:  $Rxt [Axt [(P1), (P2)]]$ . Does not the contrary thought simply amount to a surreptitious change of the rules? Wasn't the whole point of the third constraint that an interesting sceptical argument does not need to work with *warranted* premisses—that it is enough to work with premisses whose negations are unwarranted? Surely, then, it cannot be germane to establish any unwarrantability result concerning the premisses utilised; for the sceptic may always retreat to their “agnosticism” without significant compromise of the sceptical value of his conclusion.

But this is a double confusion. First, *second-order* scepticism, in contrast with the first-order variety, has no way of eluding any genuine justificatory obligation by further agnosticism. For  $Axt [Axt \{A_1, \dots, A_n\}]$  is, when “ $Rxt$ ” iterates, no logically weaker than  $Axt \{A_1, \dots, A_n\}$ .<sup>27</sup> Second, there certainly *is* a genuine justificatory obligation. You cannot construct a *paradox* using premisses which have no claim whatever to credibility. A paradox precisely consists in the case for credibility made on behalf of an incredible conclusion. And to say this is *not* to renegue on the third constraint and the considerations which supported it. It is merely that the retreat to agnosticism which it was argued that first-order scepticism may safely make, must be a retreat to a *warranted* agnosticism. The sceptic can, indeed, in the absence of compelling justification for certain of his premisses, fall back on the claim that there is at least no justification for their negations. But *this* claim must be justified, of course, if the resulting sceptical argument is to have any interest at all. The agnosticism must be motivated; any fool can derive unpalatable consequences from wholly unmotivated premisses.

So we have arrived at the following state of affairs. First: if each of (I), (II), and (III) is true, the premise of the second-order Dreaming Argument is false. But second, so I have just argued, a demonstration of that premise's unwarrantability, no less than one of its falsehood, puts paid to the paradox. And there will be such a demonstration if we can obtain  $Axt [(I) \& (II) \& (III)]$ . Can we?

Well, reflect that  $Rxt [(II)]$  and  $Rxt [(III)]$  are available from (II) and (III) by iterativity; and that (II) and (III) can be regarded as established. But the following is a sound principle:

$$\frac{Rxt [A_1], \dots, Rxt [A_{n-1}]; Axt [A_n]; \{A_1, \dots, A_n\} \vdash B}{Axt[B]}^{28}$$

<sup>27</sup> See footnote 23.

<sup>28</sup> Proof:

- (i) Suppose  $\{A_1, \dots, A_n\} \vdash B$ . Then  $\{A_1, \dots, A_{n-1}, \text{not: } B\} \vdash \text{not: } A_n$ .  
 So  
 (ii)  $Rxt [A_1], \dots, Rxt [A_{n-1}], Rxt [\text{not: } B] \vdash Rxt [\text{not: } A_n]$ .  
 So  
 (iii)  $Rxt [A_1], \dots, Rxt [A_{n-1}], \text{not: } Rxt [\text{not: } A_n] \vdash \text{not: } Rxt [\text{not: } B]$ .  
 So  
 (iv)  $Rxt [A_1], \dots, Rxt [A_{n-1}], Axt [A_n] \vdash Axt [B]$ .

So, taking  $\{A_1, \dots, A_{n-1}\}$  as  $\{(II), (III)\}$ ,  $A_n$  as (I), and  $B$  as  $[(I) \& (II) \& (III)]$ , we can secure  $Axt [(I) \& (II) \& (III)]$  just provided we have, not (I) but merely its *agnosticisation*:

$$(I)^A \quad Axt [Axt [(P1)] \rightarrow Axt [(P1^{**})]].$$

And so much surely is vindicated by the considerations we have already reviewed.  $(I)^A$  says that the denial of (I) is unwarrantable. Well, getting a warrant to deny (I) will involve explaining how  $Axt [(P1)]$ , and hence, for now familiar reasons, (P1) itself, might be true while  $Axt [(P1^{**})]$ , = not:  $Rxt [Rxt [\text{not: } Mxt]]$ , might be false. Even without Thinning, the obligation is therefore to explain how, while the thought that I am not now dreaming is indeed unwarrantable, warrant is nevertheless available to believe in the warrantability of the thought that I am not now maundering. That will involve first explaining how the (PEP) argument failed for the case of maundering;<sup>29</sup> and then explaining *either* how, despite the very tight apparent analogy, the corresponding argument does not fail in the case of dreaming, *or* how, for quite different reasons, warrant to think I am not now dreaming is impossible. We are not, no doubt, in any position conclusively to rule out all possibility of such an explanatory package. But we are surely rationally perfectly entitled to regard the prospects as dim. And that is enough (defeasibly) to warrant  $(I)^A$ .

At the end, then, second-order scepticism is confounded, ironically, by an instance of the very kind of move which is its own stock-in-trade and which promised to make it so awkward to deal with: the retreat, in the absence of proof of a needed premise, to the claim that, for all anyone is in position to affirm to the contrary, there is no prospect of sufficient grounds for its denial.

## IX

It remains to consider how matters now stand in relation to the second of the original three constraints: the constraint, in effect, that any dissolution of a sceptical paradox must be appropriately diagnostic. Recall that our first, unsuccessful response to the Dreaming Argument opened up the prospect of a cogent and precise exegesis of one of the central themes of *On Certainty*: the idea that we are warranted in accepting certain of our most basic beliefs, including, for each subject, the belief that he is not now dreaming, not as a result of some specific cognitive accomplishment but rather as a product of a special place they hold in our cognitive framework. The diagnostic proposal allied to this finding, can we but make it stick, will be that it is precisely because we fail to recognise this point that the Sceptic's key premise—that none of us can have any warrant for the belief that he is not now dreaming, or maundering, or a brain-in-a-vat, etc.,—is compelling. We illicitly convert the perceived impossibility of *earning* a warrant

<sup>29</sup> Since if it succeeded, we should have  $Rxt [(P1^{**})]$ , which is inconsistent with the falsity of  $Axt [(P1^{**})]$ .

for beliefs of this kind with their unwarrantability *tout court*, failing to recognise that this distinction is imposed by the very apparatus of the sceptical argument itself. But is anything of this prospect still in view?

Indeed. The first response had it that (P1) was actually *refuted*. If that result had stood, we would have no option but to allow that there is such a thing as warrantably believing that one is not now dreaming, maundering, etc. But the conclusion of the first response gives way to weaker findings on either of the responses—via (I) or, as seems to me more solid, via (I)<sup>A</sup>—which we just reviewed. If we go via (I), our result is that  $Rxt$  [not: [(P1), (P2)]]], and hence—granted  $Rxt$  [(P2)]—that  $Rxt$  [not: (P1)]. If we go via (I)<sup>A</sup>, our result is that Not:  $Rxt$  [ $Axt$  [(P1), (P2)]] whence—granted again  $Rxt$  [(P2)]—we obtain the still weaker Not:  $Rxt$  [(P1)].<sup>30</sup> From each of these conclusions, however, it still follows that (P1) was not demonstrated by the play made with the (PEP). And the thought may still convince that the argument from the (PEP) *would* accomplish its object were the further assumption correct that warrants for beliefs of the ilk we are concerned with—I am not now dreaming, etc.—had to be earned. The invited moral thus remains that, for this class of belief, there is such a thing as unearned warrant; and that the direction in which a full diagnosis and final resolution of the paradox should go is, accordingly, still as earlier suggested—into the territory somewhat impressionistically mapped in Wittgenstein's last notes.

But we should not overstate our constructive findings. It has not been shown that I am warranted in thinking that I am not now dreaming. It has not been shown that I am warranted in denying that there is no warrant for thinking that I am not now dreaming. It has not even been shown that there is no warrant for thinking that the claim that I am not now dreaming is unwarranted. What, precisely, has been shown is that in the presence of certain principles—(I), or (I)<sup>A</sup>—which may well seem compelling, there are elements in the apparatus of the sort of sceptical argument with which we have been concerned—specifically, the claim that (P2) is verifiable by rational reflection (whence the same goes for (P2\*\*)), the presupposition that anything available to rational reflection may be presumed available to  $x$  at  $t$ , and the transmissibility and iterativity of the epistemic operator involved—which, whether the sceptical argument proceeds at first- or second-

<sup>30</sup> Proof:

(i) Suppose  $Rxt$  [(P1)].

Then given

(ii)  $Rxt$  [(P2)],

we get

(iii)  $Rxt$  [(P1), (P2)] by Transmission;

and hence

(iv)  $Rxt$  [ $Rxt$  [(P1), (P2)]] by Iterativity.

We have

(v)  $Rxt$  [(P1), (P2)]  $\vdash$   $Axt$  [(P1), (P2)];

from which, with (iv),

(vi)  $Rxt$  [ $Axt$  [(P1), (P2)]] follows by Transmission, contrary to the cited result.

Notice, by the way, that the availability of Not:  $Rxt$  [(P1)] from (I)<sup>A</sup> generalises and consolidates our response at the beginning of §VIII to the first-order sceptic: (P1) is unwarrantable not just by the sorts of consideration offered in its support but *tout court*.

order, undercut all possibility of justification of the conjunction of its premisses and, more specifically, of that premise which concerns dreaming or some other notion of cognitive impairment. If, as I earlier suggested, an effective argument from Dreaming, or from Brain-in-a-Vathood, etc., cannot proceed without all these elements—if our analysis does indeed capture the essential implicit detail of this kind of sceptical train of thought—then we may indeed draw a large but negative conclusion: that *there is actually no method of sceptically undermining our right to rely on any of our cognitive faculties using a fantasy, whatever its exact nature, of first-personally undetectable impairment*. Endorsement of the apparatus which such an argument needs to deploy will be inconsistent with the justifiability of one of its premisses—the analogue of (P1), or of its agnosticisation. But a positive, *Über Gewissheitlich*, conclusion about the status of that premise consequently awaits validation of all the other elements in the apparatus. That project lies beyond the purely implosive brief I have undertaken here.<sup>31</sup>

Department of Logic and Metaphysics  
University of St. Andrews  
St. Andrews  
Fife KY16 9AL  
Department of Philosophy  
University of Michigan  
Ann Arbor, MI 48109  
USA

CRISPIN WRIGHT

## REFERENCES

- Dancy, J. 1985: *Introduction to Contemporary Epistemology*. Oxford: Basil Blackwell.
- Descartes, R. 1968: *Meditations on First Philosophy*, in Haldane and Ross, eds., *The Philosophical Works of Descartes*, Vol. I. Cambridge: Cambridge University Press.
- Dretske, F. 1970: "Epistemic Operators". *Journal of Philosophy*, 67, pp. 1007-23.
- Nozick, R. 1981: *Philosophical Explanations*. Oxford: Oxford University Press.
- Peacocke, C. 1987: "Understanding Logical Constants: A Realist's Account". *Proceedings of the British Academy*, 63.

<sup>31</sup> The argument presented here began to take shape in my undergraduate Knowledge and Reality lectures given in Michigan in the Spring and Fall semesters of 1989. Thanks to the students who participated. Thanks also to those who attended colloquia at McGill, Michigan State, and Penn. State at which I tried out versions of these ideas, and to the participants at the 1990 Discipuli conference at USC. In addition, I am grateful to Paul Boghossian and Gideon Rosen for interesting discussion, to Bob Hale for his usual perceptive and constructive critical reactions, to Jonathan Dancy, John Skorupski and Mark Sainsbury for helpful comments on an earlier draft, and especially to Stephen Yablo for pointing out a confusion in the way I was at one point reading " $\text{Axt } \{A_1, \dots, A_n\}$ " and for noticing how straightening it out might actually strengthen the argument. I did not in the end unreservedly back his suggestion, but §VIII has turned out, I think, substantially the better for his observation.

- Pollock, J. 1986: *Contemporary Theories of Knowledge*. Totowa, N.J.: Rowman & Littlefield.
- Russell, B. 1912: *The Problems of Philosophy*. Oxford: Oxford University Press.
- Strawson, P. 1985: *Scepticism and Naturalism: Some Varieties*. London: Methuen.
- Stroud, B. 1984: *The Significance of Philosophical Scepticism*. Oxford: Oxford University Press.
- Williams, M. 1991: *Unnatural Doubts: Epistemological Realism and the Basis of Scepticism*. Oxford: Basil Blackwell, forthcoming.
- Wittgenstein, L. 1969: *On Certainty*. Oxford: Basil Blackwell.
- Wright, C. 1985: "Facts and Certainty". Henriette Hertz Philosophical Lecture for the British Academy, in *Proceedings of the British Academy*, 71, pp. 429-472.