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The Exorcist's Nightmare: A Reply to Crispin Wright

THOMAS TYMOCZKO and JONATHAN VOGEL

Crispin Wright (1991) tries to show that a familiar argument for skepticism about the external world (the "Dreaming Argument") is unsound. This skeptical argument exploits the possibility that one's sense experience might arise through dreaming rather than perception. Wright's procedure is, roughly, as follows: He presents what he thinks is the strongest form of the Dreaming Argument. Then he constructs a parallel argument (the "Maundering Argument") for a wider skepticism concerning both perception and intellection. However, according to Wright, the premises of the Maundering Argument are inconsistent. Wright then argues that the premises of the Dreaming Argument stand or fall with those of the Maundering Argument, so that the case for skepticism about the external world is refuted. We find Wright's treatment of some key issues to be unconvincing. As we argue below, Wright misjudges the strength of the Maundering Argument, and a powerful version of the Dreaming Argument escapes his criticisms in any case.

I

Before turning to our main concerns, we must deal with a preliminary point. The skeptic deploys the Dreaming Argument in an effort to show that our beliefs about the external world lack some kind of positive epistemic status. Usually, the conclusion drawn from the argument is either that we lack knowledge of the external world or that we lack rational beliefs about it. Wright, however, thinks that versions of skepticism framed in terms of knowledge or rational belief can be trivially dispatched (1991, pp. 88, 94).¹ On his view, skepticism is of interest in so far as it is directed at a special epistemic state called "warranted belief". A warranted belief is a rational belief that is, in some sense, likely to reflect the truth (1991, pp. 95-6).

More explicitly, according to Wright, a belief is warranted for x just in case 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, it would be rational to

¹ We do not endorse this assessment.

view the probability of its truth as being unimproved by the fact of x 's holding it. (1991, p. 95)

This definition seems problematic in a number of respects. On one way of reading clause (ii), a person could not have warrant for a wide range of seemingly impeccable beliefs. As Wright uses the term, a belief's pedigree includes "its holder's grounds if any, her cognitive condition as she forms it and the circumstances surrounding its formation" (1991, p. 95). A rational observer who knew the pedigree of x 's belief would have access to all the evidence that x has. The additional information that x holds the belief in question would then seem to be irrelevant to determining whether that belief is true, and so would not affect the observer's own judgment. As a result, the probability of the belief for the observer would be unimproved by the fact that x holds the belief, and x would lack warrant according to Wright's definition.

This problem emerges clearly in connection with general beliefs about the external world, and in connection with beliefs reached by deduction. Consider a concrete example. Suppose you have examined a sufficient number of green emeralds and believe that the next emerald you see will be green. The rational observer who knew your pedigree (i.e., knew about the examined green emeralds) would conclude on such a basis that the next emerald you see will be green (to some probability). The additional information that you believe the next emerald will be green will add nothing to the observer's confidence that what you believe is true, so you seem not to satisfy the conditions for warranted belief. Similar considerations threaten the status of other unobjectionable beliefs, including beliefs about logic and mathematics.²

If it is indeed impossible to make out a suitable notion of warranted belief along the lines Wright suggests, then, by his own account, it may be that no version of skepticism remains to be dealt with. That is, Wright's anti-skeptical project could be rendered otiose at the outset. But perhaps we have not properly grasped the import of Wright's second condition. More to the point, we can take "warranted belief" as implicitly defined by the rules it is specified to obey. Wright mentions three of these prominently:

Transmission (1991, p. 97)

$$W(p_1, \dots, p_n) \text{ and } (\{p_1, \dots, p_n\} \vdash q) \text{ imply } W(q)^3$$

² In reaching this conclusion, we have assumed that the relevant probabilities for assessing warrant are $\Pr(p/\text{facts about your pedigree and you believe } p)$ contrasted with $\Pr(p/\text{facts about your pedigree})$. Alternatively, Wright's second condition might be read as requiring that, for the rational observer, $\Pr(p/\text{you believe } p)$ be strictly less than $\Pr(p/\text{you believe } p \text{ and facts about your pedigree})$; see (1991, p. 100n). But on this construal, you could never be warranted in believing you have some belief or other. The problem Wright faces in spelling out his notion of warrant is common to all attempts to work out an acceptable version of reliabilism in epistemology; we can think of no interpretation of Wright's account of warrant that is free of difficulties.

³ We symbolize Wright's locution that x has warrant available at time t for the belief p as " $W(p)$ " rather than Wright's " $R_{xt}(p)$ ". The parameters x and t are never varied or quantified over in his discussion so we can assume they are fixed. Our statement of the Transmission rule deviates slightly from Wright's so as to eliminate an ambiguity.

Iterativity (1991, p. 98)

$W(p)$ implies $WW(p)$

Consistency (1991, pp. 95, 109n.)

$W(p)$ implies $\neg W(\neg p)$

He also commits himself to a fourth principle:

Warrant for Logical Truths (1991, pp. 92n., 97, 109)

$W(p)$, where p is a (broadly) logical truth

By a “broadly logical truth” we mean both truths of logic and truths of a definitional or conceptual nature (e.g., that dreaming precludes genuine perception).⁴

Along with “warranted belief”, Wright introduces into the discussion the notion of “maundering”. Maundering is supposed to be like dreaming, only worse. In dreaming, it is as though one actually perceives, although one does not; dreaming is necessarily incompatible with perception. However, while dreaming might interfere with intellection, it does not necessarily preclude it. Maundering counterfeits both perception and intellection. It is “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” (1991, p. 106). To say that maundering is phenomenologically smooth means that “any normally experienced and reflective subject would find no cause therein to suspect that he was not perceiving and thinking normally” (1991, p. 106). The crucial point is that a person who is maundering could not, as a matter of logical necessity, have any warranted beliefs arrived at by perception or by intellection.

We are now in a position to examine Wright’s response to skeptical arguments. According to Wright, the Dreaming Argument rests on two premises. The first premise is that one does not have warrant for believing that one is not dreaming. The other is that one has warrant for the belief that dreaming logically precludes the obtaining of any warrant by perception. The skeptic’s argument is then that, since we can’t establish that we aren’t dreaming, we can’t ever establish that the conditions for warranted perceptual belief are met. As a result, we have no warrant for any belief about the world that rests on perception.

Wright further maintains that a parallel argument can be given for the conclusion that one has no warranted beliefs at all (or at least, no warranted beliefs arrived at by either perception or intellection). Just as the Dreaming Argument turns on the possibility that one might be dreaming instead of perceiving, Wright’s Maundering Argument rests on the possibility that one is maundering rather than perceiving or reasoning. Let “ W ” continue to stand for “ x has available a warrant to believe”; “ M ” stand for “ x is now maundering”; and let “ p ” be

⁴ Wright repeatedly assumes the validity of this last principle, as when he argues from a definitional principle to a claim of warrant (1991, pp 91, 97). Note in addition that the principle of Warrant for Logical Truths can be seen as a consequence of the Transmission principle, given that logical truths are entailed by any premise set, including an empty one.

a schematic letter for all propositions that might be known by perception or intellection. The Maundering Argument goes as follows:

- | | | |
|-----|--|-------------------------------|
| (1) | $\neg W(\neg M)$ [Wright's P1**] | Assumption |
| (2) | $W(p) \rightarrow \neg M$ [Wright's 2**] | Broadly Logical Truth |
| (3) | $W(W(p) \rightarrow \neg M)$ [Wright's P2**] | Warrant for Logical Truths, 2 |
| (4) | $W(p)$ | Assumption |
| (5) | $WW(p)$ | Iterativity, 4 |
| (6) | $W(\neg M)$ | Transmission, 3, 5 |
| (7) | $W(\neg M) \ \& \ \neg W(\neg M)$ | & Introduction, 1, 6 |
| (8) | $\neg W(p)$ | Reductio ad absurdum, 4, 7 |

That is, we have no warrant for any belief arrived at by perception or intellection. This follows from the assumption that we have no warrant for rejecting the possibility that we are maundering, and the further assumption that maundering excludes successful perception or intellection. The latter, Wright appears to think, is a logical truth that follows from the definition of maundering itself (1991, p. 107).⁵

As we mentioned earlier, the premises of the Dreaming Argument closely resemble those of the Maundering Argument. Where the Maundering Argument invokes

- (1) $\neg W(\neg M)$

i.e., the assumption that x lacks warrant for denying that x is maundering, the Dreaming Argument will invoke the assumption that x lacks warrant for denying that x is dreaming; where the Maundering Argument has

- (2) $W(p) \rightarrow \neg M$

i.e., maundering logically precludes obtaining warrant by intellection or perception, the Dreaming Argument will have the assumption that dreaming logically precludes obtaining warrant by perception. Otherwise, the Dreaming Argument as Wright construes it proceeds exactly the way the Maundering Argument does, with references to dreaming replacing references to maundering, and " p " restricted to propositions that obtain their warrant from perception.

Wright's central point is that the Maundering Argument can be turned into a reductio ad absurdum of its premises. Any instance of Premise (2) (i.e., any instance of Wright's 2**) is itself a logical truth known by intellection, so it falls within the scope of the conclusion (8). Hence:

- | | | |
|------|-----------------------------------|----------------------------|
| (9) | $\neg W(W(p) \rightarrow \neg M)$ | By preceding discussion, 8 |
| (10) | CONTRADICTION | & Introduction, 3, 9 |

⁵ Observe that if the conditional of (2) is a semantic entailment then (3), along with the direct use of Warrant for Logical Truths, can be eliminated from the sceptical argument. For (6) would follow from (2), (5), and Transmission. The revised argument would not suit Wright's purposes, since it could not be extended to a reductio without gratuitously importing (3) to get an inconsistency. For this reason, we have kept to Wright's own formulation.

Since a contradiction follows from (1) and (2), those premises cannot both be true. This result provides the basis for Wright's criticism of the Dreaming Argument as he construes it. Wright claims that the demonstrated inconsistency of the assumptions of the Maundering Argument deprives the initial premises of the Dreaming Argument of their credibility. Hence, the Dreaming Argument itself can give no support to skepticism.⁶ Wright's treatment of the relation between the assumptions of the two arguments is exceedingly subtle and complex. We shall not discuss this issue at any length, and nothing we say below depends upon it.

II

Wright's *reductio ad absurdum* could have two different targets. It might be deployed against the Maundering Argument itself, taken as an argument for a wide skepticism about perception and intellection (which we call "intellectual skepticism"). Alternatively, it could contribute to a refutation of the Dreaming Argument, thus undercutting a narrower skepticism concerned with perception alone (hereafter, "Cartesian skepticism"). It remains to be seen what success Wright might have in either case.

We first consider the impact of Wright's criticisms on the prospects for intellectual skepticism. It would be foolish for the intellectual skeptic to claim that some rational argument really produces warrant for the claim that rational argument does not produce warrant. The skeptic must instead allow reasoning to impeach itself, according to premises and principles that reason is bound to acknowledge. From the skeptic's point of view, the Maundering Argument can operate in just this way. It is meant to establish that, if reasoning produces warranted belief, it does not produce warranted belief. The premises of the argument, including the claim that we have warrant for the belief that maundering precludes obtaining warrant by intellection, are embraced by the friends of reason, not by the intellectual skeptic. So, the Maundering Argument would make it impossible to maintain, even on its own terms, the view that reasoning produces warranted belief. There will be no comfort at this point in the observation that the argument can be continued so as to generate an explicit contradiction—not if that contra-

⁶ "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" (1991, p. 108). Wright argues further that the failure of the Maundering Argument warrants us in rejecting the first premise of the Dreaming Argument (i.e., the assumption that *x* doesn't have warrant to believe that she is not dreaming)—or, more cautiously, the outcome of the Maundering Argument establishes that we have no warrant to accept that premise of the Dreaming Argument (1991, p. 114). These further results depend upon identifying the first premise of the Maundering Argument, in particular, as the source of the contradiction that the argument ultimately yields. Our claim will be that Wright fails to establish the inconsistency of the Maundering Argument's assumptions in the first place, and so these further points are moot.

diction still follows from assumptions one is committed to by holding that intellection produces warranted belief. So, simply as it stands, the extended Maundering Argument will cut no ice against the intellectual skeptic.⁷

Certainly, it would be futile to argue against the intellectual skeptic as follows: The result properly obtained by the Maundering Argument, i.e., that reason does not produce warrant, leads to a contradiction when conjoined with something we have known all along, namely that reason does produce warrant. Therefore, we have a *reductio ad absurdum* of the position that reason does not produce warrant. Such a response obviously begs the question. But the extended Maundering Argument amounts to little more than this, if it is really directed against the intellectual skeptic. Wright derives an inconsistency from Step (8), which says that we get no warrant by intellection, and Step (3), which asserts the existence of warrant for a belief formed by intellection.⁸

In light of what has just been said, it seems more appropriate to view Wright as proceeding solely against Cartesian skepticism, on the basis of some independent, unargued assumption that intellectual skepticism is unacceptable.⁹ For then we could take the Maundering Argument as enforcing a choice between intellectual skepticism and the joint truth of Premises(1) and (2). If intellectual skepticism is simply not an option, we are entitled to regard the conjunction of Premise (1) and Premise (2) as false. Then, as we have indicated earlier, Wright could attempt to press this outcome into service against the premises of the Dreaming Argument.

However, Wright faces an enormous pitfall if he moves in this direction. Warrant, in the sense that is at issue here, is supposed to be subject to the four constraints mentioned above: Transmission, Iterativity, Consistency, and Warrant for Logical Truths. The trouble is that there are good grounds for thinking that warranted belief cannot satisfy these admittedly appealing requirements: to assume otherwise leads to a variant of a known epistemic paradox. The derivation of the paradox may be of interest, so we provide it here.

Let G be the statement "I do not have warrant for this statement". By its construction, G is equivalent to $\neg W(G)$. (In fact, G can be formalized and the equivalence proved in any system that includes the extra predicate "W", and enough elementary arithmetic to permit Gödel numbering and the diagonalization function.) Thus, we have:

- | | |
|---|-------------------------|
| (1) $G \leftrightarrow \neg W(G)$ | Diagonal Lemma |
| (2) $W(G) \leftrightarrow W(\neg W(G))$ | Transmission (twice), 1 |

⁷ See here Frankfurt (1965) pp. 154-5.

⁸ See note 5.

⁹ Wright comments at one point: "There isn't a standing sceptical doubt about your reason", although he continues: "—only the self-defeating second paradox which, rather than generating any such doubt, issues in perfectly stable *reductio* of its premises. (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)" (1991, p. 103).

- | | |
|-------------------------|----------------------------|
| (3) $W(G)$ | Assumption |
| (4) $W(\neg W(G))$ | Modus Ponens, 2, 3 |
| (5) $W(W(G))$ | Iterativity, 3 |
| (6) $\neg W(\neg W(G))$ | Consistency, 5 |
| (7) CONTRADICTION | & Introduction, 4, 6 |
| (8) $\neg W(G)$ | Reductio ad absurdum, 3, 7 |
| (9) G | Modus Ponens, 1, 8 |

Since G has been derived as a logical truth (in a broad sense), the Principle of Warrant for Logical Truths applies to it. Hence:

- | | |
|--------------------|----------------------------|
| (10) $W(G)$ | By preceding discussion, 9 |
| (11) $\neg G$ | Modus Tollens, 1, 10 |
| (12) CONTRADICTION | & Introduction, 9, 11 |

In short, Wright's system of epistemic logic is demonstrably inconsistent.¹⁰ The devastating prospect is that we can have no warranted beliefs in the stipulated sense, and intellectual skepticism triumphs! Now, there are various ways to avoid the paradox—hierarchies of types, truth-value gaps, the retreat to sentential operators, etc.—although all of them are controversial. Wright certainly cannot *assume* that the best resolution of the paradox will leave his anti-skeptical animadversions intact.¹¹ As he says elsewhere, in criticism of another reply to skepticism: "It is no response until the appropriate theoretical work is done. The

¹⁰ The idea behind the proof just given is due to Raymond Smullyan. See here Smullyan (1987). At one point, Wright considers a further rule which he calls "Thinning", i.e., $WW(p)$ implies $W(p)$ (pp. 110-11). If we drop the Constituency rule and add Thinning, we can obtain the result that any belief is warranted. See here Thomason (1980) pp. 391-5. The concept of warrant would then become empty, if not inconsistent in a strict sense.

¹¹ The standard resolutions to the paradox alter the logical framework within which the paradox is originally derived. These changes can affect the expressibility of various epistemic concepts or the status of key inference rules. Thus, it may well turn out that the Maundering Argument can't be constructed in the new logical setting that results.

Suppose, for example, that an acceptable response to the paradox is to adopt a type-theoretic account of warrant. The intuitive idea that maundering precludes all types of warrant is inexpressible in type theory, which prohibits talk about all types of warrant. Accordingly, Wright will have to make use of a corresponding, type-theoretic notion of maundering, e.g., one according to which maundering of a certain type precludes the obtaining of warrant of that type. This, in turn, poses difficulties for the formulation of Premise (1) of the Maundering Argument. A straightforward transcription of the original will not do: simply to say that x lacks level 1-warrant for her belief that she's not level 1-maundering leaves open the possibility that x has level 2-warrant for this belief.

Alternatively, suppose Wright sought to avoid the paradox by turning to one of the many logics which allow for truth-value gaps. He would then have to explain why his skeptical opponent couldn't avoid the force of the Maundering Argument by doing the same. That is, if Wright avoids the epistemic paradox by insisting that the sentence G lacks truth value, his skeptical opponent could similarly insist that Premise (1) of the Maundering Argument lacks truth value. Indeed these cases may be quite parallel; the statement that I am maundering now (and so have no warrant for any statements including that one) exhibits something like the undercutting self-reference which characterizes the statement "I do not have warrant for this statement".

It is by no means obvious how Wright would be able to preserve the Maundering Argument and avoid falling into paradox.

sceptic's challenge cannot be met simply by describing a more congenial scenario in which it could not be presented" (1985, p. 442n.).

The threat of paradox points to a more general weakness in Wright's approach. As Wright presents it, the extended Maundering Argument is the derivation of a contradiction from two premises, using four special inference rules; Wright wants to lay the burden of the contradiction on the premises of the argument, in particular. The looming paradox would locate the trouble elsewhere, in the inference rules themselves. But the paradox aside, it is not clear that the onus for inconsistency should go where Wright lays it. Wright's way of distinguishing between premises and inference rules obscures this point. The distinction is, to a certain extent, an arbitrary one. We could, for example, treat the Iterativity rule as a schema yielding all premises of the form $W(p) \rightarrow WW(p)$.¹² At the same time, the assumption of no warrant (i.e., Premise(1)) could be treated as an inference rule like identity introduction: introduce " $\neg W(\neg M)$ " at any point in a deduction. The Maundering Argument would then amount to (at least formally) a *reductio ad absurdum* of a premise set containing the iterativity schema, instead of an argument against the consistency of a set containing the assumption of no-warrant. Wright provides intuitive motivations for the Transmission and Iterativity Principles (1991, pp. 97-98), but it might be conceded that the original assumptions of the argument have considerable plausibility as well. So, when the contradiction is derived, something has to give way, but it is not obvious that the weakest link is one of the Maundering Argument's initial premises. This means, in turn, that the Dreaming Argument's assumptions need not suffer, either.

III

We have raised the possibility that the extended Maundering Argument might tell against one of Wright's four principles of warranted belief. But doesn't the Dreaming Argument require those principles, too? In so far as the extended Maundering Argument shows that the Dreaming Argument rests on some untenable assumption(s), it would succeed in blocking that argument one way or another.

This straightforward result would follow only if the skeptic cannot give up whatever principle or principles about warrant that might be undercut by the Maundering Argument. However, the skeptic may be free to do exactly that, since there are reasonable formulations of the Dreaming Argument which make no use of the Iterativity Principle in particular. These work by contrasting the world's being a certain way and our *erroneously* dreaming it to be that way; if the world is as we think it is, then logically it cannot be the case that the world is really otherwise and only dreamt to be as we think. (In this respect, the possibility that one

¹²Wright notes, in passing, the possibility of treating Iterativity as a premise (1991, p. 99).

is erroneously dreaming is just like the possibility that one is a “brain in a vat” in some alien world.) Thus, we have as a logical truth ($p \rightarrow \neg D^*(p)$), where “ p ” now stands for the contents of any of x ’s ordinary beliefs about the external world and “ $D^*(p)$ ” abbreviates “ x dreams falsely that p ”. For example, if x is John Major, and p is Major’s belief that Berlioz was French, “ $p \rightarrow \neg D^*(p)$ ” is true. For, if in reality there was a Frenchman Berlioz, then Major doesn’t falsely dream that there was.

The alternative skeptical argument would then run:

- (1) $\neg W(\neg D^*(p))$ Assumption
- (2) $(p \rightarrow \neg D^*(p))$ Broadly Logical Truth
- (3) $W(p \rightarrow \neg D^*(p))$ Warrant for Logical Truths, 2
- (4) $W(p) \rightarrow W(\neg D^*(p))$ Transmission, Conditional Proof, 3
- (5) $\neg W(p)$ Modus Tollens, 1, 4

This alternative line of thought has been discussed in the literature (see, for example, Dretske, 1970). Since it involves weaker assumptions than the Maundering Argument, the collapse of the latter need not affect it in any way. So, the considerations Wright adduces do not demonstrate the untenability of at least one compelling version of the Dreaming Argument.¹³ To that extent, the problem of Cartesian skepticism remains unsolved.

To sum up: We have maintained here that Wright fails to refute either the case for intellectual skepticism or the case for skepticism about the external world. We are not prepared to say that the path Wright follows is hopelessly blocked; perhaps skepticism about intellection and skepticism about perception can be linked, to the latter’s detriment. But as matters now stand, Wright has provided us no rest from the skeptical doubts that bedevil us.¹⁴

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¹³ Cf. Wright’s characterisation of his version of the Dreaming Argument: “But there are no essentially simpler ways of doing the job; our analysis does not open the paradox to “resolutions” which a more skillful formulation could obviate” (1991, p. 101). In his earlier work, Wright takes notice of skeptical arguments somewhat like the alternative just presented (Wright, 1985, pp. 434-8). He doesn’t discuss them in detail, but he seems to reject the entailment asserted in Premie (2) on the grounds that propositions of the form $\neg D^*(p)$ are non-factive. In the more recent essay we are addressing, Wright suggests that he still endorses this response. Yet, he also seems to withdraw the claim that a proposition like “John Major is not falsely dreaming that Berlioz was French” would be non-factive (1991, p. 87n.). Therefore, so far as we can see, Wright has not answered the threat posed by the alternative version of the Dreaming Argument.

¹⁴ We are grateful to the members of the Smith College Philosophy Department and to the anonymous reader(s) for *Mind*, whose comments enabled us to improve this essay.

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