

Transmission Failure Failure

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Abstract: I set out the standard view about alleged examples of failure of transmission of warrant, respond to two cases for the view, and argue that the view is false. The first argument for the view neglects the distinction between believing a proposition on the basis of a justification, and merely having a justification to believe a proposition. The second argument for the view neglects the position that one's justification for believing a conclusion can be one's premise for the conclusion, rather than simply one's justification for the premise. Finally, the view is false since it is inconsistent with the closure of knowledge as closure is properly understood.

Introduction

Is there something illegitimate about the following pieces of reasoning?

Zebra

The Zebra Premise: The animal is a zebra.

So,

The Zebra Conclusion: The animal isn't a cleverly disguised mule.

[where the Zebra warrant for believing the Zebra premise is that one has a visual experience as of an animal which looks like a zebra standing in a pen . . .]

Soccer

The Soccer Premise: A soccer goal was just scored.

So,

The Soccer Conclusion: A soccer game is in progress, rather than a simulation of a soccer game.

[where the Soccer warrant for the Soccer premise is that the ball was kicked between the two white posts, the crowd went wild, the "referee" signaled that a goal was scored . . .]

Election

The Election Premise: Jones has just voted for Amy.

So,

The Election Conclusion: An election is taking place, rather than a mock election.

[where the Election warrant for the Election premise is that Jones has marked Amy's name on a ballot in apparently electoral circumstances . . .]¹

¹ In order to simplify later discussion, I take the arguments to be enthematic.

The standard view of these pieces of reasoning—shared by Crispin Wright, Martin Davies, Michael McKinsey, and others—is that they are not ways of justifying one’s beliefs in their conclusions given the justifications one has for believing their premises.² On this line of thought, one does have a certain warrant or justification for believing the premise, and the premise does entail the conclusion, but one nevertheless does not gain any justification for believing the conclusion by deducing it from the premise.

The basic argument for the standard view can be outlined as follows.³ First, in each case, one has the relevant justification for believing the premise only if one has some *independent* justification for the conclusion. Second, if one has the relevant justification for believing the premise only if one has some independent justification for the conclusion, then one cannot acquire any justification for the conclusion by deducing the conclusion from the premise (when one has the justification in question for the premise). Therefore, it is concluded, the pieces of reasoning do not transmit warrant.

If the standard view is right, then subjects presumably cannot know that skeptical hypotheses are false through inferences from their mundane knowledge. However, if the standard view is wrong, then presumably subjects *can* know that skeptical hypotheses are false through inferences from their mundane knowledge. Thus what is at stake is not just the legitimacy of the Zebra/Soccer/Election inferences, but the legitimacy of certain Moorean responses to skepticism as well. These responses try to explain how we can know that skeptical hypotheses are false through inferences from our ordinary knowledge, rather than simply assert that we can know that the hypotheses are false.

My goal is to show that the standard view is both unmotivated and false. On my view, we have reason to believe that the Zebra/Soccer/Election inferences succeed in transmitting warrant, and we have yet to be given a good reason to believe they don’t.

I will first show that the two central arguments for the view fail.⁴ The standard argument for the view fails to respect the distinction between merely having a

² See Wright (1985, 2000, 2002, 2003, 2004); Davies (1998, 2000, 2003); McKinsey (2003). Davies revises his views in his (2004), which I discuss elsewhere.

³ See Wright (1985), pp. 436-437, (2000) pp. 141-143, 153-156, (2002), pp. 334-337, 342-345, (2003), pp. 59-63; Davies (2003), p. 29-30; McKinsey (2003), p. 101.

⁴ Davies (1998, 2000, 2003) also argues for the standard view by appealing to considerations about the resolution of doubt. In criticism of these arguments, I have little to add to Beebe (2001), pp. 357-360 and

justification to believe some proposition, and actually believing the proposition on the basis of the justification. Once we attend to this distinction, we may see that a key premise of the argument is unwarranted and unattractive. Moreover, there is no reading of “independent warrant” on which both premises of the argument are plausible.

The second argument for the standard view focuses on whether one’s justifications for believing the premises are justifications for one to believe the conclusions.⁵ The starting point of this argument is that the Zebra warrant is simply not a warrant for the Zebra conclusion, even though it is a warrant for the Zebra premise. The next step and key assumption of the argument is that, if the Zebra warrant is not a warrant for the Zebra conclusion, yet is one’s warrant for the Zebra premise, then one cannot acquire justification for the Zebra conclusion by inferring it from the Zebra premise (when one has the warrant in question for the premise). I will show that this assumption is unmotivated and implausible.

In the final part of the paper, I argue that the standard view is false. I will start by explaining what it is for closure to hold for knowledge, and I will then show that the standard view is inconsistent with closure as closure is properly understood. Since we have good reason to believe that closure holds, and little or no reason to believe the standard view, we have reason to reject the standard view.

Before we proceed any further, some clarifications are due. First, I use the terms “warrant” and “justification” interchangeably, without holding that warranted true belief is knowledge.⁶ I also use the terms in a broad sense, so that they include the sort of epistemic property others call “entitlement”. Second, when I say that someone’s warrant *for believing* that p is that w, or that someone has a certain justification *for holding* the belief that p, I mean that the person believes that p, and that the person believes that p on

Pryor (2004), pp. 21-29. For convincing objections to the limitation principles of Davies (2000) and (2003), see also McLaughlin (2003), pp. 84-85.

One might think that what I treat as arguments for the standard view are instead diagnostic templates for transmission failure, intended to explain why certain inferences fail to transmit warrant, rather than to argue for the claim that the inferences fail to transmit warrant. The exegetical issue is not of great importance. If the arguments I discuss have premises which are unmotivated or false, the corresponding explanations essentially involve claims which are unmotivated or false. Also, the standard theorist cannot take it for granted that the Zebra/Soccer/Election inferences fail to transmit warrant, and the templates they use provide the best available arguments for their view.

⁵ See Dretske (1970), pp. 1015-1016; Davies (2000), pp. 399-400, Davies (2003), pp. 42, 51; Wright (1985), pp. 437-438, Wright (2000), p. 154, Wright (2002), p. 342, Wright (2003), pp. 60-61.

the basis of the relevant justification. When I mean that someone has a certain justification or warrant, although the person may not believe any proposition on the basis of the warrant, I will say that the person has the justification *to believe* some proposition.⁷ But note that my comments are to be taken as stipulations about how I will use the relevant terms, not as descriptions of English. Third, I will usually ignore possible controversies about what one's warrants for believing the Zebra/Soccer/Election premises exactly are, and will instead usually take it for granted that one's warrant for believing the Zebra premise is indeed the Zebra warrant, and so on. Finally, I also will ignore questions about how various forms of incompetence in reasoning might undermine the transmission of warrant through reasoning, and instead consider only inferences which are competent inferences.

1. Transmission

To reach a clear assessment of the standard view, we must first state and explain what it is for a piece of reasoning to transmit warrant. Here is the formulation I will use:

(Transmission): The inference of a conclusion C from the premises P1 . . . Pn of an argument transmits warrant for S just in case S has some warrant for believing P1 . . . Pn and S can acquire a warrant for believing C by means of competently reasoning from P1 . . . Pn to C (when S has the warrant in question for believing P1 through Pn).

The general idea behind this definition is that, when an inference transmits warrant, the reasoning is a way of adding to one's justifications for appropriately holding one's beliefs. When your inference transmits warrant, you have a justification for believing a certain premise or premises, and you can come to believe the conclusion on the basis of some justification thanks to reasoning from the premise(s) to the conclusion. Note, however, that a piece of reasoning may transmit warrant when one has a certain warrant for its premise(s), and that the same reasoning may fail to transmit warrant when one has

⁶ Contrast Plantinga (1993), p. 3.

⁷ For more on this sort of distinction, see Pryor (2001), p. 104 and the references in his n. 16.

another warrant for its premise(s). For example, even if the Zebra reasoning fails to transmit warrant when one has only the Zebra warrant for its premise, it might still transmit warrant when one has a different warrant for the premise.⁸ Note also that our definition is silent about *which* warrant one acquires when an inference transmits warrant. This issue will be crucial when we discuss the second argument for the standard view.

I have defined “transmission of warrant” in terms of acquiring a justification *for believing* a conclusion rather than a justification *to believe* a conclusion. Let me explain why it is crucial to define the expression in such a way. First, when we come to believe a conclusion on the basis of reasoning, one of our main goals is to acquire justification for believing the conclusion. It is not enough for the reasoning to leave us in the position of believing the conclusion, having some justification to believe the conclusion, yet not believing the conclusion on the basis of any justification. Second, it is too demanding to define transmission of warrant in terms of acquisition of warrant to believe. To see this, notice that many cases of transmission of warrant to believe would be *automatic*. For example, if you believe on the basis of some warrant that Moby Dick is a whale (and you know that all whales are mammals), then you have a warrant to believe that Moby Dick is a mammal, regardless of whether you have inferred the conclusion or not. Moreover, you cannot acquire a warrant *to believe* that Moby Dick is a mammal by reasoning from the proposition that Moby Dick is a whale. Rather than provide you with new evidence to believe that Moby Dick is a mammal, the inference would instead allow you to base a belief on evidence you already had to believe the conclusion. The upshot is that, if we define transmission of warrant so as to require the acquisition of warrant to believe, many legitimate pieces of reasoning will then suffer from failure of transmission of warrant. For example, your inference that Moby Dick is a mammal from the proposition that Moby Dick is a whale will fail to transmit warrant. But such a verdict is far too harsh. After all, you can acquire a warrant *for believing* the conclusion through the inference,

⁸ Wright (2000), p. 141, and Wright (2003), p. 58.

A complication: suppose one believes the Zebra premise on the basis of a warrant which does not produce transmission failure in the Zebra reasoning, and one also believes the premise on the basis of the Zebra warrant. It’s not clear whether anybody should say that there is transmission failure in this sort of overdetermined case. I’ll set aside this complication in what follows.

that is, you can come to believe the conclusion on the *basis* of a warrant through the inference. So I hope it is now clear why we should define warrant-transmission in my terms.

It's now a short step for us to say what it is for warrant to fail to transmit:

(Transmission Failure): The inference of a conclusion C from the premises P1 . . . Pn of an argument *fails to transmit* warrant for S just in case S has some warrant for believing P1 . . . Pn and S cannot acquire a warrant for believing C by means of competently reasoning from P1 . . . Pn to C (when S has the warrant in question for believing P1 through Pn).

We may now evaluate the standard view.

2. The First Argument

The first step of the standard argument is a claim about the nature of one's warrants for believing the premises of the Zebra/Soccer/Election arguments. According to the second step, the nature of one's warrants for those premises is sufficient to generate transmission failure in the inferences. It follows that the inferences fail to transmit warrant. We may give the standard argument the following initial statement:

1. One has the warrants in question for believing the Zebra/Soccer/Election premises only if one has independent warrants for the Zebra/Soccer/Election conclusions.
2. For any argument, if one has a certain warrant for believing its premise(s) only if one has independent warrant for its conclusion, then one cannot acquire a warrant for believing the conclusion by inferring the conclusion from the premise(s), at least when one has the warrant in question for the premise(s).

Therefore,

3. One cannot acquire a warrant for believing the Zebra/Soccer/Election conclusions by inferring the conclusions from the Zebra/Soccer/Election premises, at least when one has the warrants in question for the premises.

Pryor (2004) has disputed the standard treatment of Moore's Proof, and has in effect denied that Premise 1 is true of the example. However, there has so far been no dispute

over the standard argument when it is applied to Zebra or Soccer or Election. To see why there should be such dispute, let us consider each premise in turn.⁹

2.1. Explaining Premise 1 and A Dilemma

Since Premise 2 can be shown to be unmotivated, I set aside the question of how one might argue for Premise 1, and will instead discuss how Premise 1 can be understood.¹⁰

Premise 1's demand for "independent warrant" can be fleshed out in at least four different ways. Some of them are demands merely for warrant to believe the Zebra conclusion, some of them are demands for much more. It is worth the trouble to state these different readings, for the plausibility of each premise of the standard argument is highly sensitive to the reading it is given.

The first two readings accept that one's warrant for believing the Zebra premise is simply the Zebra warrant, and instead state *enabling conditions* for the Zebra warrant to be a genuine warrant for one to believe the Zebra premise. On one line of thought, one must have a warrant *to believe* the Zebra conclusion which does not include the Zebra premise. We may think of this as a demand for *premise-independent* warrant. On another line of thought, one must have a warrant *to believe* the Zebra conclusion which does not include the Zebra warrant. We may think of this as a demand for *initial-evidence-independent* warrant. In either case, what is demanded might be *evidence* to believe the Zebra conclusion, or instead, as some might stress, an *entitlement* to believe

⁹ For references to instances of the argument, see n. 3.

¹⁰ For arguments for Premise 1, which I discuss elsewhere, see Wright (2000), pp. 141-143, 154-156, (2002), pp. 342-343, (2003), pp. 62-63. For criticisms of Wright's (2000) argument, which do not affect the (2002/2003) argument, see McLaughlin (2003), pp. 87-88. For discussion of the internalist commitments of Wright's arguments, see Brown (2003), pp. 119-223.

Since the versions of externalism Brown discusses deny even weak versions of closure, it's not clear how much of a problem they pose for Wright. As Brown puts it, "if our warrant for such ordinary claims is independent of whether we have warrant against skeptical hypotheses, then no such concern [of transmission failure] arises (122)", or, "They [the epistemological externalists] need not agree with Wright's claim that she has warrant for the negation of the skeptical hypothesis (123)". On this line of externalist thought, one can have warrant to believe an ordinary proposition, know that it entails the falsehood of some skeptical proposition, yet fail to have any warrant to believe the negation of the skeptical proposition, and so presumably fail to be in a position to know the falsehood of the skeptical proposition. Since it's so implausible to deny such a simple version of closure, Brown's versions of externalism---at least until they are given further defense---present no threatening objection to Wright's argument.

the Zebra conclusion.¹¹ In neither case is it required that one actually believe the Zebra conclusion on the basis of some warrant.

Neither of these proposals yields a plausible version of Premise 2. When the premise(s) of an inference do not themselves include the conclusion, the only somewhat straightforward way the inference might fail to transmit warrant is when one's warrant for the premise(s) includes the conclusion. In this sort of case, one believes that C on the basis of inference from P1 . . . Pn, but one also believes P1 . . . Pn partly on the basis that C.¹² However, according to the first two proposals, one's warrant for believing the Zebra premise does not include the Zebra conclusion, nor even some separate warrant for the Zebra conclusion. As a result, there is no explicit vicious circularity in the Zebra reasoning, nor even any hidden vicious circularity in the inference. So why should an inference fail to transmit warrant when one must have premise-independent or initial-evidence-independent warrant to believe its conclusion? Since the first two demands rule out the only somewhat straightforward source of transmission failure, it is obscure why an inference should fail to transmit warrant when they apply.

The second two readings of "independent warrant" do not state enabling conditions to be satisfied by the Zebra warrant, but instead modify the account of what one's warrant *for believing* the Zebra premise really is. On one line of thought, one's warrant for believing the Zebra premise itself includes some warrant for believing the Zebra conclusion. As a result, one's justification for believing the Zebra premise is not the Zebra warrant by itself, but instead something which includes the Zebra warrant, and which is itself already a warrant to believe the Zebra conclusion. Call this a demand for *weakly conclusion-dependent* warrant. On a still more demanding line of thought, one's warrant for believing the Zebra premise includes the Zebra conclusion itself. Call this a demand for *strongly conclusion-dependent* warrant.

The problem with these proposals is that they yield very implausible versions of Premise 1. There are myriad skeptical hypotheses whose negations are entailed by the Zebra premise, and whose negations may play the same role as the Zebra conclusion. There is the skeptical hypothesis that the animal is a cleverly disguised hyena, that the

¹¹ See, e.g., Davies (2003), pp. 28-29.

animal is a cleverly disguised wildebeest, and so on. It seems far too strong to demand that, for each such hypothesis, one's justification for believing the Zebra premise includes weakly or strongly conclusion-dependent warrant against that hypothesis. After all, that demand will imply that, if you believe that the animal is a zebra partly on the basis that you have a certain visual experience, then you are not justified in believing the Zebra premise unless you also believe it partly *on the basis* of those weakly or strong conclusion-dependent warrants. There is a basing requirement on justification *for believing* which is all too hard to meet on the current readings of Premise 1. These versions have skeptical consequences, since few or no people satisfy the demands proposed.

In sum, the task of fixing a reading of "independent warrant" presents a dilemma for the standard theorist. The weaker the requirement is, the less likely it will be to generate transmission failure, and the harder it will be to defend Premise 2. The stronger the requirement is, the more likely it will be to generate transmission failure, but the harder it will be to defend Premise 1. I will not pursue the problem further here, but we should stress that the standard argument already has a serious difficulty which has not yet been recognized in the literature.

In what follows, I typically will work with the first two demands for warrant *to believe* the Zebra conclusion. After all, they yielded a version of Premise 2 which simply failed to be plausible, whereas the second two demands yielded a version of Premise 1 which was very implausible.

2.2. Defending Premise 2

Let us now turn to the crucial second premise of the main argument for the standard view, now restated in terms of warrant to believe:

2. For any argument, if one has a certain warrant for believing its premise(s) only if one has independent warrant to believe its conclusion, then one cannot acquire a warrant for

¹² And it's even controversial whether these cases are all cases of transmission failure. For some recent discussion, see Cling (2002).

believing the conclusion by inferring the conclusion from the premise(s), at least when one has the warrant in question for the premise(s).

Premise 2 proposes a sufficient condition for transmission failure. According to this claim, if one's warrant for believing a premise requires that one have independent warrant to believe a certain conclusion, then inferring the conclusion from the premise fails to transmit warrant so long as one has the suspect warrant for believing the premise.

To the best of my knowledge, there is no extended argument for Premise 2 in the literature on the transmission of warrant. The claim and its cousins are typically taken for granted. However, I suspect that those who endorse it would defend the premise with something like the following argument. It is certainly not clear how else the premise might be defended.

First, one would propose a necessary condition for a given inference to transmit warrant. The condition is that, if a thinker's inference transmits warrant, then it is also a way for the thinker to acquire a justification *for the first time* for believing the conclusion. In other words, the reasoning must enable the thinker to go from having no justification for believing the conclusion to having a justification for believing the conclusion.¹³ Second, one would insist that the condition is not satisfied by a thinker's reasoning if her warrant for the premise(s) requires that she have independent warrant to believe the conclusion. To see why one might say this, suppose that the thinker's warrant for the Zebra premise does require having independent warrant to believe the Zebra conclusion. As a result, if the thinker has the Zebra warrant for believing that that animal is a zebra, then she automatically has some warrant or another to believe the Zebra conclusion. But then it might seem to follow that, in this kind of case, she cannot acquire a warrant for believing the Zebra conclusion *for the first time* by reasoning from the Zebra premise. In short, if the proposed necessary condition for warrant transmission is correct, but not satisfied in the Zebra case, it follows that the Zebra reasoning fails to transmit warrant.¹⁴

¹³ Of course, in some cases one might already have separate justification for believing the conclusion, and then simply gain further justification for believing the conclusion thanks to one's reasoning.

¹⁴ For echoes of the argument in the literature, see McKinsey (2003), p. 102 or Wright (2000): "... it would seem that I must have an appreciable entitlement to affirm B already, independent of the recognition of its

We may set out the argument for Premise 2 as follows (leaving implicit the qualification that whether an inference transmits warrant depends on the nature of one's warrant for the premises):

4. For any argument, if one's warrant for believing its premise(s) requires that one have independent warrant to believe its conclusion, then one cannot acquire one's first warrant for believing the conclusion as a result of inferring the conclusion from the premise(s).

5. For any argument, if one cannot acquire one's first warrant for believing the conclusion as a result of inferring the conclusion from the premise(s), then inferring the conclusion from the premise(s) fails to transmit warrant.

Therefore,

6. For any argument, if one's warrant for believing its premise(s) requires that one have independent warrant to believe its conclusion, then one cannot acquire a warrant for believing the conclusion by inferring the conclusion from the premise(s).

The case for Premise 2 has several problems.

The first problem is that Premise 4 is unmotivated. To see that the claim is unmotivated, we should return to the distinction between having a justification to believe a proposition, and having a justification for holding a belief in a proposition. On the one hand, the demand for independent warrant is set out as a demand for warrant *to believe* the conclusion. Premise 1's requirement is that one have some independent justification to believe the Zebra conclusion (although one might believe the conclusion on some other basis, or not yet believe the conclusion at all). On the other hand, Premise 4's requirement for transmission success is set out in term of acquiring a justification *for believing* one's conclusion. Here the demand is that one be able to acquire one's first justification for holding a belief in the conclusion thanks to the reasoning. Since it's now clear that these two requirements are set out in very different terms, it's not at all clear why the requirements should conflict. At the very least, Premise 4 is unmotivated as it stands.

Premise 4 is also apparently wrong. The underlying thought is that no inference can provide your first warrant for believing a conclusion when you have warrant (independent or not) to believe the conclusion. But consider any case in which transmission of warrant to believe is automatic. For example, consider the inference that

entailment by A, if I am to claim to be warranted in accepting A in the first place. So the inference from A to

Moby Dick is a mammal from the claim that Moby Dick is a whale. When one knows that all whales are mammals, and one is warranted in believing that Moby Dick is a whale, one has warrant to believe that Moby Dick is a mammal whether or not one has inferred the conclusion from the premise. However, one could still acquire one's first justification *for holding a belief* in the conclusion by inferring into from the premise(s). By performing the reasoning, one would come to base a belief for the first time on some warrant one already had. So the underlying thought of Premise 4 is false.

To obtain a plausible version of Premise 4, one would need to modify it as follows:

4*. For any argument, if one's warrant for believing its premise(s) requires that one have independent warrant *for believing* its conclusion, then one cannot acquire one's first warrant for believing the conclusion as a result of inferring the conclusion from the premise(s).

Plausible as the new version may be, it is formulated in terms of an independent warrant requirement which is too demanding to be useful. One's justification for believing the Zebra premise can be the Zebra warrant even if one fails to believe the Zebra conclusion. Consider someone in a good epistemic setting who happens to lack the concept MULE.

Premise 4 is unattractive as it stands; Premise 4 is ineffective if reformulated so as to be plausible.

Let us now turn to Premise 5. According to this premise, if a piece of reasoning cannot provide one's first justification for believing its conclusion, then the piece of reasoning fails to transmit warrant. The claim is both unmotivated and apparently false. The claim is unmotivated since we have been given no reason to doubt the following alternative claim: even if an inference cannot provide one's *first* justification for believing a conclusion, it might still provide one with *another* justification for believing the conclusion. The alternative is appealing. It's clearly not the case that an inference transmits warrant only if it actually provides one's first warrant for believing its conclusion. So why not say that an inference can provide one's second or third warrant for believing its conclusion even when it cannot provide one's first warrant for believing

B is not at the service of a *rational first conviction* that B (p. 155, emphasis mine)."

the conclusion? No argument for the denial has yet been given. Furthermore, given that Premise 5 is less plausible than its denial, a good argument needs to be given for Premise 5 before we are to accept the claim.

Premise 5 also seems to have a consequence which is false. Consider a highly reflective subject who reasons along the following (unusual) lines:

M1. I have a justification for believing that p which entails that p.
M2. If I have a justification for believing that p which entails that p, then p.
So,
M3. p.

I take it that this inference transmits warrant, even if the subject also has an entailing warrant for believing M1 itself. The thought is roughly that, if you notice that you have a high-quality justification for believing a conclusion, you can thereby add to your total stock of justifications for believing the conclusion, even if you do not thereby greatly increase the degree to which you are justified in believing the conclusion. However, Premise 5 is incompatible with my description of the case. If the subject has an entailing warrant for believing M1, then M1 is correct. If M1 is correct, then the subject has some justification for believing M3. Thus, if the subject has an entailing warrant for M1, then the subject cannot acquire her *first* warrant for believing M3 through the inference. If she has an entailing warrant for M1, she automatically has some warrant for believing M3, whether or not she has performed the inference yet. It follows that, if Premise 5 is correct, the subject cannot acquire a warrant for believing M3 through the inference, at least when she has an entailing warrant for M3. But this consequence of Premise 5 seems wrong. By reflecting on the status of her initial warrant for believing that p, surely the subject can thereby acquire a further warrant for believing that p, even if she cannot thereby acquire her first warrant for believing that p. I take it that Premise 5 is false.¹⁵

In sum, the argument we have considered for Premise 2 is unconvincing and unsound. Although I cannot rule out the possibility that a better argument for the claim

¹⁵ The counterexample to Premise 5 might be a counterexample to Premise 2, but it is not obvious that this is so. To see whether we have a counterexample to Premise 2, we would need to see what the subject's warrant is for believing that [I have a justification for believing that p which entails that p], and whether the subject's warrant for believing this claim is itself governed by a requirement for independent warrant. I set these complicated issues aside.

can be set out, no such argument has been set out so far, nor is it clear what the argument might be.

The upshot is that the standard argument is itself unconvincing. At the very least, it requires much more refinement than it has so far received. However, since it is by no means clear how this work might be carried out, the prospects for the argument are dark.

Let us now turn to another argument for the standard view.

3. The Second Argument

We may get an initial feel for the argument through the following quotes. As Wright (2002) puts it,

... if the animals are zebras, then it follows that they are not mules painstakingly and skillfully disguised as zebras. Does your warrant transmit to that latter claim? There is a strong intuition it does not. Did you examine the animals closely enough to detect such a fraud? Almost certainly not. The grounds you have for (ZEBRA)---essentially, just the looks of the beasts---have no bearing on this possibility (342).

Or as Davies (2003) says of a different example,

My epistemic warrants for the two premises of the modus ponens inference do not add up to an epistemic warrant for the conclusion. Warrant is not transmitted from premises to conclusion (51).

We may set out the new line of argument as follows:

7. The warrants in question for believing the Zebra/Soccer/Election premises are not warrants for one to believe the Zebra/Soccer/Election conclusions.

8. For any argument, if one's warrant for believing its premise(s) is not a warrant for one to believe its conclusion, then one cannot acquire a warrant for believing the conclusion by inferring the conclusion from the premise(s), at least when one has (only) the warrant in question for the premise(s).

Therefore,

9. One cannot acquire a warrant for believing the Zebra/Soccer/Election conclusions by inferring the conclusions from the Zebra/Soccer/Election premises, at least when one has (only) the warrants in question for the premises.¹⁶

¹⁶ For further references to instances of the argument, see n. 5.

3.1. Motivation of the premises

If one's warrant for the Zebra premise is indeed the Zebra warrant, I take that the first premise of the second argument is correct. After all, if the creature in the pen fails to produce a visual experience as of a zebra, it follows that the creature is not a cleverly disguised mule. It would instead be an *ineptly* disguised mule or something else altogether. As a consequence, it seems that the Zebra warrant actually does bear on the possibility that the creature is a cleverly disguised mule---by raising the probability that the Zebra conclusion is false. But then the Zebra warrant is presumably not even evidence for the Zebra conclusion.¹⁷

Notice, though, that the second argument is by no means independent from the first argument for the standard view. In particular, premise 7 is incompatible with at least one version of the first argument. According to premise 7, one's warrant for the Zebra premise is not a warrant for the Zebra conclusion. According to one version of the first argument, however, one's warrant for believing the Zebra premise does not consist merely of the Zebra warrant, but instead already includes a warrant for the Zebra conclusion. If one's warrant for the Zebra premise indeed already includes a warrant for the Zebra conclusion, then premise 7 of the second argument is false. Only someone who takes a relatively modest view of one's warrant for the Zebra premise can endorse the second argument.

Setting such complications aside, I will take it for granted that premise 7 is correct. The question I want to focus on is this: Why should one think that, if the Zebra warrant is one's justification for believing the premise but not a justification for one to believe the conclusion, then the Zebra reasoning fails to transmit warrant? The idea must be that, in the case as it is described, there is only one candidate for the status of being the warrant transmitted by the Zebra reasoning, namely, the Zebra warrant.¹⁸ Since the

¹⁷ For a more thorough example of this sort of reasoning, see Williamson (forthcoming), Hawthorne (2004), pp. 73-77, or White (forthcoming).

¹⁸ To be more explicit, we should perhaps say that the standard warrant for the Zebra premise---together with the fact that the Zebra premise entails the Zebra conclusion---is not a warrant to believe the Zebra conclusion. In what follows, I won't state this sort of qualification.

Zebra warrant is not a warrant for one to believe the Zebra conclusion, and there is presumably no other candidate available to be one's acquired warrant for believing the Zebra conclusion, the Zebra reasoning does not transmit any warrant. That must be the motivation of Premise 8.

3.2. Evaluation of the second argument

The problem with the second argument is that its second premise is unmotivated and implausible. Drawing on work by Peter Klein, I will first state the assumption implicit in the premise, and then explain why one might reasonably reject the premise.¹⁹

Premise 8 assumes that, if an inference transmits warrant, then the inference ensures that one's justification for believing the premise(s) becomes one's justification for believing the conclusion. We might call this assumption the Relay view of reasoning, where the idea is that reasoning is a track where one's belief in a premise simply passes its epistemic credentials to one's belief in a conclusion. We can express the assumption more sharply as follows:

(Relay): Reasoning from premise(s) to a conclusion transmits warrant only if
if one's warrant for believing the premise(s) is that *e*, and one believes the conclusion on the basis of competent inference from the premise(s), then one's warrant for believing the conclusion provided by the inference is *that e*.

Thus, if the Zebra warrant is not a warrant for the Zebra conclusion, yet is one's warrant for believing the Zebra premise, the inference does not transmit that warrant, and does not transmit any warrant at all.²⁰

To consider whether the Relay assumption is correct, we should first note that it makes a substantive claim about what is required for transmission of warrant. If we take the phrase "transmission of warrant" too literally, this point will be obscured. After all,

¹⁹ See Klein (1981), pp. 28-32; (1995), pp. 215-222, (2003), pp. 343-345. For critical discussion, see Brueckner (2000), pp. 139-146, Cohen (1999), pp. 64-65, 74-76, and Cohen (2000a), p. 106.

²⁰ For evidence that the Relay view is often assumed in the literature on the transmission of warrant, see the references in n. 5, and see also Davies (2003), p. 26.

when we speak of transmission of a message from one person to another, we mean that the same message has been transmitted from one person to another. So one might think that, in order to have transmission of warrant from one belief to another, the same warrant must be transmitted from one belief to another. However, when we define the phrase “transmission of warrant”, we should not prejudge issues about how an inference may provide one with a warrant for believing its conclusion, and we should not prejudge issues about which warrant the reasoning secures. We should use a definition which allows us to raise as many reasonable questions as possible. It should now be clear that the Relay assumption is a substantive claim about what is required for transmission of warrant. The claim needs to be defended, and so far it has merely been assumed.²¹

The Relay assumption is also implausible. Consider Mary and Mike, who both know that 243 is divisible by 81 and 3, but hold their beliefs on the basis of different warrants. Now suppose that Mike and Mary come to believe that 243 is not a prime number on the basis of competent deduction from the proposition that 243 is divisible by 81 and 3, and take it for granted that their inference transmits warrant. If the Relay assumption is correct, then neither Mike nor Mary believe that 243 is not a prime number for the reason that 243 is divisible by 81 and 3. Their warrants for believing the conclusion would not be provided by their premise, but instead by their warrants for believing the premise. However, this description of the case is not attractive. They hold their beliefs on the basis of deduction from the very same proposition. It is plausible that, other things being equal, if you believe that p on the basis of competent inference from the known proposition that q, then one of your reasons for believing that p is that q.²² Mike and Mary reasoned from the known proposition that 243 is divisible by 81 and 3, not merely from whatever constitutes their warrants for believing that 243 is divisible by 81 and 3. So it seems that at least one of their warrants for believing that 243 is not a prime number is that 243 is divisible by 81 and 3. Since this description of the example

²¹ Contrast the definition used in Davies (2000):

it can happen that a thinker has justifications or warrants for believing the premises of a valid argument but has no epistemically adequate justification or warrants for believing the conclusion. If that is so, then the justifications or warrants for believing the premises do not themselves add up to a justification or warrant for believing the conclusion. In such a case, we shall say that those justifications or warrants are not *transmitted* from premises to conclusion (393).

Wright also sometimes seems to have a quite demanding definition in mind, as in his (2002), pp. 334-335.

²² See Stampe (1987), p. 337.

is attractive, and the Relay assumption is inconsistent with it, the Relay assumption is implausible.

If the Relay assumption is correct, you might know a certain premise, or indeed even be absolutely certain that the premise is true, yet still not possess the premise as a warrant for a conclusion you have competently deduced from the premise. On this view, if your inference provides you with any warrant for believing the conclusion at all, the warrant provided is the prior warrant for which you believe the premise. Thus, even if you know that *p*, or are absolutely certain that *p*, it is still not the case that your warrant for believing the conclusion is that *p*. If one accepts the contrary claim that knowing the proposition that *p* is sufficient (whether or not also necessary) for possession of the piece of evidence that *p*, one should find the Relay assumption implausible.

In short, even though the first premise of the new argument sounds right---though only on one construal of what one's warrant for the Zebra premise is---the second premise does not. The second argument for the standard view, like the first, requires much more refinement than it has received so far.

The following rival to the standard view remains a live option. On this line of thought, the warrant one acquires for believing the Zebra conclusion is that *the animal is a zebra*, rather than the Zebra warrant. Regardless of whether the Zebra warrant is a warrant to believe the Zebra conclusion, the Zebra reasoning might transmit another warrant, namely the warrant provided by the Zebra premise itself. Although the rival view has yet to be thoroughly developed and defended, it has not yet been shown that the Zebra/Soccer/Election inferences fail to transmit warrant.

The upshot so far is that the standard view has yet to be established.

4. Closure and the Standard View

In this section I will show that the standard theorist must deny that closure holds for knowledge. I will first set out what closure involves as it is properly understood, and

then explain why the standard theorist must reject closure as it is properly understood. The upshot will be that we have good reason to reject the standard view.²³

4.1 Closure

To see how closure should be understood, we may start with defective formulations of closure. Closure principles are often stated in the following way:

(Simple Closure): Necessarily, if one knows that p, and one knows that the proposition that p entails the proposition that q, then one knows that q.

Such formulations are commonly used, although it is conceded that these formulations might need to be qualified for finicky reasons.²⁴ However, such statements are mistaken for serious reasons. First, the formulations ignore that one might satisfy their antecedent, but, due to one's irrationality, not even believe that q. On the plausible assumption that one knows that p only if one believes that p, Simple Closure comes out false. Second, such formulations ignore that one might satisfy their antecedent, but, due to one's irrationality, believe that q for reasons which are so bad that one fails to know that q. Consider a person who knows that he has hands and that the proposition that he has hands entails that he's not a brain in a vat (where the skeptical scenario is suitably spelt out). He satisfies the antecedent of Simple Closure. However, suppose he believes that he is not a brain in a vat on the basis only of the following inference:

All brains in vats feel clammy.
I don't feel clammy.
So,
I'm not a brain in a vat.

Since our subject falls so short of justifiedly believing that he is not a brain in a vat, we should conclude that he does not know the conclusion, even though he satisfies the antecedent of Simple Closure. Simple Closure is false.

²³ For further discussion of transmission and closure, see Hale (2000), pp. 172-184 and McLaughlin (2003), pp. 83-84.

²⁴ See Nozick (1981), pp. 204-206.

We should not go on to conclude that closure does not hold. The examples instead show that closure needs to be formulated with more care.²⁵ In particular, we need to capture the minimal intuition that, when you both know that *p* and believe that *q* on the basis of competent deduction from the proposition that *p*, then you know that *q*, on some basis or another. Here is a formulation which captures this minimal intuition, though the new formulation might well turn out to require further refinement itself:

(Intuitive Closure): Necessarily, if one knows that *p* and one believes that *q* on the basis of competent deduction of the proposition that *q* from the proposition that *p*, then one knows that *q*.²⁶

Notice that, as I have formulated Intuitive Closure, the principle is not the one at work in standard skeptical arguments regarding ordinary beliefs. Typically, when a skeptic singles out some error proposition or another we can plausibly be accused of failing to know, the error proposition will be isolated from our ordinary beliefs. We will certainly fail to believe the error proposition on the basis of competent deduction from *each* of our ordinary beliefs incompatible with it. Through our inferential negligence, we thwart arguments using Intuitive Closure for generalized forms of skepticism. We will typically also fail to believe the error proposition on the basis of competent deduction from *any* of our ordinary beliefs incompatible with it. Through our inferential negligence, we thwart arguments using Intuitive Closure for extremely localized forms of skepticism. Thus, although Intuitive Closure captures an important intuition regarding knowledge and deduction, some other principle is at work in skeptical arguments and related puzzles.

4.2. Closure Failure

It is tempting to think that, if the standard view is true, it need not follow that Intuitive Closure is false. Indeed, one might even think that standard theorists are in a

²⁵ For similar points, see Goldman (1979), p. 9, Vogel (1990), n. 1, DeRose (1999), n. 14, or Warfield (2004). For some good discussion of various objections to closure principles, see Vogel (1990).

²⁶ See Gettier (1963) for a similar formulation with respect to justified belief. For similar formulations with respect to knowledge, see Williamson (2000), p. 117, and Hawthorne (2004), p. 34.

very good position to accept Intuitive Closure. To support this point, one would appeal to the key premise in the standard argument for the view: the subject has the relevant justification for believing the premise only if the subject has independent justification to believe the conclusion. One would stress that, given the further details of the Zebra/Soccer/Election cases, the subject can know the relevant conclusions thanks to the independent justifications the subject has to believe them. So one would conclude that the standard theorists can accept closure. As Wright (2000) expresses the line of thought,

It should be superfluous to remark, finally, that none of the examples, if here treated correctly, presents a counterexample to closure. On the contrary, it is built into the diagnosis of the transmission failure involved that they do not (157).²⁷

However, the standard view is incompatible with Intuitive Closure. We can bring this out by considering the following sort of example: Karen knows the Zebra premise on the basis of the Zebra warrant, and Karen believes the Zebra conclusion *only* on the basis of competent deduction from the Zebra premise. Regardless of the kind of independent warrant the standard theorist might demand, he does not succeed in preserving Intuitive Closure in the example.

First, the standard theorist might suggest that Karen knows the Zebra conclusion thanks to independent *evidence* she possesses to believe the Zebra conclusion. The first argument for the standard view, together with the overall description of the example, indeed does entail that she possesses independent evidence to believe the Zebra conclusion. However, Karen by stipulation does not believe the conclusion on the basis of this independent warrant. She thus does not know the Zebra conclusion on the basis of any independent warrant already in place. In general, when one has a true belief that p, and one possesses evidence to believe that p which is adequate for knowing that p, it does not yet follow that one knows that p. It is also necessary that one believe that p on the basis of the evidence to know that p on the basis of the evidence. Given that Karen does not satisfy this condition, she does not know the Zebra conclusion on the basis of any

²⁷ See also Wright (2000), p. 143, Wright (2002), p. 335, (2003), n. 9. Davies expresses reservations about the compatibility of his (earlier) view with closure in his (1998), p. 326. He states that his (later) view may be compatible with closure in his (2000), p. 394-5. However, in both cases he understands closure as Simple Closure.

independent evidence she might possess to believe it. The appeal to independent evidence does not allow the standard theorist to preserve Intuitive Closure.

Second, the theorist might suggest that Karen knows the Zebra conclusion on the basis of some independent *entitlement* to believe the Zebra conclusion. On this line of thought, it is somehow non-evidentially rational for Karen to believe the conclusion, and she also knows the conclusion thanks to the non-evidential rationality of believing it.²⁸

There are at least three significant problems with the new suggestion. First, it is not clear how it could be non-evidentially rational to believe the Zebra conclusion. The Zebra conclusion obviously entails that there is at least one animal.²⁹ If it is indeed non-evidentially rational to believe the Zebra conclusion, then it is presumably also non-evidentially rational to believe that there is at least one animal. I take it, though, that it is not non-evidentially rational to believe that there is at least one animal. Second, even if the subject does have some non-evidential warrant to believe the Zebra conclusion, it is still not clear that she is also thereby warranted in believing the Zebra conclusion. When one believes that *p*, and has a non-defeated entitlement to believe that *p*, it does not obviously follow that one is justified in believing that *p*. For example, even if it is non-evidentially rational to believe that one is not a brain in a vat, our silly non-clammy subject did not even seem to be justified in believing that he is not a brain in a vat. In order for an entitlement to supply justification for believing a conclusion, the subject arguably must also somehow appreciate the non-evidential rationality of believing that *p*. Since Karen satisfies no such condition with respect to the Zebra conclusion, no standing entitlement seems to supply her with justification for believing the Zebra conclusion.

Finally, even if we accept that Karen is warranted in believing the Zebra conclusion, it is still not clear whether she *knows* the Zebra conclusion on the basis of any standing entitlement. Given that she would not know the Zebra conclusion on the basis of any empirical evidence, nor on the basis of any inference, the situation would be that Karen has *a priori*, non-evidential, and non-inferential knowledge of the Zebra

²⁸ For further details, see Wright (2004) and Davies (2004).

²⁹ As I state it, the Zebra conclusion is that the animal is not a cleverly disguised mule, rather than, it's not the case that the animal is a cleverly disguised mule. However, nothing much hangs on the way I state the Zebra conclusion. Rational or not, it doesn't seem to be non-evidentially rational to believe that [it's not the case that the animal is a cleverly disguised mule].

conclusion. But presumably one cannot have such knowledge that the animal in the pen is not a cleverly disguised mule, no more than one can have *a priori*, non-evidential, non-inferential knowledge that there is at least one animal. Thus, even if there is some sort of *a priori* presumption in favor of the Zebra conclusion, it does not seem that this presumption confers knowledge.³⁰

My quarrel is not with a priori knowledge of contingent propositions about the environment; my quarrel is with knowledge of contingent propositions about the environment which a priori and non-evidential. I take it that the appeal to any entitlement to believe the Zebra conclusion does not save Intuitive Closure.

There is another option to consider: the standard theorist might try to redescribe the basis for Karen's knowledge of the Zebra premise. Perhaps Karen does not know the premise on the basis of the Zebra warrant alone, but instead on the basis of the Zebra warrant together with an independent warrant for the Zebra conclusion. On this line of thought, having competently deduced the Zebra conclusion, Karen knows the Zebra conclusion on the basis of the warrant for it already included in her warrant for believing the Zebra premise.

The new move is a desperate one: even if the proposal preserves Intuitive Closure, it does so at the cost of the standard view. According to the suggestion, Karen succeeds in knowing the Zebra conclusion thanks to the competent deduction she has performed. Rather than failing to transmit warrant, the inference succeeds in transmitting warrant, namely Karen's souped-up warrant for believing the Zebra premise. The new proposal is of no use to the standard theorist.

If Karen does know the Zebra conclusion, she presumably has some basis for knowing it. However, she does not know the Zebra conclusion on the basis of any

³⁰ Some philosophers do suggest that one can know a priori that one is not a brain in a vat. See DeRose (2000), sections 6-8, and Cohen (2000), pp. 104-106. See also DeRose (1995), esp. sections 10-11, and Cohen (1988), esp. section 5. For references to other philosophers apparently committed to the same claim (Gail Stine and David Lewis), see DeRose (2000), n. 27.

I bracket the question of whether any of these philosophers can accept Intuitive Closure. The question is delicate since they may or may not want to say that truly believing that one is not a brain in vat, in the absence of defeating evidence, is sufficient for knowing that one is not a brain in vat.

independent evidence for it, nor on the basis of any standing entitlement for it. Since the standard theorist can identify no other basis for her knowing the Zebra conclusion while holding on to the standard view, the standard theorist is committed to denying that Karen knows the conclusion in our example. Since Karen still does satisfy the antecedent of the closure principle, the standard theorist is committed to denying Intuitive Closure itself.

One might insist that the standard theorist is well-placed to reject Intuitive Closure, given that it is incompatible with his view. This point is available only if the standard view is well-motivated, which it is not. The two main arguments for the view fail. And even if there is some *prima facie* plausibility to the standard view, there is still a stronger presumption in favor of Intuitive Closure. Setting aside irrelevant complications for the formulation of closure, it just sounds wrong to say that someone might both know a premise and believe a conclusion on the basis of competent deduction from the premise, yet still not know the conclusion. The standard theorist is not well-placed to reject Intuitive Closure.

We have more reason to believe Intuitive Closure than to believe the standard view, and no good reason to doubt the closure thesis. The upshot is that we have reason to reject the standard view, given its incompatibility with Intuitive Closure.

Still, one might suggest that Intuitive Closure can be smoothly replaced with the following formulation of closure:

(Almost Closure): Necessarily, if one knows that *p*, and one knows that the proposition that *p* entails the proposition that *q*, then one is in a position to know that *q*.

Indeed, such statements are sometimes used in the literature as formulations of closure. In response, I should stress that statements such as Almost Closure are indeed used in the literature, but typically as *place-holders* for proper formulations of closure. Most writers are well aware of difficulties in getting closure right, and use claims like Almost Closure as a gesture towards what closure might be once it is properly set out. So claims like Almost Closure may be common, but they are by no means canonical.

Even if one can know a priori that one is not a brain in a vat, it would not obviously follow that one can also have a priori knowledge of the Zebra conclusion. For some interesting further discussion of contrasts between

Also, even if Almost Closure were satisfactory on its own, the standard theorist would not clearly be in a position to accept Almost Closure. Consider the inference that one is not a (hand-less) brain in a vat from the premise that one has hands. The standard theorist will no doubt deny that the inference transmits warrant, and deny that the inference secures knowledge. Moreover, given the sweeping nature of the brain in a vat hypothesis, the standard theorist will also apparently be committed to denying that any inference to the same conclusion transmits warrant, or secures knowledge. The standard theorist will thus have to provide some non-inferential, and presumably non-evidential account of how one is in a position to know that one is not a brain in a vat. Until such an account is provided and defended, the standard theorist will not yet be in a position to give a ringing endorsement even to Almost Closure.³¹

As the debate stands, it is not acceptable for the standard theorist to endorse Almost Closure, yet reject Intuitive Closure. Given the plausibility of Intuitive Closure, I think we should accept Intuitive Closure, and reject the standard view.

Conclusion

Let me summarize what I have done. First, I set out the typical argument for the standard view. I showed that its second premise is unmotivated, and I showed that on each reading of “independent warrant”, at least one premise of the argument is not plausible. Second, I set out another argument for the standard view, and showed that this argument is unconvincing as well. Finally, I showed that the standard view is inconsistent with closure as closure is properly understood.

What’s the upshot? At the very least, we need to recognize that the standard treatment of inferences such as Zebra has serious consequences, and that it has yet to be adequately defended. Given the current level of consensus about the cases, this is a

restricted and global skeptical hypotheses, see Cohen (1988), section 5, and (1999), pp. 67-69.

³¹ One option would be to appeal to the sort of view expressed in DeRose (1995) and (2000), cited above. This strategy raises questions about tracking conditions and ascriptions of knowledge, which I don’t have the space to address here. But see Cohen (1999), pp. 72-74 for a challenge to some of the relevant claims by DeRose.

Another option would be to appeal to the sort of view expressed in Cohen (1988) and (2000), cited in n. 30, which I also don’t have the space to address here. But see Cohen (1999), section 11 for an alternative to his (1988) and (2000) views.

significant result. But I think we are entitled to stronger conclusions. Unless we find some reason to reject closure, we should conclude that the Zebra-style inferences are legitimate after all, and that the standard view is wrong. And given that we should reject the standard view, we should also take Moorean responses to skepticism much more seriously than we have so far.

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