

The Justification of Deductive Inference and the Rationality of Believing for a Reason

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Preface

The present PhD thesis is concerned with the question whether good reasoning requires that the subject has some cognitive grip on the relation between premises and conclusion. There are two rough, quite distinct considerations speaking in favor of such a requirement.

The first, which is well-known from discussions of scepticism about induction, is the following: In order to acquire justification by reasoning, I must antecedently justifiably believe that the reasoning I am going to employ is good. For instance, I must justifiably believe that if my premises are true, then it is likely that my conclusion is true. Currently quite few people would adduce such a consideration without much qualification.¹ Quite the contrary, many have identified this claim as the weakest supposition in the argument of the inductive sceptic.²

The second consideration is almost on a different subject-matter. It goes as follows: In order for my belief-formation to be an instance of reasoning, and not merely a causally related sequence of beliefs, the process must be guided by my endorsement of a rule of reasoning. Therefore I must have justified beliefs about the relation between my premises and my conclusion. I think the following passage from Pollock and Cruz [1999, 67] expresses well the current consensus on the latter consideration:

We reason in accordance with rules like *modus ponens*, but to reason in accordance with them and to be guided by them does not require that we be self-reflective about our reasoning to the extent of having beliefs about what rules we use.

And we could add “and without having beliefs about how the premises relate to the conclusion”.

¹Some of the few who endorse some such requirement are Fumerton [1995], Bonjour [1998], Wright [2004a] —but not without qualification.

²For instance Van Cleve [1984], Greco [1999].

Thus, neither of these considerations carries much conviction nowadays. In its negative parts (in particular chapters 2.3, 4.3, 4.4) the present thesis recommends dismissing the first consideration. It defends the claim that one must sometimes have justification for the conclusion of one's inferential argument without having antecedent justification for beliefs about the rule or the relation between premises and conclusion. While it also much qualifies the second consideration, it is in the spirit of this consideration that a positive view of reasoning is developed in chapter 3.

Chapter 2 focuses on the question whether the reasoning subject must justifiably believe that the step from premises to conclusion is truth-preserving. The different questions to which the considerations above pertain are distinguished. In chapter 3 some accounts of reasoning—or better: accounts of believing for inferential reasons—are discussed and one account is put forward. According to this account reasoning does involve a specific kind of dispositional mental state towards the proposition that the premises imply the conclusion. Chapter 4 focuses on the question whether the subject must be in a position to justifiably believe by reflection that her premises provide a good reason for believing the conclusion. By bringing together reflective abilities and deductive justification it relates the issues discussed in the preceding chapters to the issue of (one kind of) epistemological internalism. Chapter 5 further pursues the issue of the tenability of epistemological internalism. In particular it criticizes recently defended views on how to stop the regresses and avoid the circularities developed in chapter 4 by appeal to pragmatic factors. This discussion links the preceding chapters to the issue of epistemic responsibility, the main motivation for epistemic internalism.

I have chosen to focus on the case of deduction, rather than on inference in general. But in many places, in particular when accounts of reasoning are discussed, questions concerning inference in general are addressed. The focus on deduction is intended to simplify the discussion. There are two respects in which the case of deduction poses less problems than other cases of reasoning: First, we have a better grasp of the conditions under which a deduction is justified than of the conditions under which an inference to the best explanation, say, is justified. Or, at least, it is easier for us to state such conditions in a general form.

The second respect in which the focus on deduction eases the discussion is a bit more difficult to expose without starting the argument in the preface. As said, certain objections will be raised against the view that for inferential justification antecedent justification for beliefs about the relation between premises and conclusion is required. But the most important problem for the view does not depend on assumptions about how such antecedently justified

beliefs are justified. In contrast, the classic sceptical paradox about induction depends on the claim that the justification for the belief that if the premises are true, then the conclusion is likely to be true, would have to be inductive. It is from this claim that the sceptic can argue that such a justification would be circular. The reason why a corresponding paradox about deduction has not been discussed as often is that it has seemed plausible that beliefs about the relation between the premises and the conclusion of a deduction are non-inferential. It has often been assumed that we have non-inferential justification for the belief that the premises entail the conclusion. For at least some beliefs on logical subject-matter could well be non-inferentially justified. Thus by simply granting the proponent of the first consideration above that such beliefs can be non-deductively justified, it is easier to focus on the more serious problem.³

It is perhaps best to note here that my discussion, except for chapter 5, will not engage with many different proposed or imaginable accounts of deductive justification. I discuss different requirements of the sort mentioned above, i.e. requirements to the effect that the reasoning subject must have a cognitive grip on the relation between premises and conclusion. And I discuss theories of deductive justification only insofar as endorsement of some such requirement is a characteristic claim of the theory.⁴

I owe many thanks to the people in Fribourg and elsewhere with whom I have discussed related and unrelated philosophical topics. In particular I would like to thank Davor Bodrožić, Fabian Dorsch, Philipp Keller, Martine Nida-Rümelin, Gianfranco Soldati and Juan Suarez. Many thanks to my supervisor Martine Nida-Rümelin, who not only commented on previous versions of the present text but over the years read several drafts on various topics then intended to be the topic of my PhD. I am especially grateful for her invaluable help in the preparation of the thesis-defense.

³I do not discuss the epistemology of logic in this thesis at all.

⁴For instance I discuss the negative points made in Boghossian [2003], but I do not discuss his positive view of deductive justification (by appeal to meaning-constitution).

Chapter 1

Inferential Internalism in the Context of Contemporary Epistemology and the Theory of Normativity

1.1 Summary

Inferential Internalism is, on a rough characterization, the claim that an inferred belief isn't justified, unless the reasoner rationally takes a stand on the question whether her premises provide her with an adequate reason for her conclusion. Concerning the question whether Inferential Internalism should be accepted or not, important considerations pull in different directions. On the one hand, regress- or circularity arguments seem to show that such a requirement on inferential justification is either incoherent or at least impossible to satisfy for human reasoners, so that scepticism about inference ensues. On the other hand, the connection between the notion of justification and that of responsibility renders the claim that the subject need not have a view on her reasons suspect. The aim of the view developed in this thesis is to reconcile these considerations. The aim of this chapter is to situate the discussion that is to follow in the subsequent chapters in the context of current epistemological debates.

The question whether to accept Inferential Internalism raises for the exemplary case of inference a number of fundamental issues in current epistemology. These include at least the following:

- (i) *basic justification*: Are there cases where justification obtains, in spite of the fact that the thinker has no justified view on such questions as whether the belief-formation is reliable, the reasons adequate, and so on?
- (ii) *the nature of norm-guided belief-formation*: What distinguishes norm-guided belief-formation from mere belief-formation? Is it that in the former but not in the latter the thinker's cognitive grasp of the norm plays some psychological role in the belief-formation? And, if yes, what role, and what kind of cognitive grasp? Is the cognitive grasp constituted by explicit or implicit higher-order belief or merely by a stable disposition to form first-order beliefs according to certain patterns?
- (iii) *responsibility and justification*: Is it right that the connection between justification and responsibility supports requirements to the effect that the reasoner must have a justified attitude towards the grounds of her beliefs? Or are there less demanding ways to behave in an epistemically responsible manner?

In this thesis these issues will be discussed as they arise for the specific case of inference and inferential justification. Some specific problems for

Inferential Internalism are developed and discussed, e.g. the regress appealed to in traditional inductive sceptical arguments and the regresses alluded to as versions of the “Lewis-Carroll-Problem”.

1.2 Inferential internalism: the problem

It is very plausible that the question whether someone has justifiably deduced a conclusion from a set of premises is connected to the question whether she believes, justifiably believes, has evidence against or bears some sort of attitude towards the proposition of the form *[premises] entail [conclusion]*. The claim that there is such a connection can be loosely expressed by the following intuitively compelling requirement: If someone justifiably infers a conclusion from a set of premises, then *she must not be indifferent to the question whether the premises entail the conclusion*. But given this loose but intuitive claim is acknowledged, two further questions arise. First, *why* must she not be indifferent to the question whether the premises entail the conclusion? Is this because, if she were indifferent, then she would not have *deductive justification*? Or, is it because, if she were indifferent, she would not be *deducing* at all? Second, *how much* “not indifferent to the question” must she be in order to justifiably deduce, resp. to be deducing at all? Does she need to *justifiably believe* that the premises entail the conclusion, or is it enough that she *believes* it? Or, is it even enough that she *does not have evidence to the contrary*?

Inferential Internalism is the view —about inference in general, not only deduction— that the reasoner must “not be indifferent” to the proposition of the form *[premises] support [conclusion]* in a demanding sense: The reasoner must *justifiably accept* that the premises support the conclusion, in order to justifiably believe the conclusion. This rough characterization leaves still room for many variants of different strength: (i) Variants may differ with respect to the demands put on *justifiably accepting* a proposition. (ii) And they may differ with respect to the interpretation of the connective, i.e. the *in order to*, in the requirement of Inferential Internalism (Is it merely a material conditional, or something stronger, e.g. temporal antecedence?). But the rough characterization excludes for instance that the reasoner need only believe that the premises support the conclusion (without that belief having a positive epistemic status), or that she must merely not have evidence against it.

Inferential Internalism in this sense is a traditional thesis implicitly endorsed by many philosophers (arguably by Hume, Russell and Goodman). It has

been explicitly endorsed in the 1990's by Fumerton [1995], Bonjour [1998] as a reaction to the influence of non-traditional epistemology in the form of externalism. Epistemological externalism takes in general a critical stance towards all requirements on the reasoners ability to assess her grounds. It is the cooperation between the environment and the belief-forming mechanisms itself which bestows a belief with justification, rather than the thinkers own capacity to view her belief in a positive light. Due to the influence of externalism (but also due to a new interest in the sceptical arguments—in some of which, particularly inductive scepticism, it is an important premise—, [cf. Stroud, 1984]) Inferential Internalism lost its status as orthodoxy during the 1980's [e.g. Van Cleve, 1984].

However, many people are uncomfortable with an outright rejection of Inferential Internalism. Critics of externalism think that it generally overlooks the connection between justification and responsibility [Bonjour, 1985, Boghossian, 2001, 2003]. A responsible reasoner, some of them claim, ought to have some view on what constitutes her grounds for believing. In particular, while relying on an inferential belief-formation she ought to accept that her premises support her conclusions. Other critics think that externalism is in general unable to answer satisfyingly the challenge posed by traditional scepticism [Wright, 2007].

However traditional sceptical arguments about induction themselves seem to show that Inferential Internalism (at least for inductive inference) imposes a requirement on justified belief such that no belief can ever be inferentially justified. Externalism paves the way for a conception of justification that does not need such strong requirements. In addition, some newer arguments inspired by Lewis Carroll [1895] point in the same direction [Van Cleve, 1984, Boghossian, 2001, 2003]. If these arguments are sound, then we face an uneasy choice between rejecting Inferential Internalism outright and accepting scepticism about inferential justification. On the assumption that scepticism about inference is unacceptable this dilemma prompts the need to re-evaluate either the arguments against Inferential Internalism or the negative assessment of the externalist's capacity to account for the responsibility-justification connection.

1.3 Inferential internalism: prospects

With a re-evaluation of the arguments against Inferential Internalism goes an assessment of the many different possible variants of it. It may be the case that once the correct kind of acceptance-state and the correct kind

of connection between the thinker's acceptance and the thinker's property of being justified in believing the conclusion have been found (see above), Inferential Internalism does not fall prey to the objections alluded to above [Leite, 2008].

Both sorts of specifications of the requirement of Inferential Internalism, i.e. the kind of acceptance-state involved and the kind of connective used, are connected to a larger question about the *source* of the requirement. In order to justifiably believe something, (i) one must have an adequate reason and (ii) believe for that reason (believe in response to that reason). A belief is not justified simply whenever the thinker has a good reason in its favor, —it is not justified simply whenever the belief-formation is in accordance with an epistemic norm. The belief must be held as a *response to a reason*, the belief-formation must be *guided by a norm*. According to (i) and (ii) the acceptance of the proposition of the form *[premises] support [conclusion]* may enter a requirement on justifiably believing the conclusion in two ways:

On the one hand, there may be a requirement on having adequate reasons. In this case, one claims that the reason provided by the reasoner's justified beliefs in the premises is bound up with the reasoner's justified acceptance of the proposition of the form *[premises] support [conclusion]*.

On the other hand, one may think that the reasoner's belief-forming behavior is a response to a reason, only if she accepts it as her reason, where this implies that she accepts the proposition of the form *[premises] support [conclusion]*.

In the first case, Inferential Internalism follows (perhaps with additional claims) from a thesis about the constitutive facts of having inferential reasons. In the second case, Inferential Internalism follows (with additional claims) from a thesis about how reasons and norms guide belief.

The question of the 'source' of Inferential Internalism in this sense has not yet been fully addressed. Discussion of the nature of inference (normative guidance in the case of inference) and discussion of Inferential Internalism are often held in isolation of each other. But according to some accounts of inference a belief-formation counts as an inference partly in virtue of the reasoner's (actual or potential) attitudes towards propositions of such forms as *[premises] support [conclusion]* [Audi, 1993, Leite, 2004]. According to such a view on normative guidance, it may be the case that the belief in the conclusion isn't justified, unless the reasoner justifiably accepts such a proposition. Hence it may motivate Inferential Internalism. There are contending accounts of inference that do not involve any such acceptance [e.g. Harman, 1964, Wedgwood, 2006]. Even so, discussion concerning both issues, the nature of inference and Inferential Internalism, may profit from being brought

together. This has already been done to some extent in certain discussions of the “Lewis Carroll Problem” [Engel, 2005, 2007, Stroud, 1979].

1.4 Wider issues

Inferential Internalism is a rather specific thesis. But it is tightly linked to a number of fundamental questions in contemporary epistemology:

Basic justification: The requirement imposed by Inferential Internalism is an instance of a more general (real or alleged) requirement: A cognizer must justifiably accept that her grounds for a given belief are adequate, if the belief is to be justified. The dominant view in epistemology is that the general requirement must be rejected. This is the view that there is *basic* justification and knowledge. That is, there are some cases in which a belief is justified, even though the subject has no justified view on the question whether the belief is reliably formed, supported by adequate evidence, and so on. Many philosophers think that basic justification (or “entitlement” as it is sometimes called [Burge, 2003, Dretske, 2000a]) must be part of any sensible epistemological theory. However the view has also been criticized for allowing forms of justification that are intuitively to be excluded [Cohen, 2002]. The question whether to reject Inferential Internalism is the question whether to accept basic *inferential* justification.

The issue of basic justification is, as may already be clear from the above, closely linked to the question of scepticism. Most (but not all) proponents of basic justification think that it’s main motivation is that it is required in order to avoid scepticism [e.g Field, 2000]. Some even think that accepting basic justification provides the solution to the sceptical paradoxes. If basic justification is allowed, then no further problematic justification (for the falsity of sceptical scenarios) is required in order to be justified and the sceptic’s demand to do so can be dismissed. And if basic justification is allowed, then the justification of such further propositions may not be that problematic: the further propositions may be *rule-circularly* justified [Van Cleve, 1984], i.e. justified by a use of the method the adequacy of which is under question without thereby relying on a belief that the method is adequate. “Dogmatist” responses to scepticism [Pryor, 2000] rely on countenancing basic justification. If basic justification is rejected, then some other response to scepticism must be given [e.g. Wright, 2004b]. This is thus one of the wider issues which bears on Inferential Internalism and vice-versa.

The nature of norm-guided belief-formation: As said, one motivation for Inferential Internalism may come from the idea that a belief-formation will not

count as an inference, unless the subject links her premises to her conclusion via an acceptance of the proposition of the form *[premises] entail [conclusion]*. In general, a justified belief must bear a certain specific relation to those states —these may be beliefs, but also perceptions, memories, and so on— that provide the adequate reason for holding that belief. In traditional terminology: the belief must be *based* on these states. Even more generally, everything supported by an adequate reason, whether this is a belief or a practical act, is justified, only insofar as it occurs *because of*, or *in response to* the reason. For the case of belief, one can distinguish two traditional views of the basing-relation, *causal* and *cognitive*. On the one hand, one may think that the right relation is to be specified in causal terms: there is a sort of non-deviant causal chain connecting the beliefs in the premises or the other states with the belief in the conclusion (or the perceptual belief, and so on). On the other hand, one may think that the right relation obtains in virtue of the cognizer's accepting that the one state (or its content) supports the belief. Someone wanting to motivate Inferential Internalism from a view on normative guidance must defend a cognitive view of the basing-relation. Thus, the general issue of the nature of the basing-relation is directly relevant for this line.

A connected general problem about normative guidance is that of reconciling the objectivity of the supporting reason with its motivational impact [e.g. Dancy, 1995]. Is responding to a reason (being guided by a norm) something which is itself outside or inside rational cognitive control? If it is outside such control, for instance partially the effect of non-cognitive pro-attitudes [Gibbard, 1995, Field, 2000], then relativism threatens; if it is under such control by further reasons, then a regress threatens (see below)[Blackburn, 1994, Engel, 2005]. Connected to the issue of normative guidance is the question of the nature of belief and acceptance. If belief is guided by acceptances of propositions about what supports what, how are we to conceive of these states. Are these simply dispositions to connect certain contents or are we to conceive of them in a more substantial way (as Inferential Internalist's must claim in order save the distinctive feature of their view)?

Responsibility and justification: The third wider question —besides basic justification and normative guidance— to which the discussion of Inferential Internalism is directly relevant is one of those involved in the Internalism-Externalism debate. The unspecific motivation for Inferential Internalism is the idea that justification is linked to the notion of responsibility and control. This idea is the driving force behind many recent attacks on externalism. There are a number of attempts to reconcile basically externalist epistemologies with this idea —for the case of justification in general, as well

as for inferential justification in particular. One strategy is to divide justification into *reflective justification* being under the constraints imposed by internalist intuition and *animal justification*, a pure externalist kind of justification [Sosa, 1997, Bonjour and Sosa, 2003]. Another strategy is to appeal to epistemic or intellectual virtues in addition to (or instead of) simple reliability [Greco, 1999, 2002, Sosa, 1985]. The issue of Inferential Internalism is thus an instance of the wider issue of how to account for the (alleged or real) link between responsibility and justification.

1.5 Specific issues

There are the four following main obstacles for a proponent of Inferential Internalism:

Classical Regress: First, the requirement imposed by Inferential Internalism seems prone to the classical regress problem exploited in traditional sceptical arguments. If the inference is only justified, if something else is justified (*inferential internalism*), then, if this something else is inferentially justified, as well as everything that is required by any further inference (*inferentialism about the reflective acceptances*), then the initial inference is only justified, if infinitely many things are justified. There are a number of responses to this regress problem: (i) One might reject *inferentialism about the reflective acceptances* and claim that this acceptances are the result of and justified by non-inferential a priori insight [Bonjour, 1998]; but this is less plausible for induction than for deduction. (ii) One might accept the conclusion and adopt infinitism, the view that (inferential) justification obtains only once a certain infinite number of acceptances is acquired (in the right way) [Klein, 1999]; but this faces the problem to have to account for the fact that there is a psychological dependence, i.e. the basing relation, between an infinity of states.

Justificatory Lewis-Carroll Problem: Second, there is a problem concerning the justificatory import of the acceptance of the proposition of the form *[premises] support [conclusion]* (henceforth “reflective acceptance”). (This is one aspect of the Lewis-Carroll-Problem) How does the (granted to be justified) reflective acceptance bear on the justificatory status of the belief in the conclusion? This must be by way of inferential support, for the propositional content of the reflective acceptance is not identical to the content of the conclusion. But if the support is inferential, then according to inferential internalism a further justified acceptance is required, and again a regress ensues [Boghossian, 2001, 2003]. This problem needs a careful evaluation,

because it probably applies only to some variants of Inferential Internalism. Inferential Internalism need not countenance the claim that the reflective acceptance partially constitutes (or explains) inferential support. But even if it does apply, it has been suggested that the acceptance need not be propositional and hence need not support the inference inferentially [Wright, 2001, Bonjour, 2005].

Psychological Lewis Carroll Problem: Third, there is also a problem concerning the psychological import of the reflective acceptance. (This is another aspect of the Lewis-Carroll-Problem, [Cf. Stroud, 1979]) Even if the reflective acceptance is itself not based on any other belief, one may ask how it partially explains the belief in the conclusion. If it is inferentially, in the way a belief in a premise explains a belief in a conclusion, then a regress looms. For a further reflective acceptance would have to explain this further inferential connection, and so on. A defense of Inferential Internalism must be able to secure for the reflective acceptance a distinctive (not premise-like) psychological role.

Alternative strategies: Fourth, even if none of the aforementioned problems proves to be insurmountable, one may ask whether Inferential Internalism is necessary in order to take the intuitions on responsibility into account. There are proposals to capture such intuitions in other ways. For instance, it has been argued that—even lacking the view on her reasons demanded by Inferential Internalism—a subject is inferring in a responsible manner when behaving in accordance with the inference-pattern is constitutive of the subject's possessing some of the concepts involved in the premises [Boghossian, 2003]. Or, it may be claimed that if the inferential dispositions qualify as epistemic virtues, then it can thereby be said that the reasoner behaves in a responsible manner [Greco, 1999]. Or, one may claim that in some cases it is practically rational (and thereby not irresponsible) to indulge in an inference in the absence of a reflective acceptance [Enoch and Schechter, 2008]. Inferential Internalism must compare favourably with these views.

Chapter 2

Deduction and Awareness of Logical Fact

2.1 Introduction

It is very plausible that the question whether I have justifiably deduced a conclusion from a set of premises is connected to the question whether I believe, justifiably believe, have evidence against or am in some other way related to the proposition of the form *[premises] entail [conclusion]*. The claim that there is such a connection can be loosely expressed by the following intuitively compelling requirement: If I justifiably infer a conclusion from a set of premises, then *I must not be indifferent to the question whether the premises entail the conclusion*. But given this loose but intuitive claim is acknowledged, two further questions arise. First, *why* must not I be indifferent to the question whether the premises entail the conclusion? Is this because, if I were indifferent, then I would not have *deductive justification*? Or, is it because, if I were indifferent, I would not be *deducing* at all? Second, *how much* “not indifferent to the question” must I be in order to justifiably deduce, resp. to be deducing at all? Do I need to *justifiably believe* that the premises entail the conclusion, or is it enough that I *believe* it? Or, is it even enough that I *do not have evidence to the contrary*?

In this chapter I introduce three views on deduction and deductive justification. The three views acknowledge that one must not be indifferent to the question whether the premises entail the conclusion. But they tell competing stories about why and in what sense this is so. Suppose I justifiably deduce a conclusion from a set of premises. On all three views, I can in that case not have available evidence to the effect that my premises do not entail my conclusion. According to the first view, which I will call “minimalism”, this is *all* there is to the intuitive idea that I can not be indifferent to the question whether the premises entail the conclusion. All three views hold that evidence against the proposition of the form *[premises] entail [conclusion]* undermines deductive justification. But according to minimalism nothing further about how I “relate” to the proposition of the form *[premises] entail [conclusion]* is relevant. In particular, according to minimalism I need not justifiably believe this proposition in order to have deductive justification. Nor do I need to bear an attitude towards the proposition in order to be deducing. What I will call “the psychological view” agrees with minimalism that I must not have evidence against the proposition. It also agrees with minimalism that I needn’t bear some attitude towards the proposition *in order to have deductive justification*. But it contends that I need to have such an attitude *in order to be deducing at all*. Only my making the link between the premises and the conclusion ensures that the belief-formation is a deduction. What I will call “Strong inferential internalism”, the third view, agrees

with minimalism that I must not have evidence against the proposition. It also agrees with minimalism that I need not have such an attitude *in order to be deducing at all*. But it contends that I need to bear such an attitude—which in that case must be justified—*in order to have deductive justification*. Strong inferential internalism is the view that the subject’s *justified attitude* (e.g. *belief*) *towards* this proposition is essentially *responsible for the fact that she has deductive justification*. Thus, the three views present contending interpretations of the intuitive requirement that “the subject must not be indifferent to the question whether her premises entail the conclusion”.

Section 2.1 examines some statements in favor and against taking it to be a necessary condition on deductive justification that the subject justifiably believes the proposition of the form *[premises] entail [conclusion]*. In section 2.2 I characterize the three views. In section 2.3 I discuss an argument to the effect that every other view than minimalism is incoherent. In section 2.4 I present an argument in favor of the psychological view.

Consider a subject who looks out of the window, sees that it rains and forms on the basis of the belief that it rains the belief that the roads are wet by going through the following inference (henceforth called “*Wet Roads*”):

- (1) It is raining outside.
 - (2) If it rains outside, the roads are wet.
-
- (3) The roads are wet.

Under normal conditions this is a way of acquiring a justified belief in *The roads are wet*. But what characterizes such “normal conditions”? Henceforth I will refer to the normal conditions, the one in which *Wet Roads* leads to a justified belief in (3), as \mathcal{N} . Some things are pretty much obvious: The subject must have justified beliefs in the premises. It is understood that apart from the perceptual justification for (1), the subject has some justification for (2), very possibly by past experience. It is also understood that the subject does not have strong independent evidence against *The roads are wet*, such as at the same time seeing that the roads are dry. But there may also be features that are much less obvious. In particular, some non-occurrent justified beliefs or other attitudes may be operative in the background of each “normal case”. I am particularly concerned with attitudes towards the following proposition:

- L** (1) and (2) entail (3)

I will henceforth refer to any proposition standing to an inference as this one stands with respect to *Wet Roads* either as “ L ” or as “the linking proposition”. It states that there is a logical relation between the premises and the conclusion.¹ But not only *attitudes* towards L are potentially in the background of the normal case. *Evidence* in itself for or against L might be relevant for characterizing the normal condition \mathcal{N} . For instance, if I have strong evidence that *Wet Roads* exploits an equivocation, for instance in the concept *rain*,² then arguably I am not justified in believing the inferred conclusion. Or, if a very distinguished logician tells me that it is a common mistake to believe L , this may undermine my justification for believing (3). But such evidence is evidence against L . So, a complete specification of \mathcal{N} may include some facts about the subjects situation with respect to the linking proposition; where “the situation with respect to L ” can be read both as “evidential situation with respect to L ” and “the subjects attitudes towards L ”.³

As said, \mathcal{N} is such that the subject has a justified belief in (3) in virtue of going through *Wet Roads*. This can be expressed by saying that in \mathcal{N} the following is true:

- (a) The subject has a good epistemic reason to believe (3).⁴
- (b) The subject believes (3) for this reason.⁵

The distinction between *having a reason to believe* and *believing for a (given) reason* applies in general, not only in \mathcal{N} . For instance, it is possible that I

¹This proposition is, at least at the face of it, not equivalent to the proposition (1) and (2) *epistemically support* (3). The latter proposition is about an epistemic support-relation, not about a logical relation. But I think that some of the things said in this chapter about L apply to the latter proposition too. But there are very important differences between the two [cf. Cohen, 1998], so that they must be properly treated separately. I discuss similar issues with respect to the proposition about epistemic support in chapter 4.

²“equivocation” may be understood as designating the fact that the same linguistic expression in two different premises stands for two different concepts. In this sense the mental process of inferring cannot show “equivocation”. But whenever we fall prey to an “equivocation”, it is also true that our reasoning is defective. It is this defect in reasoning that I call equivocation.

³I discuss the relation between evidence and attitudes in section 2.2.

⁴I sometimes express this fact by saying that the subject “has justification for (3)” or that for the subject “(3) has positive epistemic status”.

⁵I express the fact that the subject believes (3) for her good epistemic reason sometimes by saying that she “justifiably believes (3)” or that she “is justified in believing (3)”. Furthermore, the subject’s believing (3) for her good epistemic reason in \mathcal{N} , involves the fact that I express by saying that the subject “bases her belief in (3) on her beliefs in (1) and (2)”. See below in the text.

have good perceptual reasons for a certain proposition —plausibly partly in virtue of having a perceptual state with a certain content, e.g. that there is a cup of tea on my desk, but I may nevertheless not believe that there is a cup of tea on my desk for this perceptual reasons. I could not believe it at all, because the question didn't occur to me. Or I could believe it for other reasons, perhaps bad ones such as that I had a vision of my guru telling me that there is a cup of tea on my desk. So, if I believe *there is a cup of tea on my desk* for my good epistemic reason, my belief must be appropriately connected to my reason. That is, condition (b) must be fulfilled.⁶ It will be my contention that when addressing the question whether L (resp. evidence or an attitude towards it) is relevant in \mathcal{N} , it is important to distinguish these two aspects, (a) and (b), of \mathcal{N} .

Which aspects of \mathcal{N} are relevant for which of (a) and (b)? Very little can be said without foreclosing the possibility to investigate the relevance of L from a sufficiently neutral starting point. One aspect of (a) is certainly that the subject has justification for the premises and does not have evidence against the conclusion.⁷ But is her *believing* the premises relevant for (a) or only for (b)? One might think that she has a reason for believing the conclusion partially in virtue of justifiably believing the premises. But one might also think that she has a reason for believing the conclusion partially already in virtue of having justification for the premises, even if she does not believe them. So, we cannot simply assume the one or the other (see also immediately below on the question of how to conceive of reasons). As to (b), one aspect of it is that the belief in the conclusion is “connected” to the beliefs in the premises. This connection goes by the name of the “basing relation”. Thus one condition on (b) in \mathcal{N} is that the belief in the conclusion be based (at least)⁸ on the beliefs in the premises. But it is a controversial question, what that connection, i.e. the basing-relation, is. An initially plausible idea is that the belief in the conclusion is causally related in a certain way to the beliefs in the premises. But it is best to remain open to other possibilities, as will become apparent in the course of the chapter.

⁶A similar distinction applies also to practical reasons: I can have a good reason to act, but not act for that reason.

⁷In what follows I generally disregard the fact that evidence, reasons, justification etc. are in *degrees*. I therefore also merely implicitly appeal to the *comparative weight* of evidence etc. So, in fact, there must not be evidence against (3) that is *strong enough in comparison* with the evidence or the reasons in favor of the premises. Furthermore, when I say “evidence” or “reasons”, I generally mean evidence or reasons that aren't outweighed by further evidence or reasons.

⁸As will become apparent later on, some argue that the belief in the conclusion must be based in addition on other beliefs.

I will as far as possible remain neutral on how one should conceive of the subject's reason. Are "reasons to believe" other beliefs? Or propositions in themselves, or even facts? On many views, having a reason to believe has something to do with having evidence. But, again, there are different manners to conceive of evidence. For some a subject's total evidence is constituted by her experiential states, for others by the totality of her beliefs, still for others by what she knows, and so on. Very roughly, evidence for P is something indicating that P is true, where there are different accounts of the sense in which evidence "indicates". I would like to keep these questions in the background. My question therefore is whether whatever in \mathcal{N} is relevant for (b) or (a) involves a propositional attitude or evidence related to L .⁹ \mathcal{N} is a particular context. I ask what the features in the typical example \mathcal{N} are. So, the answer to this question will provide general conditions on (b) and (a).

There is a possible spectrum of views on this question, from minimalism which requires only that there is no evidence against L (I assume that one cannot be "more minimalist" than that)¹⁰, to the exuberant views that I will introduce below. I will briefly cite some philosophers suggesting that minimalism is not enough. Then at the end of this section I will introduce the widely shared suspicion that more than minimalism is incoherent or at least indefensible. In the main part of the chapter I will evaluate the minimalist's argument for her view, precisely the argument that more is incoherent or indefensible. I will suggest that more exuberant views can escape that charge. And I will begin to argue for a view that is slightly more than minimalist.

Here is Richard Fumerton [1995, 85-86] arguing for the view that one is justified in believing in the conclusion, only if one is justified in believing in L , resp. some similar proposition:¹¹

[...] it is *prima facie* plausible to suggest that one's belief in some proposition E can justify one in believing another proposition P only when one's belief that E is itself justified and one has

⁹Besides the question "what are reasons (states, facts, facts of what kind)?" there is the question "In virtue of what are these things (i.e. states, facts) reasons to believe (3)?" What is responsible for their normative import? I will come back to this question in sections 2.2 and 2.3.

¹⁰But on the view that no more than believing $\neg L$, even in the absence of evidence against L (resp. for $\neg L$), is relevant, see later one page 27. I also sketch a "more minimalist than the minimalist"-view near the end of the chapter in section 2.4.

¹¹As said, I use " L " to refer to any proposition of the form *[Premises] entail [Conclusion]*. Not only the one associated with *Wet Roads*. But here Fumerton's example does not even involve a deductive inference. See below in the text.

justification for thinking that E makes probable P . [...] one can make the claim initially plausible simply by looking at the ways in which it seems appropriate to *challenge* someone's claim to have good (epistemic) reasons for believing something. [...] if I am talking to an astrologer who infers from the present alignment of planets that there will be prosperity this year, I am perfectly entitled to challenge the reasonability of the astrologer's thinking that there is a connection between the two states of affairs. If the astrologer shrugs her shoulders and admits it is just a whimsical hunch that Jupiter's alignment with Mars might have something to do with economic prosperity here on earth, I can *for that reason* dismiss the astrologer's claim to have a justified belief about prosperity based on the position of planets relative to one another.

This is not a case of *deductive* inference. But Fumerton [1995, 88] thinks that in deductive reasoning one also has to be justified in believing that E makes probable P . In the deductive case the subject has justification for the proposition that E makes probable P with probability 1, i.e. the proposition *E makes certain P* . And he takes *E makes certain P* to be equivalent to L .¹² In order to avoid introducing too many abbreviations, I will, when discussing Fumerton's example, therefore simply but incorrectly call " L " the proposition *If Jupiter aligns with Mars, then (ceteris paribus)¹³ there will be prosperity this year*.

Fumerton draws a parallel between the premises and L . This parallel suggests, according to him, that just as \mathcal{N} includes justified beliefs in the premises, so does it include a justified belief in L . The parallel is that just as one can challenge the inferred belief by challenging the reason for believing the premises, so one can challenge the inferred belief by "challenging the reason for believing" in L . Perhaps Fumerton's description is tendentious, for it describes the challenge as a challenge for the reason for believing L —thereby implying that there is such a reason. But this is precisely what the minimalist denies. Still, it is a fact that one can challenge the inferred belief by raising doubts about L just as one can challenge the inferred belief by raising doubts about the premises. So, this suggests that the premises and L are on a par with respect to the justification for the inferred belief. It suggests that they play a somewhat similar role.

¹²Furthermore Fumerton does not distinguish between *E makes probable P* and *E supports/justifies P* . In his commentary to Fumerton [1995], Stewart Cohen [1998] objects to taking the latter two propositions to be equivalent.

¹³A very useful clause for astrologists!

There are other considerations suggesting that minimalism is false. For instance, John Greco [1999, 280] says the following:

[...] consider two cases of inferring a mathematical theorem from axioms. In the first case, a student knows that the axioms are true and believes the theorem on the basis of valid deductive reasoning. In the second case, another student also knows the axioms are true, but believes the theorem on the basis of reasoning that is fallacious. Clearly the first student knows that the theorem is true and the second student does not. But why? The overwhelmingly plausible answer is that the first student “sees” the relationship between the axioms and the theorem. In other words, she can see that if the axioms are true, then the theorem must be true as well. The second student has reasoned fallaciously, however. She does not see the relationship between the truth of the axioms and the truth of the theorem, although she might think she sees it.

Greco’s claims translate to claims about being justified, if we take knowledge to imply justification. Greco considers two cases. On the one hand a case in which normal conditions \mathcal{N} obtain (in which the inferred belief is justified), on the other hand one in which \mathcal{N} do not obtain. But in both cases the premises are justified and the entailment relation between premises and conclusion holds, i.e. L is true. The difference, according to Greco, is that the first student is led to infer the theorem by her correct insight (or we might say: a justified belief) into L . The second student however is lacking such an insight into L (even though he may unjustifiably believe L). There seems to be a *cognitive difference* between the two students (over and above the cognitive difference with respect to the theorem). It is not just that they are doing things differently.

Minimalism may have the resources to respond to these two points. With respect to Fumerton’s case with the astrologer, the minimalist will (i) want to quarrel with Fumerton’s description of the case, and (ii) argue that the essential intuition can be captured by her minimal requirement. The minimalist will object to Fumerton’s description on the basis of the two following points. First, Fumerton describes a dialogue. His conclusion is that, I, the astrologer’s interlocutor, can dismiss his claim “There will be prosperity this year”. This means that I have not been convinced by the astrologer. But Fumerton wants to claim that the astrologer is unjustified, because he lacks a reason for the linking-belief. But the minimalist can challenge the assumption that what the astrologer lacks in order to convince me is also what he

lacks in order to be himself justified. So, even if it is true that in order to convince me of his conclusion, the astrologer would better be justified in believing the linking proposition (and convince me with his reasons for it), this is not so easily transferrable to the astrologer's own justification.¹⁴

Second, Fumerton describes the case as one where the astrologer's *belief* in the linking proposition is challenged, thereby implying that the astrologer has to have such a belief. Similarly he says that the astrologer "admits it is just a whimsical hunch that Jupiter's alignment with Mars might have something to do with economic prosperity here on earth". But according to the minimalist the astrologer need not believe the linking proposition and therefore cannot admit that he believes it on a whimsical hunch. The minimalist will insist on describing the case as one where I challenge the reasonability of the astrologer's *inference* —where "challenging the inference" means challenging believing the conclusion on the basis of the premises. Evidence against the linking proposition can, according to the minimalist, *directly* undermine the premises' status as reasons¹⁵ for believing the conclusion. It does not have to do so indirectly via undermining a reason for believing the linking proposition (which in its turn partly constitutes the reason for believing the conclusion). Of course, evidence against L would undermine the reason for believing L , if there were one. But it can also undermine the reason for believing the conclusion directly, or so the minimalist claims. The minimalist's description is not *prima facie* less plausible in this respect than Fumerton's.

The minimalist need not deny that there is something right about what Fumerton says on the astrologer's case. First of all, she will probably agree that the astrologer is unjustified in his belief that there will be prosperity. Of course, according to minimalism too there is a feature of \mathcal{N} that is responsible for the fact the subject there has a reason to believe (3). And perhaps this feature is missing in Fumerton's example. For instance, inferences have certain objective features such as that they are valid or that the involved propositions stand in some other formal relations, e.g. inductive ones. Perhaps a good general candidate for such an objective property is conditional

¹⁴Fumerton anticipates the similar objection that the astrologer must be justified in believing the linking proposition only in order to have second-order justification, i.e. in order to be justified in the belief that he is justified in believing that there will be prosperity. This is a similar objection, since second-order justification is arguably what is required in order to be able to convince an interlocutor. Exuberant views will at least sometimes be motivated by a principle linking first and second-order justification, thereby dismissing the minimalist's objection. I cannot discuss this issue here.

¹⁵By calling the premises "reasons" I violate neutrality towards different conceptions of reasons. The more careful formulation would be this: ... undermine the reason for (3) in \mathcal{N} , without undermining a reason for L allegedly present in \mathcal{N} .

reliability. An inference is justified if it is conditionally reliable in the following sense: the inference reliably results in true belief, when the premises are true.¹⁶ Nothing prevents the minimalist from claiming that this feature is absent in Fumerton's example.

However, the intuition to which Fumerton appeals is that the astrologer is unjustified, because he cannot give a reason for the linking-proposition, *and not because of some other fact, such as that the inference is not of the right form*. But even on this, one might think, the minimalist could agree. She could agree that if the astrologer had a reason to believe in the linking-proposition, then the inference would be of the right form: once the linking proposition is added, the otherwise illegitimate inference gets the right shape. However, by doing this the minimalist would concede Fumerton's whole point. This is merely concealed by the fact that inference in question is not a deduction. But the spirit of minimalism is precisely that inferences can provide (transmit) justification in the absence of linking-propositions, whether the inferences are deductions or not.

Still the minimalist can concede more than only that the astrologer is unjustified. In particular, she can argue that her concession that \mathcal{N} requires the absence of evidence against L , may account for the intuition that it is because of the astrologer's inability to give a reason for the linking proposition that he is unjustified. Indeed she may say that cases such as the astrologer's are, correctly described, precisely the reason why she subscribes to her minimal requirement. The minimalist may agree that the astrologer's belief in the conclusion, i.e. *There will be prosperity this year*, is unjustified. But the minimalist will insist that this is either (a) because the astrologer already in fact has evidence against the linking proposition, i.e. "There is a connection between the alignment of planets and human prosperity", or (b) because in the course of the dialogue such evidence is presented to him. We imagine, she may say, the situation as resembling ours enough for it to be the case that the astrologer has evidence against the linking proposition. He simply disregards it—for whatever bad, perhaps even non-epistemic¹⁷, reason. She can insist that we understand the case implicitly as resembling ours, so that we ascribe to the astrologer, as to any real-life exemplar, evidence against the linking proposition. Or, she can claim that putting the challenge to the astrologer, presents her with evidence against the linking proposition. Perhaps, by challenging his inference in this way, we present him with testimonial evidence against the linking proposition. Or perhaps we push him to consider his own

¹⁶[Cf. Goldman, 1979,]

¹⁷Such as the non-epistemic reason of finding comfort or excitement in the idea that the events of a life mirror events in the (visible) universe.

evidence against L , thereby making it unjustified for him to continue to rely on his inference.

Furthermore, Fumerton draws a parallel between the premises and L . But there are other propositions besides L with which the parallel can be drawn. For instance, the proposition *I am not at the moment too tired to draw inferences* is also such that evidence in favor of it would undermine believing the conclusion on the basis of the premises. Or consider the proposition ‘*if ... then*’ is not ‘*tonk*’-like. If I had evidence that the accepted usage of ‘*if ... then*’ allows deducing anything from anything else, like the defined usage of Prior’s connective ‘*tonk*’ does, then inferences such as *Wet Roads*, making use of ‘*if ... then*’, would be undermined. If Fumerton is to insist that the parallel gives a reason to think that exuberance with respect to L is right, then he must admit that in \mathcal{N} these propositions are also justifiably believed. This in itself does not refute his argument, but it leads to a generalization of exuberance. If propositions such as *I am not at the moment too tired to draw inferences* must be justifiably believed in the normal conditions \mathcal{N} of an inference, then, it is to be expected, similar propositions must be justifiably believed in the normal condition of any other belief-formation. In fact, for any sort of justification that is defeasible, there would be such further propositions that must be justifiably believed. For instance, a perceptual belief can then only be justified if the proposition *My sense organs are at the moment working properly* is justifiably believed. For its role with respect to perceptual belief-formation is arguably exactly the same as that of *I am not at the moment too tired to draw inferences* with respect to inference. The perceptual belief can be challenged by raising doubts about the sense organ’s proper functioning. I think that Fumerton, for one, would not be willing to endorse such a thoroughgoing exuberance. So, seeing that the argument for exuberance with respect to L generalizes to an argument for general exuberance, discredits the former for all those who think that the latter is untenable.

Very briefly, the trouble with thoroughgoing exuberance is that it is very implausible, at least at the face of it, that the further propositions are all *non-defeasibly* justified. And if they are defeasibly justified, then there are further propositions which must be justifiably believed. And they will also be defeasibly justified, hence there are further propositions to be justifiably believed, and so on. There is an imminent danger of a vicious regress. If exuberance could be limited to L , it is plausible that the regress can be avoided. If the justification for L were deductively inferential, then the danger of a regress would arise. But it is plausible that a belief in L can be *non-inferentially* justified by logical intuition. Hence, there is no further L -

proposition to be justifiably believed. Unfortunately I cannot go into more detail here.

I have much less ideas about how a minimalist could respond to Greco's point. However Greco's passage does not provide a worked out argument against minimalism, it merely suggests that it is false. Perhaps the minimalist can provide a full description of the difference between the two cases. Or perhaps, she could argue that something that is plausible for the case of a deduction in the sense of a manipulation of schemata does not apply to deduction in general. She could hold that if I deduce schemata or mathematical propositions, it is true that I have to know the entailment relations in order to be justified. But in the case of a simple modus ponens such as *Wet Roads* that is not required.

But minimalists generally think that they do not need to go into arguments about their opponents positive points. For they think that exuberant views are fatally flawed. The following passage by Paul Boghossian [2001] gives an idea of the problem they raise against exuberant views:

[...] at some point it must be possible to use a rule in reasoning in order to arrive at a *justified* conclusion, without this use needing to be supported by some knowledge about the rule that one is relying on. It must be possible simply to *move* between thoughts in a way that generates justified belief, without this movement being grounded in the thinker's justified belief about the rule used in the reasoning.

Preceding this passage Boghossian actually gives an argument in order to support what is here claimed. He thus does not simply attempt to elicit an intuition. Nevertheless I think one can intuitively grasp the worry concerning exuberant views from the passage. The worry can be expressed simply thus: What is the subject to do with her insight into *L*? It can not be that for every inference, one must use one's knowledge of *L* *inferentially*. For if one uses one's knowledge of *L* inferentially, one uses *L* as a premise in an inference. But then one must use further knowledge for this inference, just as the knowledge of *L* is needed with respect to *Wet Roads*. And so on ad infinitum. So, *at some point*, as Boghossian says, one must stop using further knowledge and just draw the inference. This is all very loose and rushed, but there is at least an initial suspicion that there is some such fatal problem for exuberance.

Before going to discuss this worry in more detail in section 2.3, I want to discuss in more detail in section 2.2 the difference between minimalism and non-minimalistic or exuberant views.

2.2 Minimalism, strong inferential internalism and the psychological view

The point about challenge from the citation of Fumerton on page 16 supports according to the minimalist's viewpoint a minimal requirement on \mathcal{N} : The subject must not have evidence against L . According to minimalism the subject is "situated with respect to L " in the sense of not having evidence against L . According to exuberant or non-minimalistic views, the "subject's situation with respect to L " involves more than that, for instance that she justifiably believes L . In this section I want to further characterize minimalism and its contenders. The simple opposition between "merely no evidence against L " and "more than that" is in need of clarification. I will therefore in this section further characterize minimalism and non-minimalism. And I will characterize two initially plausible non-minimalistic competitors, strong inferential internalism and the psychological view.

Attitudes, evidence and epistemic status

As introduced so far, minimalism subscribes to the following requirement on \mathcal{N} having to do with L , *and on no other*:

(E) In \mathcal{N} the subject must not have evidence against L .

But even to the eyes of someone sympathetic to the spirit of minimalism (E) might be too restrictive. It might be argued that slightly more must be excluded than only evidence against L . It seems that less than evidence against L is already enough to undermine (3)'s epistemic status¹⁸ in \mathcal{N} . Consider a situation \mathcal{C} resembling \mathcal{N} in all respects except that the subject believes $\neg L$. But she does not have evidence either for or against L . It seems that in \mathcal{C} the subject's deductive reason for (3) is undermined. If I believe that (3) does not follow from (1) and (2), is not something wrong when at the same time I go through the inference *Wet Roads* and thereby come to believe (3)? And this, whether or not my belief that (3) does not follow from (1) and (2) is supported by evidence?¹⁹ So, the intuition about \mathcal{C} seems to support the following requirement in addition to (E):

¹⁸The epistemic status of a proposition is determined by the subject's epistemic reason in favor or against believing that proposition. I use the three expressions "the reason to believe P", "P's positive epistemic status" and "the justification for P" equivalently.

¹⁹Evidence against L is evidence in favor of $\neg L$.

(D) In \mathcal{N} the subject must not disbelieve L .²⁰

Both (E) and (D) are in the spirit of minimalism. Neither of them requires an attitude or evidence towards, resp. in favor of, L . So it is to be expected that these two requirements are derived from one simple requirement. I suggest that it is the following:

(R) The subject must not have a reason to disbelieve L .

Minimalism is the view that L plays only the following role in \mathcal{N} . A reason to disbelieve L directly undermines (i.e. without undermining or defeating an otherwise present reason for believing L) the subject's reason to believe (3) that she otherwise would have in \mathcal{N} —in virtue of some features of \mathcal{N} , on the exact nature of which I want to remain neutral in this chapter. According to minimalism the deductive justification for (3) in \mathcal{N} is defeasible. If the subject has certain additional reasons, then her reason to believe (3) is defeated. Among these possible reasons one finds for instance reasons (that are sufficiently strong) to disbelieve (3) or reasons to disbelieve any of the premises. But also, reasons to disbelieve L .

But having thus characterized minimalism as the endorsement of (R) and no other requirement on \mathcal{N} relating to L , I should come back on the steps from (E) and (D) to (R). On what assumptions do the intuitions supporting (E) and (D) support (R)? I have claimed to want to remain neutral on the correct conception of reasons and evidence. And I also want to remain neutral towards views on epistemic reasons such as evidentialism and pragmatism or coherentism and foundationalism. But do the steps from (E) and (D) to (R) really permit such neutrality?

In fact the step from (D) to (R) clearly is not very neutral, for it assumes a quite unorthodox view on the relation between evidence, belief and reasons to believe. Someone who derives (R) from (D) must claim that disbelieving L in the absence of evidence for or against L is *prima facie* justified. Therefore, the subject in \mathcal{C} —where she disbelieves L on no evidence, and hence violates (D)—violates (R). This step forces the minimalist to take a certain general view on justification. This is the view that belief is *prima facie* justified. Whatever belief-state I happen to find myself in, if there is nothing (no evidence) indicating that it is false or unjustified, it is justified. That is, it is *prima facie* justified. I will give this view the label “affirmativism”.²¹ Of

²⁰I take believing $\neg L$ to be equivalent to *disbelieving* L .

²¹This view is endorsed by Harman [1984, 1986, 2003]. Some remarks in Burge [1993] also suggest this view. In Pollock and Cruz [1999] this view is called “negative coherence

course, a minimalist could avoid commitment to affirmativism by rejecting the intuition about \mathcal{C} and thus by rejecting (D). This seems at first not an impossible way to go, since the intuitions are perhaps clearer about violations of (E) than about violations of (D). I will come back to affirmativism and the intuition about context \mathcal{C} in section 2.4.

But the step from (E) to (R) has to be taken. Of course, a non-minimalist will also accept (E), but she will draw a different conclusion from it.

If in a situation otherwise like \mathcal{N} the subject had evidence against L , two consequences would follow. First, the subject would lose her reason to believe L , if she had any. Second, the subject would have a reason to disbelieve L . Accordingly there are two candidate requirements from which (E) could be derived, namely either of the two following:

(R*) The subject must have a reason to believe L .

(R) The subject must not have a reason to disbelieve L .

These two requirements are of course not equivalent. A subject can fail to have justification for L , even though the subject does not have justification to believe $\neg L$. It is possible that both L and $\neg L$ are unjustified.

The first, (R*), is an anti-minimalistic requirement. This is the conclusion the non-minimalist would draw from (E). A minimalist will precisely reject the claim that justification for L is required. It is true that evidence against L would undermine such a justification, but this cannot be the minimalist's concern. So the minimalist will claim that the no-evidence requirement derives from (R). It is because evidence against L would provide a reason to disbelieve L that such evidence must not obtain in \mathcal{N} .

The derivation of (E) from (R) is unproblematic. For on plausible any view on epistemic justification (which appeals to the notion of evidence) evidence partially determines justification. In particular, on any view, sufficient evidence against L will provide justification for disbelieving L . It is true that reliabilism is a view of justification that usually does not appeal to the notion of evidence at all, but then, of course, (R) will anyway be the relevant requirement on \mathcal{N} . As to other views on justification, they all agree that evidence partially determines justification. For instance, people who think that justification is partially determined by pragmatic factors, will agree that evidence is still *partially* responsible for justificatory status. And other views, such as

theory" (although in that case it supposes that all evidence is provided by belief, something which affirmativism need not endorse).

doxastic theories of justification and the view I have called “affirmativism” will simply conceive of evidence in a certain way.

According to some people, non-evidential features of \mathcal{N} are relevant for the justificatory status of eventual attitudes with respect to L (and for justificatory status in general). For instance, it is claimed that practical constraints on the subject’s available time for gathering evidence on the subject matter (here L) determines how much and whether evidence is required for justification. On such a view justificatory status is determined by evidence and the practical constraints together. Opposing this view are evidentialists, i.e. those who hold that justification is solely determined by evidence. But the step from (R) to the no-evidence requirement (E) merely presupposes that evidence partially determines justification. It does not presuppose evidentialism. Someone thinking that pragmatic factors are relevant for justification need not deny that the presence of evidence against L makes it the case, together with the relevant pragmatic factors, that the subject has justification for disbelieving L . Such a person would certainly hold that *insofar as evidence against L violates a requirement on \mathcal{N}* , it does so because the evidence in question is relevant, due in part to pragmatic factors, to L ’s epistemic status. So, such a person would not hold that the no-evidence requirement holds independently of (R). The view that pragmatic factors are relevant does not question the derivation of the no-evidence requirement from (R).

On some views justification is determined solely by a subject’s propositional attitudes. In particular, coherentists would hold that the epistemic status of an eventual belief in L solely depends on the subject’s other propositional attitudes (with respect to any “related” proposition, where the coherentist proposes criteria for “relatedness”). Does this not undermine the claim that evidence partially determines epistemic status? No, one must simply understand “evidence” in a way in which it is relevant to epistemic status according to coherentism. A coherentist would hold that the evidence with respect to L is determined or constituted by the subject’s other attitudes. So, this view could be accommodated by identifying these other attitudes with the evidence for or against L .

Finally, there are those who think that a belief in $\neg L$ or in L is *prima facie* justified. I have in mind those views according to which a belief is *prima-facie* justified by the fact that the proposition thereby appears to the subject in an “affirmative mode”. As long as there is no undermining evidence (understood in whatever way, e.g. other beliefs, experiences etc.) a proposition that appears in an “affirmative mode” before the mind is justified. On such a view —I have called it “affirmativism”— a belief has an intrinsic positive epistemic status that can only be undermined by evidence, but does not

need to be supported by evidence. But wouldn't a proponent of affirmativism reject the claim that the epistemic status with respect to L is determined by the evidential dimension? For according to affirmativism the attitude in a certain sense endows itself with a positive epistemic status. However, it is possible to integrate this view too. According to affirmativism, the evidence is relevant for justificatory status too. Simply, a belief in a proposition is evaluated positively when there is no evidence against it, but none in favor of it either.

Affirmativism does then not challenge the idea that evidence determines epistemic status. As said, a minimalist proponent of this view will have only one requirement on epistemic status, (R). According to him (D) is not an independent further requirement on \mathcal{N} . According to him, having evidence against L , as well as simply disbelieving L gives a negative justificatory status to L . And both undermine knowledge of (3), resp. undermine the justification for (3) in \mathcal{N} .

It is possible to endorse (R) without endorsing affirmativism. But if one shares the intuition that in circumstance \mathcal{C} the subject is not justified in her inferred belief in (3), then one needs to endorse requirement (D) on independent grounds. But if the minimalist's view on the *total* relevance of L is that a reason to disbelieve L is a defeating reason for the subject's reason to believe (3) in \mathcal{N} , then there does not appear to be any motivation for her to endorse (D) on independent grounds. For such a view has two independent requirements on \mathcal{N} , one on L 's epistemic status, (R), the other on the subject's attitude towards L , (D). Minimalism has no motivation for the second requirement. But non-minimalistic views, as I will explain shortly, can endorse two distinct requirements on \mathcal{N} , one on L 's epistemic status, the other on the attitude towards L . And they may have a motivation for each.

I turn now to the characterization of non-minimalistic or exuberant views. As said exuberant views require "more" than the minimalist. But this can be both "more attitude" and "more evidence", resp. "higher epistemic status". Consider someone who claims that in \mathcal{N} the subject must believe L , but does not need to be justified in her belief in L . Such a person actually endorses a non-minimalistic requirement on the attitude and (probably) the minimalist's requirement on the epistemic status. This view is suggested by Peter Klein [1999, Fn 41].

More typical is perhaps the view that can be ascribed to Fumerton: The subject must have a belief in L and it must be justified, presumably by being supported by evidence. On this view the subject is required to have an attitude and she is required to have enough evidence for the attitude to be

justified. This kind of view endorses a requirement of the following general form:

justified-attitude-requirements: In \mathcal{N} the subject (i) must have attitude A towards L , and (ii) attitude A must be justified, resp. L has positive epistemic status with respect to attitude A.

So far, I have used the locution “proposition P has positive epistemic status” without relativizing to an attitude. In fact, I have explained positive epistemic status in terms of potential *belief*: P has positive epistemic status for subject S , if and only if a potential belief by S (which is rightly based) is justified. But, at least according to some, other attitudes can be positively epistemically evaluated. For instance, one can evaluate whether in a given situation one has the right to “simply assume something”. And an evaluation can be positive for some non-belief attitude, while if the attitude were a belief, it wouldn’t be justified. According to Wright [2004b,a] there is just such a requirement on \mathcal{N} of the justified-attitude-form where the attitude is not a belief and where the constraints on evidence are therefore weaker. His requirement is the following: The subject must have the attitude of rational trust towards L . And according to him trust in L is rational when the subject has no evidence against L and some further non-evidential conditions are fulfilled. According to him one has, in certain circumstances at least, the right to assume (he prefers “trust on”) L to be true on no evidence. So there is potentially a variety of exuberant views according to which attitude they require. Furthermore there are the exuberant views which are not of the justified-attitude form. Such views have independent requirements on epistemic status of L and on the attitude towards L .

The foregoing characterization of non-minimalism is still quite superficial. For it is silent on the motivation of the respective (if more than one) requirements on \mathcal{N} . I will now turn to this question and thereby come to distinguish two very different kinds of non-minimalistic views.

Dependence-relations

Variation among views on the import of L can also come from a different source. They may give different answers to the following question: Why is the epistemic status of L or an attitude towards L relevant in \mathcal{N} ? Why is there any such requirement on \mathcal{N} ?

Minimalism will hold that the epistemic status of L is relevant merely because $\neg L$ is a *defeater* for deductively inferential justification. She says that,

just as arguably any other kind of justification, deductively inferential justification is defeasible or *prima facie*. Something about \mathcal{N} is responsible for the *prima facie* positive epistemic status of (3). But whatever it is, it does not directly involve L 's epistemic status nor an attitude towards L . However, $\neg L$ is a defeater: If $\neg L$ has positive epistemic status for the subject (and hence L negative epistemic status), then (3) loses its *prima facie* positive epistemic status. The truth of a defeater, e.g. $\neg L$, undermines knowledge. All else being equal, if someone infers deductively but in fact her premises do not entail the conclusion, then she does not acquire knowledge in this way. According to minimalism $\neg L$'s being a defeater in \mathcal{N} neither implies that L must have positive epistemic status, nor that the subject must have a positive attitude towards L .

Opposite minimalism, there is the view that it is *in virtue of* a justified belief in L that the premises provide²² reasons for believing the conclusion. According to this view, that the subject is justified in believing L *explains why* she is right to take the inferential step. I will call this view “strong inferential internalism” (although I cannot discuss here how it fits into the different proposed categorizations of epistemological internalism and externalism). This implies that the epistemic status of (3) depends on the positive epistemic status of L . But it implies a special kind of asymmetric dependence that it is worth specifying in some detail.

In order to make the kind of dependence more precise one can consider the following case: Suppose I walk through some wood. I see some small unique object on the ground and form the belief that X , some person I know, is or was in this wood. But what I see is in itself completely unconnected to what I come to believe as a result of what I see. It's only in virtue of the fact that I justifiably believe that this object belongs currently to X that the resulting belief can have a positive epistemic status. Strong inferential internalism holds that just such a role is played by a belief in L in \mathcal{N} . On this view, just as seeing the object in the wood in itself cannot provide a reason for believing that X was in this wood, so the justified beliefs in the premises of *Wet Roads* do not in themselves constitute (or provide) a reason for believing the conclusion. I will call the asymmetric dependence relation between the justification of my belief in X *was in the wood* and my justifica-

²²When I say that “the premises provide or constitute reasons”, I intend still to remain neutral on what exactly the reasons are in \mathcal{N} . As said before, it is uncontroversial that the subject must have reasons for her premises. It is only in this sense that “the premises provide or constitute a reason for (3)”. The strong inferential internalist's claim is that it is in virtue of the reasons for L , that the subject's having reasons for the premises is at all relevant to her having a reason for (3).

tion for the belief in *The object I see belongs to X* the “resting on” relation: My justification for the belief in *X was in the wood* rests on my justification for believing in *The object I see belongs to X*. Similarly, that the positive epistemic status of (3) in \mathcal{N} depends on the positive epistemic status of (1) and (2) in this way is uncontroversial. Strong inferential internalism holds that the justification of (3) in addition rests on the subject’s justification for *L*.²³

In order to further explain the resting-on relation one can contrast it with other dependence-relations between different epistemic status’. The epistemic status of (3) also depends, but in a different way, on the epistemic status of a given defeater. And there is the further, third kind of dependence illustrated by the following example:

Suppose I have (only) weak mnemonic evidence that there are infinitely many prime numbers greater than 100. And I have weak evidence, obtained by hasty calculation, that there are more than four prime numbers greater than 100. Suppose this combination of weak evidence is sufficient to confer positive epistemic status on both of the two following propositions:

- (A) *There are infinitely many prime numbers greater than 100.*
- (B) *There are at least four prime numbers greater than 100.*

²³I take “resting on” from Pryor [2000, 524-526]. He explains it by appeal to the intuitive notion of “begging the question”. If the justification for a proposition A rests on the justification for a proposition B, then the justification for B cannot beg the question whether A. He gives the following example of a case where one begs the question:

If my reasons for believing that the butler committed the murder crucially rest on the assumption that the murderer was left-handed, then I obviously couldn’t appeal to the claim that the butler was left-handed, and that *he committed the murder*. To do so would be question-begging.

(Here it’s rather the imagined *activity of justifying* which is question-begging than a justification one has. The problem for spelling it out in terms of a question-begging justification is purely verbal: it is that a justification one has, either is not question-begging or it is not a justification at all. Therefore one can not say “I would have a question-begging justification”. One could spell it out in terms of the justification for which one believes a certain proposition: If I believed the butler was left-handed for the reason that he committed the crime, I would beg the question. For the justification for which I believe the butler did it rests on the justification for which I believe that he is left-handed.)

Similarly, in my example, I would beg the question if I were to conclude that the object I see belongs to X on the basis of my belief that X was in this wood. Similarly, according to strong inferential internalism, inferring the conclusion (3) as a step towards justifying *L* would beg the question.

But neither individual piece of evidence is sufficient to confer positive epistemic status on one proposition individually.

In that case there is a dependence between the positive epistemic status of the two propositions: For each it is the case that if the other hadn't positive epistemic status, then it wouldn't have positive epistemic status. I call this relation "mutual dependence".

The following three definitions summarize the difference between the three mentioned dependence-relations.

P* is a defeater for my reason for believing *Q if and only if, all else being equal, if I had a (sufficiently good) reason for believing *P*, then I would not have the reason for believing *Q* (that I would otherwise have).²⁴

my reason for believing *Q* rests on my reason for believing *P* if and only if, if I had not the reason for believing *P*, then I would not have my reason for believing *Q*; but not vice versa: It would not be that case that if I had not the reason for believing *Q*, then I would not have my reason for believing *P*.

my reasons for believing *P* and *Q* mutually depend on each other if and only if, if I had not the reason for believing *P*, then I would not have my reason for believing *Q*; and vice versa.²⁵

There are still other relations between justifications. For instance, if the status of two distinct propositions exclusively rests on the status of the same third proposition, then they happen to be justified only if the other is. Consider the following example:

²⁴For the purpose of comparison it is good to keep in mind that if *P* has positive epistemic status, then $\neg P$ has negative epistemic status. Minimalists hold that $\neg L$ is a defeater of the epistemic status of (3) in \mathcal{N} . So the counterfactual relation obtaining between the epistemic status of *L* and that of (3) is the following:

If *L* has negative negative epistemic status, then (3) has not the positive epistemic status (that it would otherwise have).

²⁵The counterfactuals in the text are to be contrasted with the kind of counterfactual used in some (externalist) accounts of knowledge, e.g. Dretske [1970, 1971], Nozick [1981], Sosa [2002]. Here we have a counterfactual dependence between reasons, not between facts and the beliefs about them.

I have good testimonial evidence for (A) from the example above, i.e. *There are infinitely many prime numbers greater than 100*. Arguably²⁶ the two following propositions thereby acquire positive epistemic status for me:

(B) *There are at least four prime numbers greater than 100.*

(C) *There are at least two prime numbers greater than 100.*

So, the positive epistemic status' of (B) and (C) both rest on the justification for (A).

In that case, they are either both justified or unjustified, for their justification rests on the same evidence. Either the evidence does confer positive epistemic status on both (in fact all three) propositions, or, in the case epistemic status is defeated, it confers positive epistemic status on none. One might speak of co-instantiation of epistemic status. I will call this relation the “common support relation” where I take “support” to designate the converse of the resting-on relation. Transposed to the case of *Wet Roads*, someone could claim that the justification for (3) and for *L* stand in the common support relation. But this is, firstly, not very plausible. For what could support *L* and at the same time together with (1) and (2) support (3)? Second, even if there is something like this, the resulting theory would be very close to strong inferential internalism. For it would entail that the justification for (3) rests on some further proposition than the justification for (1) and (2). I will therefore not consider this relation separately in what follows.

So, in principle, views of the relevance of *L* may differ with respect to which of the several mentioned relations between the epistemic status of *L* and that of (3) they claim to obtain: the defeater-relation, the resting-on relation, mutual dependence, or the common support relation. It is important to distinguish these different relations when examining the argument minimalists take to be fatal for the exuberant views in section 2.3. Of the four mentioned relations, minimalists hold that it is the defeater-relation, strong inferential internalism

²⁶The example has the defect that it involves deductively inferential justification. So, it assumes precisely one of the issues addressed in the paper, namely whether evidence for (A) in itself confers justification upon (B) or (C) or whether for each there must be additional evidence for a linking proposition. Such a linking proposition would differ with respect to (B) and (C). In that case the epistemic status of (B) or (C) do not exclusively rest on that for (A), and hence do not exclusively rest on the same justification. The example therefore assumes that strong inferential internalism is false. However, since I am here distinguishing different views (of the dependence between (3) and *L*) which need not be compatible with one another, this does not matter.

holds that it is the resting-on-relation. Coherentists may be tempted by the claim that it is mutual dependence.

As said, strong inferential internalism implies that the epistemic status of (3) rests on the epistemic status of L . This is a claim about a dependence-relation. But the view is characterized by an explanatory claim, namely that the attitude towards L explains why (3) has positive epistemic status. However, it is possible to appeal to the resting-on relation in order to explain the epistemic status. There are different senses of “explaining the epistemic status”. Someone might want to reductively explain epistemic status in general, as when (some) reliabilists claim that justification can be naturalistically explained in terms of reliability. Such an explanation is not the issue here. For if one epistemic status is explained by appeal to another on which it rests, the explanation clearly appeals to the same normative notion. The explanation at issue is less ambitious. It is possible, at least sometimes, by pointing to a resting-on relation to make a given epistemic status less mysterious. In my example of the object in the wood above, it is clear that one does not understand how I could be justified in believing that X was in the wood on the basis of the perception, as long as one does not know that my justification rests on a justification for the proposition that the object I see belongs to X . Strong inferential internalism holds that just in this sense, the justification the subject obtains in \mathcal{N} for (3) is explainable by appeal to the resting-on relation.

But besides the mentioned views of minimalism, strong inferential internalism, and claims that one of the two remaining mentioned dependence-relations obtains, there is another view of the relevance of L in \mathcal{N} . The relations considered so far were all relations among epistemic status'. A possible different view is that in \mathcal{N} there is a dependence relation between the belief in (3) and an attitude towards L . On such a view the attitude towards L partially explains why the subject believes (3). This implies a dependence that can also be expressed in terms of a counterfactual. But this time the relation is between beliefs (or attitudes):

psychological dependence: The subject does not believe $L \square \rightarrow$ the subject does not believe (3).²⁷

Endorsement of the psychological dependence claim, i.e. the claim that in \mathcal{N} the belief in (3) counterfactually depends on the attitude towards L , is one of the characteristic claims of what I call the “psychological view”.

²⁷I abbreviate the counterfactual conditional by the aid of “ $\square \rightarrow$ ”.

A proponent of the psychological view does not merely claim that the belief in L *somehow* explains the belief in (3). For instance, it is no part of the view that the belief in L plays that kind of non-justifying role in the belief formation, as in the usual illustrations of the difference between non-justifying and justifying role of a belief. Here is an example of the common kind illustrating the notion of a belief playing some non-justifying role in a belief-formation:

The detective in the story about the butler's murder above comes to believe that the butler did it in the following way: He hears someone say that butlers are generally left-handed. The detective finds this an obviously absurd claim. However, due to his believing that someone was talking about butlers and left-handedness he comes to wonder whether in the present case one might determine whether the murderer is left-handed. Eventually he thereby comes to justifiably believe that the butler committed the murder. In that case it is true that if the detective didn't have the belief that he heard someone talking about left-handedness, he wouldn't have formed the belief that the butler is the murderer. So, his belief that the butler committed the murder psychologically depends, in the way explained above, on the detective's belief that someone talks about left-handedness.

This is of course not the role the psychological view reserves for the belief in L . The claim is that as a matter of one of the characteristic traits of situation \mathcal{N} the psychological dependence obtains. On page 14 I have characterized \mathcal{N} as a situation in which (a) the subject has a good epistemic reason to believe (3), resp. (3) has positive epistemic status for the subject, and (b) the subject believes (3) for this (good epistemic) reason. The dependence-relations considered so far were only concerned with (a). But L , resp. an attitude towards it, might be exclusively relevant for (b): such an attitude explains why the subject believes (3). The attitude is partially responsible for the fact that in \mathcal{N} the subject believes (3) for *that* reason —and not for another or for no reason at all. Suppose for the sake of simplicity that the attitude is a belief in L . Then proponents of the psychological view hold the following: By believing L the subject links the content of her premise-beliefs with the content of her belief in (3). And it is in virtue of her making that link that she comes to have (or sustains) her belief in (3).²⁸ But her belief in L is not

²⁸There are different interpretations of the claim that “it is in virtue of her making the link that she comes to have (or sustains) her belief in (3)”. According to one interpretation the subject comes to believe (3) in virtue of a reflective inference: an inference taking L ,

relevant for (a). The subject has in \mathcal{N} a good epistemic reason to believe (3) independently of her believing L .

Furthermore, one of the facts relevant for (b) is that the psychological dependence of the belief in (3) on the beliefs in the premises is that characteristic of deduction. The subject in \mathcal{N} believes (3) for her good epistemic reasons (partially) in virtue of *deducing* (3) from the premises. The psychological view holds that the specifically deductive feature of the belief-formation involves the subject's bearing some attitude towards L . So, if the relevant feature of \mathcal{N} is made explicit, the psychological view holds the following:

deduction: If the subject believes (3) for her good deductive reason, then

- (i) she believes L , and
- (ii) she does not believe $L \Box \rightarrow$ she does not believe (3).

In general, the psychological view makes a connection between the explanatory role of the belief in the linking proposition and the fact that the belief formation qualifies as a deductive inference: If a subject comes to believe C as a result of a deductive inference from premises P , then the belief in the linking proposition L partially explains why she believes (3). If a belief formation is a deduction from P to C , then L plays an explanatory role. The psychological view gives an answer to the question "What is a deductive inference?". It does not provide an answer to the question "Why is deductive inference justified, resp. epistemically valuable?".

The psychological view is (part of) an account of one kind of reasoning-process. It is natural to suppose that for the psychological view the epistemic status of the attitude towards L is not relevant. Suppose still that the attitude in question is a belief in L . That the reasoning process is a deduction cannot depend on the question whether the belief is justified or not. Whether the process is a deduction is a purely descriptive, psychological question. The epistemic status of all the involved beliefs is therefore irrelevant. I will later qualify this claim. But for the moment it provides a further feature by which one can distinguish the psychological view from strong inferential internalism.²⁹

(1) and (2) as premises and concluding (3). See below in section 2.3 for the difficulties this interpretation encounters.

²⁹It is plausible that Klein [1999, fn 41] has a psychological view in mind, when he suggests that it is a requirement on inferential justification that the subject believes L , but not that she be justified in this belief (I have mentioned his suggestion on page 27). But he does not (at this place) distinguish between having inferential justification and being justified in inferentially basing the belief in the conclusion, i.e. between (a) and (b), so that it is difficult to tell.

So, there is a broad distinction between three distinct conceptions of the relevance of L in \mathcal{N} . The mere-defeater-conception endorsed by minimalists holds that L is relevant insofar as $\neg L$ is a defeater for the good epistemic reason the subject has in \mathcal{N} . Strong inferential internalism holds that the subject in \mathcal{N} has a good epistemic reason in virtue of having a reason to believe or a reason to bear some other attitude towards L . The psychological view in turn holds that the subject's attitude towards L is responsible for the fact that she believes (3) for her good epistemic reason. Minimalism, resp. the mere-defeater-conception, and strong inferential internalism exclude each other. This is not surprising, since they give different answers to the same question, i.e. "Why does one have deductive justification in \mathcal{N} ?". The mere-defeater-conception and the psychological view are compatible. Again, this is not surprising since the two views give answers to different questions, i.e. on the one hand the question about having justification, on the other the question about deductively basing belief. In fact, it is here understood that a proponent of the psychological view holds that with respect to (a), i.e. the subject's having of a good epistemic reason, the mere-defeater-conception is correct. He claims that the intuitions which seem to support strong inferential internalism, namely intuitions to the effect that L is more involved than merely as the negation of a defeater, in fact support the psychological view instead.

In the remainder of this chapter, I will concentrate on three competing, mutually exclusive views:

- (I) *Minimalism* as endorsement of the mere-defeater-conception and denial of the psychological view. L is only relevant as the negation of a defeater of the reason for believing (3).
- (II) *Strong inferential internalism* as holding that the justification for (3) rests on and is partially explained by the justification for L and that L is not relevant in any further way. In particular it is not relevant for explaining why the subject believes (3) for her good epistemic reason.
- (III) *The psychological view* as endorsement of the mere-defeater-conception and the endorsement of the claim that an attitude towards L is partially responsible for the fact that the subject believes (3) for her good epistemic reason.

In this spectrum of views the psychological view is moderate in the sense that it endorses the positive claim with respect to L of minimalism, i.e. the mere-defeater-conception, but attributes a further role to L without going as

far as to give L (resp. its epistemic status) the credit for the subject's having a good deductive reason.

Without doubt, strong inferential internalism faces fierce opposition. Many people subscribe to the view loosely characterized by the following thesis: In order to be justified in inferring (deductively or non-deductively), it is not required to be justified in believing that the inference-rule is sound, justification-conferring, probability-conferring or has any similar property. Examples include Van Cleve [1984, 558], Klein [1999], Railton [2000], Boghossian [2001, 2003, 2006], Bergmann [2004] and there are many others.³⁰ As I have said in note 1, there are important differences between the propositions L and for instance the proposition *the inference is justification-conferring*. But it is safe to say that these authors would, and some explicitly do, also deny that in order to obtain deductive inferential justification, one is required to justifiably believe L . In that case they deny strong inferential internalism. They do not deny the psychological view, if that view does not entail that the belief in L must be justified —as I have suggested above. Supporters of (views similar to) strong inferential internalism include Fumerton [1995] and Bonjour [1998]. Variants of the psychological view are defended in Audi [1993, Chap. 8] and Leite [2004].

In section 2.3 I will discuss the minimalist's incoherence-objection alluded to in the introduction. This objection, if it cannot be deflected, is a powerful argument for minimalism. I will develop two versions of this objection, one against strong inferential internalism and one against the psychological view. I will argue that the objection is more convincing against strong inferential internalism than against the psychological view. In the final section (2.4) I will begin to defend the psychological view. I will argue that it better accounts for the fact that something goes wrong when the subject believes $\neg L$ than minimalism.

2.3 Two Carrollian arguments

In this section I discuss the minimalists main objection against all other non-minimalist views. It is the intuitive problem to which Paul Boghossian refers in the passage cited in section 2.1. This intuitive problem goes by

³⁰People subscribing to the thesis just mentioned will also be inclined to subscribe to a more general thesis about all sources of knowledge, not only inference: In order to acquire knowledge through some source, it is not required to know that the source is reliable. In the terminology of Stewart Cohen [2002] and others this is the claim that there is “basic knowledge”.

the name of the “Lewis-Carroll-Problem”, because it can be read into the famous dialogue between the Tortoise and Achilles by Lewis Carroll [1895]. In fact, as has been noted, there are (at least) two distinct problems that can be read into this dialogue. To each of the views that I have presented as competing with minimalism applies only one of the two problems. On the one hand there is a problem for the strong inferential internalist’s claim that the epistemic status of (3) is dependent on and explainable by appeal to the epistemic status of *L*. On the other hand there is a problem for the psychological view’s claim that (occurrence of) the belief in (3) is explainable by appeal to (the occurrence of) an attitude towards *L*.

The argument against strong inferential internalism

As said, according to strong inferential internalism, the positive epistemic status of *L* explains why the subject has a reason to believe the conclusion on the basis of the premises. But what is it to “explain why one is justified”? It’s not an explanation of some belief-forming process. It’s an explanation of something normative, namely that the subject has a reason to infer.³¹

I take all the following sentences to express the same or a similar question: “In virtue of what does one have justification?”, “What are the justification-conferring facts?”, “Why does one have justification (on a given occasion)?”. Accounts of epistemic justification provide general answers to these questions. Such accounts have certain ambitions. For instance, reliabilism wants to give a reductive account of justification in naturalistic (non-normative) terms. Other naturalistic accounts take the route of non-factualism about normativity.³² Ambitious forms of internalism want the account of justification to be such that it is knowable via reflection and a priori reasoning whether we have justification or not.

³¹The most fully developed version of the argument I am about to give can be found in Boghossian [2003]. My version differs from his in some respects, mostly a matter of emphasis. First, his characterization of the view the argument is supposed to refute is compatible with both strong inferential internalism and a variant of the psychological view. Second, I put the emphasis on the argument’s power to refute an explanatory claim. The Carrollian problem in my opinion is not so much that the attacked view gives rise to a regress of reasons, as that it attempts to circularly explain why one has a reason. This will become clearer in the text.

³²If non-factualism about epistemic justification is true, then all that can be said in explaining why certain kind of (fundamental) inferential steps are justified, is that these are the fundamental modes of reasoning we accept. Nothing further is expressed by these epistemic evaluations than that we fundamentally accept the mode in question [cf. Field, 1998, 2000, Gibbard, 1995].

But these general questions about justification are not at issue here. Strong inferential internalism, although perhaps committed to certain views on these issues, attempts to explain much less. Consider again the example given above about the object I perceive in the wood. Given only the information that I see the object, it is in a very straightforward and uncontroversial sense mysterious why this contributes to my having a reason to believe that *X* was in the wood. And one reveals part of the mystery by giving the additional information that I have a reason to believe that the object I see belongs to *X*.³³

As said, according to strong inferential internalism it is the fact that my justification for the proposition *X was in this wood* rests on my justification for the proposition *The object I see belongs to X* that carries the explanatory burden. For the argument that follows, it is important to insist on this double aspect of strong inferential internalism. This view does not merely claim that the justification for (3) rests on the justification for *L*, but also that this explains why one has inferential justification for *L* in \mathcal{N} . The two theses are the following:

- (A) The justification of (3) in \mathcal{N} rests on the justification for *L*. (dependence-claim)
- (B) That in \mathcal{N} one has justification for (3) can be partly explained by appeal to A. (explanatory claim)

According to one reading of Carroll's dialogue, it shows that one cannot explain why one has justification for a given fundamental kind of deductive inference by appeal to the justification for the logical belief, because such an explanation is circular. Consider the case of *Wet Roads*. There is an

³³There are cases where it is in fact a controversial issue whether there is a mystery about why one has a reason or not. For instance, proponents of inferential accounts of perceptual justification would perhaps claim that it is mysterious how the mere perception of an object gives me a reason to believe that there is such an object. They would argue that just as in the example above one needs some additional information, in particular something like the information that the subject has a reason to believe that she has a perceptual state and that this state indicates the truth of its content. Their opponents would argue that it is not at all mysterious in the first place how the perceptual state can contribute to the subject's having a reason. They would perhaps claim that this appears mysterious only for those with misguided general views on justification. Similarly in the case of deduction, minimalists would perhaps argue against the strong inferential internalist that it is not mysterious how the justified premises can confer justification upon the conclusion. However, the example of the object I see in the wood is not such a controversial case. In that case the additional information is clearly required to understand why I have a reason to believe that *X* was in the wood.

important disanalogy between an appeal, in the course of an explanation, to the fact that the subject has justification for (2), the conditional, and an appeal to the fact that the subject has justification for the proposition that (1) and (2) entail (3), i.e. *L*. When one wonders why a subject having justification for (1), i.e. *It is raining outside*, in a given circumstance has justification for (3), i.e. *The roads are wet*, the information that in the circumstance the subject has justification for (2), i.e. the conditional, reveals part of the mystery why she has justification for (3).

It is difficult to say why this explanation is successful. One aspect of it is that, given the additional information about (2), the set³⁴ of justified propositions that confer justification upon another, i.e. the set of the premises, bears a necessary relation to the proposition upon which justification is conferred, i.e. the conclusion. That is, the *truth* of *L* seems to make such an explanation possible. Without (2), the contents (1) and (3) are unrelated. With (2) premises and conclusion are related in the manner expressed by *L*. So, one aspect of the explanation is that it reveals a necessary connection among the (or some)³⁵ propositions involved in the inference. Furthermore there is something general about the connection between premises and conclusion. The propositions are necessarily connected due to logical form. (1), (2), (3) have the following logical form (“*p*” etc. are proposition-schemata): *p*, *If p, then q*, *q*. So, the explanation allows to see the connection between the three propositions as an instance of a general connection among propositions with a certain logical form.

Another aspect of the explanation seems to be that the additional information allows to see the subject’s transition to conform to a general principle of reasoning. Again, it is in virtue of the logical form of the three propositions that the transition conforms to the principle. The principle can be stated thus:

MPP-reasoning: Believe *q*, if you believe *p* and *if p, then q*! (Or else give up *p* or *If p, then q*!)

Of course the two mentioned aspects of the explanation, i.e. on the one hand that there is a necessary connection between all or some of the involved propositions, on the other hand that there is a general principle linking the beliefs in the premises with the belief in the conclusion, are connected. But

³⁴Or a subset of that set. See footnote 35.

³⁵According to strong inferential internalism, *L* is also involved in the inference. In order to remain neutral at this point one must say that it reveals the connection among *some* of the involved propositions.

there is no simple correspondence. It is not sufficient for a transition to conform to a principle of reasoning that the propositions stand in a necessary connection. As has been noted many times, there are propositions that stand in a necessary connection to each other, even in virtue of logical form, although there is no justified direct inference from the one to the other. That is, there is no principle of reasoning linking the one directly, i.e. without any further propositions, to the other. Take any example of a proposition entailing another where even the best logician needs to construct a proof in several steps. The direct step from the first to the second is not justified and there is no general principle of reasoning linking the beliefs in them. Furthermore, it is generally agreed that there are principles of non-deductive reasoning that link beliefs in propositions that do not stand in a necessary relation to each other. So there is no simple correspondence between the two aspects of the successful explanation. I will content myself with pointing to these two aspects without claiming that one or the other is more fundamental in understanding why the explanation is successful. For the argument against strong inferential internalism it is not necessary to endorse any further claim. For, according to that argument, both aspects are missing in the strong inferential internalist's alleged further explanation by appeal to *L*.

The strong inferential internalist's opponent claims that no similar advance in understanding can be achieved by an appeal to the justification for *L*. It is not possible to subsume *Wet Roads* under a more general, or in some other way explanatorily more fundamental principle in virtue of the subject's further belief in *L*. And it is not possible to establish any tighter connection between the set $\{(1), (2), L\}$ and (3) than the relation that obtained between the set $\{(1), (2)\}$ and (3). The relation in both cases is entailment. Surely there is no sense in which including *L* makes the connection between the set of the premises and the conclusion tighter.³⁶

Nothing here speaks against claiming that a belief in *L* is involved. But on the supposition that *MPP*-reasoning is one of our fundamental forms of correct reasoning, the belief can at best be involved as part of reasoning of the form corresponding to that very same principle or a no more fundamental other principle. For instance, someone could correctly infer from *L* the proposition

³⁶In a relatively early paper on the Lewis-Carroll-Problem by J.F. Thomson [1960] entitled "What Achilles should have said to the tortoise" the observation that no "tighter" logical relation than entailment can obtain is claimed to be sufficient to avoid the problem. This seems to miss the aspect to which I allude here as that of conforming to a principle of reasoning. A step to a conclusion entailed by a set of premises can fail to conform to a principle of reasoning. In that case addition of further premises, although not altering the kind of logical relation between premises and conclusion, may well have the effect that the step now conforms to a principle of reasoning.

If (1) and (2), then (3) (by another principle of reasoning)³⁷. From *If (1) and (2), then (3)* and (1) and (2), she could then infer (3). But obviously this last step is just another instance of *MPP*-reasoning. So, this alleged explanation is circular.³⁸

And even if it is false that *MPP*-reasoning describes one of our fundamental principles of reasoning, the same Carrollian argument would apply to whatever is a fundamental principle. As Boghossian says, *at some point*, we have finished explaining by appeal to further beliefs about the relation between the contents. At some point the principles by which reasoning is evaluated are reached. And while one can still try to explain why the principle plays a role in determining what a subject has an epistemic reason to believe, *one cannot do so by appeal to further beliefs of the subject and more general principles*.

I have given the argument in a form that directly challenges the strong inferential internalist's explanatory claim (p. 39). In this form the argument refutes the idea that the information that the justification for (3) rests on the justification for *L* can explain why (3) has positive epistemic status in \mathcal{N} . The moral to be drawn is that the strong inferential internalist's explanation is circular. But often when the Carrollian argument is presented or mentioned the accent is put on a regress. This is of course in line with Lewis Carroll's original dialogue which, it is suggested, is never ending. If the accent is put on the regress, one is led to think that the problem for

³⁷ Something like:

modal reasoning: Believe *q*, if you believe $\Box q$! (Or else give up $\Box q$!)

³⁸ The following adaption of the Carrollian dialogue illustrates the predicament of strong inferential internalism as I understand it:

A: Why is S' step from *p* to *q* justified?

B: Because S' also believes that *if p, then q*.

A: I see, S infers *q* from *p* and *if p, then q*. This seems OK.

A: But wait, thinking of it, why is S' step from *p* and *if p, then q* to *q* justified?

B: Oh, because S also justifiably believes that that step preserves the truth.

A: I see, S infers *q* from *p*, *if p, then q* and *if 'p' and 'if p, then q', then q*.

A: But I still don't get it. Why is S justified in taking the last inferential step?

B: (in a mood of despair) Because S believes that that last step preserves the truth.

Here B and A do not directly appeal to the proposition corresponding to *L*, but rather the one corresponding to *If (1) and (2), then (3)*. There is a difference, but it is ultimately irrelevant to the argument against explanation. There does not seem to be an explanatorily more fundamental principle linking belief in *L*, (1) and (2) and the conclusion (3).

the attacked view, here strong inferential internalism, is that it commits the proponent of the view to the claim that a subject who justifiably infers must have an infinity of justified beliefs. It is possible to illustrate the fact that an explanation is circular by giving the basically same explanation over and over again.³⁹ But one should not conclude from this that the problem for strong inferential internalism lies in the fact it is committed to the claim that a subject who justifiably deductively infers must have an infinity of justified beliefs or justification for an infinity of propositions, i.e. the propositions corresponding to *L* on infinitely many further levels.

It is in the aim of keeping the problem of circular explanation and the problem of requiring justification for infinitely many propositions apart that I have distinguished on page 39 between the strong inferential internalist's explanatory claim and her dependence claim. Her motivation for the dependence claim is the explanatory claim. Suppose there is another motivation for the dependence-claim. The justification for (3) rests on the justification for *L*. Suppose further for the sake of illustration that it also rests on the justification for the infinitely many propositions of the form of *L* but taking as antecedent always the set of premises one level below (the consequent is always (3)). For instance, at the level next to one where one appeals to *L* the proposition is the following: *(1), (2) and L entail (3)*. Given these suppositions, a subject only has justification for (3), when it has justification for an infinity of further propositions. This is problematic, but not as obviously problematic as a circular explanation. It is not generally impossible to have justification for infinitely many propositions. After all, when one has justification for a general proposition about an infinite population (e.g. numbers), then one has justification for an infinity of propositions. Now, the issue here is not only having an infinity of reasons, but furthermore having an infinite chain of reasons each resting on the preceding one. When I have *one* (or a finite number) of reasons justifying a general proposition about an infinite population, I have an infinity of reasons. But it is the one (or the finite number of) reason(s) for the general proposition on which all the others rest. However, it is not wholly implausible to suggest that one and the same capacity provides me in a sort of "inductive way" (in the mathematical sense of "inductive", not the epistemological) with the infinity of reasons for the infinity of propositions and with an infinity of reasons for the general proposition. The reasons for the individual propositions do hence not rest on the reason(s) for the general proposition. If there is a one way dependence, then rather in the other way: the reason for the general proposition depends on the infinity of reasons for the individual propositions. In the same vain, it

³⁹I do this in footnote 38.

is not wholly implausible that whatever capacity allows the subject to have a reason for L , also provides a reason for any similar proposition “higher up”. Of course, I cannot vindicate here the claim that reasons can be arranged in such a way. Nevertheless, I think one can conclude that the regress of reasons is not *obviously* vicious.⁴⁰ But even if such a regress of justifications is not vicious, this does not help the strong inferential internalist. For his explanation of the inferential justification of (3) is still circular. So, it is not so much the dependence claim as the explanatory claim which in my eyes seriously undermines strong inferential internalism.

My rendering of the argument explicitates the traditional diagnosis of the Lewis-Carroll-Problem: L should not play the role of a further premise. It seems at first, that strong inferential internalism does not make this mistake. For, he attributes to L not the same, but a more important or fundamental role than that of the premises. That the subject has a reason for L is supposed to explain why the reasons for the premises provide a reason for (3). However, it turns out, that the only way the justification for L could help explain why (3) is justified is in the way (2) (or in the example about the object in the wood the proposition *The object I see belongs to X*) helps to explain it, and this is as a premise. So, the traditional diagnosis seems right to me; but sometimes people think that it is the Tortoise’ avoidable mistake to think of L ’s role as that of a premise. This line is not available to the strong inferential internalist, for *as a premise* seems to be the only way L could play the role strong inferential internalism reserves for it.

The Lewis-Carroll-Problem as developed here poses a serious threat to strong inferential internalism. I have not provided a full discussion of the problem. There might be some further moves and objections a strong inferential internalist would want to consider.⁴¹ But the view I want to defend is the psychological view. Therefore it is more important to determine whether a version of the Lewis-Carroll-Problem poses a similarly strong threat to the psychological view.

⁴⁰That that particular regress, i.e. a regress concerning propositions such as L in the course of inferential justification, is not vicious is suggested by C. Wright [2001]. Wright does, following Boghossian, not distinguish between the explanatory regress and the regress of dependences. For other epistemic regresses and the claim that one can have justification for an infinity of propositions, see [Sosa, 1980, Klein, 1999].

⁴¹I discuss in more detail a version of the Lewis-Carroll-Problem as it pertains to a view similar to strong inferential internalism, but appealing to a proposition about epistemic support instead of L , in chapter 4.4.

The argument against the psychological view

I will continue talking of a *belief* in L , even though the psychological view may appeal to other attitudes instead. According to the psychological view the subject believes (3) in virtue of making the link between $\{(1), (2)\}$ and (3) via a belief in L . But this is not an exact description of the psychological role of her belief in L . How does she “make a link” between premises and conclusion via belief in L ? Perhaps by making an inference involving L as a premise. But this leads to a circularity-problem analogous to the one encountered by strong inferential internalists.

The problem can be posed in the following way.⁴² The psychological view claims that the belief in L partially explains why the subject believes (3). Her making the link between premises and conclusion via belief in L is responsible for her belief in (3). More particularly the causal efficacy of the belief in L is responsible for the fact that the occurrence of the sequence of beliefs corresponding to *Wet Roads* is a rational form of belief-transition. There are rational and “arational” belief-transitions. For instance, suppose in the following sequence of propositions, the belief in any one is causally responsible for the belief in the following one: *Here is a hat; Paul has a hat; Paul’s apartment is nice; I should buy some flowers to put on my kitchen table.* This belief-transition is arational in the sense that each belief plays a non-justifying role in the transition to the following belief. In contrast, in \mathcal{N} the premises of *Wet Roads* play a justifying role, the transition the conclusion is therefore a rational form of belief-transition. According to the psychological view the fact that a belief in the linking-proposition is partially responsible for the transition from premises to conclusion marks the difference between a rational and an arational belief-transition.

That a belief-transition is rational, does on this meaning of “rational” not imply that the belief in the conclusion is justified. A belief-transition can be of a rational form when, for instance, the premise-beliefs are unjustified and hence the conclusion unjustified too. Therefore if the belief in L is needed to explain why the transition is of a rational form, it does not thereby explain why the subject has inferential justification for (3). In order to be justified in believing (3) in \mathcal{N} the transition must be rational in this sense, but in order to have inferential justification, the subject need not even believe (3).

The Lewis-Carroll-Problem arises for this view as follows: In what sense is the causal efficacy of the belief in L to mark the difference between the

⁴²My exposition of the problem does not differ greatly from the exposition in Stroud [1979]. For basically the same problem, posed as a challenge to account for the motivational force of logical reasons, see also Engel [2005]

arational belief-transition above and *Wet Roads*? For the only way in which a belief in L could be responsible for the belief in (3) that could plausibly count as rational would be when L is a premise in a reflective inference (i.e. an inference taking (1) and (2) again as premises) to the conclusion that (3). But in that case, the explanation must appeal to the claim that the reflective inference is more primitively (in a more explanatorily fundamental manner) a rational process. But since *Wet Roads* and L are of the same form, this cannot be true. It remains still to be explained why the reflective inference is a rational belief-transition.

It is true that we can imagine a transition corresponding to *Wet Roads*, that is not rational in the sense explained. This happens when, to use the Stroud's phrase [Stroud, 1979, 186-187], the subject does not "put her premises together" and thereby fails to see the connection between them. So, the subject has to put the premises together by having the belief in L in order for the transition to be rational. The problem is that the "putting together of the premises" is to be causally efficacious. And then it seems that for the contribution of the linking-belief to be of the rational kind, the subject must "put together" linking-belief and premises.

This version of the Lewis-Carroll-Problem again exploits the fact that L can play a role similar to (2) in an inference of the same *MPP*-form involving more complex propositions. But this time the similarity is not with respect to the role in conferring justification upon (3), but in explaining the (occurrence or sustenance of the) belief in (3). In the argument against strong inferential internalism it seemed that L could play no other role in order to satisfy the explanatory goal set by strong inferential internalism. The corresponding claim in the version against the psychological view seems much less convincing. The crucial question is whether the belief in L must be used in an inference (hence as a premise) in order to explain the belief in (3). The psychological view is not committed to this claim. Why could not the belief in L contribute in some other way to the belief in (3)? It is not obvious that it then couldn't mark the difference between a rational and an arational belief-transition. But the psychological view must then provide an alternative explanation of the belief in (3) involving the belief in L . I will not sketch such an explanation in this chapter.⁴³ In what follows I simply assume that there is such an explanation.

⁴³This will be done in chapter 3.

2.4 An argument for the psychological view

In this section I will argue that the psychological view better accounts for a certain intuition than minimalism. Of course, such an argument makes only sense if the psychological view is a coherent position that can overcome the Lewis-Carroll-Problem from section 2.3. But for the time being let us assume that this is the case. Even so, the argument I give here does not have the force to convince anyone who does not already find the psychological view plausible. Rather, if the argument works, it establishes a certain theoretical advantage of the psychological view over minimalism. Normally the place for such a relatively weak argument is after one has exposed and given the main motivation for one's view. Still, the argument belongs in this chapter, because it directly touches on and further clarifies the relation between evidence and attitudes discussed in section 2.2.

The intuition to which I want to appeal is the following. On page 23 a context \mathcal{C} was introduced with the following characteristics: While being otherwise like \mathcal{N} , \mathcal{C} is such that the subject does not have any evidence against L , but all the same believes $\neg L$. Intuitively, in such a situation inferring the conclusion (3) does not seem right.

This intuition may be disputed. In particular, someone who thinks that the whole question of L 's relevance does not even arise in the first place would certainly deny the intuition. Someone might think that L is not even relevant in the way the minimalist thinks it is. She could argue for such a view for instance by pointing out that animals and very young children draw deductive inferences without even being capable of understanding L . So, the argument continues, L cannot be relevant for adults either. In this chapter I simply assume that this position is false. The point I want to make here is that it would be odd for a minimalist, i.e. someone who accepts that $\neg L$ is a defeater, to reject the intuition. Indeed, it would be odd to say that having evidence against L undermines the justification for one's belief in (3), but that it is perfectly all right to believe $\neg L$, provided one does not have evidence for such a belief.

Given the intuition is accepted by both the minimalist and the proponent of the psychological view, one can ask whether both views account for it in the same way. In particular there appear to be two possible diagnoses of what goes wrong in \mathcal{C} :

- (i) The subject's justification for (3) is undermined, i.e. the subject does not have justification for (3).

- (ii) Although the subject does have justification for (3), resp. does have a good epistemic reason for (3) (because \mathcal{C} resembles \mathcal{N} enough), it is not rational for her to believe (3) for this reason.

I will argue that a minimalist will give the first answer, i.e. (i), while a proponent of the psychological view will give the second, i.e. (ii). But first I have to explain how these answers differ from each other.

The distinction between options (i) and (ii) supposes that there are two ways in which a certain belief can be evaluated. It supposes that one can evaluate whether the reason is good and in addition whether it is rational to believe for that reason. But this might seem odd at first. Is the question not whether a given belief is rational the same as whether there are good reasons for it?

But in the general theory of normativity (or “meta-ethics”) it is now common to distinguish between two sorts of evaluations. The distinction is expressed in terms of “subjective” vs. “objective”, or “internal” vs. “external” reasons, or sometimes between “having a reason” to act vs. “it being rational” (being under a rational requirement) to act. John Broome [2000] has explicitly addressed the issue in terms of epistemic reasons, not only practical ones. He has argued that for a case of simple *MPP* such as *Wet Roads*, one is under a rational requirement to believe the conclusion, when one believes the premises, even in the case where one does not have a reason to believe the premises and, thus (everyone agrees), when one does not have a reason to believe the conclusion. Similarly in the practical case, to take a well known example, when I want to drink gin and believe that the liquid in the bottle before me is gin, then I am under the rational requirement to choose to drink the liquid in the bottle. But given that what is in the bottle is petrol and I do not want to drink nor have any other reason to drink petrol, I have no reason to choose to drink the liquid in the bottle. So, there are two ways in which beliefs and intentions to act can be evaluated, namely whether the subject *is under a rational requirement* to be (or get) in the state in question (i.e. the intention or the belief), or whether she *has a reason* to be (or get) in the state.⁴⁴

How can the difference between having a reason and being under a rational requirement be characterized in a general way? Kolodny [2005, 509] says the following:

When we say “you ought to” in the sense of “you have reason to”, we usually seem to be saying something about the relation

⁴⁴For discussion of this distinction, [cf. Williams, 1981a, Broome, 2000, Scanlon, 1999, Wedgwood, 2003, Kolodny, 2005].

between your *situation* and your *attitudes*. When we say “you ought to” in the sense of “it would be irrational not to”, we seem to be saying something about the relation between your *attitudes, viewed in abstraction from the reasons for them*. We are saying something, for example, about whether your beliefs are logically consistent, or whether your intentions for ends cohere with your intentions for means —things that are true, if they are, quite independently of whether there is reason for you to have any of those beliefs or intentions.

In characterizing the distinction in this way, Kolodny does clearly not aim at explaining the two notions. They are merely characterized in relation to one another. So, if we grasp the notion expressed by “having a reason to”, then we can contrast it with the notion expressed by “being under a rational requirement to”, as something that applies to an agent in virtue of the relation among attitudes, *irrespective* of the reasons for them (i.e. whether one has reason to have these attitudes). The characterization of being a reason for as a relation between your actual situation and your attitude must also be understood in contrast with the notion of being under a rational requirement. If we grasp the notion expressed by “being under a rational requirement to”, then we can contrast it with the notion expressed by “having a reason to” as something that applies to an agent in virtue of *further* aspects of the agent’s situation than what is relevant for the rational requirement. I think this characterization of the distinction is sufficiently clear for what follows without presupposing to much about epistemic justification, i.e. having an epistemic reason for.

There are a lot of debated issues surrounding this distinction. For instance, what is the exact form of rational requirements? Can rational requirements be explained by appeal to reasons, or is the direction of explanation the other way around, or can neither be explained by appeal to the other? I can of course not address these questions here. The important point is that the distinction applies to the case at hand. According to the intuition mentioned above, something is wrong when the subject believes (3) in context \mathcal{C} . But wrong in which way? We can ask whether the belief in $\neg L$ makes it the case that the subject does not have a reason to believe (3), or whether it makes it the case that in believing (3), the subject violates a rational requirement.

Let us begin by exploring the first option, i.e. that in virtue of the belief in $\neg L$ the subject loses the reason to believe (3) that she would otherwise (namely in context \mathcal{N}) have. But one cannot lose a reason merely in virtue of a rational requirement. With respect to the example above, suppose that

I have in the circumstance a reason not (to want) to drink the petrol. For instance, because it is very unhealthy to drink petrol. I could lose this reason. (If I lost it, I would not necessarily have a reason to (want to) drink the petrol, but I would no longer have a reason not (to want) to drink it.) But merely believing that it is gin cannot make me lose my reason not (to want) to drink it, although I am now rationally required (to want) to drink it. It is still unhealthy to drink petrol and there is still no outweighing benefit from my drinking it. My reasons for or against drinking the petrol in front of me have not changed at all. Instead, if the situation changed in such a way that I acquired a good reason to do something very unhealthy in the circumstance—for instance if I acquired a very good reason to get ill—then I would lose my reason not to want to drink petrol. To give an example for the case of theoretical reasons, consider the following (somewhat worn out) situation:

I see somebody who looks like Tom stealing a book from the library. And actually it is Tom. Suppose this provides me with a reason to believe that Tom stole a book from the library. But his father tells me that he has a twin-brother who also goes to the library sometimes. But I have good reasons to believe that Tom's father will lie through his teeth in order to save his son from trouble. And Tom does not have a twin-brother. Still somehow, against good reason, I come to believe that Tom has a twin-brother.

Do I have a reason to believe that Tom stole a book from the library? It seems that I have, for I have a good reason to believe it, because I saw him. And I have no reason to mistrust appearances. In order to have reason to mistrust appearances, I would need to have *undefeated* reasons to believe that Tom has a twin-brother. But the father's lie does not provide me with such an undefeated reason, for I have a reason to mistrust the father. So, my unjustified belief that Tom has a brother cannot undermine my reason to believe that he stole a book from the library. Of course, this does not imply that there is nothing wrong with my believing, on the one hand, that Tom stole the book on the basis of my seeing someone with such appearances, and on the other hand, that Tom has a twin-brother. But the problem is not that I have no reason to believe that Tom stole the book.

If believing $\neg L$ is to change/undermine the subject's reason to believe (3), then, according to the characterization above, we are to consider the attitudes, as well as the reasons for them. Or, in other words, we are to consider more aspects of the situation than if only a rational requirement is the issue.

So, the belief in $\neg L$ cannot be relevant irrespective of the reasons for $\neg L$. For only attitudes for which there are reasons can undermine other reasons. This means, that if option (i) is to be pursued, in \mathcal{C} the subject has a reason for $\neg L$. Since, by supposition, she does not have evidence in favor of $\neg L$, this commits one to affirmativism. According to affirmativism, a belief has in the absence of evidence for and against the proposition in question a *prima facie* positive epistemic status, i.e. it provides one with a *prima facie* reason for believing the proposition. According to option (i), in \mathcal{C} the belief in $\neg L$ undermines the subject's reason to believe (3). This it can only do, because in virtue of having that belief and not having evidence against $\neg L$, the subject has a reason to believe $\neg L$.

Of course, one could object to this account, because one finds affirmativism implausible. It is clear that affirmativism is not orthodoxy at the moment. But there is a much more straightforward objection to this account, independently of one's acceptance of affirmativism. The problem is that the intuition persists, even when the subject has evidence *against* $\neg L$. Even in a context \mathcal{C}^* otherwise similar to \mathcal{N} in which the subject believes $\neg L$, but has evidence in favor of L , something is wrong. Suppose someone I recognize as being very good at logic affirms that L . Nevertheless I believe $\neg L$ (in favor of which I still do not have any evidence). If in that circumstance I base my belief in (3) on (1) and (2), something is still wrong. But even according to affirmativism in such a circumstance there is no reason to believe $\neg L$, i.e. the belief in $\neg L$ is unjustified. Hence, this belief cannot undermine my reason for (3). It is then clear that in \mathcal{C}^* , what is wrong can not be that my reason for (3) is defeated. Therefore we can discard option (i) also for context \mathcal{C} . Or at least, if we persist in affirmativism and claim that in \mathcal{C} the subject does not have a reason to believe (3), we must admit that even in \mathcal{C} something additional is wrong. The upshot is that option (i), i.e. the diagnosis that the only thing that is wrong in \mathcal{C} is that the subject does not have a reason for (3), can be discarded. The problem with believing $\neg L$ must be that it leads to irrationality.

Let us then turn to option (ii). This is the claim that the subject violates a rational requirement when in \mathcal{C} or \mathcal{C}^* , she believes $\neg L$ and bases her belief in (3) on (1) and (2). So, although—at least in \mathcal{C}^* —she has a reason to believe (3), it is irrational for her to do so. There is a certain internal inconsistency between her attitudes. And this is bad irrespective of the reasons for these attitudes.

But between which states does the inconsistency arise? (3) and $\neg L$ are not inconsistent. And (1)-(3) and $\neg L$ do not form an inconsistent set of propositions either. $\neg L$ merely implies that it is possible that not all of (1)-

(3) are true,⁴⁵ it does not imply that one of (1)-(3) is false, if at least one other is true. Furthermore, the intuitive problem in \mathcal{C} or \mathcal{C}^* is not that (1)-(3) and $\neg L$ are all four believed. The problem is rather that (3) is deduced from or based on (1) and (2). This serves the psychological view very well. For according to this view it is precisely in virtue of the fact that the subject bears an attitude towards L , that she deduces (3) from (1)-(2), or bases her belief in (3) on her beliefs in (1) and (2). And, of course, L and $\neg L$ are inconsistent. And thus, on this view the subject has inconsistent attitudes in \mathcal{C} and \mathcal{C}^* and therefore violates a rational requirement.

The minimalist on the other hand denies precisely that the subject in any of these contexts, including \mathcal{N} , bears an attitude towards L . But if what is wrong in \mathcal{C} and \mathcal{C}^* is that a rational requirement is violated, the minimalist is hard-pressed to explain how a rational requirement could be violated in these contexts. It appears that she has no good explanation for the fact, if it is a fact, that something is wrong in \mathcal{C} or \mathcal{C}^* . While with respect to \mathcal{C} the minimalist could by endorsing affirmativism hope to give an explanation, this, as we have seen, is not possible with respect to \mathcal{C}^* .

I will briefly raise two objections to this argument, both of which are useful in order to evaluate the argument and relativize its force. The first objection is that as long as we do not have a better grip on what rational requirements there are, it is premature to claim that they can only be violated when there are (logically) inconsistent attitudes. Perhaps there is a rational requirement that is violated precisely when (3) is deduced from (1) and (2) and $\neg L$ is believed, without there having in addition to be an attitude (or a set of attitudes) which is inconsistent with $\neg L$.

I completely agree with the first part of the objection. The argument depends on the claim that rational requirements are only violated when there are inconsistencies among believed (or otherwise accepted) propositions. But I have not provided a defense of this claim, nor have I characterized the form of rational requirements. And I agree that it is not clear that they only require not to hold logically inconsistent attitudes. For instance, it is plausible that there is a requirement not to be in the state of believing the following two propositions, even though they are not logically inconsistent:

⁴⁵As pointed out to me by Gianfranco Soldati and Martine Nida-Rümelin my formulation here is misleading and strictly speaking incorrect. It is not possible that (1)-(2) are true and (3) false, since this is logically impossible. For L is true. Furthermore, the logical falsehood $\neg L$ is prone to render any set of propositions of which it is a member inconsistent. So, what I should be saying is that there is (at least one) quadruple of propositions (or proposition-schemata) where one relates the others as a linking proposition such that the falsehood of the linking proposition is compatible with the truth of the other three.

- I have overall (epistemic) reasons to believe p .
- $\neg p$

There are other examples of plausible requirements of a similar form.⁴⁶ However, even if it is quite right, that if rational requirements turn out to have different forms than the one to which the proponent of the psychological view appeals in order to vindicate her claim that the subject believe L , her argument does not go through quite as easily. In particular, perhaps she must appeal to a different attitude than a belief in L . But what I find implausible is that the irrationality in \mathcal{C} and \mathcal{C}^* is primitive. There must be some additional attitude or other which in some way conflicts with the belief in $\neg L$. How could the belief in $\neg L$ conflict with the fact that the subject bases her belief in (3) on (1) and (2), if all there is to the basing-relation is that a certain kind of causal route leads from the beliefs in the premises to the belief in the conclusion?

The second objection is more important and I announce from the start that I cannot satisfyingly rebut it in this chapter. I have hinted at the idea behind this objection while considering briefly on page 22 a possible reply on behalf of the minimalist to Greco's suggestive point. The idea is that the intuition in favor of any relevance of L in \mathcal{N} , stems from the fact that the examples such as *Wet Roads* are such that while they are claimed to be basic cases of deductive inference, the way they are presented makes us think of other, non-basic cases. And the intuition that L is relevant has its source in the fact that in the non-basic cases of which we come to think instead of the basic cases, L is relevant. But in these non-basic cases L simply is a premise. So, the intuition applies not to \mathcal{N} , but to a similar situation \mathcal{N}^* , in which the inference is not *Wet Roads*, but the following:

⁴⁶Scanlon [1999, 25-32] calls violation of these and similar requirements "irrationality narrowly construed". And it is these that he contrasts with "not doing what is the best thing to do" which corresponds more or less to what I have called "having a reason" or perhaps "having an overall reason to do". In a similar spirit Kolodny [2005] argues that all requirements of rationality, when properly specified, have a similar form, i.e. they are requirements to conform one's beliefs and intentions with one's judgments about what one has most reason to do or believe. According to him (I simplify quite a bit) there is no rational requirement to believe q , when one believes p and p implies q in itself. The requirement arises only when one further judges that one has better reasons for p and p implies q , than one has reasons against q . Unfortunately I cannot discuss this here.

- (1*) If it rains, the roads are wet.
- (2*) It rains.
- (3*) *It rains* and *If it rains, the roads are wet*.
- (4*) Necessarily, if *It rains* and *If it rains, the roads are wet*,
then the roads are wet. (L)
-
- (5*) The roads are wet.

And because we think of cases where the reasoning takes this more complicated form, we have rightly the intuition that L is relevant. But in fact for the simple cases it is not. And, of course, if the case is of the more complicated form, it is irrational for the subject to believe $\neg L$. For this belief conflicts with her belief in one of the premises, L . But in the simple cases where the inference is really *Wet Roads*, a belief in $\neg L$ does not result in an irrationality at all.

For someone who levels this objection against the psychological view, it would be natural also to deny that evidence against L can defeat one's justification in \mathcal{N} . According to such a person, the idea that $\neg L$ is a defeater is the product of the same confusion between \mathcal{N} and \mathcal{N}^* that gives raise to the mistaken idea that the subject is irrational in \mathcal{C} .

In this chapter, I must let this objection stand. But I hope that once the psychological view is properly motivated and qualified, it can be addressed.

Chapter 3

The Psychological View

3.1 Introduction

Suppose a subject successfully deduces a conclusion from a set of premises. Must she be aware of the logical fact that the premises entail the conclusion? This question hides two distinct further questions, namely “Must she be aware of the logical fact in order to have deductive justification?” and “Must she be aware of the logical fact in order for her belief-formation to qualify as a deduction?” Views on the relation between justifiably deducing and being aware of the logical fact of the form *[premises] entail [conclusion]* are motivated by these two very different questions. On the one hand the view can aim at explaining *why one has in a given circumstance deductive justification*. According to one of these views, strong inferential internalism, the subject does not have deductive justification, unless she is aware of the fact that the premises entail the conclusion. On the other hand a view can aim at explaining *why in a given circumstance what the subject does or undergoes is a deduction*. According to one of these views the subject does not deduce her belief in the conclusion from the premises, unless she has some sort of awareness of the proposition of the form *[premises] entail [conclusion]*. This is the sort of view I have called “the psychological view”.¹

We have imagined a circumstance \mathcal{N} in which a subject, as it was said, “believes (3) by going through the inference *Wet Roads*”:

- (1) It is raining outside.
 - (2) If it rains outside, the roads are wet.
-
- (3) The roads are wet.

What it means to be “going through an inference” was deliberately left vague. One could express the same idea by saying that in \mathcal{N} the subject believes (3) “by basing her belief on the inference *Wet Roads*”.² I have pointed to two features of \mathcal{N} of interest to epistemology, namely:

¹Throughout this passage I use “being aware of a fact or a proposition” in a very loose sense. It can mean that one knows that the fact obtains, that one justifiably believes that it obtains, that one merely believes that it obtains or, even, that one has some weaker attitude than belief towards it, e.g. that one provisionally accepts the proposition. I will become more precise in the course of the chapter.

²“Belief based on inference” is the locution used in Harman [1964], a paper entitled “How belief is based on inference”.

- (a) The subject has a good epistemic reason to believe (3) partially in virtue of justifiably believing (1) and (2).
- (b) The subject believes (3) for her good deductive reason (provided at least partially by her justified beliefs in (1) and (2)).³

In this chapter I will be concerned with condition (b). But the psychological view is an alternative to strong inferential internalism. Thus we can for the purpose of this chapter assume that concerning (a) it is not the case that the subject has a good epistemic reason partially in virtue of a being aware of the logical fact. In fact I will assume for this chapter that no other belief than (1) and (2) is involved in the subject's having a good epistemic reason to believe (3).

Condition (b) again expresses the idea that the subject bases her belief in (3) on the inference *Wet Roads*. The psychological view attempts to specify conditions on (b). The simplest picture of what it means to base a belief on inference is that the premise-beliefs cause the belief in the conclusion. It was said that this is a plausible necessary condition on basing a belief on inference. But it is clearly not a sufficient condition. We can imagine all sorts of deviant causal chains leading from the premise-beliefs to the belief in the conclusion (see below for an example). The psychological view attempts to develop the simple picture into something more plausible. Roughly, the idea is that a necessary condition on (b) is that the subject is aware of the logical fact, thus that she bears some attitude towards the following proposition, abbreviated as "*L*":

L (1) and (2) entail (3)

The idea is that the premise-beliefs cause the belief in the conclusion, because the subject brings the premises together—which she does by bearing an attitude towards *L* and coming⁴ to believe (3) partially because of this attitude.

The inference *Wet Roads* is more specifically a deduction. Thus the psychological view provides necessary (and perhaps sufficient) conditions on *deducing*. Here is again what the psychological view says about deduction from

³As said, the expression "reason provided partially by the justified beliefs in (1) and (2)" is meant to be neutral with respect to different conceptions of reasons, as well as to what exactly is responsible for the fact that the subject has such a reason.

⁴I discuss whether the question concerns why the subject comes to believe (3) or rather why she maintains her belief in (3) later in this chapter. For the moment it does not hurt to think of it as the coming to believe (3).

page 35 (replacing “belief” with the more general “attitude A”, where “A” is a certain type of attitude, e.g. belief, acceptance, supposition etc.):

deduction: If the subject believes (3) for her good deductive reason, then

- (i) she bears attitude A towards L , and
- (ii) she does not bear attitude A towards $L \square \rightarrow$ she does not believe (3).

(ii) specifies that the attitude is not just an idle wheel in the mechanism leading to the belief in (3). (ii) expresses a counterfactual dependence. This is more cautious than requiring a causal dependence. If attitude A is a cause of the belief in (3), then (provided the belief in (3) is not causally overdetermined) (ii) is true. But the converse does not hold. For instance, when something s teleologically explains feature f , then s is not a cause of f . But still, if s weren't the case, then f wouldn't be the case. Take as s something of the form *feature e is advantageous for the survival of species S* and as f something of the form *species S has feature e* . s is not in the usual sense a “cause” of f , but s still explains f . In general, when p is a cause of q (and q is not causally overdetermined) the counterfactual $\neg p \square \rightarrow \neg q$ holds. But the converse is not true.

But clause (ii) is also at the source of the Lewis-Carroll-Problem for the psychological view from chapter 2.3. For convenience, let us isolate clause (ii) as before under the name of “psychological dependence” (from page 33, here in the more general form, replacing “belief in L ” by “attitude towards L ”):

psychological dependence: The subject does not bear attitude A towards $L \square \rightarrow$ the subject does not believe (3).

The meaning of counterfactuals is standardly given in possible worlds semantics. Thus its truth-conditions are the following: In all the possible worlds that are nearest to the actual world and in which the subject does not bear attitude A towards L , she does not believe (3) either. These nearest possible worlds to the actual world resemble the situation \mathcal{N} in all the relevant respects except that the subject does not believe L . For example, in the nearest worlds in which the subject does not bear attitude A towards L she still believes the premises (1) and (2). The counterfactual therefore expresses a dependence of the belief in (3) on the attitude towards L .

The counterfactual represents a quite unspecific statement of this dependence. Specific underlying mechanisms are responsible for the truth of the

counterfactual. We have seen that one possible mechanism would be that obtaining when (3) is inferred from L as a premise in a reflective inference. One can then think of the mechanism as a causal mechanism where the belief in L is one of the (sustaining —see below) causes and the belief in (3) the effect. But the Carrollian Argument from section 2.3 speaks strongly against taking this to be the mechanism in virtue of which psychological dependence holds. The belief in (3) must in some other way psychologically depend on the attitude towards L . Thus, we can take the dependence-claim to be the core or generative claim of the psychological view. And we can take different specifications of the underlying mechanisms as variants of the psychological view. In what follows I will be concerned with motivating, distinguishing and evaluating such variants of the psychological view.

Thus, In this chapter I explore different ways an attitude towards L could partially explain the belief in (3). In section 3.2 I will explore a strategy that appeals to an attitude towards L that is psychologically very “thin”. The idea is that such an attitude can be ascribed merely in virtue of the subject’s manifesting a certain inferential disposition. In that case, we would not need to think of the attitude towards L as a belief-state causally efficacious in the same way that the premise-beliefs are. The Carrollian problem could thus be avoided. I call this account the “dispositional account of deduction”. I reject this account. In section 3.3 I introduce an account which appeals to a proper belief in L , accordingly called “the belief-proper account of deduction”. I defend this account against several objections, before giving in section 3.4 some reasons to be dissatisfied with it. In section 3.5 I introduce and argue for a different explanation of the belief in (3). According to this explanation the attitude towards L is ascribed in virtue of the subject’s being sensitive to the defeater $\neg L$. This account is called “the sensitivity account of deduction”. I argue that this account has some important advantages over the belief-proper account.

3.2 Inferential dispositions

All accounts I will discuss in this chapter attempt to supplement the simple view alluded to above. According to the simple view, the subject believes (3) for the deductive reason provided by her justified beliefs in (1) and (2), simply in virtue of the fact that the premise-beliefs cause the belief in (3). Thus,

(S) (3) is believed for the deductive reasons provided⁵ by (1) and (2), if and only if

(a) the beliefs in (1) and (2) cause the belief in (3).

The problem with (S) is that one can be caused to believe (3) by the beliefs in (1) and (2) without thereby deducing (3) from (1) and (2). For instance, consider the following case:

The Evening Gets Worse: Paul looks out of the window and comes to believe that it rains, i.e. (1). He then comes to occurrently believe that if it rains, the roads will get wet, i.e. (2). These two beliefs give rise to an indefinite expectation that the evening will get worse. For instance, he expects (believes) that he will be involved in a row sooner or later this evening. And among other things he expects that it will be difficult to drive home, because the roads will be wet.

Even though Paul believes (3) as a result of believing (1) and (2), he does not believe (3) for the deductive reason provided by (1) and (2). His expecting the evening to get worse is mainly responsible for his belief in (3). An even more blatant case represents the following example:

Anger and Pools Paul looks out of the window and comes to believe that it rains, i.e. (1). He then comes to occurrently believe that if it rains, the roads will get wet, i.e. (2). These two beliefs give rise to an indefinite expectation that the evening will get worse. This expectation leads Paul to become angry. In his violent anger he destroys the garden pool and the water of the pool floats in the direction of the roads. Paul comes to believe that the roads will be wet, i.e. (3).

The problem with (S), in other words, is that even if the premise-beliefs together cause a belief in the conclusion, it does not imply that the premises are “brought together” in the way of an inference. In these examples the belief in (3) does not solely depend on the specifics of the contents (1) and (2), for without the intervening states Paul wouldn’t believe (3). So, the contents (1) and (2) must play a more direct role in the formation of the belief in (3).

⁵For the locution “reason provided by (1)-(2)”, see footnote 3.

The first account I want to discuss adds a further requirement besides (a), as follows:⁶

(D1) (3) is believed for the deductive reasons provided by (1) and (2), if and only if

- (a) the beliefs in (1) and (2) cause the belief in (3), and
- (b) (a) is the manifestation of a disposition to believe (3), when one believes (1)-(2).

According to the proposal the missing ingredient is specified by (b). In neither of the cases above Paul believes (3) as the manifestation of a disposition the manifestation-condition of which is that he believes (1) and (2). I will refer to the proposal at hand as the “dispositional account of deduction”.⁷

(D1) is not yet fully explicit. Dispositions come too easy. If there is a causal route from some belief p to another q , however deviant, then it can be said, that the subject manifests a disposition to believe q when she believes p . The proposal at hand is that the disposition mentioned in (b) is a particular kind of disposition. The intuitive idea is that the subject is disposed to behave in accordance with modus ponens, *MPP*. When she comes to believe (3) in \mathcal{N} , she does so in virtue of manifesting such a disposition to accord with *MPP*. The subject has some more specific (the “easy”) disposition to believe (3) (the proposition *token*, if you want), when she believes (1)-(2), in virtue of having the disposition to believe some proposition-*type*, when she believes other proposition-types. Thus, we can say that the set of proposition tokens $\{(1), (2), (3)\}$ is of the same type as many other sets of proposition tokens. For instance (1)-(3) are of the same type as the following three propositions: (i) *Fritz is a cat*. (ii) *If Fritz is a cat, then Fritz has teeth*. (iii) *Fritz has teeth*. These propositions contain the same logical concepts (i.e. *if* . . . , *then*), and are composed of each other in the same way as (1)-(3) —in short they are of the same *logical type*. The logical type of (1)-(3) is the type shared by all propositions which can legitimately be substituted for the proposition-constants in the *MPP*-pattern. Thus, (1) is a p -type, where (2) is a (*if* p , *then* q)-type, and (3) is a q -type proposition. So, the subject in \mathcal{N} manifests her general disposition to believe the q -type proposition, when she already believes propositions of the p - and (*if* p , *then* q)-type.

⁶One might ask: Is there not a difference between deductively inferring and believing for deductive reasons? See below in the text.

⁷Calling the account the “dispositional account” is somewhat misleading, since, as will become clear later, all accounts considered in what follows appeal to a disposition or another.

According to the dispositional account, there is some fact about the subject responsible for her belief in (3) which makes her treat contents of certain types in similar ways. This fact is her disposition to accord with *MPP*. In this case the right aspects of the contents (1) and (2) are responsible for the belief in (3), namely their logical type. When the belief in (3) is a manifestation of that disposition, it is due to the logical relation between contents (1) and (2)—and not due to some further state to which they give rise, in virtue only of some aspects of their content—that I come to believe (3).

It is at first sight not evident why the dispositional account should be treated as a variant of the psychological view. For this it needs to subscribe to the claim of psychological dependence on page 33,58. But to subscribe to the psychological claim it must first ascribe to the subject an attitude towards *L*.

But the dispositional account has been proposed in combination with the claim that the subject's inferential disposition warrants ascription of a belief (or similar state) about the relation between the contents (1)-(3). That the subject is disposed to accord with *MPP* on the occasion involving (1)-(3) suggests that there is a sense in which she accepts that (1)-(3) satisfy a valid pattern of inference, a pattern she is on other occasions disposed to accord with. Without wanting to go into discussing criteria for belief, it can be said that although the subject does not believe *L*, she behaves in so important a respect as if she did, that one can ascribe to her an attitude towards *L*. Belief can be roughly conceived as a state individuated by its functional role. For instance a certain belief is a state that combines with certain desires to yield certain intentions to act. Or it is a state that under some conditions yields occurrent belief—where occurrent belief can perhaps be individuated phenomenally. The attitude towards *L*, ascribed in virtue of the subject's disposition, fulfills just part of the functional role that the belief in *L* fulfills. For instance a belief in *L* together with the beliefs in (1) and (2) would yield a belief in (3). And the disposition together with the beliefs in (1) and (2) does exactly this, yield the belief in (3).⁸

⁸The sketched view resembles what Stroud [1979, 195-196] discusses as the “permissive model of understanding”. (It is a model of understanding, because according to the view discussed by Stroud, the disposition to infer in question constitutes the subject's understanding of the premises. On this view the fact that the subject understands the premises [which she believes to be true] explains why she believes the conclusion. This link to understanding is however optional and I do not make in the text. It is an influential idea endorsed among others by Peacocke [1993]. Influential criticisms of the idea have been advanced by Prior [1960], Williamson [2003].) It also resembles what Engel [2005, 31-32] discusses under the heading “expressivism”. (According to “expressivism” the inferential disposition is also responsible for belief in (3). In addition, according to expressivism the

As said, the dependence-claim should not be understood in such a way that the attitude towards L plays the role of a premise in a reflective inference. The alternative interpretation of the psychological dependence claim given by the dispositional account is the following: (i) The attitude towards L ascribed to the subject is ascribed in virtue of the fact that the subject has a certain kind of disposition to infer (3) from (1) and (2). (ii) And the belief in (3) psychologically depends on this disposition insofar as the subject's coming to believe (3) is the manifestation of the disposition to believe (3) when she believes (1) and (2). On this proposal, the subject has a disposition to treat beliefs with the contents (1)-(3) in a particular way. Therefore, one can ascribe to such a subject an attitude towards a proposition linking these contents. And since it is in virtue of having that disposition, i.e. in virtue of the belief-formation being a manifestation of that disposition, that the subject believes (3), the disposition can be appealed to in the (psychological) explanation of the belief. So, the belief in (3) is explainable by appeal to an attitude towards L which does not play the role of a premiss. Thus the Lewis-Carroll-Problem is avoided. And it is still true that if the subject hadn't that attitude/disposition she wouldn't believe (3). Thus one can subscribe to the psychological dependence claim without thereby supposing that L explains belief in (3) in the way the premises do.⁹

inferential disposition partially provides the reason for believing (3). Expressivism is one way to reconcile the justificatory force of a reason with its motivational (psychological) force. I do not address the problem of reconciling these two aspects of reasons, because I do not provide an account of deductive (justificatory) reasons. Still if it is supposed that the reason for (3) is provided by no other state than (1) and (2), then there might potentially arise the problem of how to account for the motivational force of such a reason. However, there are various options, such as rejecting internalism about reasons (which is *prima-facie* independent of epistemological internalism as discussed in chapter 4), and I cannot discuss the issue here.)

⁹It is perhaps not exactly clear in what sense being disposed to accord with *MPP* warrants the ascription of an attitude towards L . In particular, wouldn't this disposition rather warrant ascription of the belief in *MPP is valid*? L states that necessarily if this, i.e. (1)-(2), is a fact, then that, i.e. (3), is a fact. It is thus about the particular propositions or facts (1)-(3). In contrast, *MPP is valid* states that necessarily if any facts c_1, c_2 related to each other as (1) and (2) obtain, then some fact c_3 related to c_1, c_2 as (3) to (1)-(2) obtains. It is thus about all proposition of a certain logical type [Cf. Haack, 1976]. Thus if the inferential disposition to accord with *MPP* warrants ascription of an attitude at all, then more plausibly an attitude towards *MPP is valid* than L .

Perhaps a proponent of the dispositional account could respond in the following way: It is true that the subject in \mathcal{N} manifests her general disposition to believe the q -type proposition, when she already believes propositions of the p - and (*if p, then q*)-type. Still we can also ascribe to the subject the disposition to believe token (3). It is just an additional fact that the disposition to believe token (3) is had in virtue of the disposition to believe logical type-(3). So, the attitude towards L is rather ascribed in virtue of the

Inferring and believing for inferential reasons

There are reasons to be dissatisfied with the dispositional account of deduction. But before turning to more substantial problems, I want to address an issue that has been looming for a while. On the face of it *inferring (3) from (1)-(2)* is not the same as *believing (3) for the deductive reasons provided by (1)-(2)*. The first seems to be a description of *the event of coming to believe (3)*, while the second is a description rather of a state than an event —or if it as an event, it is rather the event of *maintaining belief in (3)*.

One could argue that this appearance is misleading. “believing (3) for the deductive reasons provided by (1)-(2)”, according to this view, is not a description of why belief in (3) is maintained. Beliefs are maintained simply because they are remembered or stored. *That (3) is believed for a certain reason* hasn’t anything to do with the fact that the belief is stored, but only with how the belief in (3) came to be stored. So, that (3) is believed for a certain reason, involves that the event of coming to believe (3) is explained in a certain way. It does not involve that maintaining the belief in (3) is explained in a certain way.¹⁰

But this seems wrong. For according to this picture I could believe (3) for the reason provided by my beliefs in (1)-(2), while I no longer believe (1)-(2). Suppose that my belief in (3) is inferred from (1)-(2) and in this way comes to be stored. Later on, I abandon or loose my belief in (1) or in (2) (or in both), but still believe (3). Do I still believe (3) for the reason provided by (1)-(2)? It seems not. The natural thing to say is that I now believe (3), because I remember it. Very plausibly I do not have an *experiential* memory of (3). This could normally only be the case if I had had an experiential state representing (3), such as if I had seen that the roads are wet. But I still remember (3) in a non-experiential way. It seems to me that when my believing (3) becomes insensitive to whether I believe (1) or (2), I am not believing (3) for the reasons provided by (1) and (2). And thus I am not believing (3) for deductively inferential reasons, even though I came to first have my belief in (3) as the result of inferring it from (1)-(2).

Usually one takes account of this by saying that the premises (or more generally the involved states) are *sustaining causes* of the belief in (3).¹¹ Sustaining causes are events (extended in time), such that when they cease to exist, their

disposition to believe token (3) than the disposition, also had by the subject, to believe logical type-(3).

¹⁰Such a view is suggested by Goldman [1999b].

¹¹For instance Korcz [1997], Bergmann [2004]

effect ceases to exist. So, because the beliefs in the premises are sustaining causes, the following counterfactual holds:

premise dependence (PD1): The subject ceases to believe the premises $\Box \rightarrow$ the subject does not *maintain* her belief in (3).

This gives rise to a minor complication. Instead of appealing to a counterfactual in order to express the idea of a sustaining cause, one could also appeal to a disposition. This is not surprising, since counterfactuals and disposition-statements are related.¹² It is to some extent controversial how exactly they are related. Consider the following statement:

premise dependence (PD2): The subject is disposed to give up belief in (3), when she abandons belief in (1) or (2).

It is widely held that (PD1) and (PD2) are not equivalent. The subject can have the disposition without the counterfactual being true, and the counterfactual can be true without the subject having the disposition. For my purposes these differences do not matter. However, (PD2) complicates the situation in so far as that the proposal now appeals to dispositions at two levels. For (PD2) does not refer to the inferential disposition that is characteristic of the proposal at hand.

How is the characteristic (i.e. inferential) disposition to be integrated with the idea of sustaining causes? The disposition is of course not an additional sustaining cause besides the beliefs in the premises. Rather the premises are sustaining causes, in virtue of the subject's disposition. Thus, there is a lower-level dispositions, which obtains because the beliefs in the premises are sustaining causes. And there is a higher-level dispositions, the disposition to treat (1)-(3) content-types in a certain way. Taking this into account, we can give the following characterization of the dispositional account of deduction, or more appropriately "the dispositional account of believing for deductive reasons":

(D2) (3) is believed for the deductive reason provided by (1) and (2), if and only if

(a') the subject is disposed to abandon the belief in (3), if she abandons belief in (1) or (2), and

¹²[Cf. Goodman, 1955, Lewis, 1997].

(b') (a') is the manifestation of a disposition to treat (1)-(3)-type propositions in that way.

The vocabulary of “treating” and “abandoning” propositions is not here intended to suggest that these are voluntary actions. So, the premises are not simply sustaining causes for the belief in (3) —which would be compatible with it's being so in virtue of some kind of irrational dependence. Rather they are sustaining causes in virtue of the subject's stable disposition to believe the (3)-type propositions, as long as she believes the corresponding (1)- and (2)-type propositions.

So, there seems to be no obstacle in principle to amend the proposal in such a way as to account for *maintaining a belief* rather than *coming to believe*. On the proposal at hand, the higher-level disposition is attitude A without which the subject wouldn't have the lower-level disposition. And the lower-level disposition, together with the fact that the subject believes the premises (or: does not lose the premises) explains why the subject continues to believe (3). The higher-level disposition therefore partly explains why the subject continues to believe (3).

However, in the course of taking sustaining causes into account, the sense in which the beliefs in the premises and the attitude towards *L* together “explain” the belief in (3) has changed. The intuitive idea was that the three states, i.e. the two beliefs in the premises and the attitude towards *L*, together cause or at any rate explain the belief in (3). This means that for each there is a counterfactual stating that if the subject weren't in that state, then she wouldn't believe (3). The counterfactuals for the premises still hold in the amended account. If the beliefs ceased to be held, the subject would cease to believe (3). But the counterfactual for the attitude towards *L*, called “psychological-dependence”, is not part of the amended dispositional account (D2) anymore. If the subject ceased to have the higher-level disposition mentioned in (b'), condition (a') would no longer obtain. This means, the belief in (3) would cease to depend on the beliefs in the premises, but it does not mean that the belief in (3) would cease to be held. Whether in that case the subject would still believe (3) or not is a further question not ruled by (D2). It is still true that the higher-level disposition together with the fact that the subject maintains her belief in the premises in some sense “explains why” the subject maintains belief in (3). But by abandoning the psychological-dependence claim we are a bit further away from the initial intuitive idea behind the psychological view.

The tracing-back intuition

My reason for rejecting this proposal is that something is missing: Even if a subject manifests such a higher-level disposition, this is not sufficient for her belief to be *believed for a reason*. The intuition cannot very well be brought to bear when one considers *Wet Roads*. Ideally one could produce an example where the subject has good deductive reasons, believes the conclusion, the belief depends on beliefs in the premises in the way of the lower-level disposition, and it does so as the result of her having the higher-level disposition; and she intuitively still wouldn't believe for her good deductive reasons. But I think that this direct route is not possible. Intuitions concerning such a case are too much muddled by considerations of relative theoretical advantages, so that one would have to lay out a number of theoretical alternatives first. I will therefore provide an example where the subject does not have good reasons—or where it is at least not clear that she does, and then argue that something else besides the fact that there are no good reasons is also going wrong in this example. And this something else is that in this case the conclusion is not really believed for a reason at all.

Consider the following pattern (We can not assume here that it is an *inferential* step, therefore I call it “pattern”) to which I will refer as *Sad Day*:

(A) x is sad.

(B) Today is a sad day.

Suppose a subject has the disposition—due to a somewhat morose or over-empathic character—to believe (B)-type propositions, as long as he believes some (A)-type proposition. When he stops believing the (B)-type proposition, he will stop to believe the (A)-type proposition and this saves his day. Here an (A)-type proposition is a proposition expressed by any sentence as (A) where “x” is replaced by any grammatically and semantically suitable term. A (B)-type proposition is any proposition with the (concept of the) day on which it is thought in place of “today”.¹³ So, let us assume that the belief in (A) is coupled (as a matter of personal character) to an emotional

¹³I disregard here a complication due to the fact that *today* is an indexical concept. On many views such a concept has two “sides”. It has a “character” which specifies features of the circumstance of thought, e.g. the day when it is thought, that determine its “content”, e.g. May 2, 2007. A (B)-type proposition is any proposition with the same “character” as (B), while the “content” differs for different proposition tokens of this type. [Cf. Kaplan, 1989]

response which in turn is responsible for the belief in (B). And this in such a manner that were the emotion to disappear, the belief in (B) would disappear. And were the belief in (A) to disappear, the emotional response would disappear. So, the subject has a disposition to abandon the (A)-type proposition when she abandons the (B)-type proposition. I will refer to the whole so characterized circumstance also as “*Sad Day*”.

Perhaps our subject does not have a good reason to believe his (B)-type proposition, whenever he believes the (A) type proposition. Even though I do not know in a general form the application conditions for “sad day”, at least sometimes the belief in (B) will be clearly unjustified. For instance, when in the (A)-type proposition “x” stands for “yesterday”, the subject will believe according to the following pattern:

(A') Yesterday was sad.

(B') Today is a sad day.

It seems clear to me that in that case he does not have a good reason to believe (B').¹⁴ But furthermore, it seems plausible to me that such a subject does not believe the (B)-type proposition for a reason provided by (A') at all. His belief in the (B)-type proposition is explainable by appeal to the disposition and the belief in the (A)-type proposition. But this explanation is not of the same type when a belief is explained as being held for a (bad) epistemic reason.

So, the question is whether a manifestation of the disposition to accord with *Sad Day* is a case of believing for a reason —whether or not the reason is good. Now, a proponent of the dispositional account of deduction at first sight need not be too worried by this case. Very clearly the case cannot constitute a counterexample to her account. Even if it is not a case of believing for a reason, it is not true that it satisfies conditions (a') and (b') of (D2). First,

¹⁴Someone might argue that the emotional response constitutes (or transmits) a good reason for believing (B) or (B'). After all *sad day* is an evaluative concept, and it is not completely out of the question that evaluative judgments are at least sometimes justified partially by appropriate emotional responses. However, even if appropriate emotional responses do sometimes provide good epistemic reasons for evaluative beliefs, it seems to me that if the emotion arises from the belief *yesterday was a sad day* it could not license the belief in *today is a sad day*. Either the emotional response to the belief in (B') is inappropriate, or the “step” from the emotional response to the belief in (A') is inappropriate. I do not assume here that emotional responses can never provide a reason to believe something evaluative. It is simply very implausible that this is such a case.

(D2) is only about believing for *deductive* reasons, not about believing for a reason in general. Second, (D2) as specified below obtains in virtue of what has been called the “higher-order disposition” to accord with *MPP*. But the disposition to accord with *Sad Day* is obviously of a very different kind.

I do not intend to present *Sad Day* simply as a counterexample to the dispositional account of deduction. The strategy is, first, to point out why *Sad Day* does not qualify as a case of believing for a reason; second, to make plausible that the missing feature is a completely general feature that must be had by all cases of believing for a reason. And, third, to argue that the feature is missing from the dispositional account of deduction.

Sad Day is different from *The Evening Gets Worse* (on page 60). Neither is a case of believing for a reason (provided by the respective “premise”-beliefs), but *The Evening Gets Worse* even less so than *Sad Day*. Concerning Paul’s case I didn’t speak of dispositions. But as said, dispositions come easy, and we can ascribe to Paul the disposition to believe (3), when he believes (1)-(2). The interesting question is whether the disposition is a disposition to react to a certain *type* of proposition and whether the disposition in *Sad Day* and the disposition in *The Evening Gets Worse* react to similar kinds of types. So, in *Sad Day*, the subject has a stable disposition to make depend (beliefs in) certain types of contents on others, namely the (B)- on the (A)-type proposition. In the former case, *The Evening Gets Worse*, if we try to identify types of propositions which the subject is disposed to make generally depend on others, we are led to incorporate many circumstantial features. Thus, that it is the belief in (3) that results from the beliefs in (1)-(2) depends on the fact that on the occasion it appears to be a bad thing to Paul that the roads are wet. If he thought or felt that it was good that the roads are wet, he would never have come to believe (3), resp. he would never make depend belief in (3) on the beliefs in (1)-(2). Thus (3) is believed in virtue of being of the type “proposition with a content that is bad on the occasion”.

Also, believing (3) here depends on the fact that (1)-(2) lead Paul to expect something bad. So, Paul is disposed to react to the proposition type “propositions which lead to expecting something bad”. And it is to be supposed that other propositions could play that role just equally well as (1)-(2).

In other words, the specific contents of (1)-(3) are not sufficient to determine Paul’s belief-forming- or belief-revising-behavior. The beliefs in (1)-(2) are not sufficient in themselves to determine that it is (3) that Paul comes to believe instead of some other proposition. This is not so in *Sad Day*. The fact that the subject has a disposition to accord with *Sad Day* determines that it is exactly because of the (A)-type proposition that she comes to believe

the (B)-type proposition. So, in the spirit of the dispositional account we could ascribe in *Sad Day* an attitude A towards a content linking (A) and (B). The subject's stably conforming in his belief-revising and belief-forming behavior to *Sad Day* warrants saying of him that he accepts that (A), in itself, supports (B) —at least, one could expect a proponent of the dispositional account agreeing to this. But Paul does not in this sense “accept” that (1)-(2), in themselves, support (3).

It is true that the disposition in *Sad Day* is not a disposition to react to the same features of the propositions as is *Wet Roads* (according to the dispositional account). In *Wet Roads* the disposition is to react to the logical type of the proposition, as explained above. In *Sad Day* the proposition types are not individuated merely by the logical concepts and the way the propositions are composed of each other. The type of proposition is for instance individuated partially by the concept *sad*. I will discuss below whether this difference is of any help to a proponent of the dispositional account.

Given that *Sad Day* is not a case of believing for a reason, we can ask why this is so. Perhaps one aspect is that the disposition involves a mediating emotional response. But it is not to this that I would like to draw attention. I will express the point here in the form of an intuition with a somewhat vague content. It is to be seen later what precise requirement does justice to this intuition.

The problem is that the subject is not —not in virtue of the mentioned disposition, anyway— sensitive to criticisms of her belief in (A') as she would be, if she believed (A') for the reason provided by (B'). (i) She is not sensitive to challenges to the effect that (A') and (B') are unrelated. If someone convincingly pointed out to her that (A') does not support (B'), this would not result (not because of the disposition, anyway) in her losing the emotion triggering belief in (B'). And thus, even if she were to accept that (A') and (B') are unrelated, it would not result in her giving up (B'). (ii) And even though successful challenges to (A') would result in her giving up belief in (B') —because if she gave up (A') the emotion would wane, this is not because she understands that a challenge to (A') is in her case a challenge to (B').

We can express this loosely by saying that she does “not trace back her commitment to (A) to (B)”. When a belief-formation is guided by the sort of character-trait responsible for the emotion's being triggered by the belief in (A'), then, in a sense to be specified, one does not understand oneself as having a reason to believe (B') because one has a reason to believe (A'). Even though the emotion wanes at the same time as the belief in (A'), and thus also the belief in (B') disappears, it does not thereby disappear in the right

way (or “for the right reason”). As said, this is merely an intuition and it is only hinted at what is missing by way of formulations that are not at all clear. What does it mean to say “does not trace back one’s commitment” or “does not understand oneself to have a reason because one has another”? But it seems to me that there is the intuition and it is an advantage for an account of believing for a reason, if it can give a sense to these loose expression such that they apply to believing for a reason. I will call the intuition the “tracing-back-intuition”.¹⁵

Restricting the eligible dispositions

As said, the disposition in *Sad Day* differs from the disposition that according to the dispositional account manifests itself in \mathcal{N} with respect to *Wet Roads*. I will now examine whether this difference is of any help to a proponent of the dispositional account. Could she generalize her account in such a way to believing for a reason (not only for a deductive reason) that *Sad Day* is excluded? And would such a generalized account do justice to the tracing-back intuition?

The proponent of the proposal must argue that only dispositions concerning certain proposition-types have the effect that one believes for a reason. That is, she must restrict the eligible disposition. I therefore refer to this response on behalf of the dispositional account as the “restriction-strategy”. For instance, in *Wet Roads* the subject believes (3) as a reaction to believing (1)-(2) qua propositions of the type that can be substituted in the *MPP*-pattern. Her belief-forming behavior depends on the logical type of (1)-(3). This suggests that for the case of believing for a deductive reason she could restrict the eligible dispositions to those that are disposition to accord with some valid patterns such as *MPP*. For the case of believing for non-deductive reasons there are equally patterns specified in terms solely of logical vocabulary to which the dispositions must be restricted. These patterns would be “inductively valid”.

¹⁵Here is a passage by Audi [1993, chap. 8, 240-241] expressing the same idea with similarly loose expressions as I do:

[...] when S believes p for a reason r [i.e. believes p for the reason provided by belief in r], he believes p in the light of r , not merely because of it, and that he must in some way see r as supporting p [...] where this suggests, not his explicitly taking r into account, but his belief system’s somehow reflecting r ’s subjectively registered support for p .

A question arises concerning the validity of the pattern. There are several problems. First, arguably there is no inductive validity. That is, there are no inductive patterns specifiable in purely syntactic terms (except for the logical concepts), such that when the premises are justified, so is the conclusion. This is one of the upshots of Goodman's new riddle of induction. Whether the induction is justified depends on the precise non-logical concepts involved in the observation-beliefs.¹⁶ Second, validity should not be required anyway. It is a general requirement on an account of believing for a reason that it does not rule out that one sometimes believes for bad epistemic reasons. On the current proposal this is not completely ruled out. That would happen for example when although the premises entail the conclusion (a valid pattern is satisfied), the premises are unjustified. But one could not believe for a bad reason because an inferential step is invalid. If the step is invalid, so the response goes, the "conclusion" is not believed for a reason at all.

This is counterintuitive. Consider the "gambler's fallacy". Suppose someone's betting behavior accords with the following principle: "If in a fair lottery a number is not drawn many turns in a row, the probability that it will be drawn in the next turn increases". We say of such a person that she "reasons fallaciously". Intuitively, that is, we say of such a person that she *does* reason, hence that she does believe something for a reason. The problem is that her reason is bad, not that she does not believe for a reason. Similarly, when someone falls in to an equivocation, we say that he reasons fallaciously, hence that he does reason. In contrast, in *Sad Day*, we do not say that the person behaving in accordance with the pattern exhibits fallacious reasoning. That person does not reason at all.

So, this poses a problem for a proponent of the restriction strategy. For she must make some indication how the dispositions are to be restricted. Validity is not a good criterion. This is perhaps not an insurmountable problem. Perhaps even when the pattern is invalid the subject who reasons is disposed to react only to "formal" features of the proposition in question. Thus, reasoning according to the gambler's fallacy abstracts away from the kind of game we are playing and so on. In an equivocation the propositions somehow appear to be other than they are. And it is their appearing to be of certain logical type that triggers the belief-formation. So, perhaps there is a way to restrict the disposition to disposition to react to "formal" features.

But perhaps there are other differences between *Sad Day* and *Wet Roads* which could be exploited in the aim of restricting the eligible dispositions. There must be a way to exclude *Sad Day* without excluding the gambler's

¹⁶[Cf. Goodman, 1955]

fallacy and similar cases. Perhaps the way to do this is not to restrict to dispositions to react to “formal” features. Another idea would be to exclude certain specific features present in *Sad Day*. For instance, one could make the following claim: a disposition can be responsible for the fact that something is believed for a reason, only when no emotional response or character trait grounds or is involved in the disposition. Although I cannot argue that no such account could be convincing, it seems to me that a proponent would be hard pressed to avoid the charge of ad-hocness. (See also below.)

Anyway, even if some such account were at hand, it is not clear in what sense restricting the eligible dispositions is supposed to give a meaning to the tracing-back-intuition. Indeed, why should the fact that only certain content-types are linked together, provide the means to claim that the subject “traces back her commitment”?

Perhaps one could argue that every instance of believing for a reason is the manifestation of the disposition to accord to *MPP*-reasoning or some similar (perhaps invalid) pattern involving a conditional. In that case perhaps the presence of the conditional premise, e.g. (2) in *Wet Roads*, secures that the subject “traces back her commitments”. By believing (2) the subject believes that her claim to (3) depends on her claim to (1). Perhaps even some such premise can be identified in induction too. One could perhaps argue that enumerative induction is a form of inference to the best explanation, because it relies on the premise that the generalization best explains the instances.¹⁷ So, here again there is then a premise with what might be called a “linking content”. Suppose we leave out “best” in the premise about explanation. Enumerative induction has then the following form:

(1') n observed X's have been Y's, 0 observed X's have not been Y's.

(2') The explanation for (1') is that all X's are Y's.

(3') All X's are Y's.

In this inference (2') arguably implies *if (1'), then (3')*. So, this inference can be seen as a disguised *MPP*. And if every inference-form that is eligible can

¹⁷Gilbert Harman [1965, 1968] has argued that enumerative induction is a form of inference to the best explanation. But (at least in Harman [1968]) he does not claim that there is a premise such as (2') involved. He says that in an enumerative induction, one “infers an explanation from the data” and this does not imply that one of the premises is about explanation. He clearly thinks that inference to the best explanation is not a deductive form of inference Harman [cf. 1968, 166-167].

be interpreted as having a similar underlying form, then each one contains a “linking premise”. And, thus, if we restrict the inferential dispositions that underly believing for an inferential reason to the *MPP*-form (or similar), we can take on board the intuition that the subject traces back her commitment for the conclusion to the premises. Hence, by restricting the eligible dispositions in the right way we can accommodate the tracing-back intuition, or so one could argue.

There are a number of serious problems with this account. Most importantly, if every justified inference is deductively valid —as it would be if it is of the *MPP*-form, then it is hard to see how premises such as (2') could be justified. It does not seem to be non-inferentially justified. But from what could it ultimately logically follow that something is to be explained by something else? That (1') is explained by (3') is not “contained” in anything we already know. Genuine induction is required to extend our knowledge to new facts, deduction can only bring out what is already implicitly known, so the saying goes. But I do not want to pursue this issue, for the proposal is anyway speculative in the extreme.¹⁸

In particular, it is from the start questionable whether the tracing-back intuition can be satisfied merely by the fact that one of the premises, here (2), has a content linking the other premise(s), here (1), to the conclusion, here (3). It is true that no belief with a conditional form is present in *Sad Day*. But the absence or presence of some conditional or other is in fact irrelevant for the point expressed by the tracing-back intuition. The conditional must link the conclusion to the contents of the beliefs *in virtue of which the subject has a reason to believe the conclusion*. Consider again *Wet Roads*. The problem is that in *Wet Roads* it was agreed that the good epistemic reason the subject has, is had in virtue partially of her justifiably believing *both* (1) and (2). So, even if believing (2) ensures that the subject traces back her commitment to (3) to (1), this does not mean that she traces back her belief in (3) to her good epistemic reason for believing (3). For this reason is provided by her justified beliefs in *both* (1) and (2). So, the suggested deductivism about inference cannot do justice to the tracing-back intuition.

In any case, I would like to put forward an alternative. A convincing case against pursuing the restricted proposal could be made, if an alternative convincingly accounts for the difference between *Sad Days* and cases of reasoning, and furthermore successfully captures the tracing-back intuition. To

¹⁸Corresponding to apriorism about induction, i.e. the claim that what is called the “Uniformity of Nature” is known a priori, one could try to argue that facts about explanation, at least in basic cases, are known a priori. In that cases some premises of the kind of (2') are not inferred from observations.

provide such an account will be my aim in what follows.

3.3 Belief proper

A very straightforward way to take the tracing-back intuition into account is by appealing to a belief in L proper. The discussion above suggests that a conditional that links the conclusion to *all* the premises is required to do justice to the tracing-back intuition (more on this below). And a belief in L ensures that the subject believes precisely such a conditional. The resulting account, to which I will refer as “the belief-proper-account” of deduction takes the following form:

- (B) (3) is believed for the deductive reasons provided by (1) and (2), if and only if
 - (a*) the subject is disposed to abandon the belief in (3), if she abandons belief in (1) or (2), and
 - (b*) the subject is disposed to abandon the belief in (3), if she abandons her belief in L .

The clause that differs from (D2) is (b*). How does (b*) exclude the imagined case *Sad Day*? As before, *Sad Day* is intuitively not only not a case of deductive inference, but it is not a case of inference at all. So, the question is how a belief-proper account *extended to non-deductive inference* would exclude *Sad Day*. If extended to other cases of inference, the belief-proper account would require that the subject believes some kind of linking proposition. For believing a linking (complex) proposition is the requirement by which the belief-proper account wants to ensure that the subject traces back her commitments. So, the account of believing for inferential reasons is the following:

- (BI) p is believed for the inferential reason provided by the justified belief in q , if and only if
 - (a*) the subject is disposed to abandon the belief in p , if she abandons belief in q , and
 - (b*) the subject is disposed to abandon the belief in p , if she abandons her belief in a linking proposition with a content similar to *q makes probable p* .¹⁹

¹⁹More on the precise content of the latter proposition below.

So, *Sad Day* is excluded, because the subject does not satisfy (b*). The case as imagined is that an emotional response triggered by belief in *x is sad* in turn triggers belief in *Today is a sad day*. Furthermore it was said that the subject has an emotional set-up (the morose character) such that this mechanism manifests a stable disposition. But this is not relevant at present, since the belief-proper account does not appeal to stable dispositions at what was called the “higher-level” (I come to this in a moment). So, what is missing in *Sad Day* (as it is implicitly understood) is that the subject does not believe such a linking proposition or, at least, her belief in it would be irrelevant to whether she believes *today is a sad day*. If I were to present evidence to such a person that even if, yesterday, say, was a sad day, today could very well be a happy day, she would presumably abandon her belief in the linking proposition, but not in *today is a sad day*. It was understood that she could come to abandon belief in *today is a sad day*, only if her mood changed. And arguing for my claim that today could still be a happy day, even if yesterday was a sad day, does not obviously change her mood. On this version of *Sad Day* the subject thus fails to satisfy condition (b*).

But suppose now a version of *Sad Day* in which the subject’s mood would change, if she came to be convinced that *yesterday was sad* is unrelated to *today is sad*. She would therefore abandon her belief in *today is sad*. I refer to the version of *Sad Day* in which the subject does (i) believe the linking proposition, and (ii) react to her ceasing to believe the linking proposition as “*Sad Day**”. Concerning *Sad Day** I would no longer affirm that she does not believe *Today is a sad day* for a (bad) reason provided by her belief in *Yesterday was a sad day*. This will be contested. I claim that in *Sad Day** the subject does believe for a reason (although, of course, for a bad one).

One could object that since there is still the intervening mood which is responsible for whether belief in *Today is a sad day* is abandoned or not, the belief in *Yesterday was a sad day* cannot provide a reason for which it is believed. It could be argued that when emotions are responsible for my beliefs in the way sketched in *Sad Day**, then these are not held for a reason. But this does not seem to me to be a pre-theoretic judgment. If one already thinks that believing for a reason has something to do with how the dependence between the involved beliefs is implemented in the subject’s psychology, then it might seem clear that this is not a case of believing for a reason. But if one thinks, as a proponent of the belief-proper account does, that the important thing is the dependence—in particular the dependence specified in (b*)—and not how it is implemented, then one will not take this to be clear at all. If the subject in *Sad Day** is sensitive to evidence for *x’s being sad* has nothing to do with today’s being a sad day, then I am ready to

think of the case as one in which the subject does believe *Today is a sad day* for the reason provided by her belief in *x is sad*.

Everyone agrees that clause (a) ($= (a') = (a^*)$) is insufficient,²⁰ for it allows that the belief in the conclusion depends in all sorts of manners on the belief in the premises —manners that we would not be willing to treat as inferring or believing for a reason. But the belief-proper account addresses that problem in a fundamentally different way from the dispositional account. The dispositional account tries to be more specific on the mechanism underlying the dependence required by clause (a'). Thus clause (b') refers back to (a') and requires that it obtains in virtue of a stable disposition with respect to content-types. I have argued that cases like *Sad Day* (not: *Sad Day**) are not cases of believing for a reason, although it is not clear how a proponent of (b') could exclude them. I have argued that it is not obvious how the dispositional account could modify (b'), resp. restrict the eligible dispositions —especially if it tries to take the tracing-back intuition on board. The belief-proper account does not attempt to specify the mechanism underlying (a'). It rather adds a further dependence-requirement. This dependence requirement is sought to exclude *Sad Day* and to do justice to the tracing-back intuition. And if the account succeeds in doing this, then it can allow itself to be very liberal with respect to the mechanisms underlying any of the two dependences. Thus, it does not matter whether emotions intervene or whether the dependence between the propositions obtains only once in a lifetime.²¹

²⁰But see below.

²¹To these two strategies for finding the further necessary condition(s) besides (a*) correspond, unsurprisingly, two strategies for finding further conditions besides mere causal dependence in accounts of the “basing-relation”. The basing-relation is the relation that obtains when a belief’s being justified (being believed for good epistemic reasons) depends on its being psychologically related to other states, typically other beliefs and perceptual states. For instance, on many accounts, I have a perceptually justified belief, only if it depends in the right way, i.e. is “based” on, a perceptual experience. It is uncontroversial that I have a deductively justified belief, only if it depends in the right way, i.e. is based on, the beliefs in the premises. In the chapter I speak of “believing for a reason” rather than the basing-relation. But it is clear that when I “believe a conclusion for the reason provided by my beliefs in the premises”, then the relation that obtains between the beliefs in the premises and the belief in the conclusion is the basing-relation. Thus, an account of believing for deductive (or more generally: inferential) reasons will include an account of the basing-relation, at least as it obtains between beliefs. On most accounts the basing-relation involves a causal dependence between the states in question. But it is acknowledged by all sides, that there are causal dependences that do not qualify. *Sad Day* is just such a case. There are then two broad strategies to exclude these cases. The first, which might be called the “non-deviant causal chain” strategy, attempts to exclude them by being more precise on the underlying causal mechanisms. The other strategy, which

There are probably *some* limits to be set. Suppose my brain is monitored by some scientist. Upon realizing that I do not believe *L* anymore and being a bit of a pedant he decides that I should loose belief in (3). He can and does bring this about by intervening directly in my brain. Without his intervention, however, I would have continued to believe (3). In that case I do not believe (3) for the reason provided by (1) and (2). The disposition to give up believe in (3) when I loose belief in *L* must in some sense be “my own” disposition. But in order to defend the belief-proper account it is not required to be more specific. One must take (B) as an approximation. It is still sufficiently different from the dispositional account in order to evaluate their respective merits.²²

How does the belief-proper account take the tracing-back intuition on board? According to the present account the subject traces her commitment to (3) back to her premises in a very straightforward sense. If we take the expression “trace back her commitment to the premises” in the most demanding and literal sense (of course, even then “tracing” is a metaphor), then we think of the subject as having fully conscious beliefs about her commitments, resp. about what is her reason for believing (3). But clearly it would be too strict to require such a belief to be conscious. A non-occurrent belief would certainly suffice. However, the belief-proper account does not even appeal to a non-occurrent belief in the proposition *My reason for believing (3) depends on my reasons for believing (1)-(2)* or any similar proposition involving the concept *reason* or the concept *commitment*, but it appeals to a belief in the proposition *L* and this is not . According to the belief-proper account the

might be called the “cognitive” strategy attempts to exclude them by putting further cognitive requirements on the subject. For instance, the subject must believe or know certain things about the relation between her belief in the conclusion and her belief in the premise. An example of someone pursuing the second strategy is Audi [1993]. The dispositional account can be seen as an attempt of the “non-deviant causal chain” kind, while the belief-proper account can be seen as an attempt of the “cognitive” kind. A useful overview on accounts of the basing-relation is Korcz [1997].

²²The two conditions (b') and (b*) are not exclusive. So it is possible to combine the two accounts. In fact, a plausible version of the dispositional account could include the idea that the dispositional basis of the inferential disposition is also the dispositional basis for a belief in *L*. Depending on the details of the adopted theory of belief, it is thus also the dispositional basis of a dispositional (i.e. non-occurrent) belief in *L*, or of a disposition to believe *L*. In fact this could be claimed to be the reason why having such a disposition constitutes bearing an attitude towards *L*.

However, even on this version of the dispositional account, (b*) would be a further condition besides (b'). For if the dispositional basis did not obtain, then according to (b') it is not the belief in (3) which would cease, but the dependence of (3) on the beliefs in (1) and (2) as specified in (a'). Whether the subject would still believe (3) is a further question. This is the question on which in that case condition (b*) would rule.

subject need not believe that her reasons depend on the truth of the premises or on the fact that the premises support the conclusion. Therefore, there is a sense, in which the subject need not “trace back her commitment to the premises”. However, her belief-revising behavior is to some extent as if she did believe these things. What would be her belief-revising behavior if she had these beliefs about reasons?

- (i) If she believed *My reason for (3) depends on the truth of the premises*, then if she didn’t believe in the truth of the premises, she would when reflecting on the question abandon belief in (3).
- (ii) Similarly if she believed *My reason for (3) depends on the fact that (1) and (2) support (3)*, then if she were to doubt that (1) and (2) support (3), she would also abandon belief in (3). Let us further make the plausible assumption that she believes *(1) and (2) support (3)* on the basis of the belief in *L*. So, given she ceased to believe *L*, she would cease on reflection to believe *(1) and (2) support (3)*. And, then, given her belief in *My reason for (3) depends on the fact that (1) and (2) support (3)* she would on reflection cease to believe (3).

This corresponds to the belief-revising behavior predicted by (B). (i) is also the belief-revising behavior predicted by clause (a*): If she ceased to believe (1)-(2), then she would abandon belief in (3). And (ii) is the belief-revising behavior predicted by clause (b*): If she ceased to believe *L*, she would cease to believe (3). Thus the subject’s belief-revising-behavior with respect to (3) according to (B) is as if she reflected on her reasons for believing (3). It is as if she “traced back her commitment to (3) to (1)-(2)” in the full sense of having beliefs about her reasons for believing (3). In virtue of this resemblance with respect to the “net result” in belief-forming behavior, I think the belief-proper account does justice to the tracing-back intuition.

So, the belief-proper account succeeds where the dispositional account failed. It can exclude *Sad Day* while at the same time do justice to the tracing-back intuition. But let us turn now to more critical questions.²³

²³The belief-proper account also resembles another intuitive way, in which one might account of believing for a reason. It can be extracted from the following passage from Harman [1964, 354]:

To say that my belief in *p* is based on the (abstract) inference *i* [a sequence of propositions] is to claim that stating the inference gives the reason why I believe *p* in some sense of “reason”. Here one is torn between taking “reason” as “cause” and taking it as “justification”. That is, sometimes I believe *p* because I consciously made the inference *i*; and this explains how my belief

The Lewis-Carroll-Problem again

The first question that arises for a proponent of the belief-proper account is whether it can avoid the Lewis-Carroll-Problem. In its most general form the Lewis-Carroll-Problem arises whenever the motivation for introducing the further belief in L (and perhaps in addition reasons for that belief, as in the version against strong inferential internalism) “carries on” on any further level such that ever more further beliefs are introduced. The Lewis-Carroll-Problem for the psychological view is generated if one endorses the following three claims:

Insufficiency of (a*): It makes sense to ask for more than the beliefs in (1) and (2). Something more than the dependence on beliefs in (1) and (2) is needed to explain the belief in (3) in a satisfactory manner.

Necessity of (b*): This something more is a dependence on the belief in L .

Level confusion: The impression that the introduction of L helps explain the belief in (3) is due to the fact that we illicitly think of the reflective inferential step from (1) and (2) and L to (3). But to explain such an inferential step L was introduced in the first place.

is based on inference. At other times my belief is not the result of conscious inference, although *I would mention the abstract inference i if asked to justify or defend my belief in p* ; and now this explains how my belief is based on inference.[emphasis is mine]

Harman then goes on to develop a third sense in which belief can be based on inference. His third sense roughly corresponds to the dispositional account. I am here interested in his second sense in which a belief is “based on inference”. Adapted to the current example, it suggests a different condition in place of (b*):

(b+) the subject would appeal to (1) and (2), if asked to justify or defend her belief in (3)

In fact, the citation suggests an account of believing for a(n) (inferential) reason that replaces both (a*) and (b*) with (b+), making it the only condition on believing (3) for the reason provided by the justified beliefs in (1) and (2). But it is equally a not too implausible alternative to (b*) in an account which in addition requires that the beliefs in the premises are sustaining causes.

It has been argued that an appeal to dispositions to justify a belief in certain ways cannot help account for what it is to believe for a reason. The main problem that has been identified is the problem of rationalization. The idea is that subjects who rationalize do not believe for the reason they would cite as their reason. Now, this critique applies to an account which appeals to (b+) as unique condition. It is not obvious that it applies to (b+) as an additional condition besides (a*). Leite [2004] is a recent defense of an account of believing for a reason that appeals to how the subject would justify her belief.

I have claimed in 2.3 that the third claim is far from obviously true. Why should it be assumed that L 's role in the explanation of the belief in (3) is that of a belief in a premise in a reflective inference? The dispositional account provided an instance of an account that appeals at least to a sort of belief in L , but that does not ascribe a premise-like role to that (sort of) belief. But the belief-proper account appeals to a proper belief. In addition, on the dispositional account the dependence of the belief in (3) on the disposition is of an altogether different kind than the dependence on the premises. But on the belief-proper account the dependence between the beliefs in (3) and in L is not required to be of a different kind than the dependence between the beliefs in (3) and in the premises. So, the suspicion might arise that it cannot avoid the Lewis-Carroll-Problem. In order to be free of that suspicion, a proponent of the belief-proper account must show that what motivates his introducing the belief in L in addition to the beliefs in (1) and (2) does not motivate introducing beliefs in higher-level L -propositions.

Something can be noted from the start. It is not part of the belief-proper account that the dependence of the belief in (3) on the beliefs in (1)-(2) is mediated by the belief in L . If the subject abandons (1) or (2) this may have a direct effect on the belief in (3). It is not the case that the subject has to reason reflectively involving L to come to abandon (3) once she has abandoned (1) or (2). If the belief-proper account attempted to specify the dependence of (3) on (1)-(2) by appeal to a belief in L , this would arguably be an inferential dependence, i.e. a dependence in which L , (1) or (2) and (3) are inferentially brought to bear on one another. And in this case, the inferential dependence of (3) on (1)-(2) has been circularly specified. This is the Lewis-Carroll-Problem. But, in contrast to the dispositional account, as said before, the belief-proper account does not appeal to L in order to specify the dependence of (3) on (1)-(2). It allows this dependence to be simply causal. The additional dependence of (3) on L is merely to ensure that the subject is in some sense aware of the fact that (1) and (2) provides her with her reason to believe (3). Even more can be said. The belief in L partially *determines that the beliefs in (1)-(2) provide the reason* for which the subject believes (3). I will develop this claim in what follows.

It is not necessary to come back on the insufficiency of (a*) here. One point is worth developing, though. (B) is an account of believing (3) for the reason *provided by the beliefs in (1) and (2)*. So, when it is claimed that (a*) is insufficient or that (a*) and (b*) are jointly sufficient, then it is meant that these conditions are insufficient (jointly sufficient) for believing (3) for the reason *provided by the beliefs in (1) and (2)*. It does not mean that they are conditions on believing either for

- (i) a reason provided by the beliefs in (1) and (2) and further beliefs, or
- (ii) a reason provided by some but not all of (1) and (2).

I will give an illustration of the two cases (i) and (ii). This will allow to specify the role assigned to the belief in *L*. Consider a variation on *The Evening gets Worse* as follows:

*The Evening gets Worse**: The case is as before, except that Paul's expectation that the evening will get worse is in a propositional form and we can ascribe to him the belief in *The evening will get worse*. In fact, Paul reasons in the following way:

- (1*) It rains.
 - (2*) If it rains, the roads will get wet.
 - (3*) If the roads will get wet, then the evening will get worse.
 - (4*) If the evening will get worse, then the roads will get wet.
-
- (5*) The roads will get wet.

Paul uses the conclusion (3)=(5*) as an intermediary step to reach *the evening will get worse* and from there he reaches the conclusion (3) again via (4*). Somehow he fails to realize that his intermediary conclusion (3) is the conclusion in the end.

Intuitively, this could²⁴ be a case of believing for a reason, although an unnecessarily complicated reason. But it is not a case of believing for the deductive reasons *provided by the the beliefs in (1) and (2)*. Further beliefs are involved. So, this is an example where the belief in (3) does depend on the beliefs in (1) and (2) as specified by clause (a*). But the belief in (3) depends on further beliefs too. If the subject were to cease to believe either (3*) or (4*) she would cease to believe (3). *The Evening Gets Worse**, is an example of a case in which although (a*) obtains, the subject does not believe for the reason provided by (1) and (2). Depending on further facts (differing according to the adopted account) this is a case of believing for a

²⁴According to the belief-proper account *The Evening Gets Worse** is a case of believing for a reason, if the linking propositions for the different inferential steps are believed and causally efficacious.

reason. But even if it is, it is not for the reason provided by (1) and (2), but for the reason provided by (1)–(2) *and further beliefs*, that Paul believes (3). Thus it is a case of kind (i).

In the present context the more interesting case is (ii), i.e. when the reason is provided by fewer beliefs than (1) and (2). It was said, during the discussion of the restriction strategy of the dispositional account, that the conditional form of (2) allows to see the subject as “tracing back” her commitment to (3) to (1).²⁵ At the same time it was said that the subject does not trace back her commitment to (3) to what provides a good reason in \mathcal{N} , namely the justified beliefs in both (1) and (2). But these points suggest that one could see the case where L does not play any role as a case where the subject traces back her commitment to a different reason, i.e. the reason provided solely by her justified belief in (1). Accordingly such a case can be seen as a case of believing for the reason provided by (1). That is, it can be granted that if the belief in (3) merely depended on the beliefs in (1) and (2), the subject would believe for a reason, but not for the reason provided by (1) and (2). In particular, she would believe for the reason provided by (1) alone. That is, the case should be described as follows:

(BLO) (3) is believed for the reason provided by (1), if and only if

- (a**) the subject is disposed to abandon the belief in (3), if she abandons belief in (1) and
- (b**) the subject is disposed to abandon the belief in (3), if she abandons belief in (2).

A proponent of the belief-proper account should probably claim that this is a case of believing for a reason, because the belief in (2) satisfies the tracing-back intuition in the same way that he claims the belief in L does in the deduction *Wet Roads*.²⁶ I call the corresponding inference the “lower-order” inference, because the linking proposition, (2), is of a lower-order than the linking proposition in *Wet Roads* which is L .

The belief in L thus plays the role of *determining which beliefs provide the reason for which the subject believes (3)*. It is obvious that if this is the

²⁵I discuss below the difference between linking-propositions that are mere conditionals, such as (2), and linking-propositions that involve concepts such as *entailment* or *necessarily*, such as L .

²⁶Can the reason for which the subject believes according to (BLO) be a good epistemic reason? That is, does justification transmit from (1) to (3)? It seems to me that it does not. Justifiably believing (1) is not sufficient to *have justification (to have a good epistemic reason) for believing (3)*

role assigned to the linking-belief, there is no reason whatsoever to think that a further linking-belief is required to link (1)-(2) and L to (3). Indeed, according to the belief-proper account, if there were such a further linking-belief, the reason for which the subject would believe (3) would not be the one provided by the beliefs in (1)-(2). In that case the reason for which the subject believes (3) is provided by (1)-(2) and L . This is precisely the case when (3) is believed as the result of a reflective or higher-order inference. Again, believing for the reason provided by (1)-(2) and L , is accounted for by the belief-proper account in the following way:

(BHO) (3) is believed for the deductive reasons provided by (1), (2) and L ,
if and only if

(a***) the subject is disposed to abandon the belief in (3), if she abandons belief in (1), (2) or L and

(b***) the subject is disposed to abandon the belief in (3), if she abandons belief in (1), (2) and L together entail (3).

So, although (b*) is also a condition on the reflective (or “higher-order”) deduction, for it is contained in (a***), (b***) is not a condition on the first-order deduction.

The belief-proper account does not make the distinction between the role of the premises and the role of the linking proposition by appeal to different kinds of dependences, as the dispositional account did. But this does not mean that the role played by the belief in the linking proposition is the same as that played by the beliefs in the premises. The role of the premise-beliefs is to provide a reason. The role of the linking-belief is to (partially)²⁷ determine which beliefs provide the reason for which the subject believes. The role of the linking-belief is always played by the highest-order linking-proposition believed by the subject on which the belief in the conclusion depends. If it is (2), then (BLO) accounts for the case. If it is L , then (B) applies. And if it is the proposition specified in (b***), then we have the reflective inference (BHO). But this move does by no means imply that the account is only plausible because it confuses levels. Thus, claim 3.3 above (Level confusion) is false and the Lewis-Carroll-Problem does not arise.

If this account of the difference between levels, e.g. the first order inference *Wet Roads* and the reflective inference, is correct, then one believes for a different reason when one makes a reflective inference to the same conclusion.

²⁷The dependence of conclusion on the premise-beliefs as in (a*) is a further necessary condition.

I think this result is supported by intuitions. The following seems to be true of reasons in general:

(RD) If two reasons are different, they have different defeaters.

As said, a defeater d for a reason r (for believing p) is a proposition such that if the subject has a sufficiently good reason to believe d , then the subject does not have r that she would otherwise have. In chapter it was said that $\neg L$ is a defeater for the reason provided by the justified beliefs in (1) and (2). Accordingly, it seems unavoidable to claim that the negation of the higher-order linking proposition (1), (2) and L together entail (3) is a defeater for the reason provided by justified beliefs in (1)-(2) and L . Any negation of a premise is always a defeater for the reason partially provided by it. So, L is a defeater both of the higher-order and of the first-order inference. But (1), (2) and L together entail (3) is not a defeater for the reason provided in *Wet Roads*.

This result is intuitively plausible. When I deduce according to *Wet Roads*, I am permitted to be pretty much indifferent to evidence against (1), (2) and L together entail (3). There might be conditions —and these are the conditions of which one would normally think— under which such evidence should worry me. This is because such evidence might (and normally would) constitute evidence against L . For instance, if someone competent tells me that *MPP* is invalid, then I would have evidence against both L and (1), (2) and L together entail (3). But if the evidence is merely against the latter proposition, e.g. someone competent tells me that the higher-order linking proposition is false but that L is true, then I am right to be indifferent to such evidence. This is because my reason for believing (3) is not partially provided by a justified belief in L and therefore the relation of the set of propositions $\{L, (1), (2)\}$ to my conclusion (3) is not in itself relevant to whether I have a reason.

Intellectualism

In the preceding discussion I have developed the idea that the role of the *order* of the linking-proposition is to partially determine the beliefs that provide the reason for which the conclusion is believed. In what follows I will introduce the idea that the specific *linking-concept* involved in the linking proposition, e.g. *entailment* in L , partially determines the *kind* of reason for which the subject believes the conclusion. I will do this by discussing a very obvious objection to the belief proper-account. Roughly, the objection is that there

are many cases that we intuitively consider to be cases of deduction, but in which the subject lacks the conceptual sophistication to grasp the linking-proposition. In order to assess and respond to this objection it is necessary to know precisely which concepts this proposition is built off.

In the course of the preceding two discussions I have drawn a distinction between the belief-proper account of deduction and the belief-proper account of believing for an inferential reason, or of inferential reasoning. The latter, (BI) is thought to be more general than the former, (B), in the sense that deduction is one kind of inferential reasoning. This fact is represented in (B) and (BI) by a difference in the specification of the linking-proposition. More precisely the first contains the concept *entailment*, whereas the second was said to contain just any concept similar to *makes probable*. We can read “makes probable” in (BI) as denoting a group of concepts containing probably among others *confirms*, *justifies*, *probabilistically implies*, *entails*, *explains*, *evidences*, *indicates*, *is a reason for*, *implies*.

The belief-proper account has it that the characteristically *deductive* feature of *Wet Roads* is that the linking proposition is of the form *[premises] entail [conclusion]*, while non-deductive inferences allow for other linking propositions, such as the indicative of the form *If [premises], then [conclusion]*. So, according to the belief-proper account as developed here, a subject cannot deduce without having the concept *entailment*. For, unless he is able to grasp the proposition *L*, he cannot believe it. But this gives raise to the following objection. I first heard of entailment in my first year at University. So, didn’t I deduce before?²⁸

Paul Boghossian [2001] raises this objection, not against something like the belief-proper account, but against the following more general requirement discussed in chapter 2.1: In order to justifiably deduce (3) from (1)-(2) *I must justifiably believe L*. This requirement is not part of the belief-proper account as such, and I have not yet discussed whether it should be endorsed by a proponent of the belief-proper account.²⁹ In contrast this requirement is an integral part of strong inferential internalism. The objection, however, concerns a component of this requirement that is certainly endorsed by the belief-proper account, namely the requirement *that I must believe L*. Here is

²⁸Besides the people mentioned in the text, this objection against a condition such as (b*) is raised in Korcz [1997, 186-87]. Intellectualism objections in connection with requirements for inferential justification are very old. For instance, Hume [1999, 118] argues (besides his more important points) that induction cannot depend on a justified belief in the principle of the uniformity of nature, because a child could not understand such a principle.

²⁹I do this in section 3.4.

the objection: Boghossian [2001]

[the requirement that in order to justifiably infer (3) from (1)-(2), one must justifiably believe *L*] is far too sophisticated a requirement. A child who reasoned:

- If he were hiding behind that tree, he wouldn't have left his bicycle leaning on it
- But it is leaning on it
- So, he must be hiding behind some other tree

would, other conditions permitting, have reasoned his way to a justified conclusion. But such a child would not have beliefs about logical entailment. He wouldn't even have the ingredient (meta-)logical concepts.

Audi [1993, chap. 8, 241] who defends a belief-proper account (of believing for an inferential reason) also considers this problem:

[In requiring a belief in the linking proposition] we must avoid [...] attributing to *S* [the subject] concepts beyond the grasp of the least conceptually developed creatures capable of believing for a reason.

In response on the same page Audi takes, as I understand him, the following two measures. He allows a range of propositions with different concepts to play the linking role. Thus besides the proposition that (1)-(2) *entail* (3), all sorts of propositions ascribing different relations to (1)-(3) can play the linking role. He mentions the following concepts: *confirms*, *justifies*, *probabilistically implies*, *entails*, *explains*, *evidences*, *indicates*, *is a reason for*, *implies*. The second measure is to distinguish between the belief *that* (1)-(2) entail (3) (or more generally, the belief *that* a “support relation” between the premises and the conclusion obtains) from the belief *of* the entailment relation that it obtains between (1)-(2) and (3) (or more generally, the belief *of* the “support relation” that it obtains between (1)-(2) and (3)). The intended sense of the second expression “believing *of* the relation that it holds” is such that the subject need not in this case, as he says, “conceptualize” the relation.

Discussing Audi's first measure will take some time, since this seems to collide with the idea that the precise concept involved determines the kind of belief-formation. At first sight this measure is not available to a proponent of the

belief-proper account as a response to the Hide-and-Seek case. For the kind of relation the subject thinks is holding between (1)-(3) determines what kind of reasoning she employs. Thus if the relation the subject is thinking of is *explanation* instead of *entailment* then she is not deducing (but plausibly making an inference to the best explanation). But in the Hide-and-Seek case the child is intuitively deducing and not involved in drawing any other form of inference. I will come back to this below.

The second measure is an interesting option. Unfortunately Audi does not develop it in more detail, so that it is difficult to say, whether the measure is successful. It would be good if one could give an example of a thought which is a thought *of* the entailment relation that it holds but not a thought *that* the entailment relation holds. I think it is very plausible that even before I heard of entailment I had a notion of a distinction between different kinds of relations. I had some notion while sitting in the math lesson that the reasoning by which I tried to follow the calculations on the blackboard was of a different kind than the reasoning by which I estimated what will happen during the next break. So, this might be an example of a situation in which I was, without being able to conceptualize, aware of the entailment-relation that it holds between the propositions about numbers, without also believing *that* entailment holds between them. Thus it is plausible that some notion, i.e. some pre-conceptual awareness of a distinction, of *necessitation*, can be ascribed to subjects even before they possess the concept of *entailment*.³⁰

Even so, one plays Hide-and-Seek before one does calculations. And the example above seems to be a perfectly possible reasoning of a child before school age. So, it is questionable whether ascribing notions as primitive predecessors of concepts allows to satisfyingly respond to the intellectualism objection.

However, there is a further possible measure which Audi does not consider. One could bite the bullet and agree that the child does not believe for a reason. Her belief in the conclusion is independent of a belief in a linking proposition (which she does not have the conceptual sophistication to grasp), hence it is not held for the reason provided by her beliefs in the premises. So, we cannot say that the child believes for a good epistemic reason. But this does not exclude, the answer continues, that the child's belief in the conclusion can be in some other way positively epistemically evaluated. She does seem to have a reason —partially at least in virtue of her justified beliefs in the premises and because the inference pattern is valid. Furthermore

³⁰In a thorough discussion of this measure one would have to discuss and endorse specific accounts of concept possession. I cannot do this here.

her belief in the conclusion does depend at least on parts of these reason-providing facts. Condition (a*) can be supposed to be fulfilled. If she gave up the premises, she would give up the conclusion. And one could perhaps say that it is partially in virtue of the fact that the pattern is valid that the child has learned to reason in this way. Perhaps she even has the kind of disposition to which the dispositional account appeals. So, we can say of such a child that she is *responding* to the presence of a good epistemic reason. But the belief-proper account puts high-demands on believing for a reason. It does not consider this *responding to a reason* to sufficiently trace back the commitments to qualify as *believing for a reason*. However, it can admit, that responding to a good epistemic reason in the way the child does is a good thing from an epistemic point of view. It is not as good as believing for that reason, but it is good to some extent.³¹

Believing for a reason of a certain kind

The belief proper-account of inference as developed here purveys the following roles to the linking-proposition, as said before:

- (i) The linking-proposition singles out the beliefs that provide the reason for which one believes.

³¹This response takes up recent ideas to distinguish between animal knowledge and a more sophisticated kind of knowledge. See Bonjour's contribution in Bonjour and Sosa [2003] and Sosa [1991a]. A similar answer is given to the intellectualism objection as raised by Boghossian in the response to that paper by Wright [2001]. Sosa [1991a, 240] distinguishes the two kinds of knowledge as follows:

One has *animal knowledge* about one's environment, one's past, and one's own experience if one's judgments and beliefs about these are direct responses to their impact — e.g., through perception or memory — with little or no benefit of reflection or understanding.

One has *reflective knowledge* if one's judgment or belief manifests not only such direct response to the fact known but also understanding of its place in a wider whole that includes one's belief and knowledge of it and how these come about.

Some draw a related distinction between “entitlement” and “justification” or “reason”, for instance Burge [2003, 504] and Dretske [2000a]. But Sosa leaves open whether one and the same individual can have both kinds of knowledge, whereas Burge and Dretske take sophisticated adult humans to have both entitlement and justification. For the present response to intellectualism it is sufficient that there are both kinds of knowledge or justification in different individuals. Thus it may be impossible for sophisticated adults to merely respond to a reason.

- (ii) The linking-concept determines the kind of reason for which one believes.

The first role has been explained in the discussion of the Lewis-Carroll-Problem. The second role must now be further elucidated. (ii) raises some questions. One can believe for a bad reason. But what happens if one believes for a deductive reason, while the (justified) beliefs provide a non-deductive reason? Or if one believes for a non-deductive reason, while the beliefs (singled out by the linking-proposition) provide a deductive reason? Does one believe for a bad reason in these cases? I will address these questions and others by defending a certain reply to the intellectualism objection.

There is a strategy for the belief-proper account as developed here which roughly corresponds to Audi's first measure above. The idea is to ascribe to the child a linking-proposition with a different concept in place of *entailment*. As said, on the belief-proper account of deduction this has the consequence that the child's belief-formation is not a deduction. But perhaps it could be said that the child's belief-formation (or preservation) is still a case of believing for a(n) (inferential) reason. This would constitute a less extreme response than the last one considered above, according to which the child does not believe for a reason, but merely responds to one. Perhaps this is the appropriate description for the case of a child who is sufficiently computationally sophisticated to grasp propositions with the complexity of a linking-proposition, but who does not yet have the concept or notion of necessity required to grasp *L*. In any case, discussion of this strategy will lead to the clarification of a further aspects of the belief-proper account, namely how the concept involved in the linking proposition determines the kind of reason for which the conclusion is believed.

The child in the Hide-and-Seek example is justified. We therefore do not want to say that she believes for a kind of reason that she does not have. So, if the child believes for a good non-deductive reason, she must have a good non-deductive reason. But does she? There are many non-deductive reasons that she does not have in the circumstance. For instance, it is clear that the justified beliefs in the premises do not provide a good reason in an inference to the best explanation. The conclusion is not the best explanation for the fact that the premises obtain. So, if the child's linking-proposition was of the form *[conclusion] explains [premises]*, she would believe for a kind of reason that she does not have. The child's linking-concept cannot be an alternative to *entailment* such as *explanation*. The idea must rather be that the child's linking-concept is a *determinable* of which *entailment* is a *determinate*.

On the present proposal we are to see the case as a broadly inferential, although not specifically deductive belief-formation. Therefore, we are to think of the child as believing some less specific linking proposition. Consider the following scenario to which I will refer as “the child–parent situation” or “*Child-Parent*”:

Child-Parent: Suppose³² that the child’s linking proposition is as follows:

IL If he were hiding behind that tree, he wouldn’t have left his bicycle leaning on it *and* But it is leaning on it, *then* He hides behind some other tree.

Next to the child stands one of his parents who goes through roughly the same “reasoning”, but ends up believing for the deductive reason provided by the beliefs in the premises. Both child and parent justifiably believe the same premises and the same conclusion. But they believe different linking propositions, the child the indicative *IL* above, the parent *L* (adapted to the case).

According to the belief-proper account they believe for different kinds of reasons, hence for different reasons.

There is something very unintuitive about saying that they believe for different reasons. For consider the question why they each *have* a reason for believing the conclusion. I still want to remain as far as possible neutral on general questions about when one has a reason for believing something. But it seems fairly uncontroversial that for both, the child and the parent, this has something to do with the same fact, i.e. that they justifiably believe the premises and that the sequence of propositions satisfies a valid pattern, i.e. modus tollens.³³ And it is partially in virtue of these same facts that they are justified in believing the conclusion. This suggests that parent and child believe for the same reason.³⁴

³²This implies that the child has the computational capacity to grasp such complex propositions. If she does not have this capacity, then one would be forced to say that she merely responds to a reason.

³³But according to the view called “strong inferential internalism” in chapter 2 the second fact may not be relevant. On this view it is rather that the subject justifiably believes that the propositions satisfy a valid pattern. Since I have presented the psychological view as an alternative to strong inferential internalism, it does not matter here that the discussion supposes strong inferential internalism to be false.

³⁴At this point, one could modify the account in order to claim that they believe for the same reason. The way to do this that suggests itself is as follows: One could step

The challenge is to dispel the intuition that parent and child believe for the same reason. The intuition is supported by the observation that the fact that parent and child are both justified, to a large extent at least, depends on the same facts, namely that the premisses are justified and that the pattern is valid. But one can say the following: It seems that they believe for the same reason, because the two reasons differ merely in determinacy. It is clear that the child's inference does not correspond to any of the allowed non-deductive inference-forms such as inference to the best-explanation. Surely, the child and his parent do not believe for two unrelated or independent reasons. The child believes for a more *indeterminate* reason than the parent.

It must not be granted, the response continues, that the parent and the child believe for the reason they partially have in virtue of exactly the same facts. The parent's reason obtains partially in virtue of the fact that L is true, which is true in virtue of the fact that MPP is valid. The child's reason obtains partially in virtue of the fact that IL is true, which is also true in virtue of the fact that MPP is valid. So, while in a sense both reasons *ultimately* depend on the same fact, namely that the pattern is valid, they *immediately* depend on different consequences of it. Moreover the consequence in virtue of which the child has a reason, IL , follows from the consequence in virtue of which the parent has a reason, L .

But, if as claimed above, having the same reason implies having the same defeaters, then if two reasons differ, they must have different defeaters. $\neg L$ is a defeater for the parent's reason. But is $\neg L$ also a defeater for the child's reason? I will first make a case that it is not. I will then discuss an objection to this and finally defuse this objection. If $\neg L$ is not a defeater for the child's reason, then, of course, the child's and the parent's reason differ.

back from the formulation "believing for a certain kind of reason" and instead propose "believing in a certain way (for a certain reason)", i.e. move from "not believing for a deductive reason" to "not believing deductively for a reason". These two expressions suggest two very different versions of the belief-proper account. In the first expression "deductive" is an adjectival modifier of "reason", whereas in the second expression "deductively" is an adverbial modifier on "believing for a (certain) reason". According to the first expression the account states what it is to believe for a certain kind of reason, namely the deductive kind. According to the second expression it is an account of what it is to believe in a certain way for a reason, namely the deductive way. The second account leaves open the possibility that one believes deductively for a reason for which one could (in principle) believe non-deductively. One could refer to the first version as the "adjectival version", to the second as the "adverbial version" of the belief-proper account.

In the text I argue that parent and child believe for different reasons. Hence, if these arguments are correct, the adverbial version is not needed. In fact, it is false, if it implies that parent and child believe for the same reason.

If the child's and the parent's reasons differ, we can add circumstantial features such that the two beliefs in the conclusion are subject to diverging epistemic evaluations. Consider the following variation on the child-parent situation. I will refer to this scenario as the "the situation with the logician" or "*The Logician*":

The Logician: Suppose that a logician comes along and tells them that *MPP* is invalid and suppose, that in the circumstance this constitutes for the parent a sufficient reason to believe $\neg L$. In this circumstance the parent's belief in the conclusion becomes unjustified. The child however would not understand what the logician tells them.

The intuition in this case is perhaps not crystal-clear, but I at least have the tendency to say that the child's belief in the conclusion does not simply thereby become unjustified. This diverging assessment gives raise to a problem to which I turn in a moment: It is easier to be justified for someone who is less conceptually sophisticated! Here the point is merely that the child's and the parent's reason have different defeaters and are hence distinct.³⁵

But this point might be contested. Even if the assessment differs, this merely implies that different circumstantial features defeat the reason. It does not imply that the defeaters are different. Indeed, that the child is not unjustified on hearing the logician, does not mean that her reason for believing the conclusion has different defeaters than the reason of the parent. For a defeater, as defined, is merely a certain proposition. Actually defeated is the reason only in case the subject *has a reason* to believe that proposition. So, it is perfectly possible that the child's reason has the defeater $\neg L$. The child simply lacks a reason to believe that defeater.³⁶

In fact, a point could be made that $\neg L$ is a defeater of the child's reason. For defeaters have two features:

³⁵I say that the belief of the child does not become *thereby* unjustified, meaning that it does not become unjustified upon hearing the incomprehensible utterance of the logician. The child may well become unjustified in virtue of the fact that some authority, the parent or the logician, contests the conclusion. The point is that in that case the child has a good reason for some other defeater than $\neg L$, for instance $\neg[\textit{conclusion}]$.

³⁶Given it is accepted that the epistemic evaluation of parent and child differ, it is plausible that the question whether a given subject *has* a good reason or not depends on the question whether she is in principle able to believe *for* that reason. This can be extracted from Williams [1981b]. Now, it is not exactly clear in what sense the subject must be "in principle able" to believe for that reason. But it is not implausible that if the subject does not have the concepts necessary to believe for that reason, then she is not "in principle able" to believe for that reason.

- (i) If the subject has a sufficiently good reason for believing the defeater, the reason for the conclusion is undermined.
- (ii) If the defeater is true, the subject will not acquire knowledge.

And, it seems that if L is indeed false, then not even the child will acquire knowledge of the conclusion of her inference. For instance, in the following scenario, although the child does not have a reason to believe the defeater, she does not acquire knowledge:

Community in Error Suppose one of the basic inferential patterns to which the reasoning of a community corresponds—one of which educated adults in that community think that the premisses logically entail the conclusion—is in fact invalid. Suppose that assuming the validity of the pattern yields some serious inconsistencies; and that the best dissolution of these inconsistencies implies giving up (belief in) the validity of the pattern. By a cosmic coincidence inferring according to this pattern has not led to many false conclusion; nor have the logicians of that community had occasion to notice its invalidity by their a priori methods. Children learn to bring their reasoning in accordance with that pattern, although they do not have the concepts necessary to grasp the linking proposition corresponding to L . Furthermore, the children's beliefs (in the conclusions of such reasoning) depend on a belief in IL .

It seems that neither the children nor the adults of that community acquire knowledge by means of such reasoning. They are in a sceptical scenario corresponding to the dream-hypothesis (in which by cosmic coincidence the dream corresponds to reality).³⁷

According to this objection, *Community in Error* shows that $\neg L$ is a defeater for both child and parent. Hence, $\neg L$ is not the defeater by which the child's reason can be distinguished from the parent's. And since there is no other distinguishing defeater in sight, it must be wrong to claim that child and parent believe for different reasons.

³⁷How should we describe the situation of the child? Perhaps we must say that she does not have a good reason in this context, for L is false and knowledge undermined. But then, the parent's case can not be described as one in which the parent's good reason is undermined by the reason to believe $\neg L$. It would be a bad reason which in addition is undermined. Alternatively we could say that the parent and child have the same (otherwise) good reason, the parent's is undermined, the child's not; but both fail to acquire knowledge. Thus, the child would be gettierized.

However rethinking the example more carefully suggests that $\neg L$ is not really what is responsible for the fact that the child does not acquire knowledge. It was implicitly assumed that the invalidity of the pattern results in the falsehood of L , and that this results in the falsehood of IL . This implicit assumption is explainable by the fact that we think of the pattern as something like MPP . And we believe that it is in virtue of the validity of MPP that L is true, and that it is in virtue of the truth of L that IL is true. But we can imagine a situation in which this is otherwise.³⁸ For instance, suppose that MPP is invalid, but that a large subclass of cases that satisfy that pattern satisfy a truly valid pattern. In that case, although MPP is invalid, L may be true (It is true if L in that situation falls in the subclass of cases that satisfy a different valid pattern). But suppose instead now that the case at hand does not correspond to any valid pattern. In that case L is false. But suppose that the child's premises make the conclusion probable. As it happens the child's reasoning about bicycles, trees and where his friend hides is reasoning of a reliable kind, although, just as in inductive reasoning, the premises do not entail the conclusion. Thus, IL is true —not in virtue of a logical fact, but in virtue perhaps of some laws of nature or in virtue of some objective probability (distribution of events).³⁹ In this scenario, it would seem that

³⁸Some might contest the claim that we can imagine such a scenario. For instance, there is no possible world, arguably (e.g. if we adopt S5), in which L is false. But I think we do not have to imagine the kind of possible world to which we appeal when judging the metaphysical possibility of $\neg L$. I suggest we imagine a scenario in which a community (in the case our own) has adopted inadequate concepts. Their judgments about modality, in particular L , are thus misguided. I suppose here that one's concepts influence one's judgments about modality, just as they influence any other judgment. I do not thereby suppose that these are judgments about concepts. They may well be about mind-independent modal reality. So, we have to imagine a scenario in which modal judgments are misguided. Such scenarios are metaphysically possible. We thus do not have to imagine the metaphysically impossible.

³⁹The probabilistic relation can perhaps already be read into the conditional IL . If the conditional IL is interpreted as nothing more than material implication, then there is no further connection between premises and conclusion than that either the premises are false or the conclusion is true. However, IL can also be interpreted in such a way that its truth condition involves a more substantial, e.g. probabilistic, relation between the premises and the conclusion. However, it is not clear that the child could already have a notion of such a substantial connection. What the child believe is perhaps merely the material conditional. Views on inferential justification which involve linking propositions, either in the manner of strong inferential internalism or in the manner of the psychological view, to my knowledge normally exclude that this role be played by a material conditional. See for instance Fumerton [1995, 88], Audi [1993, chap. 8, 241]. Their worry is that the material implication does not express the fact that the premises *support* the conclusion. This worry does not seem to me to apply to the version of the belief-proper account as developed here. For the way in which the belief-proper account is supposed to do justice

only the parent's belief in the conclusion does not constitute knowledge. The truth of $\neg L$ undermines the parent's knowledge, but, if at the same time, IL is true, it does not undermine the child's knowledge.

I conclude that child and parent have different defeaters and thus different reasons for believing the same conclusion. Furthermore, the defeater by which the two reasons are distinguished is $\neg L$. This means that to the psychological difference between child and parent, namely the difference in the linking-proposition, corresponds a difference in defeaters. However it is not the difference in the linking-concept which determines which reason each one has. This is determined partially by conceptual sophistication, hence by the linking-concepts which the subject possesses, but not by the linking-belief they actually have. Thus, if the parent's linking-proposition is IL , she still has a deductive reason (for which she does not believe).

In sum, my response to the intellectualism objection to the belief-proper account of deduction, is that it is an account of believing for a pretty sophisticated kind of reason. It is possible to believe for less determinate kinds of inferential reasons that are less demanding. And even believing for an inferential reason is itself already a rather sophisticated matter. I make room for other normative appraisals, besides "believing for a good epistemic reason", of held beliefs that do not suppose such a demanding relation between thinker and reason. This is the appraisal of a subject as "responding" to a good epistemic reason.

I must now return to a claim relied on all along the foregoing discussion. It is not unproblematic to claim that conceptual sophistication of a subject is relevant for how her belief is epistemically evaluated. When we consider a variant of *Community in Error* where L is false, but IL true, we also feel some resistance to saying that the child has knowledge while the parent has not. Similarly, in the situation with the logician, we are uneasy with the claim that the parent's reason is defeated while the child's reason is not. Both assessments were claimed to be supported by intuition. It might be objected that there is merely an intuition that something different is wrong with the parent believing for her reason than what is wrong with the child believing for her reason. Do we really want to say that nothing is wrong with the child's belief? And if we do, does not this yield the result that it is better, at least on the occasion at hand, to believe for the more indeterminate reason of the child than for the more determinate reason of the parent?

to the tracing-back intuition does not require that the subject believes that the premises support the conclusion. It is sufficient that the subject to a large extent behaves as if she believed this. And a belief in the material conditional has this result.

It seems clear that there are costs for believing for a more determinate reason. There is an imaginable circumstance in which the parent's reason is defeated, but not the child's. And the parent might be misled in more ways. Even if $\neg L$ is false, the parent might still have a reason for it, and thus her deductive reason for the conclusion might be undermined. In this circumstance the child, believing for the more indeterminate reason, could be justified. Thus, the child ends up with one more justified true belief than the parent. On the assumption that having more true justified beliefs is better, this means that the child is better off. And, thus, we are led to draw the absurd conclusion that it is generally better to ask for the opinion of a child than for an adult!

So there must be outweighing gains for the parent. It is intuitively better to believe for more determinate reasons. One idea is that the parent is able to say more determinate things in response to the question *why she believes* or *why she is right to believe* the conclusion. What she will cite (after having cited the premises), namely L , implies what the child will cite, namely the indicative IL , but not vice versa. The parent is able to say more determinate things and knows more about what information is relevant and so on. But the question remains: What good does it to her to be able to take more things into account, when this results, on some occasion, in her having fewer justified true beliefs?

It is not possible to fully address this question without providing an account of good epistemic reasons. I therefore content myself with some general indications why believing for a more determinate reason could be better than believing for a less determinate reason. If we take seriously the idea of determinable and determinate reasons, then the following can be said. Believing for a determinable reason in the whole augments the number of circumstances where the reason is defeated. Suppose I believe something because I believe that some object X is red (the determinable) without believing that it is this or that determinate shade of red. In that case, evidence that X is not crimson will defeat that reason, as long as the subject has not acquired the belief that it is some other shade of red. Similarly, if I believe for a determinably inferential reason, evidence that some specific kind of inference fails, will defeat my determinably inferential reason. If, however, I believe for a deductive reason, evidence that some other kind of inference fails, will not be relevant. These are only some vague indications that would have to be fully worked out in order to properly address the issue. Any view which relativizes reasons to the conceptual sophistication of the subject in question must somehow explain why it is valuable to be more conceptually sophisticated.

3.4 Problems for the belief-proper account

The belief proper-account of the subject's believing (3) for the deductive reason provided by (1)-(2) implies that she believes L . Some further questions concerning this belief must be asked. First, a psychological question: Must the belief in L be believed for a (whether good or bad) reason, in order for the subject to believe (3) for the reason provided by her justified belief in (1)-(2). Second a normative question: Must the subject justifiably believe L in order to be justified in believing (3) in this circumstance, i.e. \mathcal{N} ?

The belief-proper account and foundations

I will begin by the psychological question. Is the linking-proposition always believed for a reason? In order to have the means to address this question, it is necessary to ask what kinds of believing for a reason there are. So far I have discussed only accounts of believing for a deductive, and, to some extent at least, accounts of believing for an inferential reason. But what should a proponent of the belief-proper account say about, for instance, believing for a perceptual reason, or believing for a non-inferential a priori reason? That is, what kind of general theory of belief-formation (that can in principle lead to justified belief) is a proponent of the belief-proper account of deduction to defend? In order to address the intellectualism objection, a proponent of the belief-proper account admits two sorts of belief-formations that can in principle lead to a justified belief, namely believing for a reason and responding to a reason. There are further belief-formations that are of neither kind, beliefs that spontaneously arise etc. Let us call the kind of belief-formation that can in principle result in a justified belief "reacting to a reason". It is a purely psychological question whether someone is reacting to a reason or not, since the reason may be good or bad.

Coherentism and foundationalism are views on good reasons. So they are not directly relevant to the present discussion. However, it is useful to define psychological coherentism and psychological foundationalism as follows:

psychological coherentism: All reasons to which epistemic agents are capable to react are provided by at least one other belief.

psychological foundationalism: Some reasons to which epistemic agents are capable to react are not provided by other beliefs.

Psychological coherentism will be combined with coherentism simpliciter (coherentism about good epistemic reasons). For if no justified belief is a reaction to a reason not provided by any other belief, then there is no point in affirming that there are good epistemic reasons not provided by other beliefs. For such a reason would always be irrelevant to actually held beliefs. I will refer to reasons not provided by other beliefs as foundational reasons. Psychological foundationalism is incompatible with coherentism simpliciter. For all belief-formations counting as reactions to reasons are in principle capable of yielding justified beliefs. Thus, if it is possible to react to a foundational reason, then it is possible to have a justified belief as the result of such a belief-formation. Hence, there are possible good epistemic reasons not provided by other beliefs.

Psychological coherentism does not pose a problem for the belief-proper account for it entails the following claim:

coherentism about reasons for the sophisticated (CS): All reasons for which it is possible to believe are provided by other beliefs.

This means that all believing for a reason is believing for an inferential reason. Hence (BI) covers all cases of believing for a reason.

Psychological foundationalism is compatible with (CS). It is thus compatible with the claim that (BI) covers all instances of believing for a reason. In that case it would have to adopt the following claim:

(FR) All reacting to foundational reasons is merely responding to a reason.⁴⁰

This means that the foundations, i.e. the beliefs that are reactions to a reason that is not provided by other beliefs, are not believed for a reason. The foundations are justified, if they are,⁴¹ in virtue of the fact that there is a good reason to believe them and that the subject is responding to this reason in the less intellectually demanding way alluded to above.

Let us illustrate the kind of foundationalism that endorses (FR) with an example. On most recent foundationalist views perceptual beliefs are foundations. Suppose a subject has a good epistemic reason for a perceptual

⁴⁰In other words: It is impossible to believe for a foundational reason.

⁴¹Notice that my use of “foundation” here is not the same as a foundationalist about good epistemic reasons uses them. For here a belief can be a foundation, even if it is unjustified. It is merely a belief that is a reaction to a reason, whether good or bad, that is not provided by any further belief. Thus, “foundation” is a psychological description, not a normative one.

belief, e.g. a belief about some middle-sized material object in the subject's visual field. This reason is not provided by any other belief of the subject. The presence of this good perceptual reason has plausibly something to do with the fact that the subject has a visual experience. According to (FR) the subject does not believe for that good perceptual reason, but it merely responds to it.

In contrast a foundationalism that denies (CS) could say that the subject in that case believes for a non-inferential reason. A proponent of this view must provide some account of believing for a reason besides (BI), namely an account of believing for a non-inferential reason. The account of believing for a reason provided by (BI) must be extended so that it can apply to foundations. In providing such an account one must do justice to the tracing-back intuition. For this is a general intuition about believing for a reason.

But a proponent of the belief-proper account is hard pressed to provide such an account that does justice to the tracing-back intuition. She could not simply deny that the tracing-back intuition applies to foundations. For the intuition is that when one believes for a reason, no matter what kind of reason, then one is able to trace-back one's commitments. Assuming foundationalism, having perceptual justification does not depend on a further justified belief. Does this mean that there are no commitments to which the subject could trace back her perceptually justified belief? It is clear that having a perceptual reason does depend on some further facts, for instance on the fact that one has a perceptual seeming. Shouldn't the subject trace-back her belief to the perceptual seeming then? If yes, wouldn't a proponent of the belief-proper account have to say that the subject does trace back by having a linking-belief. But what are in this case the linked contents and by which concept are they linked? This question brings with it a lot of difficulties. For instance, on some views the content of the perceptual state is non-conceptual. But how could non-conceptual content be partially the content of a linking-belief? Claiming that the content *I have a perceptual seeming with non-conceptual content C* is linked to the content of the perceptual belief will not help. For either this content is non-conceptual and then it cannot be linked, or it is conceptual, but then is the content of a propositional attitude about what perceptual state I am in. And in this case, the perceptual belief is not a foundation for its justification depends on the justification of this attitude.

It is not clear that these are insurmountable problems. One could adopt the view that perceptual states have conceptual content and try to argue that there can be a linking-belief. Or one could introduce some further ways (besides linking-beliefs) to trace back one's commitment. But this risks to

undermine the motivation for the belief-proper account of believing for an inferential reason.

However, at this point there are a few further options available for a proponent of the belief proper account. The simplest is to adopt psychological coherentism. However, since this is incompatible with foundationalism simpliciter, one thereby excludes one very prominent and plausible theory of good epistemic reasons. It would clearly be better, if the view were compatible with the kind of moderate foundationalism that is held by many people.⁴² The remaining option is psychological foundationalism that adopts (FR). This is the view on which the foundations are mere responses to reasons, but not believed for a reason.

But this option brings with it a “slumping problem”: Believing for a reason is supposed to be more valuable than merely responding to a reason. Consider again *Wet Roads*. It is said that (3) can be believed for the reason provided by the justified beliefs in (1)-(2), or (3) can be believed as a result of responding to the reason provided by (1)-(2), as when a sufficiently young child comes to believe (3). But believing (3) for a reason is better than believing (3) as a result of responding to a reason. Suppose that the belief in (1) is perceptually justified. Now, if that means that (1) is not believed for a reason but merely believed as a result of responding to a reason, this seems to imply that the relative value of believing (3) for a reason compared to merely responding to a reason is slumped. Perhaps there is a good argument that it is still better in a relevant way. Again, let us take note of this problem without excluding that it can be solved.⁴³

Thus, it must be noted that the belief-proper account is not altogether at ease with foundations. If it allows that foundations are believed for a reason, then it risks to undermine the motivation for the linking-belief requirement on holding non-foundational beliefs for a reason. If it adopts the view that all foundations are merely responses to reasons, then it faces the slumping-problem. And if it excludes foundations altogether, then it excludes a very plausible epistemological view.

⁴²“moderate” because it allows the foundations to be defeasibly justified. Classical foundationalism, in contrast, postulates indefeasible, self-evident foundations.

⁴³Such a slumping-problem is considered by Wright [2004b] against his own appeal to “entitlement”, a lower kind of justification.

An infinite regress of beliefs

But let us return to the (psychological) question whether the linking-proposition is always believed for a reason. This question hints at the possibility of a regress of beliefs as follows:

- (I) The linking-proposition is always believed for a reason.
 - (II) Believing for a reason always implies believing some linking-proposition.
-
- (III) If one believes for a reason, then one has an infinity of beliefs and one single belief depends on an infinity of further beliefs.

We can now apply the discussion of foundations to the case of the linking-belief. In fact, we find the proponent of the belief-proper account in a similarly uneasy position. For it might initially seem that if the linking-belief, at least at some point, were a foundation, then the regress could be halted. However, this move merely brings again the problems with foundations to the fore.

It was said that it is hard to see how foundations could be believed for a reason where this involves a linking-proposition. But even if this idea could be made plausible, such foundations of course would not help avoiding the regress. If the linking-belief were such a foundation believed for a reason (thus assuming (I)), it would still imply that there is a further linking-belief (thus implying (II)).

However, if the linking-belief is a foundation believed for a reason where this does not involve a linking-proposition, we could deny (II). But then, as said, a new kind of believing for a reason must be introduced. Furthermore this puts at risk the motivation for introducing the linking-belief requirement in the first place. In general the belief-proper account seems to be ill-motivated if believing for a reason is in some cases not in virtue of a linking-belief. This would mean one has to accept (II). The linking-belief cannot be a foundation believed for a reason in a way not involving a further linking-belief.

Again if the linking-belief is a foundation not believed for a reason we face the slumping problem. In general, if one does not accept (I), then one seems to face a variant of the slumping-problem. For instance, if the linking-belief is not even a reaction to a reason, then one must ask: How worthy can it be to believe for a reason as opposed to responding to a reason, if believing

for a reason involves a belief that is not even a response to a reason? And if the linking-belief is a reaction to a reason but merely a response, a similar question can be asked: How worthy can it be to believe for a reason as opposed to responding to a reason, if believing for a reason involves a belief that is no more than a response to a reason?

It is not too implausible, at least not for the case of deduction, that the linking-belief is a foundation. Of course, it can be excluded that linking-beliefs are perceptual foundations. They do not have the sort of content that can be directly perceptually supported. The question is whether they could be some other sort of foundation. In particular, on some theories of justification a priori intuitions can support belief. A priori intuitions are (defeasible) direct, i.e. non-inferential, insights into certain truths. There are two ways in which a proponent of the belief-proper account could incorporate a priori intuitions in order for the linking-proposition to play the role of a foundation.⁴⁴ She could take them to be seemings, i.e. perhaps non-propositional experiential (non-sensory) states which (perhaps partially) provide a reason to believe the linking proposition —a bit like (according to some at least) non-propositional perceptual states provide a reason for perceptual belief. Or, she could take them to be a kind of propositional attitude and claim that the linking-proposition must not be believed properly, but “intuited” (thus rendering the name “belief-proper account of deduction” somewhat inappropriate).⁴⁵

But the problem is that even if the linking-belief is a foundation, this must be in either one of the three ways alluded to above: (i) A foundation believed for a reason where this involves a further linking-belief. (ii) A foundation believed for a reason where this does not involve a linking-belief. (iii) A foundation not believed for a reason. The first does not avoid the regress. The second undermines the belief-proper account. The third faces the slumping problem. So foundations do not seem to bring the solution to the regress.

But if the linking-beliefs are always believed for an inferential reason, then we have in fact not only an infinity of linking-beliefs, but also an infinity of beliefs providing the reasons for the infinitely many linking-beliefs. For each linking-proposition is believed for a reason, where this reason is provided by a further belief and believing for this reason therefore involves a further linking-proposition.

⁴⁴That there are a priori foundations is a very traditional and influential idea. In recent times it has been endorsed among many others by Chisholm, Bonjour [1998, 2003, 2005], Burge [1993], Bealer [1992], Goldman [1999a].

⁴⁵For accounts of a priori intuitions, see Goldman and Pust [1998], Bealer [1998, 1999, 2004], Sosa [1998].

In summary, a proponent of the belief-proper account faces a trilemma.

- (i) Either the beliefs in the linking propositions are not foundations, then they are believed for an inferential reason, and then there is a regress of linking beliefs as well as of linked (supporting) beliefs;
- (ii) or they are (at some point) foundations and foundations are not believed for a reason, and then we face the slumping-problem;
- (iii) or they are foundations and foundations are believed for a reason. But it is hard to explain how foundations could be believed for a reason, in a way that takes the tracing-back intuition on board. And if this means that there must be a linking proposition, then there is an infinite regress of linking-propositions.

It is to be noted that this trilemma does not depend on adopting psychological foundationalism. For the first horn is the problem as it arises for a psychological coherentist.

It is not my aim to present this dilemma as a fatal argument against the belief-proper account. It is here rather meant as an indication that there is no obviously unproblematic path to accounting for the manner in which the linking-belief is psychologically embedded with the subject's other states. Perhaps one or more of the horns of the trilemma turns out on scrutiny not to be so worrisome.

For instance, it is not clear that horn (ii) is so problematic. For the slumping problem mentioned before in the discussion of foundations is not exactly the slumping problem that arises in connection with the linking-belief. We can call the former problem "the slumping problem for foundations", the latter "the slumping problem for the linking-belief". As said, a given "foundation" in the psychological sense I use this term can be justified or unjustified. But foundations can in principle be justified. And for a foundationalist about good epistemic reasons, some foundations are justified. Furthermore he holds that the justification of all non-foundational beliefs rests on the justification of the foundations. Thus, for him the slumping problem arises as follows. The kind of justified belief one has, when one believes for a good epistemic reason, is better than the kind of justified belief one has, when one responds to a good reason. So, suppose a given justified foundation is not believed for a good reason (as none are on the view under consideration). If now someone believes for a reason partially provided by that justified foundation,

the justification obtained by her belief rests on an instance of the lower-kind of justification obtained by the foundation. That the belief is held⁴⁶ for a reason ensures that the subject traces back her commitments. But, if foundations are not believed for a reason, she traces back these commitments to beliefs that are crucial for her justification and there stops to trace further back. This seems not to be a much more responsible behavior than when one does not trace back one's commitments from the start. This is the slumping problem that arises for this way of dealing with foundations.

The slumping problem for the linking-belief is not exactly the same. For suppose the linking-belief is such a foundation not believed for a reason. Suppose it is justified in virtue of being a response to a good reason. Does in this case the justification obtained by the the belief in the conclusion rest on the lower kind of justification obtained by the linking-belief? No, for the good reason for which the conclusion is believed is not provided by the justified linking-belief at all. This is different from the case where the foundation provides the reason for which one believes. In fact, it is not even clear that the linking-belief must be justified in the first place. This is the question to which I now turn.

The justificatory status of the linking-belief

The second question asked at the beginning of this section was whether the linking-belief must be believed for a good reason. Or we can now ask, whether it must be believed for a good reason, or at least “be a response to” a good reason.

We have already seen a way in which the psychological view imposes constraints on \mathcal{N} that can be qualified as “normative”. If believing for a deductive reason involves having some propositional attitude, e.g. as according to the psychological view, an attitude towards L , then the subject must not have conflicting attitudes, e.g., as seen, disbelieving L . When this happens a (normative) rational requirement is violated. This was claimed in chapter 2.4. The question asked here is whether the attitude towards L postulated by the psychological view must in addition to not violating a rational requirement be supported by reasons.⁴⁷

Believing (3) for the reason provided by (1) and (2) implies that the subject believes a linking-proposition L . Suppose that the be-

⁴⁶I use “held for a reason” as a stylistic variant of “believed for a reason”.

⁴⁷For the distinction between support by reasons and rational requirement, see there in chapter 2.4.

lief in L is completely unjustified, for instance because the subject has strong evidence against L . It sounds false to say that in that circumstance the belief in (3) is justified. Hence, the linking-belief must be justified.

However, it is not clear that this describes a coherent situation. For evidence against L will defeat the otherwise good epistemic reason. Thus, the subject does not believe for a good epistemic reason. What we must imagine is rather a situation in which the linking-belief L is unjustified, but not because there is evidence against it, but because either there is no reason in favor of it or because it is not believed as a response to such a reason. Only in this circumstance could the reason for (3) provided by (1) and (2) be good, i.e. remain undefeated.

It seems that in such a situation the belief in (3) is unjustified, in spite of the fact that there is a good reason for it and in spite of the fact that it is believed for that reason. This means that believing for a reason has or lacks an evaluative property which is relevant for the epistemic evaluation of the belief held for that reason, e.g. the belief in (3). As argued in chapter 2.4, it can have the evaluative property of violating a rational requirement. Now it can be claimed in addition that the linking-belief must be justified. And this even though the reason for believing (3) does not depend on the reason for believing L . And even though the reason for L does not even seem to be required for the subject to be in the psychological state of believing (3) for the reason provided by (1) and (2). Even if the linking-belief is unjustified, according to the belief-proper account if the belief in (3) depends on it in the way specified in (B), then it is believed for the reason provided by (1) and (2).

This either means that it is believed for a good epistemic reason, or that it is held in mere response to a good epistemic reason. Again, the proponent of the belief-proper account faces a dilemma: Either the linking-belief (at some point) is a mere response to a good reason and this risks to slump the status of the belief held for a reason (believed for a reason). Or it is believed for a reason throughout and there must then be an infinity of good epistemic reasons. I will allude to the first horn as the “slumping problem with the linking-belief”, to the second as the “linking-belief regress-objection”.

However, even if

L must have positive status: i.e. being justified in believing (3) for the reason provided by (1) and (2) implies being justified in believing L (for a reason or in response to a reason) (implication-claim),

the justification for (3) does not *rest on* the justification for L . Here is again the strong inferential internalist's dependence-claim from page 39:

J(3) rests on J(L): If S didn't have her justification for L , then S wouldn't have her justification for (3), but not vice versa.

The belief-proper account does not imply the dependence claim. This means that the belief proper account leaves it open that the justification for L rests on the justification for (3). Because the reason for (3) does not depend on the reason for L , it is possible that the reason for (3) supports the reason for L . Perhaps there does not happen to be a reason provided partially by the deduced belief in (3) supporting the belief in L , but the implication-claim leaves it open. Such a justification of L would not beg the question, for the justification for (3) does not rest on the justification for L .

That the belief-proper account does not imply the dependence-claim has important consequences for the present problem. With respect to the linking-belief regress-objection the following can be said: Even if there is an infinite number of justified linking-beliefs, this does not entail that there is an infinite number of reasons. The reasons for the linking-beliefs or the linked premises do not rest on one another. Thus reasons used earlier in the chain of reasons can reappear at a later stage. The implication-claim together with the claim that each linking-belief is believed for a good epistemic reason does not entail a structure of reasons such that each reason obtains only if an infinity of further reasons obtains. Rather there could be reasons (themselves not depending on any further reason) supporting the structure of infinitely many beliefs at various points.

In general, the implication-claim obtains more as a matter of internal coherence than as a matter of there being something bad about the reason for believing (3) when the linking-belief is unjustified. One could say that when the linking-belief is unjustified, then the way the subject believes for a (let us suppose) good epistemic reason produces some "collateral damage". The implication-claim thus points to a collateral requirement on believing for a good epistemic reason.

This collateral status of the implication-claim not only shows the alleged regress in a more benign light, I think that it also supports the view that the slumping problem with the linking-belief is much less of a problem than it might appear. For that the linking-belief is a mere response to a reason is not obviously as bad as when the belief in (1) or (2) *that provides the reason for believing* (3) is a mere response to a reason. The justification for L in \mathcal{N} is a justification for a belief with a very specific function. Namely, the

function of establishing for which reason the subject believes (3). Whether the reason is good or bad does not depend on the justification for that belief (although if it's negation is justified, then the reason is defeated). It seems to me plausible to claim that when the justification for a belief with this function is of a lower kind, this does not lower the justification for the belief for which a reason is provided.

I think of the two horns of the dilemma, I prefer the slumping problem with the linking-belief. Intuitively the idea is this —expressed in terms reminiscent of the quotation from Boghossian [2001] in chapter 2.1:

In believing for a reason one has to start with taking some things to be reasons. One has to take certain linking-contents for granted. One cannot indefinitely take things for epistemic reasons only because one takes some other things to be reasons for thinking that the first things are reasons. At some point one has to start with taking things for reasons.

Against taking the regress route speaks here simply the fact that I would have an infinity of linking-beliefs. (As suggested, the infinity of beliefs could perhaps be supported by a finite number of reasons.) It is true that passages such as these illicitly suggest that there would have to be ever a temporally antecedent linking-belief and this might be partially responsible for the impression that there can not be infinitely many (for that would take an infinite amount of time). The belief-proper account does not imply that the linking-beliefs are temporally antecedent. Still the mere fact that the subject must believe an infinity of contents, where there does not appear to be a clear way how the beliefs are extended from a finite set of beliefs —as it is the case with beliefs about numbers— does speak against there being an infinite number of linking-beliefs.

So, if we take the slumping-horn, then one somehow “starts” with certain linking-beliefs without believing them for a reason. This does not mean that it is completely arbitrary which linking-beliefs one has. One is by certain factors such as one's psychological make-up, one's upbringing in a certain community etc. lead to taking certain things for reasons. Furthermore, these factors happen to shape one in such a manner that one starts with taking certain things for reasons in response to the actual presence of a reason (for believing the relevant linking-proposition). The fact that one does not *believe the linking-proposition* for these reasons does not lower one's justification.

3.5 Sensitivity to defeaters

In this section I propose a version of the psychological view which I think avoids at least one of the problems mentioned in section 3.4. In particular, it is a version that can be extended to yield an account of foundational believing for a reason. Thus it avoids the serious slumping problem that arises on the belief-proper account when the premises of an inference are foundations; i.e. the problem called the “slumping problem for foundations”.

Here is the sketch of an alternative to (B). I will call the alternative “the sensitivity account of deduction”.

- (S) (3) is believed for the deductive reasons provided by (1) and (2), if and only if
 - (a°) the subject is disposed to abandon the belief in (3), if she abandons belief in (1) or (2), and
 - (b°) the subject is disposed to abandon the belief in (3), if she obtains evidence against L .⁴⁸

In order to sketch a defense of the sensitivity-account I will address in turn the following questions: (i) How does (b°) allow to distinguish the sensitivity account from minimalism? (ii) How does (b°) account for what I have called the “tracing-back-intuition”? (iii) Why does (b°) warrant the ascription of an attitude towards L ? (iv) How can the account be extended to foundational believing for a reason? (v) What does the account imply about the justificatory status of L ?

(i) The clause that differs from (B) is (b°). This clause states that the subject is sensitive to evidence in favor of a certain defeater, i.e. $\neg L$. This is *not* simply the statement that $\neg L$ is a defeater. What is and what is not a defeater is not obviously⁴⁹ a question about the subject’s psychology. Some proposition could be a defeater for a given reason without the subject being sensitive to evidence in favor of it. For instance, suppose I have a perceptual reason for believing that I wear grey socks. A defeater with respect to this

⁴⁸It was said in chapter 2.1 that “evidence” can be conceived of in many different ways. Here I am not completely neutral between these conceptions. The sensitivity in question is a sensitivity to certain mental states. Thus in this section when I speak of evidence, certain mental states are meant. However, if another conception of evidence is preferred, one could characterize the relevant sensitivity in terms of states which provide or could provide evidence against L . This is a similar move as when it was said that the beliefs in (1) and (2) “provide” a reason for believing (3).

⁴⁹See note 50.

reason is the proposition *Under current lighting-conditions blue objects appear grey*. This is true independently of the question whether I actually believe that my socks are grey, or whether if I were to believe it, I would be sensitive to evidence in favor of that defeater. That is, it is independent of how I psychologically stand with respect to the proposition *Under current lighting-conditions blue objects appear grey*. Whether I am sensitive to a certain defeater, in contrast, is a purely psychological question.⁵⁰

This means that the sensitivity account still requires more than minimalism. On both views $\neg L$ is a defeater. But on the sensitivity account it is a requirement on \mathcal{N} that the subject is sensitive to that defeater, while according to minimalism it is not.

(ii) *How does the sensitivity account deal with the tracing-back intuition?* Again, the most literal way to understand the locution “tracing back one’s commitment” would warrant ascription of a belief in *My reason for believing (3) depends on my reasons for believing (1)-(2)*. But as the belief-proper account, so too the sensitivity account ascribes to the subject a psychology that in its result in belief-revising behavior resembles a subject who would believe *My reason for believing (3) depends on my reasons for believing (1)-(2)*. But the sensitivity account ascribes only what is barely necessary for showing this belief-revising behavior. Thus, on the belief-proper account evidence against L was relevant because in a rational subject it would lead to abandoning L , which would lead by clause (b*) to abandoning (3). On the sensitivity account, the “middle event”, i.e. abandoning belief in L is cut out. Still that evidence against L leads to abandoning (3) is the result which would obtain if the subject believed *My reason for believing (3) depends on my reasons for believing (1)-(2)* for a reason provided by L . Thus, in this sense, the belief-revising behavior of the subject is as if she “traced back her commitment to (1) and (3)” in the full sense of having beliefs about her reasons or commitments.

(iii) *Why does (b°) warrant the ascription of an attitude towards L ?* In a similar sense in which it can be said that the “subject traces back her commitment” one can also ascribe an attitude towards L . Again, the belief-forming

⁵⁰On some accounts of having a reason, whether I have a reason and whether something is a defeater for a given reason depends on my psychology in the following way: I have a reason to act or believe in a certain way, if and only if, an idealized self, an idealized extension of my current psychology, would act or believe in that way. Similarly D is a defeater, only if an idealized self would when given the information that D , not act or believe in a certain way (it would otherwise act or believe). But even on such an account whether something is a defeater does not solely depend on my current non-idealized psychology, whereas whether I am sensitive to D solely depends on my current psychology.

behavior is *as if* the subject believed L . More specifically, the belief-revising behavior (the conditions under which the subject would revise her belief in (3)) is *as if the subject relied on a belief in L* . Let us call the attitude ascribed in virtue of this similarity to belief “confidence in L ”. Confidence, just as belief, is a *mode of entertaining a proposition*. Other modes are supposing, imagining, wondering etc. But confidence is more similar to belief than these other modes.⁵¹

But this gives immediately rise to the next question. If the behavior is as if she believed L , why do we not ascribe to the subject a belief in L , i.e. a non-occurrent belief. After all, belief is plausibly seen as a psychological state individuated by a very complex disposition (or the material basis typically resulting in such a disposition)⁵² to behave in certain ways —where the “behavior” in question has to be taken in a broad sense including happenings in conscious thought. Some beliefs are non-occurrent and they are probably ascribed partially in virtue of a certain disposition to behave in certain ways and form certain occurrent conscious thoughts.⁵³ For all their similarity, the state of having confidence in L must also be dissimilar to the

⁵¹Following Cohen [1989] there is some literature on distinguishing some belief-like state, referred to most often as “acceptance” from belief. Unfortunately I cannot discuss here in detail how confidence stands with respect to this distinction (which appeals among other things to a difference in voluntariness). I use the designation “confidence” by reference to “rational trust” from Wright [2004b]. The principal feature of “trust” is that it can be reasonable in the absence of evidence in favor of the proposition in which one trusts. I claim later something similar about confidence. However, confidence is different from “trust” (and Cohen’s “acceptance”) in that, as I claim later in this and the next chapter, confidence does not provide a reason for a belief. For instance, being (reasonably) confident in L does not provide a reason for believing L or any other proposition. According to Wright, as I understand him, “trust” in L supports “a claim to being warranted”. Thus, “trust” in L provides a reason for claiming (believing) (1) and (2) provide a good reason for believing (3).

⁵²See note 53

⁵³Partially individuating belief in this way does not commit one to a functional theory of the mind, or, even worse, a behaviorist theory of the mind. Furthermore, since I merely individuate the *mode* ‘belief’ functionally, I do not thereby individuate the content held in this mode functionally. Furthermore, I want to allow for the possibility that belief is individuated by the material basis of the disposition. A certain physical state (type) could typically be the basis for such a disposition. Then, a token state of this type may be a belief, even though in the given case, due to circumstantial factors, it does not form the material basis for a disposition. This is a possibility I do not intend to exclude, when I say that the belief is ascribed in virtue of the subject’s being in a certain disposition. In this case the state is indirectly individuated by the disposition.

In fact, even the disposition need not be individuated by how the subject would act on a given occasion. “Disposition” could be designation of the material state making the counterfactual usually true.

state of believing L , unless they are one and the same type of state.

An important difference lies in the typical way one comes to be in one or the other type of state. Typically one comes to entertain a proposition in the mode ‘belief’, when one acquires evidence for the proposition and when one is interested in whether it is true. In contrast, one comes to entertain a proposition in the mode ‘confidence’, typically when one is interested in whether *some other* proposition is true and when one has evidence *for some other* proposition. This is a very salient difference. Another, less important, one is that a proposition that is entertained in the mode ‘belief’, is more readily “at hand” than if one confides in it. For instance, the subject would more promptly assert it. A further difference is perhaps that a sophisticated thinker who believes some proposition will often be able to say why she thinks it is true. This will not be the case when the same thinker has confidence in a proposition (see below).⁵⁴ These differences allow for a distinction between the mode ‘belief’ and the mode ‘confidence’.

Another very important difference between the modes ‘belief’ and ‘confidence’ is that belief is flexible (psychologically) with respect to countervailing evidence. Evidence against the entertained proposition can render a belief in it unjustified. So, one does violate some norms when one believes a proposition against which one has strong evidence. But this does not prevent it from being psychologically possible to believe a proposition against which one has strong evidence. In contrast, the sensitivity to evidence against proposition L constitutes the state of having confidence in L . Thus, if one has evidence against L one either is sensitive and gives up belief in (3), or one is not and thus does not have confidence in L in the first place. It is thus not psychologically possible to have confidence in L , and have evidence against L .⁵⁵

⁵⁴I point here to psychological differences. There are plausibly also some differences concerning the norms governing belief and confidence. Thus a belief which is not supported by evidence is (usually) unjustified. But one can argue that one can justifiably have confidence in a proposition without having evidence in favor of it. When states are governed by different norms, there will usually also be a difference how psychologically the subject will behave in adopting and revising these states. In particular, there will be a difference in the behavior the subject shows when she reflects whether she should have the attitude towards these propositions. In characterizing the difference between belief and “trust”, it is to these differences in governing norms that Wright [2004b] appeals. I draw on these same normative differences below in the text.

⁵⁵One could develop a more flexible version of the sensitivity account. As belief could be individuated rather by the physical state that ordinarily grounds a certain disposition, so one could individuate the sensitivity as that physical state that ordinarily grounds the respective disposition. In that case, it could happen that the subject is in that physical state and has evidence against L , without abandoning belief in (3). I prefer the inflexible

(iv) *How can the sensitivity-account be extended to foundational beliefs?* I have argued that the belief-proper account faces a problem when it is combined with foundationalism. For the belief-proper account cannot readily be extended to cover foundations, i.e. beliefs that are justified, although the good epistemic reason is not provided by further beliefs. The problem for the belief-proper account is that it is far from evident that believing for foundational reasons involves linking-beliefs; and that if it does not, then how could commitments be traced-back in foundational beliefs. The sensitivity-account can be extended in such a way, as I will try to make plausible in the following. On the sensitivity account the commitments are not traced-back in virtue of a linking-belief, but in virtue of a sensitivity to a certain kind of evidence.

It is noteworthy that the evidence against L to which the subject must be sensitive according to (b°) is evidence for a defeater, namely $\neg L$. Similarly, if the account is again extended to inference in general, the negations of the various possible linking-beliefs are defeaters for each kind of inference. The question then arises whether we could not for e.g. perceptual reasons find characteristic defeaters such that being sensitive to this defeater would determine that it is for this kind of reason (e.g. a perceptual reason) that one holds the (perceptually justified) belief.

On moderate versions of foundationalism the reasons for foundational beliefs are defeasible. Thus, my perceptually justified belief that the wall behind my computer-screen is light-green is defeasible by considerations to the effect that lighting conditions are in certain ways abnormal. (This does not imply, as insisted on several times before, that my perceptual reason is partially provided by a justified belief that the lighting-conditions are normal.) So, given there are defeaters for foundational reasons too, could not the sensitivity to some or all of these defeaters account for the fact that one believes for this reason? Foundational reasons also carry commitments. In an inference the commitments are to the truth of the premises and to the truth-transmitting relation between premises and conclusion. In visual perception I am for instance committed to the claim that the lighting-conditions are normal, that I have a certain perceptual experience, and other things. And if sensitivity to evidence for $\neg L$ is sufficient to trace back commitment to the claim that L , then sensitivity to evidence for the typical defeaters of perception will be sufficient to trace back commitments to these claims.

So, the foregoing considerations suggest the following general account of be-

version. The reason is that I think that if on a *given* occasion the subject is not able to “trace back her commitment”, i.e. is not sensitive, then *on that occasion* she does not believe for a reason. The intuition is not that the subject should trace back her commitment most of the time, but *on any occasion on which she believes for a reason*.

believing for a reason:

- (SG) p is believed for the reason R , if and only if the subject is disposed to abandon the belief in p , if she obtains evidence for some defeater d of R .

Thus for instance, I believe *The wall is light-green*, and I am at the same time disposed to abandon that belief, if I obtain evidence for *The lighting-conditions are abnormal*. The idea of (SG) is that I believe for my perceptual reason in virtue of being sensitive to a certain set of defeaters. Just as whether a subject is sensitive to $\neg L$ or $\neg IL$ determines whether she believes for a deductive or an indeterminately inferential reason, so the specific set of defeaters to which the subject is sensitive determines for which specific reason she believes. Some defeaters (or aspects of defeaters)⁵⁶ will characterize the *kinds* of the reason: whether it is visual, auditory, inferential, deductive, abductive, and so on. Some defeaters (or aspects of defeaters) will determine the reason in a more fine-grained manner: whether it is provided by this or that belief or perceptual state. Each reason is provided in a certain circumstance of the subject. The specific defeaters to which the subject is sensitive will also determine the *range* of the reason-providing circumstance: For instance if the subject is sensitive to evidence that some barns up to a certain distance are fakes, then it is this sensitivity which determines that the reason for which the subject believes can be defeated by evidence about fake-barns in this range.⁵⁷⁵⁸

⁵⁶Such as which linking-concept is involved

⁵⁷I can here only provide a sketch of the sensitivity-account. I here therefore merely suggest that different kinds of defeaters play different kinds of roles in determining for which reason a given belief is held. All this has to be investigated and argued for in much more detail.

⁵⁸No clause in (SG) corresponds to (a°): the dependence on the premise-beliefs. Unfortunately I cannot discuss in the required length the necessity of clauses (a) to (a°). I here introduced it as a natural view —accepted almost unanimously— that the belief in the conclusion must depend on the beliefs in the premises. However, this is not really relevant for the tracing-back intuition and the other main issues that I connected with the concept of *believing for a reason*. It seems to me to be a defensible view that (a)-clauses are not necessary. In the spirit of the sensitivity-account, one could replace it by requiring sensitivity to evidence against the premises, for the negations of the premises are defeaters for the reason for (3) provided by (1) and (2). Perhaps when the belief in (1) and (2) are not held, then the problem is not that the subject does not believe for a reason provided by (1) and (2), but rather that the reason is not good, because (1) and (2) are not believed.

Both options, i.e. (i) replacing (a) by a sensitivity-requirement or (ii) insisting on (a), have parallels for the case of perception. One could require that the belief depends on the presence of a perceptual state in the way (a) requires a dependence on the beliefs in the

Consider again foundational perceptual reasons. Arguably, none of the defeaters to which the subject is sensitive negates a linking-content, i.e. a content linking the content of my perceptual experience to the content of my perceptual belief, in the way $\neg L$ negates a linking-content. Thus, the problem of finding a linking-content for foundational beliefs mentioned in section 3.4 does not arise. Since I take the slumping problem for foundational beliefs to be worrying, I think that this presents a major advantage for the sensitivity-account over the belief-proper account.

(v) *What does the sensitivity-account imply about the justificatory status of L ?* The fact that the attitude towards L to which the sensitivity account appeals is not an attitude of the mode ‘belief’, but of the mode ‘confidence’, has some important consequences on the requirement on the justificatory status of L . In section 3.4 it was said that the belief in the linking-proposition cannot be unjustified, if the belief in (3) is to be justified. In chapter 2.2 it was said that justificatory status of a proposition must be relativized to an attitude:

justificatory status relative to attitude-mode: L has positive justificatory status relative to attitude of mode ‘M’, if and only if a potential attitude of mode ‘M’ towards L (which is rightly based) would be justified.

This means that it is in principle possible that reasons for being confident in L are different from reasons for believing L . And I think that this is precisely the case.

Under what conditions is it reasonable to be confident in L ? It is plausible that these reasons (for being confident) are provided by much less evidence in favor of L than the reasons for believing L . Confidence in L has a different cognitive role than belief in L . Confidence in L does not provide an inferential reason for anything which can be inferred from L . Confidence cannot provide inferential premises. Confidence neither supports belief in L , nor does it support (perhaps together with other (justified) beliefs) belief in anything else. It is therefore plausible that confidence is reasonable under conditions in which the corresponding belief would not be reasonable. This means that confidence in L does not require a reason for believing L .⁵⁹

premises. Or one could claim that it is possible to believe for a bad perceptual reason, without being in a perceptual state at all. This would occur when one is sensitive to the specific defeaters for perceptual reasons without being in the perceptual state.

⁵⁹It is natural to say that confidence in L would be unreasonable, if there were evidence against L . However, this cannot be said, if “confidence in L ” is understood in the specific way this state is defined here. If one has evidence against L , then one cannot unreasonably

Why is it reasonable to be confident in L in the absence of a reason for believing L ? In response we can draw upon an idea enunciated in Wright [2004b] and in Dretske [2000a]. The regress-problem itself provides a reason for merely being confident! Believing each defeater to be false for a reason would involve a new set of defeaters corresponding to this new reason. And if these new defeaters must be believed to be false for a reason, then there are new defeaters again, and so on. Thus, if you want, the best way to construct an epistemic agent that can believe for defeasible reasons is to give her confidence in the falsehood of what she takes to be defeaters. An agent who would try to settle that each defeater is false would never achieve being in the state of believing for a reason. Respective to the aim of believing for a good epistemic reason, being merely confident in some propositions is instrumentally more valuable than trying to believe everything for a reason.

This explains why it is reasonable to be confident in L instead of believing L for a reason. How do we get from there to the claim that it is reasonable to be confident in the absence of a reason for believing L . Could one not claim that one is reasonably confident in L only if one so *responds* to a reason for believing L ? I think this is implausible. For consider how few it requires to defeat a reason. Quite indeterminate and vague doubt about the falsehood of a defeater is sufficient to defeat a reason. But if one were confident in the falsehood of the defeater in response to a reason for believing it to be false, then the defeating evidence against its falsehood would have to overpower the reason in favor of its falsehood. It seems to be the character of defeasible believing for a reason that the subject need not possess evidence in favor of the falsehood of the defeater.

So, it is reasonable to be confident in some propositions instead of believing them for or in response to a reason. However, can one not also ask whether it is reasonable to be confident in precisely these defeaters and not in others? On the sensitivity-account the precise contents of the defeaters to which a subject is sensitive determine the reason for which it believes. Let us call the sensitivity to the given set of defeaters “the subject’s conception of her reason”. The question to be asked now is whether the subject’s conception of her reason must not be reasonable. And if yes, by what kind of reason: reasons for believing that such is the reason, or some other kind of reason?

Some evidence appears to render confidence unreasonable. This would be evidence to the effect that $\neg L$ is not a defeater for my present reason for

be confident in L . One is in the state of being confident in L , only when one believes (3) while being sensitive to evidence against L . Thus, it is impossible to be confident in L while having evidence against L . This diverges from how we would naturally speak of “confidence” in a proposition.

believing (3). If I had such evidence, it would be unreasonable to be sensitive to L . Does this mean that I must have a reason for believing $\neg L$ is a defeater for my present reason to believe (3)? I do not think so. For the negation of $\neg L$ is a defeater for my reason, and more generally any proposition which supports *I misconceive my reason for believing (3)* is also a defeater for my reason to believe (3) in \mathcal{N} . These propositions are “higher-order defeaters” of my reason for believing (3). But according to the sensitivity-account this means that I must be sensitive to the higher-order defeaters, if I believe for the reason provided in \mathcal{N} . But this means that confidence in $\neg L$ is a defeater for my reason is also enough, if it is enough for L .⁶⁰

And by the same considerations pertaining to the aim of being at all capable of believing for a good epistemic reason it is reasonable to be merely confident that one’s conception of one’s reason is right—in the absence of reasons for believing that this is so. If I were to believe for a reason that my conception of the present reason is right, I would have to rely on the proposition that the conception of the latter reason is right, and so on. Thus, epistemic agents capable of believing for a reason must be confident, at some point at least, that they conceive of their reason correctly.⁶¹

I therefore think that the sensitivity account of believing for a reason promises not only to account for foundational believing for a reason, but also avoids the belief-proper account’s problems with the justificatory status of the linking-belief.

⁶⁰Indeterminate reasons for unsophisticated subjects are not defeasible by evidence for higher-order defeaters, since such subjects are incapable of grasping the the higher-order proposition. But I suppose that the subject in \mathcal{N} is sophisticated.

⁶¹But that one does not need a reason for believing that one conceives correctly in order to be reasonably confident does not mean that one’s being sensitive to these rather than other defeaters cannot be evaluated. In general, various factors explain why in a given circumstance a subject is sensitive to these (and not other) defeaters. These include upbringing and learning, initial psychological set-up, some beliefs about the mechanisms of belief-formation. And some features are circumstantial, for instance, perhaps the presence of the good epistemic reason itself is partly responsible for the fact that the subject’s sensitivity determines this reason (as the one for which the subject believes). Perhaps the perceptual experience which partially provides a perceptual reason also triggers the subject’s sensitivity to the relevant defeaters. In some cases the wrong sensitivity will be triggered and as a consequence the subject will not believe for a good epistemic reason. Or perhaps something is wrong with the factors which give rise to the sensitivity, although they determine a good epistemic reason. For instance, if the sensitivity is shaped by unjustified but true beliefs, then it seems that something is wrong with my believing for a good epistemic reason. In any case, the evaluation of “appropriateness” of sensitivity to these and not other defeaters is independent of reasons for believing that they are appropriate. Perhaps one can say that of the features which explain the subject’s being sensitive to these and not other defeaters some provide a reason for being sensitive.

Chapter 4

Internalism about Deduction

4.1 Introduction

I have introduced a “normal context” \mathcal{N} in which *Wet Roads* leads to a justified belief in (3). *Wet Roads* is the following sequence of beliefs:

- (1) It is raining outside.
 - (2) If it rains outside, the roads are wet.
-
- (3) The roads are wet.

The discussion of \mathcal{N} was so far aimed at explaining some aspects of the following two features:

- (a) The subject has a good epistemic reason to believe (3).
- (b) The subject believes (3) for this reason.

In chapter 2 it was asked whether and how these two features involve some attitude of the subject towards the proposition L , i.e.

L (1) and (2) entail (3)

In chapter 3 a certain view of the second feature, (b), was presented on the background of taking a minimalistic stance towards the relevance of L for the first feature, (a). In the present chapter this discussion will be placed in the context of a broader issue concerning the justification of deductive inference, and, to some extent, concerning justification in general. Strong inferential internalism and minimalism as introduced in chapter 2 each falls under a broader kind of view to be introduced shortly.

Taking a step back from the distinction between (a) and (b), we can say that in \mathcal{N} the subject is *justified in believing (3)*, where this implies both (a) and (b). Concerning *being justified in believing (3)* in \mathcal{N} , i.e. being justified in taking the inferential step from (1)-(3),¹ two broad views can be distinguished

¹I talk here as elsewhere as if the primary focus was the process of inference or even the activity of consciously inferring. But as explained in chapter 3, the primary focus is on what sustains the belief in (3). The precise formulation I used is “believing (3) for the good epistemic reason provided by (1)-(2)”. But speaking in terms of a justified inferential step is stylistically better. As long as it is clear that

- (i) the issue is not so much the coming to believe than how the belief is sustained, and
- (ii) that “taking the step” does not mean intentionally taking an action,

I believe this use does no harm.

as follows:

Inferential Internalism: According to Inferential Internalism such a step is justified, only if the reasoner is in a position to defend taking the step, or she is in a position to assess taking the step as something right. For instance, the thinker's justifiably believing that the step is an instance of a valid pattern could provide her with something to defend her taking the step or with something justifying her believing that taking the step is justified. Thus, the subject's assessment from her own point of view, or her capacity to do so, is relevant for the fact that she justifiably believes (3).

Inferential Externalism: This is the view that such an inferential step has some property, such as being a step of a reliable kind, that explains why the subject is justified in taking the step, without this property being in any special way accessible to the thinker: neither must the thinker be able to assess e.g. the reliability nor must he be able to see the reliability as something that justifies his taking the step.

These are here intended as rough characterizations. What does it mean exactly "to be in a position to assess"? Section 4.2 is devoted to clarify the distinction. There the characterization will also be compared to other ways the distinction between epistemological "internalism" and "externalism" can be drawn. For there are many different ways to make that divide. What I have here in mind is sometimes characterized as "access internalism" and its denial.

Still it is as yet possible to relate the two characterizations to the views introduced before. Strong inferential internalism is a kind of Inferential Internalism. In virtue of the justified belief in L , required according to strong inferential internalism, the subject is plausibly "in a position to assess that it is justified in believing the conclusion on the basis of the premises" in the relevant sense. Even more, it is not simply an accident that strong inferential internalism implies Inferential internalism. Rather strong inferential internalism is motivated, at least partially, by whatever motivates Inferential Internalism. As to the psychological view, it may well be that in some sense of "being in a position to assess taking the step" the requirements of the psychological view do imply that the subject is in such a position. Minimalism does not properly imply Inferential Externalism, for there may be ways to assess that one is justified that are independent of whether one believes L or not. But, again, it is best conceived as being motivated by whatever motivates Inferential Externalism.

However, Inferential Internalism is a more general view than the ones introduced before. In particular, it is more general than strong inferential

internalism. A (justified) belief in L can plausibly play some role in assessing for oneself whether one is justified in believing (3). But it is far from clear that such a belief must be involved in any way one could so assess whether one is justified. That is, it is not clear that (justifiably) believing L is a necessary condition on being in a position to assess that taking the inferential step is right. So, even if strong inferential internalism proves untenable, this does not automatically mean that no position is tenable, according to which some *other mental state* or states play roughly the role purveyed to the justified belief in L by strong inferential internalism. For instance, it is perhaps possible to assess that one is justified in believing (3) by some direct, intuitive insight into the fact that one is justified *without having to compute some belief*. Or perhaps beliefs in *other contents* than L can bring one in a position to evaluate one's epistemic standing. Of course, these views will be variants of Inferential Internalism to the extent that the kind of assessment they allow for is the kind of assessment required in the locution "being in a position to assess that taking the step is justified".

Even once one particular meaning has been given to the locution "being in a position to assess that taking the step is justified" Inferential Internalism allows for different versions. Two respects in which there will be variations can be noted. First, as will be clear from the preceding chapters, the requirement to be in a position to assess can obtain as a matter of (a) or (b). Either it is because the subject has a good epistemic reason, that she must be in a position to assess that taking the inferential step is right. Or it is because the subject believes for that reason that she is in such a position. Second, as formulated the requirement merely states that the subject will not be justified in believing (3), *unless* she is in such a position. But this could be a consequence of the much stronger claim that it is *in virtue of* being in such a position that the subject is justified in believing (3). In connection with such variation some distinctions from chapter 2 will again become relevant.

Variants of Inferential Externalism will principally vary according to the features that explain why the subject is justified in believing (3) on the basis of (1)-(2). In fact, some views here classified as Inferential Externalism will not take the locution "explains why the subject is justified" to be appropriate. A particularly strong kind of non-reductive view about justification would hold that it is an unanalyzable normative fact that one is justified in believing (3) in a circumstance such as \mathcal{N} —or at least, that once the psychological matter of believing for a reason, i.e. (b), has been settled, it is an unanalyzable fact that the subject has a good epistemic reason for believing (3). Other views may hold that it is analyzable to some extent, but without eliminating the normative notion *epistemic justification*. Still others may hold that it is

reducible to some notion of *justification* that is non-epistemic, such as *practical justification*.² Then there will be full-blown reductive views which will explain the epistemic justification by some naturalistic property such as the reliability of the involved process.³ But in order for any of these views to be externalist in the intended sense, it must not explain the justification of the belief in (3) in terms of features that underly the subject's capacity to assess whether she is justified in believing (3).

Variants of Inferential Internalism also vary according to the property which explains why the subject is justified in believing (3). Again the fact that the subject is justified in believing (3) is the combination of the justification-conferring fact in \mathcal{N} (the reason for believing (3)) and the fact that the belief in (3) is "based on" this justification-conferring fact. On all variants of Inferential Internalism this combined fact implies that the subject is in a position to justifiably assess that she is justified. A typical internalist view will either claim that the justification conferring-fact *is identical* with the fact that the subject is in such a position, or that the justification-conferring fact *implies* that the subject is in such a position. However there will still be the fact that the (potential) assessment is justified. Thus with respect to the normative property of the assessment the internalist will eventually also have a story what this property is: Perhaps an irreducible explanatorily fundamental normative property. Or perhaps the property that the assessment is in some practical sense justified. Even a view is imaginable on which the relevant normative property of the assessment can be naturalistically reduced.

A last point to be noted is that Inferential Externalism and Internalism can be associated with the corresponding views on justification (i.e. being justified) in general. Thus, general internalism (in this sense) is the view that for every of her justified beliefs, a subject must be in a position to appreciate that it is justified. Take the case of perception. Some claim that the

²For such an account of inferential justification, see Enoch and Schechter [2008].

³Other naturalistic properties have been suggested. For instance Boghossian [2003] attempts to explain deductive justification by appeal to the claim that the inferential step is meaning-constituting. It is the fact that taking an inferential step such as *Wet Roads* is responsible for the fact the subject possesses the concept *if...then* that explains why taking the step is justified. Boghossian is an Inferential Externalist, for the fact that the step is meaning-constituting does not imply that the subject is in a position to reflectively assess that the step is justified. Facts about meaning-constitution are not generally reflectively accessible. And it is (presumably) not reflectively assessable by every justified reasoner that if it is meaning-constituting, then the step is justified.

For critique of Boghossian's view, see Williamson [2003] who criticizes the underlying account of concept-possession, and Enoch and Schechter [2006] who criticize the claim that meaning-constitution can in itself account for the normative property of justification.

justification of perceptual belief is at bottom inferential. On such a view a perceptual state gives rise to a epistemic justification (for the perceptual belief), only insofar as there are other justified beliefs, perhaps partly about the perceptual state. Non-inferential views, on the contrary, have it, for example, that the perceptual⁴ state in itself gives rise to facts about what one epistemically ought to believe. But non-regarding this distinction, one can hold that the perceptual belief is justified, only if theses states and whatever is responsible for their eventual positive epistemic status bring the subject in a position to assess that she is justified. Thus on an inferential view of perceptual justification, the other justified beliefs are such that they allow such an assessment. For instance these include beliefs about the reliability of perception and similar “higher-order” beliefs that reflectively support the belief that the perceptual belief is justified (see later for the “higher-order” and “reflective support”). But even the non-inferential view is compatible with internalism. It is in principle possible to claim that the perceptual state that provides the justification for the perceptual belief also allows for the further assessment. One could claim for example that the affirmative character that distinguishes the perceptual experience from a case of imagining, supports the higher-order judgment that things are as they appear -which in turn arguably supports the judgment that one is justified to believe on the basis of this perceptual states. Of course, these are highly speculative claims. I merely want to show that internalism in the sense intended here can be applied in many variations to many views on particular kinds of justification. In addition this provides an illustration of the kind of question about the assessment that the subject is according to internalism required to be able to make.

In section 4.2 I will further clarify the distinction between Inferential Externalism and Internalism. In sections 4.3 and 4.4 I will present two arguments against Inferential Internalism. The first is a sceptical argument, the second is a generalization of the Lewis-Carroll-Problem from chapter 3. And in section 4.5 I will discuss whether the psychological view is a kind of Inferential Internalism that avoids these objections.

⁴Where on some views a perceptual state capable to yield justification is factive in the sense that it implies the truth of its content. On other views illusory perceptual states can equally give rise to justification. These and related distinctions do not matter here.

4.2 Inferential externalism and internalism

Of the different ways to draw the distinction between epistemological “internalism” and “externalism” perhaps most well known are those appealing to the following distinguishing feature: According to internalism epistemic justification supervenes on the subject’s mental properties. According to externalism it does not and, thus, justification partially depends on facts about the subject’s environment.⁵ Mental properties are properties that are accessible in a first-person way, properties to which the subject has privileged access. Thus that I have a visual experience is a mental property of mine, that it is caused by certain objects in my visual field is not a mental property.

An “externalist” in this sense could hold the following view of the justification of inference:⁶ Whether an inference is justified or not depends on the (non-mental) question whether the inference is *conditionally reliable*. An inference is conditionally reliable, if and only if the beliefs produced by this inference have “a sufficiently high truth-ratio for those cases in which the input beliefs (premises) are all true”⁷. So, deductive inference is justified because often enough, if the input beliefs are true, then the conclusion is true. An “internalist” in the corresponding sense would instead hold that no non-mental property such as conditional reliability is relevant for the fact that deductive inference is justified. Necessarily, if the mental properties involved in deduction (e.g. the premise-beliefs) obtain, then the belief in the conclusion is justified. Contingent environmental facts about the truth-ratio of the output of deduction are irrelevant.⁸

⁵But many versions of externalism try to accommodate some sort of supervenience. On these versions a brain in a vat may be justified, even though the experiences do not depend in the required way on the environment. The externalist feature is then that the supervenience obtains in virtue of environmental facts. This kind of externalism is called “norm externalism” in Pollock and Cruz [1999, 131ff]. The idea is that it is an epistemic norm that the experiences of the brain in a vat yield justification. But this is a norm only in virtue of the fact that the experiences are actually reliable. The distinction between externalism and internalism is then best drawn in terms of the contingency (externalism) vs. necessity (internalism) of facts about what justifies what (i.e. the epistemic norms or epistemic principles). For developments of this idea and associated semantics of “justification”, see Goldman [1992, 1999c], Chase [2004].

⁶In the present section, I disregard differences between deductive and other kinds of inferential justification.

⁷Goldman [1999c, 12]. Goldman introduces conditional reliability in Goldman [1979].

⁸The case of deduction is a bit special. For one might think that deduction has necessarily a high truth-ratio for cases where the inputs are true. For, *necessarily*, if the premises are true, so is the conclusion. In that case, it is not a contingent environmental fact that deduction is conditionally reliable. Goldman [1999c, 13], at least, seems to think just that. But in fact, whether deduction is necessarily conditionally reliable depends

But in discussions of inferential justification a different distinction between “internalism” and “externalism” is predominant. There the focus is not so much the supervenience-thesis as a thesis about access to the support-relation between premises and conclusion.

For instance, Fumerton [1995, 36] endorses what he calls the “Principle of Inferential Justification”:

Principle of Inferential Justification (PIJ): When S’ belief in P on the basis of belief in E is justified, then (i) S must be justified in believing E, and (ii) S must be justified in believing that E makes probable P.⁹

He draws the distinction between inferential internalism and inferential externalism according to the willingness to endorse clause (ii). This is a more specific claim than that inferential justification supervenes on mental properties. Furthermore, it is in itself compatible with the denial of such a supervenience. (PIJ) could be motivated (although it is implausible that anyone would actually do this) by the claim that only if (ii) obtains, then the inference will be conditionally reliable. Thus, one could still hold that inferential justification depends on non-mental facts.

Boghossian [2003, 229] gives the following characterization of inferential internalism:

(Simple Inferential Internalism): A deductive inference performed by S is warrant-transferring just in case (i) S is justified in believing its

on how the process of deduction is individuated. If, indeed deduction is individuated by the relations between propositions, then it makes sense to claim that it is necessarily conditionally reliable:

Deductive inference is the process leading from propositions to a proposition logically entailed, inductive inference is the process leading from propositions to an inductively related proposition, for instance via probabilistic relations (Goldman [1999c, 13]), and unjustified steps connect unrelated propositions.

But I have argued in chapter 3 against individuating deduction in this way. Thus I take it to be a contingent fact that deduction is conditionally reliable. This does not presume against strong inferential internalism or the psychological view, of course. For even if deduction is merely contingently reliable, this does not exclude that each time a subject deduces she has a good reason to think *Necessarily, if the premises are true, then the conclusion is true*. The psychological view as developed in chapter 3 precisely partially individuates deduction by appeal to whether the subject thinks *Necessarily, if the premises are true, then the conclusion is true*.

⁹We can assume that the same principle holds for *having justification* in place of *being justified*.

premises (ii) S's justification for believing its premises is suitable independent of his justification for believing the conclusion, and (iii) S is able to know by reflection alone that his premises provide him with a good reason for believing the conclusion.

Boghossian [2003, Fn 3] claims that these conditions are meant to specify "by virtue of what facts a deductive inference transfers warrant [yields a justified belief]". So, this perhaps excludes a further dependence on non-mental properties. But let us concentrate for the moment on the characterizations at hand and ask the question how they relate to the internalist supervenience-thesis later.

Lastly¹⁰, here is a characterization extracted from a passage of an unpublished draft by Crispin Wright [cited by Boghossian, 2001, 40]:

An account of the justification of an inferential step is internalist, if and only if it appeals to a "reflectively appreciable warrant" for taking the inferential step.

Let us quickly compare the three quotes. The first two explicitly mention a content that the subject has to justifiably believe or know, in order to obtain inferential justification. But there is a difference. The content mentioned by Fumerton is not normative. *E makes probable P*, at least when "probable" is interpreted as meaning "objectively probable", is a non-normative state of affairs. The content mentioned by Boghossian, *The premises provide a good reason for believing the conclusion*, is normative in the sense that it states something about what ought to be believed. In the quote from Wright, I suggest there is implicit appeal to a similar content. If we read "appreciable warrant" as "appreciable *as* warrant", then the requirement seems to be again that the subject must be able to reflectively appreciate (justifiably come to believe) that she is warranted (has an epistemic reason) to take the inferential step. Thus Boghossian's and Wright's requirement are very similar (unsurprisingly, since Wright's is from a comment to an earlier development of Boghossian's views on inferential justification). Let us isolate the relevant content as applied to *Wet Roads*:¹¹

¹⁰Further examples could be given. E.g. Pryor [2001, 106-107].

¹¹But there is prima facie a difference between *H* and the following content extractable from Wright's requirement:

W It is justified to take the inferential step from E to P.

For *H* does not seem to imply that the premises are justified, while *W* does. But in fact, it seems to me we can read both in either way. Both can be taken to imply that the premises are justified and both can be taken not to imply this. See below in the main text.

H (1) and (2) provide a reason for believing (3).

Again, we need not take *H* to commit to a specific view on reasons. “(1) and (2) provide a reason” is meant to be neutral on whether “the reason” is the fact that (1) and (2) or whether it is the (justified) beliefs that (1) and (2) or the propositions (1) and (2) or still something else. Different views on reasons will yield slightly different propositions that roughly correspond to *H*. But for the most part of what follows these differences are not relevant. I will refer to propositions such as *H* which states that inferential premises support an inferential conclusion as “*H*” or as “normative linking propositions” —in contrast to the “linking proposition” such as *L* which is not normative.

I suggest that Fumerton’s requirement implies the other. In fact, as mentioned shortly, if “makes probable” means “makes subjectively probable”, i.e. “makes it reasonable for the subject to accept”, then there wouldn’t be much difference between the contents. Still, Fumerton would require that the subject *has* a justified belief in *H*, while Boghossian and Wright would merely require that the subject *be in a position* to come to justifiably believe *H* in a certain way. And since having a justified belief implies being in a position to acquire such a justified belief, Fumerton’s requirement could be subsumed under the other. Anyway, if we read “makes probable” as meaning “makes objectively probable”, then Fumerton’s requirement seems to be a way to satisfy the other requirement too. For if the subject justifiably believes *E makes probable P*, then she seems to be in a position to reflectively appreciate that her premises support her conclusion. Indeed, she can infer from *E makes probable P* that *E* provides a good reason to believe *P*, i.e. *H*. And the content *E makes probable P* is reflectively available to the subject, since she already has a belief in this (more on this below).

Under what conditions is the subject “in a position to reflectively appreciate that her premises support the conclusion”? The subject must be capable by drawing only on certain of her cognitive resources to form a justified belief in the content. As said, these resources include inferring from an antecedently justified belief. It is not permitted to acquire a new justified belief by perception, testimony or memory (if memory involves more than drawing upon stored beliefs). But it is permitted to form new justified beliefs by introspection. Introspection yields justified beliefs about one’s mental states. Thus in a reflective appreciation the subject may reason from antecedently justified contents and from contents she can justify introspectively.¹² Furthermore,

¹²May she in addition form new beliefs by a priori reasoning? In his critique of internalism, Goldman [1999b] seems to allow additional a priori justified beliefs. I am reluctant to do so, but I think the issue depends on the precise conception of a priori justification

the belief in H can, at least on some theories, be justified non-inferentially. For instance, the presence of an a priori intuition (where this is some mental state that has a content) could allow the subject to justifiably come to believe H ; a bit like, —again, on some theories only— a perceptual state can allow to justifiably come to believe some perceptual content. But again, such a state should not be a newly acquired sensorial state such as a perceptual state. In sum, the subject is in a position to reflectively justifiably believe H , either (i) if there is a good reflective inference or (ii) a good reflective non-inferential route to that belief. And an inference is reflective if all the premises are either antecedently justified, or introspectively justified. And a non-inferential route is reflective if the states which provide the non-inferential reason are antecedent to the reflective appreciation. I will motivate these constraints on reflection and thus Inferential Internalism soon. Let us first state the requirement and return to the question how it relates to the supervenience thesis:

higher-order requirement (HO-R): If subject S is justified in believing (3) for a good deductive reason provided by (1) and (2), then S is in a position to reflectively justifiably come to believe H .

It might at first seem that (HO-R) implies the supervenience-thesis. For introspectively accessible states as well as antecedently held beliefs are mental properties in the sense that the subject has privileged access to them. So, one might think, first, that reflection is reflection on mental properties; second, that since the reflection yields a justified belief about justification and takes only mental properties into account, justification must be determined by mental properties.

But both ideas are false. First, if reflection can take antecedently justified beliefs as premises, these premises are the content on which one reflects. And such premises can have all sorts of contents, for instance typical empirically justified contents such as *Induction has proved reliable*. So, reflection is not only on mental properties.¹³

one adopts. Something which I cannot provide here. See below in the text for how these constraints on reflection are motivated.

¹³There is an additional requirement which would yield the result that reflection is only on mental properties. Suppose in addition to (HO-R) the following more general higher-order requirement:

general higher-order requirement (HO-G): Every belief is justified, only if the subject is in a position to reflectively justifiably come to believe that it is justified.

Since antecedent beliefs used in reflection have to be justified, every antecedently justified

Second, even if reflection were only on mental properties, this wouldn't mean that justification must be determined by mental properties. That evidence about something is of a certain kind, does not obviously yield conclusions about what determines that something. Thus, even if reflectively justified beliefs about justification were always inferred from beliefs about mental properties, this wouldn't imply that it is mental properties that determine justification.¹⁴

Why reflection, but not acquisition of evidence in the usual empirical ways, perception, for example? Here is a possible underlying idea. It can be spelled out tentatively and to a large extent metaphorically in the following way: Higher-order judgments are instruments of control of the belief-formation by the subject. It is phenomenologically implausible (as well as perhaps giving rise to a regress) that all belief-formation is in this manner controlled by occurrent higher-order judgments. But if the higher-order judgment is available by reflection, though not actually formed, then the belief-formation does not wholly "float free". For in that case there is a well-working subpersonal mechanism of control taking over, a mechanism the well-working of which can be assessed on the personal level by reflection. The subpersonal mechanism needs the same information as would the occurrent higher-order

belief implies that the subject is in a position to reflectively justify that the antecedent belief is justified. Since one cannot draw on infinitely many antecedent beliefs (let us suppose), the ultimate reflective reasons are provided by introspection and a priori intuition. (In fact, the requirement, as is widely believed, can not avoid the regress anyway, for the introspective, as well as the reflectively justified beliefs are under the very same requirement.) This would have the result that facts about justification would be ultimately known by appeal to reasons provided by introspection and a priori intuition. Some have been happy to endorse this claim, e.g. Russell [1997].

¹⁴Again, with the right further assumptions it would follow that if facts about justification are exclusively known from knowledge of facts about one's mental properties, then facts about justification are determined by facts about one's mental properties. A traditionally influential route would lead via the following thesis:

Rationalism: If one has a reflectively justified belief about justification (such as a belief in *H*), then it is true.

This does not mean that such beliefs are infallible, but only that if they are justified, then they are true. Rationalism excludes that what provides the reflective reason for believing *H* obtains without the justification-determining facts for the inferential justification obtaining. What provides the reflective reason for *H* must be what determines that the subject has an inferential reason (e.g. for (3)). Thus, if reflective reasons were provided by contents of introspection and thus by contents about mental properties, then mental properties must be what determines the justification of the inferential step. But endorsing rationalism would make inferential internalism unnecessarily vulnerable. However, the thesis I call "rationalism" is an integral part of what Plantinga [1990] calls "Classical Internalism" (ascribed to Descartes and Locke).

judgment. Therefore this information is present on the subpersonal level and processed on that level, but it can be accessed by reflection. By contrast, if the information is available by further perception only, no subpersonal mechanism of control could be in the process of using it. But the point is not merely that the information is available to subpersonal mechanisms if it is available to reflection, for, then, why should the information not be merely subpersonal and not all available to reflection, one must ask. Rather the subpersonal mechanisms which are somewhat stable dispositions are themselves under potential (and from time to time under actual) control on the personal level, something which is only guaranteed if the information they process is available to reflection. This is admittedly all very rough and somewhat too complicated to underlie the intuitive attraction of (HO-R) and it may also be too mechanistic a picture. But I think that it is at least one way of making the connection between control (resp. responsibility which presupposes some sort of control) and principle (HO-R) and it seems to me that the attraction of the principle stems from this connection, although perhaps it has to be made in another way. It is important to note that, if that was the view underlying (HO-R), then it would be irrelevant to (HO-R) how good exactly reflection was. The irrelevance of the availability of perceptions as opposed to reflective states as introspections is not claimed to depend on a superior certainty or reliability of introspection. It's rather because the objects of introspection are already "in the head" and hence liable to play some role on the subpersonal level, whereas the objects of perception do not.

In order for the requirement to be at all plausible, one needs to be a bit more precise on the content of the higher-order judgment, in particular concerning the concept of justification which is applied in the higher-order judgment. An obvious objection¹⁵ is that an *HO*-requirement is indefensible, because it

¹⁵This objection is raised in a number of places, normally when philosophers want to dismiss quickly higher-order requirements in order to pursue some other issue. For instance, Pryor [2001, 106]:

One might feel that this [Access Internalism for all kinds of justification] is too strong, especially for basic, unreflective kinds of justification like we get in perception. Access Internalism seems to say that our perceptual beliefs are justified only if we're justified in believing that they are justified. But whether and how our perceptual beliefs are justified is a matter that epistemologists are constantly investigating. It seems harsh to say that no one's perceptual beliefs are justified unless he has a justified position on that matter.

Similarly, Klein [1999, 309]

This [inferential internalism] amounts to requiring that S not only be an epistemologist, but also that S have a well-reasoned epistemology in order to

is rhetorically asked, when even epistemologists are unsure what is required for justification, how could a non-philosopher have justification for the belief that the step fulfills these requirements. Doesn't the higher-order requirement implausibly impose that the subject justifiably applies a concept, the concept of justification, which is a highly theoretical epistemological concept the application-conditions of which are furthermore much disputed? Furthermore, does not the requirement impose on every so justified subject to already have the correct theory of inferential justification, the present object of investigation?¹⁶

There are three things to be said against this. First, the subject need not have any concept associated with the word "justification". The required ability is merely that the subject justifiably judges on reflection that she ought to believe something or ought to hold on believing something. So, the subject does not need to have the theoretical concept of justification.

Second, the ability to apply a concept does not imply that the subject is able to state the fully general correct application conditions for the concept. A subject can, so to speak, justifiably believe *of* the application conditions of a concept, whichever they are, that they obtain, without justifiably believing that such-and-such application conditions obtain. So, a subject can justifiably believe that her belief is justified without having found the correct general characterization of justification. It is a substantial question whether one can have justified beliefs about what is justified without knowing any general principles. I think that inferential internalists should be "particularist" on that matter.¹⁷

be justified in believing, for instance, that a thunderstorm is likely. Epistemology is important, but having a justified epistemology is not required in order to have justified beliefs.

Goldman [1999a, 287-288] presents a similar worry.

¹⁶There are two distinct objections which reproach inferential internalists to impose a much too intellectual requirement. The first one, discussed here, objects that if that is the requirement, then no one except the most careful of philosophers has inferential justification. The second, discussed chapter 3, objects that if that is the requirement, then some beings which intuitively have inferential justification, such as very young children and higher mammals, cannot have it.

¹⁷Goldman [1999a, 287-288] raises a similar objection against internalism as the one under consideration here. He objects to Chisholm's view that epistemic principles can be known by reflection and a priori reasoning alone (at least not by the "common man"), and goes on from there to deny the internalist thesis that one (or at least the "common man") can know whether he is justified purely by reflection and a priori reasoning. But I think the internalist should reply by endorsing particularism about judgments of epistemic justification. In order to know, even by reflection, whether one is justified, one need not appeal to a general principle. It is clear that the issue merits a more thorough discussion

Third, the fact that there is disagreement about the application conditions of a concept, does not imply that as long as the disagreement is unresolved, the concept cannot be justifiably applied. One source of disagreement can stem from the attempt to find a fully general application condition, or a truly explanatory characterization of the concept. So, in some cases epistemologists disagree on the general application condition without disagreeing about whether such-and-such a case is justified.¹⁸ However, typically if they disagree on the general application condition, then there are normally at least hypothetical cases on which they disagree. Thus they disagree on whether the brain in the typical brain-in-a-vat-scenario is justified.¹⁹ But the disagreement can be much more radical, as when the sceptic disagrees that any number of the most usual cases are cases of justified belief. Here the disagreement comes from the role attributed to some property, e.g. certainty, which is associated with justification, without it being necessarily extrapolated from commonly accepted cases. In all cases however, the arguments for the one or the other position are quite subtle and it is not necessary to deny (except, of course, for the sceptic) that one can be justified in believing one case to be justified, at least before having considered the subtle argument which disqualifies that case. In sum, disagreeing epistemologists can all be justified, given that they have different information.²⁰

4.3 The sceptical argument against internalism

The sceptical argument I am going to present is an attempted reductio of a particular version of Inferential Internalism. I will begin by isolating the specific claim to which the sceptical argument applies.

than I am able to provide here.

¹⁸This is the case in the disagreement between epistemological internalists and norm-externalists. Norm-externalists need not deny that application conditions for “justification” involve only the internal state of the subject, so they agree on the extension of “justification” as given by the internalists. But they claim that what explains why such and such an internal state yields justification is the (internally inaccessible) reliability (in the evolution of the species) of a belief based on these internal states.

¹⁹As when the classical (not norm-) externalist disagrees with the internalist.

²⁰Klein and Pryor acknowledge in the cited passages that the epistemology must not be true, but only justified.

Explanatory inferential internalism

“Strong inferential internalism” is the name given in chapter 2 to the thesis that a justified belief in L explains why the subject in \mathcal{N} has a reason to believe (3). As said, (HO-R) allows for strengthening if we pass from the simple implication to stronger relations between antecedent and consequent. Thus we can construct a corresponding version of Inferential Internalism. Let us also focus again only on (a), i.e. that the subject has a reason to believe (3) in \mathcal{N} :

Explanatory requirement (E-R): The subject has a reason to believe (3) provided by (1) and (2) partly in virtue of the fact that she is in a position to reflectively justifiably come to believe H .

Here again “in virtue of” is meant to designate an explanatory connection. Her reflective capacity at least partially explains why (1) and (2) provide a reason for the subject to believe (3).

Now let us add an assumption about being in a position to reflectively assess H :

(A) One is in a position to reflectively justifiably believe H , only if one has justification for H .

This amounts to saying that the subject has a good epistemic reason to believe H , whenever she is in a position to reflectively justifiably assess H . This seems to be a plausible assumption. The difference between *having a reflectively justified belief in H* and *being merely in a position to obtain it* consists largely in the fact that the reflective belief in H is not actually formed on the basis of whatever provides the reflective reason. For instance, if reflectively forming the belief involves drawing upon antecedently justified beliefs, then these beliefs provide their contribution to the reflective reason antecedently to the reflective belief-formation. Also, if the reflection involves introspectively justified beliefs, we may assume that the introspected mental properties provide their contribution to the reflective reason antecedently to the reflective belief-formation, i.e. antecedently to being actually introspected.

Taking (A) and (E-R) together, we obtain:

Explanatory HO-requirement (EHO-R) The subject has a reason to believe (3) provided by (1) and (2) partly in virtue of the fact that she has a reflective reason to believe H .

I call endorsement of (EHO-R) from now on “explanatory inferential internalism”. Strong inferential internalism as introduced in chapter 2, i.e. the view that the deductive justification in \mathcal{N} is partially explained by appeal to an epistemically antecedent justification for L , underlies the same idea. The idea is this:

The fact that from the subject’s own justified point of view there is a supporting inferential relation between the premises and the conclusion is supposed to explain why she is right to take the inferential step.

The two theses merely put the accent on different aspects of the subject’s justified point of view. If you want, the former thesis which involves L puts the accent on the starting point of the subject’s reflective assessment, whereas the latter thesis which involves H puts the accent on the end-result of that assessment.²¹

Finally we can again connect the issue of explanation to the issue of having antecedent justification. As argued in chapter 2, if the justification of (3) rested on the justification of some other proposition, say L or H , then the justification of (3) could be at least partially explained by appeal to the justification for this other proposition. Perhaps there are other dependence relations than the resting-on relation that could play an explanatory role. In particular, there are perhaps coherentist ways to conceive a dependence that would allow the one justification to be explained by the other. But the resting-on relation is a very good candidate. So, here then is the claim which will be used in the sceptical reductio argument against the particular version of Inferential Internalism that commits itself to this claim:

- (A1) The subject’s justification for believing (3) in \mathcal{N} rests on her justification for believing H .

²¹It is a widely accepted thesis about reflection that in reflection the question whether one ought to believe p becomes the question whether p is true. Similarly, one could argue that the question whether my premises support my conclusion, i.e. the question whether H , becomes the question whether if my premises are true, then my conclusion is true, i.e. something deducible from L . So, L is relevant for the subject only because she is about to settle whether H . On the relation between truth and the question what one ought to believe in reflection, see Shah [2003].

A reductio of explanatory inferential internalism

Here is the outline of the reductio-argument against explanatory inferential internalism:

- (A1) The subject's, S' , justification for believing (3) in \mathcal{N} rests on her justification for believing H .
 - (A2) Given (corresponding) (A1) applies to every deductive justification, it is impossible for S to have justification for believing H .
-
- (A3) S does not have justification for (3).
 - (A4) But S has justification for (3) in \mathcal{N} by assumption.
 - (A5) Hence, (A1) is false.

It has been explained above that (A1) is a plausible part of explanatory inferential internalism. The main task here will be to argue for (A2). However, I will first point out how this reductio relates to classical sceptical arguments such as the argument of the inductive sceptic.²² The main part of the argument, namely (A1) to (A3) strongly resembles a classical sceptical argument. In such arguments it is first argued that the justification obtained by some method, e.g. induction or perception, rests on the justification for some other proposition. The upshot is a premise similar to (A1) (I come to the dissimilarities below). Next it is argued that such justification is impossible to obtain. This makes for a premise similar to (A2). And from these two premises, it follows that one can not obtain justification by such a method, hence something like (A3).²³

There are three important dissimilarities between the reductio above and such classical sceptical arguments. First of all, sceptical reasoning as employed traditionally is open to the possibility that the sceptical conclusion—something like (A3)—is what we have most reason to believe. Descartes does not appear to start his investigation from the point of view of someone who is already certain that his beliefs in the external world, say, are justified. And Hume endorses the sceptical conclusion that induction is unjustified, although later in the text he comes to relativize this result. Still, it has recently become customary to treat the traditional sceptical argument as a challenge

²²In the discussion that follows I particularly draw on the versions of the sceptical argument in Stroud [1984], Wright [1991, 2004b], Pryor [2000].

²³See below for the difference between “lower-” and “higher-order scepticism”.

to our conception of justification. It has been treated as an argument showing that several individually intuitively convincing claims about justification are incompatible. Even so, one option would appear to be to endorse the sceptical conclusion.²⁴ So, traditional sceptical arguments are not presented on the background of agreed acceptance that we have justification in the case at hand. But it is clear that this is more a difference in the role the central steps (A1) to (A3) are meant to play in a particular epistemological enterprise.

The second difference, again perhaps more in presentation than in substance, is that traditional sceptical arguments motivate acceptance of (A1) in a different manner. The explanatory inferential internalist's endorsement of (A1) is motivated by his answer to the following question: What explains why (1) and (2) provide a reason for believing (3)? The answer involves the claim that this has to do with the subject's having a reason for thinking that (1) and (2) provide a reason for believing (3). From this the explanatory inferential internalism concludes that the justification for (3) rests on the subject's justification for *H*. In contrast, traditional sceptical arguments (applied to deduction) may be seen as starting from the following observation:

(A0) If a certain metaphysical possibility, the "sceptical scenario", obtains, then we do not acquire knowledge by going through *Wet Roads*.

(A0) is then taken to support something similar to (A1) (again, I come to to the dissimilarities in a moment), namely that in order to have justification for (3), the subject must have justification for excluding the sceptical scenario. The further assumption on which (A0) supports (A1) could be the following:²⁵

²⁴And again, it has sometimes be endorsed. For instance, Popper accepted the claim that induction does not yield justification. And Berkeley accepted the claim that we do not have justification to believe in the external, mind-independent world.

²⁵On two weaker assumption (A0) would also support (A1), namely:

(AD') In order to have justification for (3), the subject must justifiably rule out what she has reason to believe to be a condition that undermines knowledge.

(AD'') The subject in *N* (or *we*, at least) has good reason to believe that in the sceptical scenario she (we) wouldn't acquire knowledge by going through *Wet Roads*.

(AD') roughly corresponds to what is called "Descarte's principle" in Wright [1991] (the latter is entirely in terms of knowledge, though). (AD') imposes weaker constraints on justification than (AD). For if the subject in question does not have a reason to believe that in the sceptical scenario knowledge is undermined, then she needn't justifiably rule it out. But it has the consequence that it is easier to have justification, when one has fewer knowledge or justified beliefs about what conditions undermine knowledge. This might

- (AD) In order to have justification for (3), the subject must justifiably rule out (or have justification for ruling out) that a condition obtains in which she wouldn't acquire knowledge by going through *Wet Roads*.

Thus the sceptic's endorsement of (A1) is not motivated by a certain view of what explains why (1) and (2) provide a reason for (3). Rather, it is motivated by what in itself appear to be plausible conditions on justification. This does not exclude that these conditions (A0) and (AD) have the appearance of plausibility in virtue of an underlying intuitive acceptance of explanatory inferential internalism. In that case, the difference between the sceptical argument and the reductio of explanatory inferential internalism would again be more a difference in presentation than in substance. However, this does not seem to me to be the case, and I do not want to argue for it.²⁶

I now turn to the main difference between traditional sceptical arguments and the reductio above. This is the difference between the proposition for which in the sceptic's argument the subject must have justification and $\neg H$ used in the reductio. Above I have alluded to the proposition relevant for the sceptic as the "sceptical scenario". For scepticism about perception this is the dreaming-hypothesis or the envatted-brain-hypothesis or something similar. For scepticism about induction this is the hypothesis that "nature is not uniform", that the unobserved does not resemble the observed or something similar. Unlike $\neg H$ these propositions are (i) not about reasons and (ii) they are *general* in the following sense: they are no more about any particular instance of perception or induction than any other. But $\neg H$ is about (1) and (2) and (3) in particular.

There is also an important similarity between the propositions $\neg H$ and the sceptical scenarios. Both are defeaters. Thus the truth of either of these propositions implies that the subject doesn't acquire knowledge. And if the subject had a good reason to believe either of them, her justification would be undermined. $\neg H$ undermines knowledge acquired by *Wet Roads*, since knowledge implies (I assume) having a good epistemic reason. And evidence in favor of $\neg H$ would undermine the subject's justification in \mathcal{N} .

Defeaters generally fall into different classes. Some are about the particular circumstance of the belief-formation. For example, *I am presently too tired to deduce in a conditionally reliable manner from more than one premise is*

be problematic. I cannot discuss this issue here, as it is not relevant for the reductio of explanatory inferential internalism.

²⁶However, if there is a motivation independent of explanatory inferential internalism for adopting (A2), then any theory of deductive justification, even non-internalist theories, must somehow have an answer to the sceptical challenge.

such a circumstantial defeater in \mathcal{N} . In contrast, some defeaters are about the belief-forming method in general. For example, *Deduction is no more reliable than reading tea leaves*, is such a generalized defeater which could be called “method-defeater”. At the face of it $\neg H$ is rather a circumstantial defeater, as it mentions the particular premises (1)-(2). However, there is a similar general defeater as follows:

$\neg H'$ *p* and *if p, then q* do not provide a good reason for *q*.

Here the particular propositions (1)-(3) are replaced by proposition-constants and $\neg H'$ is thus a generalized defeater. $\neg H'$ implies $\neg H$ and evidence for $\neg H'$ constitutes evidence for $\neg H$, but not vice versa. It makes therefore sense to take the circumstantial defeater to be more fundamental. Any requirement to the effect that the subject must have a reason to believe *H* would seem to imply a corresponding requirement for *H'*.²⁷ It seems then that the difference between sceptical scenario and $\neg H$ with respect to the

²⁷In fact the issue is more delicate than I present it here. *H* implies *H'*. But *H'* might be what Dretske [2005] calls a “heavyweight implication” of *H*. That is, there are good reasons to believe *H* that are not good reasons to believe *H'*. Here is one of Dretske’s example of a heavyweight implication: I have a good perceptual reason to believe *There are cookies in the jar*. I can see that there are cookies in the jar. *There are cookies in the jar* implies *Idealism is false*. But I can not see that idealism is false. Thus my good perceptual reason for believing *There are cookies in the jar* is not a good reason to believe *Idealism is false*. It is a controversial issue whether there are heavyweight implications. People who adopt what is called the “Moorean” response to scepticism deny that I can not see that idealism is false. Anyway, someone could argue that I can have a good reason for believing *H* without having a good reason for believing *H'*. On this view, it would not be true that a requirement to the effect that I must have a good reason to believe *H* implies a similar requirement about *H'*. Thus I could have a reason to believe that (1)-(2) provide a reason to believe (3) without having a reason to believe that this is an instance of a good belief-forming method.

I should stress that taking a requirement on *H* to lead to a requirement on *H'* does by no means presuppose “Mooreanism”. First there is the option to accept that there are heavyweight implications, but deny that *H'* is a heavyweight implication of *H*. Second, one could accept that in some sense of “reason” one can have a “reason” for *H* without having a reason for *H'*, but that in order for the “reason” to be in some specified sense to be “really good” or “defensible” or “claimable”, the subject having such a really good reason for *H* must have an additional reason for *H'*. This second option would correspond to the manner in which Wright [2004b] treats heavyweight implications (called “cornerstones”): In order to have a “claimable warrant” (means a “defensible reason”) for my belief in *There are cookies in the jar*, I need to have some sort of reason (an “entitlement”) to believe *Idealism is false* in addition and antecedently to the perceptual warrant. My perceptual warrant for *There are cookies in the jar* does not provide such a reason for believing *Idealism is false*. There is some additional antecedent reason (“entitlement”) for the latter proposition.

circumstantial-method-defeater-divide is not a very consequential dissimilarity.

The other dissimilarity was said to be that $\neg H$ is about reasons while sceptical scenarios normally describe a possible world in non-normative terms. A first question one might want to ask is whether there is anything similar to the inductive sceptic's scenario, say, for the case of deduction. Is there a metaphysically possible condition under which deduction generally does not yield knowledge? It is true that one encounters very rarely scepticism about deduction.²⁸ I think the reason is that people implicitly individuate deduction as the process leading exclusively from premises to a conclusion where the relation between them is in every instance logical entailment. But given deduction is individuated in this manner, it is metaphysically impossible that it is conditionally unreliable. There is no possible world in which such premises are true and such conclusions false. Thus the scenario is metaphysically impossible. And if that is the case, then, at least in traditional epistemology, it is obvious how to respond to the sceptic: We have perfectly good reasons provided by rational intuition that that scenario does not obtain. We know it insofar as we are able to have non-inferential direct insight into some modal facts. Thus the sceptic's premise similar to (A2) would be false. But, as said, I think this is the wrong way to individuate deduction.

Perhaps a sceptical scenario for deduction can be devised —especially if deduction is individuated in the way proposed in chapter 3. We only need to generalize one of the defeaters for deduction. For instance, if subjects were psychologically so that equivocation would be so widespread, that it was the normal case, then deductive inference would be generally undermined, i.e. not lead to knowledge. We can even imagine that we are in this situation. It is metaphysically possible that the different equivocations are so combined (by cosmic coincidence) that we never had occasion to notice these failings. At first sight, there seem to be metaphysically possible worlds in which deduction is generally undermined. So, there is a method-defeater for deduction which could play the role of the sceptical scenario in a sceptical argument for deduction.^{29 30}

²⁸An exception is Haack [1976]. In her case it is higher-order scepticism.

²⁹That there is such an imaginable situation for deduction, does not mean that deduction and induction can be undermined in exactly the same way: For instance an enumerative induction to the conclusion *All F's are G* can be undermined by evidence for *Some F is G*. But the latter defeater is compatible with the inductive premise *All F's observed up to time t are G*. For deduction there is no such defeater compatible with the premises, but incompatible with the conclusion.

³⁰Still, one might deny the metaphysical possibility for other reasons. One could perhaps argue that it is constitutive of belief that it enters in inferential reasoning in such a manner

Let us assume that such a sceptical scenario, “*SC*” for deduction can be devised. The sceptic’s argument to the effect that we do not have deductive justification could then run as follows:

- (S1) The subject’s justification for believing (3) in \mathcal{N} rests on her justification for believing $\neg SC$.
- (S2) Given (S1) applies to every deductive justification, it is impossible for S to have justification for believing $\neg SC$.

(S3) The subject does not have justification for (3) in \mathcal{N} , nor for any other instance of deductive reasoning.

How does *SC* relate to *H*? Or more to the point, how does the premise (A1) in the reductio relate to the corresponding (S1)? An initially plausible thesis is the following:

- (SH1) The subject’s reflective justification for believing *H* in \mathcal{N} rests on her justification for believing $\neg SC$.

With (SH1) in place, (S1) appears to be a consequence of (A1): Because the subject must have reflective justification for *H*, she must have justification for $\neg SC$.

In fact, it has been argued that the sceptic’s argument should anyway rather be construed with (SH1) instead of (S1). On this view, the sceptic does not challenge the claim that we have justification for (3), but the claim that we are justified in believing that we have justification. This “higher-order” sceptical argument would run as follows:

that such reasoning is generally truth-preserving. That is in the sceptical scenario the subjects would not be believers at all. We would misdescribe those subject’s as making deductive inferences at all, for they do not even have beliefs. This is certainly a way to respond to the sceptic’s argument, although, at first sight, I am not sure whether the sceptic could not describe a worrying sceptical scenario in a manner which does not make use of the notion of belief or deductive inference. In any case, such a conceptual connection between belief and the truth-preservingness or truth-directedness of inference seems not wholly implausible. One could also argue that to suppose that we are in such a scenario is to suppose that we are incapable of reasoning anyway. And this is a scenario we have every right to discard, since it makes no sense to ask a question, e.g. about justification, without assuming that we are in a position to say something sensible about it. [Cf. Adam and Tannery, 1996 (1645), First meditation]

(SH1) The subject's justification for reflectively believing H in \mathcal{N} rests on her justification for believing $\neg SC$.

(SH2) It is impossible for S to have justification for believing $\neg SC$ under this circumstance.

(SH3) The subject does not have reflective justification for H in \mathcal{N} , nor for a corresponding H for any other instance of deductive reasoning.

(SH2) states that in the context of reflectively investigating whether H , it is not possible to have justification for $\neg SC$. I will discuss the different versions of the second premise in a moment. With the higher-order sceptical argument vindicated, the falsehood of explanatory inferential internalism would follow. For from (SH3) and (A1) it follows that the subject does not have justification for believing (3) in \mathcal{N} . In fact, (SH3) roughly corresponds to (A1).

So, on the one hand there is a structural similarity between the sceptic's argument and the reductio of explanatory inferential internalism. A first premise states that the justification in question, e.g. for (3), rests on the justification for some other proposition, e.g. SC or H . The second premise states that it is under the relevant conditions impossible to have justification for this other proposition. On the other hand, there are some relations between the respective premises. Strong inferential internalism (here (A1)) can be seen as a possible motivation for the sceptic's first premise (S1). And the higher-order sceptical argument supports the second premise in the reductio. Both relations depend on the claim (SH1), i.e. the claim that the reflective justification for H rests on the justification for the negation of the sceptical scenario. I hope that this comparison helps prepare the ground for the following discussion of the second premise of the reductio.

The argument for the second premise

Again, the second premise is the following:

(A2) Given (corresponding) (A1) applies to every deductive justification, it is impossible for S to have justification for believing H .

As said $\neg H$ is a defeater for the reason for (3) provided by (1) and (2). The requirement (A1) can be spelled out in terms of this notion: The justification for (3) rests on the justification for believing that $\neg H$ does not obtain. The

reason I turn it this way is that the argument is slightly different whether we consider $\neg H$ which, as said, is a circumstantial defeater, or whether we consider $\neg H'$ which is a method-defeater. The argument for the method-defeater is more similar to the classical anti-induction argument. It runs as follows:

- (D1) The justification for H' must be partially deductively inferential.^a
- (D2) The subject's justification for believing H' rests on her justification for believing H' .

-
- (D3) Such a justification is viciously circular, hence the subject does not have justification for H' .

^aI omit the qualifier "reflective" on "justification" for ease of exposition.

(D2) follows from the fact that a requirement corresponding to (A1) obtains for every deductive justification—according to explanatory inferential internalism—and (D1). In contrast to H the proposition H' is about deductive reasons in general. Since \mathcal{N} is a typical favorable context for the deductive inference to (3), if the justification for (3) rests on the justification for H' , then any other deductive inference must rest on the justification for H' too. Thus, given (D1), the deductive inference to H' rests on the justification for H' . But since it is impossible to have justification for a proposition antecedently to having it, it is thus impossible to have such justification. The circularity involved is not merely "rule-circularity": a rule-circular justification is a justification for the proposition *Method m generally provides reasons* by method m itself. By (D2), the problem with the reflective deduction is not merely that it is a deduction, but that it rests (as a premise) on a justification for the conclusion for which it is to provide a justification.

The most problematic part of the argument is obviously (D1). Why should the reflective justification for H' be deductively inferential? Is there no other way to justifiably believe that deductive premises provide reasons for deductive conclusions? In particular, can one not rationally intuit in a non-inferential manner that deductive premises provide good reasons? Do we not know directly that it is generally reasonable to deduce? This response resembles the apriorist response to the inductive sceptic. On one version of this response, it is possible to non-inferentially intuit that it is reasonable to believe the conclusion of the best inductive arguments. This has yielded the objection that, even if we could thus know that these arguments are reasonable, without knowledge of the substantial empirical question whether the

unobserved resembles the observed, there is no way to non-inferentially know that what we judge to be reasonable really has a good chance to lead to the truth. For if the unobserved does not resemble the observed, the truth of the inductive conclusion is not even (*objectively*) *probable* on the assumption that the inductive premises are true.

With (SH1) it seems that (D1) can be vindicated. According to (SH1) the justification for H' rests on the justification for believing that the sceptical scenario is false. And then it is overwhelmingly plausible that the justification for the falsehood of the sceptical scenario $\neg SC$ rests on further deductive reasons. It does not seem possible simply to intuit that equivocation is not the normal case. Or, to take another possible sceptical scenario, that there is no large number of tonk-like inadequate concepts among our currently employed logical concepts. There are, I would think, good reasons for thinking that this is not the case, but these reasons involve some reasoning. In general, some of the possible sceptical scenarios for deduction seem to be possible worlds rather like the world in which the unobserved does not resemble the observed. That is, worlds that we cannot directly, with no amount of reasoning, exclude. Our non-inferential ways of coming to know fundamental logical or modal facts seem not to be applicable. Furthermore, if the justification for H' rests on the justification of other propositions such as $\neg SC$, then it could well be that the supporting propositions provide precisely deductive reasons for believing H' . Thus the threat of further deductive reasons does not only intervene in the justification for $\neg SC$, but also for the justification of H' from $\neg SC$. This is a very important point that can be generalized as follows.

If the reflective justification for H' rests on the justification of any other proposition (not only $\neg SC$!) and the support the other proposition provides is deductive, then the justification will be circular. For instance, the following initially plausible claims have this result: The justification for H' rests on the justification for *MPP is valid*. The justification for the latter proposition is provided by non-inferential logical intuition. But even if the justification for *MPP is valid* is non-inferential, it is plausible that *MPP is valid* provides together with some other proposition, e.g. *If an inference pattern is valid, then the premises generally provide a reason for the conclusion.*, a deductive reason for believing H' . But in that case, (D2) is vindicated and the circularity obtains. A similar point will apply with respect to the justification for H to be considered in the following.³¹

³¹This is essentially the point made in Boghossian [2003, 2001]. I will consider his precise point below in the main text.

The corresponding argument (A2) with H instead of H' , is structurally different:

- (C1) The justification for H must be partially deductively inferential.
 - (C2) The subject's justification for believing H rests on her justification for believing a corresponding proposition H_1 for the reflective inference.
 - (C3) The justification for H_1 must be partially deductively inferential, hence it rests on a justification for H_2 , and so on.
-
- (C4) There is no infinite chain of (epistemically) antecedent justification, hence the subject does not have justification for H .

It is to be noted that (C1) can be weakened in a certain way without much consequence. Strong inferential internalism is here taken as a thesis about deduction. But it seems clear that a proponent of explanatory inferential internalism about deduction would hold a similar view about any kind of inference. (In fact, in section 4.2 I explained inferential internalism as a view on inference in general.) This means that even if the inference to H is e.g. an inference to the best explanation, a explanatory inferential internalism would hold that its justification rests on the justification for a corresponding H_1 linking the abductive premise to the abductive conclusion. This would lead to the same regress, no matter what kind of inferences are further involved.

Since (C2) is the explanatory inferential internalist's claim, the argument can come under attack by (C1) or (C3) and by (C4). One can either claim that the justification for H or one of its "successors" H_1 , H_2 etc. is non-inferential or that there is an infinite chain of justifiers. It seems to me that the case for (C4) is *prima-facie* weaker than the case for (D3). It is less controversial that the involved kind of circularity in (D3) is bad, than that there can not be an infinite chain of justifiers as claimed in (C4). However, it is clear that infinitism is initially problematic. In particular, it appears to me to be initially more problematic than not adopting explanatory inferential internalism, i.e. (C2).³²

³²Furthermore, infinitism can avoid the circularity only on the following condition:

- (GP) The justification for H does not rest on the justification for any proposition about inference generally, i.e. H' extended to all kinds of inference.

For in that case, the circularity with respect to the justification for the generalized H' obtains again (on the assumption that the justification for the generalized H' is inferential).

So the weakest links seems again to be (C1) or (C3). Even in the remote past people have thought that on a particular instance of inference, it is possible to non-inferentially justifiably come to rationally intuit that in this particular instance one has a reason.³³ In the recent past, this response has been considered and endorsed precisely in response to a version of the foregoing argument (C1)-(C4).

Boghossian [2003] develops an argument against (A2) as follows: The justification for H cannot rest on an inferential justification for some other proposition. Thus, if it rests on some other proposition this proposition must be non-inferentially intuited. For instance, one could perhaps non-inferentially intuit L , i.e. (1) and (2) entail (3). However, L can support H only in a further deduction, namely from L and something like *If my premises entail the conclusion, then they support my conclusion*. Thus, according to (A2) this deduction requires its own justification for a corresponding H_1 , and so on.³⁴ ³⁵

But Bonjour [2005, 100] who can be interpreted as endorsing (A2) recently says the following:³⁶

For a variety of reasons, but most fundamentally because of the role that such [a priori] insights are supposed to play in deductive inference, it is often and quite possibly always a mistake to construe them as *propositional* in form. The problem here is essentially the one pointed out long ago by Lewis Carroll: at least in the most fundamental sorts of cases (think of *modus ponens*), the application of a propositional insight concerning the cogency of such an inference would require either a further inference of the very sort in question or one equally fundamental, thereby leading to a vicious regress. Instead, I suggest, the relevant logical insight must be construed as non-propositional in character, as a direct grasping of the way in which the conclusion is related to the premises and validly flows from them.³⁷

³³For instance Goodman [1955]. However the immediate judgment is according to him further supported by some general judgment (which is in turn inductively supported by the different instance-judgments. He thus adopts some form of holistic coherentism. Still the (first) instance-judgment must have some initial justifying force by itself.

³⁴Boghossian does not focus on H but rather on *The conclusion is justified*. I come to this question below.

³⁵To my knowledge the first version of a similar argument is Van Cleve [1984].

³⁶To my knowledge the suggestion to appeal to non-propositional states in connection with the kind of problem exposed here was first made by Wright [2001].

³⁷Bonjour [2005] and Boghossian [2001, 2003] both claim that the argument stems from

We can interpret this passage as proposing a way to deny (C1): the reflective justification for H is non-inferential. Bonjour thinks that if the reflective reason for H is provided by a non-propositional state, then it will not be an inferential reason. This seems very plausible. For it is plausible that non-propositional states do not enter into computational processes. They are not combined with and compared to propositional states, rather they give directly rise to propositional states.

Let us first sum up what I call the “sceptical argument” against explanatory inferential internalism, and then give an overview of the options with which the argument leaves a proponent of this view.

- First, a certain claim is ascribed to explanatory inferential internalism: the justification of a deductive conclusion rests on the reflective justification for the normative linking-proposition H . Then, it is argued that from this assumption —absurdly— scepticism follows.
- The sceptical conclusion is reached via the claim that the reflective justification for H is inferential. In that case a regress of justification for normative linking-propositions H_1, H_2 etc. obtains.
- If the reflective justification for H rests on the inferential justification of a proposition about inference in general, then the justification is not merely regressive, but even viciously circular.

If this argument is sound, then there appear to be only three options for rebutting it. A proponent of explanatory inferential internalism could claim some of the following:

- That he is not committed to the claim that the justification for a deductive conclusion rests on the reflective justification for H .

But in that case he is hard pressed to give his explanation of the deductive justification by appeal to the reflective justification for H . Strong inferential internalism is the view that the fact that (1) and (2) provide a reason to believe (3) in \mathcal{N} can be explained by appeal to the fact that the subject has a reflective reason to believe H . How else could such an explanation go than by claiming that H antecedently supports believing (3) on the basis of believing (1) and (2).³⁸ Or, he could claim:

Lewis Carroll. I call “Carrollian argument” the distinct argument of section 4.4. For the differences see below in the text.

³⁸One might perhaps think that there could be some holistic support relation between H and (3), so that the deductive justification for (3) does not asymmetrically depend on

- That the reflective justification for H is non-inferential.

Finally, his claim could be:

- That infinitism is true, and that the inferential justification for H does not rest on an inferential justification of a proposition about inference in general.

I think the case against against explanatory inferential internalism can be strengthened. In section 4.5 I present an argument that focuses directly on the explanatory claim, thus avoiding the need to argue that explanatory inferential internalism implies the resting-on claim (A2). Furthermore the argument does not depend so much on the claim that the reflective justification for H is inferential.

4.4 Tortoise' argument against explanatory internalism

Here is again the defining thesis of explanatory inferential internalism:

Explanatory inferential internalism: That (1) and (2) provide a reason for believing (3) is partly explained by the fact that there is a reflective reason to believe H .

As mentioned this closely resembles the thesis of strong inferential internalism. The argument to be presented is a generalization of the argument against strong inferential internalism from chapter 2.3. This was then called the “Lewis-Carroll-Problem for strong inferential internalism” in virtue of the fact that the argument can be read into a dialogue presented by Lewis Carroll [1895]. I will here present the argument in close connection to the original dialogue.

Roughly, the argument is that any way in which we could appeal to the subject's epistemic position towards H in an explanation of why she has a reason to believe (3) provided by (1) and (2), would rely on our having antecedently an explanation of why deductive reasons are good epistemic reasons.

the justification for H . But if explanation is asymmetric, then the epistemic dependence must plausibly be asymmetric too. And I conjecture that this is sufficient for the sceptical argument.

The original dialogue

In order to briefly summarize the note by Carroll, let us assume that it is about *Wet Roads* instead of the inference involving propositions about (simple) geometry given by him. Let us further call the following conditional constructed out of the propositions involved in *Wet Roads* “the logically true hypothetical”:

C If (1) and (2), then (3).

This proposition is logically true, although this is not part of its content. In the latter respect it is to be distinguished from the proposition *L* which does not play a role in Carroll’s dialogue.

The note by Carroll features a dialogue between Achilles and the Tortoise in the course of which Achilles is lured into a regress. At the crucial stage of the dialogue the Tortoise asks whether someone might not accept the premises of *Wet Roads* and yet not be “logically forced” to draw the conclusion. In their diagnosis of this possibility, they agree that the subject must therefore accept the logically true hypothetical, in order to be forced to draw the conclusion. However as the Tortoise is not forced into accepting the conclusion at the start, accepting the logically true hypothetical no more “logically forces” it to accept the conclusion. The initial premises entail the conclusion just as well as the new set of premises including the logically true hypothetical. At this point the dialogue continues potentially infinitely as ever new and more complex hypotheticals are added to the initial premises in the hope of reaching a point where the “logical force” is irresistible.

The dialogue exploits the fact that the two sets of premises bear the same logical relation to the conclusion. Here is again the representation of *Wet Roads* compared to its “enhanced version” (to stress that it is of the *MPP* form also represented as a two-premise-inference):

(1) It is raining outside.

(2) If it rains outside, the roads are wet.

(3) The roads are wet.

- (1*) *It is raining outside* and *If it rains outside, the roads are wet.*
- (2*) If *It is raining outside* and *If it rains outside, the roads are wet*,
then *The roads are wet.*
-
- (3*) The roads are wet.

It is not immediately clear what lesson Carroll intends one to learn from the dialogue. How should one understand the expression “logically forced” (to the conclusion)? Depending on the interpretation, the dialogue raises somewhat different general issues. On a first reading, the expression means the same as “committed” or “epistemically required”. The dialogue could then be taken as providing an argument against the view that one is epistemically required to take the *MPP*-step, because one accepts —and only insofar as one does— the logical principle, i.e. because one believes in the hypothetical which is a logical truth. Against such a view the dialogue purportedly shows that the commitment to the conclusion of the *MPP* is not in any sense stronger given the hypothetical is added as a further premise. The conclusion is still no more (!) than entailed by the premises. If one is committed to believing what is entailed (or at least obviously entailed, see below) by what one believes, then the initial *MPP* and the inference from the set of premises including the hypothetical are on a par.³⁹

On another plausible reading Carroll means by “logically forced” something like “psychologically forced” in the sense that a subject can not psychologically avoid believing the conclusion. On this reading Achilles and the Tortoise agree that it is psychologically possible for subjects to believe the premises but not the entailed conclusion (while considering, understanding and so on, all three propositions). They then conclude that what explains why the subject believes in the conclusion when she does are not merely the beliefs in the premises but a further belief in the logically true hypothetical, and they are thus lead into trouble. It seems that if subject’s are psychologically constituted in such a manner that believing the premises of an *MPP* never *alone and in itself* explains why she believes what follows from it, then she is so constituted that believing the premises and in addition the logically true hypothetical will never explain why she believes what follows from the

³⁹In fact, according to many, one can distinguish between two sorts of epistemic commitments: one corresponding to a commitment because one has a good epistemic reason, the other to a commitment because one is rationally required. For the distinction, see chapter 2.4.

premises neither.⁴⁰

But in fact, the two readings are not wholly independent, for (i) epistemic commitments do not simply correspond to logical relations between propositions, but depend on some features of the (kind of) subjects which are under the commitment, and (ii) the psychological explanation in question (supposedly not applying to the recalcitrant subject) is a special sort of psychological explanation, namely one in terms of motivation by reasons, which is relevant to the question of normative commitment.⁴¹ On (i): No one is held responsible for not believing, even when presented with the proposition, something which is in a very non-obvious manner entailed by what one believes. Epistemic commitments, even those about deductive inference, do not simply correspond to logical relations.⁴² On (ii): If “logically forced” is not concerned with motivation, it is not concerned with “real psychology”. The problem is not simply to give any sort of psychological explanation (somehow involving the beliefs in the premises) of the belief in the conclusion. The point cannot be that belief in the premises and the logically true hypothetical can no more explain the belief in the conclusion than simply the beliefs in the premises. For as far as just any psychological processes are concerned, nothing speaks against the view that there is a psychological process from the first set of beliefs to the conclusion but not from the second set (perhaps neither speaks anything in favor of that view). Rather when the concern is motivation, then the psychology under consideration is ideal. Such a subject fully considers, understands and believes the premises and considers one in the light of the other(s), is not misled by disturbing features, can deploy enough resources to the task etc. The possibility Achilles and the Tortoise envision is that such a subject would not be moved to the conclusion. The issue, on this reading, is not whether the subject is committed to the belief. That may be granted. What they do not grant is that the subject would be forced to move to the conclusion, could not help but to be moved to it—except some mistake in processing, understanding and so on. They then proceed to exclude the possibility to be unmoved by ascribing further beliefs to the subject.

The argument against explanatory inferential internalism is an adaptation of the first reading. It is to be noted that Achilles and Tortoise are not involved in the activity of justifying (3). Rather, on both readings they are

⁴⁰This reading corresponds to what I have called the “Lewis-Carroll-Problem for the psychological view” in the preceding chapters.

⁴¹“motivation” is often reserved for the practical case as motivation for action. I use it freely for the move to a belief which one so comes to believe for a reason.

⁴²This point is made by Gilbert Harman in a number of places.

trying to explain something. This is the reason why I take the argument to be provided to be closer to the dialogue by Carroll, than the sceptical argument from section 4.3. The sceptical argument would better correspond to a regressive dialogue in which someone is trying to justify his belief in (3). But in the Carrollian dialogue Achilles is trying to give an explanation from a third-person point of view of why the subject should or why she does believe (3).

Explanatory circularity

On the explanation of the dialogue I am about to give, it can be divided in three steps. In the first step, a successful explanation of why (1) provides a reason to believe (3) is given by appeal to the subject's justified belief in (2). In the second step a similar explanation of why (1) and (2) provide a reason for (3) is given by appeal to the subject's justified belief in *C*. In the third step it is made obvious that this explanation is regressive or circular. So, let us give the argument in the form of a dialogue between two characters, A and B. A is Tortoise, B is Achilles. They are talking about the subject S. Here is **Step 1**:

A1: Why is S' step from (1) to (3) justified? Why does (1) provide a reason to believe (3) in \mathcal{N} ?

B1: Because S justifiably believes (2), i.e. *If (1), then (3)*.

A2: I see, S infers (3) from (1) and (2). This seems OK.

In Step 1 B's answer is helpful. It allows A to better understand why S' step is justified. Given that S infers (3) from (1), one can say that S accords with the following imperative:⁴³

(!) Believe (3), if you justifiably believe (1)!

This imperative holds in \mathcal{N} . It is true also that S accords with the following imperative (or "principle" since it is more general in scope):

Rain- Wet-reasoning Believe the (3)-type proposition, if you justifiably believe the (1)-type proposition!

⁴³It is normally important to note whether someone *merely accords with* an imperative or a rule or whether she *follows* the imperative or the rule.

We can call the latter imperative a principle of which the former imperative is an instance. The question to which S' belief in the conditional C is relevant is why, in the circumstance, it is right for S to accord with the first imperative. This gives us an answer why S has the right to infer (3) in \mathcal{N} . It gives an answer to the question what about the circumstance it is that makes it correct to accord to the imperative. The answer is that given S' belief in the conditional, in fact, S accords with an imperative that is an instance of a more general principle, namely:

(!!) Believe (3), if you justifiably believe (1) and (2)!

which is an instance of a principle which could be called the principle of *MPP*-reasoning:

MPP-reasoning: Believe the q -type proposition, if you justifiably believe the p -type and the *if* p , *then* q -type propositions!

“ q -type” (and accordingly “ p -type”) designates in this principle a different type than in the former principle. In the former principle it was any proposition that it rains at t in place x (but at any place x and time t), this time, it is any proposition related to another, the p -type, via a *if* p , *then* q -type. Roughly, the propositions of one type correspond to each other only by being related with the particular “if, then”-connective in a complex proposition connecting each of them to some other. So, with the help of the subject's belief in the conditional, she can be seen as according with a more general principle. In this sense, it can be explained why according to the first imperative is in the circumstance the right thing to do. In the next step the dialogue takes an unhappy turn; **Step 2:**

A3: But wait, thinking of it, why is S' step from (1) and (2) to (3) justified?

B2: Oh, because S also justifiably believes that that step preserves the truth, i.e. she justifiably believes C .

A4: I see, S infers (3) from (1), (2) and C .

Step 3 expresses the inevitable dead end into which the two characters have manoeuvred themselves. **Step 3:**

A5: But I still don't get it. Why is S justified in taking the last inferential step?

B3: (in a mood of despair) Because S believes that that last step preserves the truth.

In Step 3, one must realize that the explanation B was giving up to line A4 is not successful. It assumes that S has the right to infer according to the valid pattern of inference, *MPP*, a right which A wants to have explained. So, A is perfectly right to ask her question in A5.

Any of the three lines in Step 2 may be criticized in order to avoid Step 3. (i) One can criticize A's question in A3 and deny that this is a legitimate question to ask at all, resp. deny that anyone needs to be able to answer that question. (ii) One can criticize B's answer in B2, or (iii) one can criticize A's way of interpreting B's answer in A4.

Someone who thinks that it is a primitive normative fact that (1) and (2) provide a reason for believing (3) can deny that it makes sense to ask the question on line A3. But an explanatory inferential internalist will not deny this claim. Typical inferential externalist's won't deny the right to ask this question either. For they think that something can be said in answer to it. For instance it can be said that this is because the subject has a conditionally reliable process leading from (1)-(3) at her disposal. Or one could say the fact that (1)-(2) entail (3) plays a role. Or one could say that the fact that the inference from (1)-(3) is meaning-constituting for the logical concept *if* ..., *then* is relevant, and so on.

Inferential externalists will typically claim that the mistake is on line B2. The subject's justification for believing *C* has nothing to do with the fact that (1) and (2) provide a reason for (3). But the explanatory inferential internalist can also claim that his view is not exactly captured by B2. He could claim that B2 can be modified without abandoning explanatory inferential internalism. In particular, he will claim that it is not *C* to which B should appeal, but *H*.

Finally, the explanatory inferential internalist can claim that the answer given in B2 is misunderstood on by A on line A4. He could claim that B2 does not say that *C* is a *premise* in an inference to (3).⁴⁴

What is exactly the problem with the explanation on A4? Obviously it is modeled on the one given on A2, that is, on the appeal to the implicit premise (2). As argued, the introduction of the latter belief served to view S' inference as according to a more general principle. It allows one to see what feature

⁴⁴Audi [1993] and Wright [2001] point to this distinction between the function of a premise and another possible justifying function of such a belief connecting premises and conclusion.

of the circumstance made it circumstantially justified for S to accord to the simpler imperative (!) (resp. the simpler principle). But the imperative that is satisfied given the further belief in the logically true hypothetical, namely:

Believe (3), if you justifiably believe (1), (2) and *C*!

is not an instance of a more general principle. In fact, its only appeal comes from the fact that it is an instance of the very same principle, i.e. *MPP*-reasoning. But clearly, the explanation by appeal to a more general principle that was successful in Step 1 cannot be iterated. We want to understand it better.

But the explanatory inferential internalist will say the following: “Of course, if you model the explanation on Step 1, you will not be able to invoke a more general epistemic principle.” The problem for this response is to find a way to in *C* could be responsible for the subject’s falling under some more general principle.

The question then becomes “Could there be some more general principle explaining why it is a good thing, from an epistemic point of view, to conform to the principle of *MPP*-reasoning?”. Inferential internalists will want to connect such a principle with the higher-order requirement. For, fulfilling the higher-order requirement must somehow be relevant to the explanation. So, it is natural for him to appeal to a principle involving higher-order beliefs. The only principle for which it seems to me to be at all plausible to claim greater generality (or more generally, more fundamental explanatory value) than for *MPP*-reasoning is an adaptation of the following principle about reasons:

Basic principle of reasons: If you justifiably believe you ought to do X (all things considered), then do X!⁴⁵

Following this principle seems to be constitutive of being a rational agent. It seems to be so fundamental that if one could explain by appeal to it why following the principle of *MPP*-reasoning is a good thing, then one would

⁴⁵Again, principles about reasons must be distinguished from principles about rationality. A similar principle of rationality could be the following:

Basic principle of rationality: If you believe you ought to do X (all things considered), then do X! (Or else give up the belief!)

In fact, I am not even sure that my “basic principle of reasons” is true. In the practical case, I might justifiably believe that I ought to do X, but still not have a reason to do X. The “basic principle of rationality”, however, seems to me correct.

have a true explanation of the latter. However, it needs to be applied to theoretical reasons, as follows:

Basic principle of theoretical reasons: If you justifiably believe you ought to believe p , then believe p !

If, somehow following the principle of *MPP*-reasoning in circumstance \mathcal{N} could be subsumed under the basic principle of theoretical reasons, then it seems that we would have a more general explanation.

One could now think that H is exactly the belief that satisfies the antecedent of that principle. In that case, the question of the kind of reason the subject has for believing H comes again to the foreground. For instance, if the idea is that C or L is involved in the justification for H , then it appears that some inferential justification must be explained anyway. Thus, the explanatory inferential internalist cannot appeal to a justified belief in C or L in order to subsume the subject's situation in \mathcal{N} under the basic principle of theoretical reasons, without supposing that some instance of inferential justification has already been explained.

This means that we reach the same conclusion as we reached by the sceptical argument of section 4.3. The sceptical argument however, left the proponent of explanatory inferential internalism with two options that are no longer available if the Carrollian argument of this section is sound. These options were: (i) Adopt infinitism, and (ii) deny that explanatory inferential internalism implies that the justification for (3) rests on the justification for H . The first option is no longer available, for we needn't assume that infinitism is false for the purpose of the argument. The Lewis-Carroll-Problem exposed here is not that each inferential step implies and antecedently justified other inferential step. Infinitism in this sense would be compatible with it being explainable (i.e. it not being a primitive normative fact) why this infinite chain of inferential dependence provides a reason to believe (3).⁴⁶ The argument here is that the explanation by appeal to inferentially justified H would be a circular explanation of inferential justification. The second option, (ii) is not available to the explanatory inferential internalist either. We are presently considering an explanation of why an epistemic reason for (3) obtains that appeals to there being an epistemic reason for H , and that the latter reason is provided by propositional contents (resp. the justified beliefs in them). Perhaps this explanation does not imply the claim that the justification for (3) rests on the justification for H . But it would have to appeal to some kind of

⁴⁶Klein [1999] argues against Sosa [1980] that infinitism is compatible with a reductive naturalistic account of epistemic justification.

support-relation between propositions, perhaps some sort of holistic support by coherence among all believed contents. But even so, it is hard to see what kind of more fundamental support-relation could play a role in an explanation of the principle of *MPP*-reasoning. These considerations seem to leave a proponent of explanatory inferential internalism with the only remaining option: the reason for H is provided by a non-propositional seeming.

However, there is even a further problem with subsuming \mathcal{N} under the basic principle of theoretical reasons. This is that H is not really the proposition specified in the antecedent of that principle. H is a normative *linking*-proposition. The proposition specified in the antecedent is the following:

$H(3)$ There is a (an overall) good epistemic reason to believe (3).

And the problem now is that $H(3)$ is inferentially justified from H . As said, I have remained neutral on the exact content of H . It could be a normative hypothetical proposition linking the *propositions* (1),(2) and (3), or a hypothetical proposition linking propositions about *believing* (1)-(3), i.e. a proposition roughly corresponding to the (hypothetical) imperative (!). But these differences do not matter, for if H has hypothetical form, then $H(3)$ is reached by reasoning. But perhaps H is categorical, relating the fact that (1) and (2) to the fact that (3), or the fact that (1) and (2) are justified to (3). Perhaps something like this: “Given that (1) and (2), it must be right to believe (3)” or “Given that belief in (1)-(2) is justified, I ought to believe (3)”. But this does not help, for $H(3)$ must be deduced from this by something like ‘*and*’-*Elimination*.⁴⁷

Even though the step is in that case not an instance of *MPP*-reasoning, but “‘*and*’-*Elimination*-reasoning”, it is not an attractive view, that by this way one can achieve an explanation of why it is epistemically good to conform to *MPP*-reasoning. Intuitively principles such as *MPP*-reasoning and ‘*and*’-*Elimination* are on a par with respect to their value in explaining why some epistemic move is justified. So, an appeal to ‘*and*’-*Elimination* in explaining why it is a good thing to conform to *MPP*-reasoning only prompts the demand for an explanation of why it is a good thing to conform to ‘*and*’-*Elimination*. And it does not seem that the basic principle could explain ‘*and*’-*Elimination* better than *MPP*-reasoning.

⁴⁷And suggesting that it is $H(3)$ rather than H of which inferential internalism should claim that it is relevant for the justification for (3) seems to me to give up on the main idea: The subject’s cognitive stand towards the support relation between premises and conclusion is relevant for inferential justification.

This means that not even the last option left open by the sceptical argument of section 4.3 is available. For no matter whether the reason for H is inferential or not, the appeal to H will in any case suppose that it has already been explained why inferential reasons obtain.

At this point of the argument it seems to me safe to conclude that no principle can stand with respect to principle of *MPP*-reasoning as this principle stands with respect to the principle of *Rain-Wet*-reasoning. But even though this conclusion seems safe, a proponent of (explanatory) inferential internalism can claim that the relation between the principle of *MPP*-reasoning and the principle of *Rain-Wet*-reasoning is not a good model for how he intends the higher-order judgment (or that it is reflectively available) to explain why it is a good thing to conform to *MPP*-reasoning. In particular, the explanatory inferential internalist could appeal to a principle that does not appeal to a justified belief or any other propositional state in the antecedent of the principle. The model of such a principle would not be the basic principle of reasons. Rather it would be a principle similar to principles which state that given a certain emotion is appropriate, then a certain action is to be taken. (An occurrent, episodic) fear of X does not only justify (according to some) the belief that X is dangerous, but it also directly, without appeal to that belief, justifies taking some action, for instance, running away. The action so recommended is conditional on some feature of the circumstance. This can be expressed by giving the following “principles (imperatives) of fear”:

(F!) If you (appropriately) fear x , run!

(F!!) If you (appropriately) fear x and your way out is blocked, attack!

Similarly there could be correct principles concerning a rational seeming or intuition with a non-propositional content corresponding roughly to H . The principle could then be the following

(S!) If it seems to you that H , then believe (3)!

(S!!) If it seems to you that H , but you can not move to (3) (because you have strong evidence against it), give up (1) or (2)!

As in the case of fear, the action recommended by the same seeming depends on the availability of actions. Furthermore, as in the case of fear, the availability of actions need not be assessed by the subject in the form of a belief. That the way out is blocked is not something that must be entertained in the form of a belief in order to justify attacking. Rather it is something assessed

by the subject on a more immediate level, giving rise to the action without reasoning. Similarly the assessment whether you can move to (3) or not, need not be available in the form of a higher-order belief about the justificatory status of conclusion or premises from which the subject must reason.

In order for a principle such as (S!) to be more fundamental than *MPP*-reasoning, some conditions must obtain. I do not know in general form what must obtain in order for an epistemic principle to be explained by another. Probably the application of the latter must be broader than that of the former. This would mean that all, or at least all inferential, belief-formation would somehow have to be subsumed under principles involving such rational seemings.

From a phenomenological point of view this picture seems to me not to be wholly unattractive. There appears to be a phenomenological difference — not stemming from a difference in belief— between moving to a conclusion that one finds obviously entailed and half-heartedly moving to an entailed conclusion where somehow that feeling is absent (e.g. because one believes that the transition is correct without fully “seeing it”). A proponent of this view agrees with Boghossian [2001, 37] from the citation in chapter 2:

What this Lewis Carroll-inspired argument shows, it seems to me, is that at some point it must be possible to use a rule in reasoning in order to arrive at a *justified* conclusion without this use needing to be supported by some knowledge about the rule that one is relying on. It must be possible simply to *move* between thoughts in a way that generates justified belief, without this movement being grounded in the thinker’s justified belief about the rule used in reasoning.

In so far as the seeming does not constitute knowledge about the rule (resp. the justifiedness of a move) the use of the rule is not supported by knowledge and the movement is not grounded in the thinker’s justified belief about the rule. And it is also true, on such a picture, that at some point it must be possible simply to move to the conclusion. But contrary to Boghossian’s claim that move is “grounded” on this picture, namely it is grounded in the non-propositional state. Still the subject is *moving simply* to the conclusion, in the sense that just relying on a feeling or seeming is giving in to a pull without having made sure in propositional form that it is the right thing to do.

However, this picture is no longer clearly explanatory inferential internalist in character. The problem is that, although the seeming (perhaps) justifies *H*,

that it does so appears to be irrelevant to it's justifying taking the inferential step. It does not longer seem that taking the inferential step is justified, *because* the higher-order judgment is reflectively available. Rather it seems that what is (partially) responsible for it being right to take the inferential step *happens* to reflectively support the higher-order judgment. Even if the higher-order judgment weren't supported by the seeming, it would still partially explain why taking the step is justified. For it would do so in virtue of (S!) which does not mention the fact that the seeming supports *H*.

4.5 Internalism and the psychological view

I take it that the sceptical argument from section 4.3 and the Carrollian argument from section 4.4 render explanatory inferential internalism implausible. The latter argument directly discredits (EHO-R), i.e.

Explanatory HO-requirement (EHO-R) The subject has a reason to believe (3) provided by (1) and (2) partly in virtue of the fact that she has a reflective reason to believe *H*.

The former argument via discrediting the claim about one justification resting on another:

(A1) The subject's justification for believing (3) in \mathcal{N} rests on her reflective justification for believing *H*.

Of course, neither of these claims is entailed by Inferential Internalism itself, i.e. by:

Higher-order requirement (HO-R): If subject *S* is justified in believing (3) for a good deductive reason provided by (1) and (2), then *S* is in a position to reflectively justifiably come to believe *H*.

One could now discuss different motivations for Inferential Internalism and try to see what more specific requirement, if any, this motivation would support. The motivation for Inferential Internalism need not be an underlying explanatory ambition as that of explanatory inferential internalism. However, I cannot at present fully engage with the wide-ranging issue of the motivation for Inferential Internalism. The aim of this section will rather be to discuss whether and in what sense the psychological view —more particularly the belief-proper account of chapter 3.3 and the sensitivity account

of chapter 3.5— is a version of Inferential Internalism. I hope that these accounts have been sufficiently motivated there.⁴⁸

It seems that the belief-proper account implies Inferential Internalism, i.e. (HO-R). As argued in chapter 3.4 it is a corollary of the belief-proper account that the belief in L must be justified (this was called the “implication-claim”). But a justified belief in L will provide a reason for believing H , perhaps together with some other belief such as a belief in *If (1) and (2) entail (3), then (1) and (2) provide a reason for believing (3)*. The question is whether these justified beliefs provide a *reflective* reason for H . To do this, it was said that these beliefs would have to be antecedently justified, or the contents would have to be open to introspection.

But “antecedently justified” is ambiguous. In the brief motivation of inferential internalism in section 4.2 it was said that the introspectible states and the antecedently justified beliefs must be capable of controlling the (first-order) belief-formation at the sub-personal level. In the course of conscious reflection on the first-order belief-formation these states provide a reason for the occurrent thought that the belief-formation is justified. The reason why the beliefs have to be antecedently justified is that they play a role before the subject consciously reflects on the belief-formation. But then what is meant here by “antecedently justified” is that the beliefs must be justifiably held temporally before the reflective process starts. If the subject acquired the justification for these beliefs in the reflective process, then their controlling the first-order belief-formation antecedently would be illegitimate.

There is another sense of “antecedently justified” to which I have appealed sometimes when expressing the fact that one justification rests on another. In that sense if justification j_0 for p is antecedent to justification j_1 for q , q cannot provide j_0 on pain of begging the question. In that sense too, because the antecedently justified beliefs provide a reason for H , their justification cannot be provided by H .

However that L , if it is to provide reflective justification for H , must be antecedently (in both senses) justified to H , does not imply that L must be antecedently justified to (3) in either sense. The claim with respect to the resting-on sense of “antecedent” would be a claim that I have insisted the belief-proper account need not endorse. But how does antecedence fit with the story by which Inferential Internalism was here motivated? Consider first temporal antecedence: Would it not be strange to claim that the belief in L controls the first-order belief-formation to (3), but could be justified tem-

⁴⁸For the issue of the motivation of epistemological internalism, see for instance Goldman [1999b], Leite [2005], both critical of internalism.

porally either at the same time or later than (3)? This would not at all be strange, for belief-formation is probably best not conceived in a linear manner. The internal processes controlling belief are perhaps best conceived as non-monotonous: Beliefs arrived at at a later time control beliefs that occur earlier. And for resting-on antecedence: Imagine (it is somewhat difficult) that (3) partially provides the reason for L . Would this mean that the belief in L cannot control the belief in (3)? If the justification for L rests on (3), then the reason for (3) cannot be provided by L . But why should one suppose that only beliefs which partially provide a reason for (3) can control it?

Thus, the requirement on antecedence is the following: A belief can provide a reflective reason for believing H , only if it is “antecedently justified” in the sense of its justification not being provided by H , and it’s being justified temporally before the reflective process starts. It does not need to be antecedently justified in either sense with respect to (3). If this is correct, then it seems to me that the belief-proper account may be seen as a weak version of Inferential Internalism, one that neither implies (A), nor (EHO-R).⁴⁹

According to the sensitivity account believing for a reason implies being sensitive to a number of defeaters. For the case of deduction these contain $\neg L$ and, at least for subjects who have the concept of *reason*, $\neg H$. Another way, adopted earlier, to express the fact that the subject is sensitive to these defeaters was as follows: The subject is confident that the defeaters are false, or is confident that L and H . The question then is whether reasonable confidence in these propositions puts the subject in a position to reflectively assess H . The question is not so much whether the propositions are appropriate for providing a reflective reason for H —they obviously are appropriate, but rather whether a reflective reason can be provided *by the state of confidence* (in these propositions).

It seems to me that reasonable confidence (that H or any other proposition) cannot provide a reason for believing H . The problem is not that confidence is a merely dispositional state. For dispositional belief can provide a reason for believing something. The problem is rather that the kind of consideration (reason) which makes confidence that p reasonable, does not make belief in p reasonable. We can parody the situation as follows:

We do not have evidence in favor of p . So we should not believe p . But in the given circumstance it’s reasonable to be confident that p without evidence. So, we are confident that p . But if it’s

⁴⁹Whether it really is a version of Inferential Internalism depends on what in addition to L provides the reflective reason for H and whether it is plausible that this is present in a subject in context \mathcal{N} .

reasonable to be confident that p , then we can believe p . So, let us believe p .

The point is that the reasonability of confidence depends on the fact that it is in the circumstance more reasonable (from the point of view of the aim of being capable of believing for a reason at all) to be merely confident than to believe p . In the circumstance in which it is reasonable to be confident that p it is reasonable not to try to find good reasons for believing p , as this would engender a regress. It would be odd, if confidence would provide a reason for believing p in a circumstance in which no reason for believing p is required.

But this is perhaps too quick. It is true that in the circumstance, namely the first-order belief-formation, in which confidence that L or that H is reasonable, it is reasonable while belief would not be reasonable and it would be unreasonable to try to justifiably believe L or H . But Inferential Internalism requires that there is a reason *provided in reflection* for H . The circumstance of reflection is not the circumstance of the first-order belief-formation. So, perhaps in the circumstance of reflection the antecedently reasonable confidence that H provides a reason for believing H .

A first point to note about this proposal is that the reflection in question would not be the typical case of reflection as it occurs every day. A typical case of reflection is prompted by a specific doubt about the falsehood of a defeater. The first-order belief, e.g. the belief in (3), is then endorsed or rejected as the result of such a reflection. In the course of a reflection that results in endorsement of the first-order belief, the doubtful defeater becomes, in the ideal case, believed for a good epistemic reason. This belief in the falsehood of the (antecedently) doubtful defeater partially provides a reason for believing H . And H is believed for this reason in virtue of confidence in a new set of defeaters, containing most of the defeaters for the first-order believing for a reason (except the doubtful one) and additional defeaters that are specifically reflective. In such a typical case of reflection the reflective reason is not provided by the states of confidence. On the contrary, the doubtful defeater has to become justifiably believed to be false, it cannot remain the object of mere confidence.⁵⁰

⁵⁰It is to be noted that when speaking of “availability to reflection” in the characterization of Inferential Internalism “reflection” did not mean what is in this passage called “typical case of reflection”. Here reflection can involve the acquisition of new evidence, whereas before reflection is restricted to new introspective evidence and antecedently justified beliefs. Some “typical cases of reflection” are also cases of “reflection” in the former sense, namely when the doubt can be settled by introspective evidence or by drawing upon formerly justified beliefs.

So, there would have to be a special kind of reflection in which mere confidence provides a reflective reason. Perhaps it would be the kind of reflection in which the sceptic is engaged —a reflection not prompted by specific doubt, but rather by the quite general question “Are we really justified?”. Then, perhaps, the idea could be that in such a reflective process one can draw on one’s confidence that e.g. *H*, in order to justifiably come to believe *H*. And if such a reflection were possible, then the subject would be in a position to reflectively justifiably believe *H* while being confident that *H* during the first-order belief-formation. In that case, the sensitivity-account would imply Inferential Internalism.

I do not think that such a reflection could yield justified belief in *H*. First, the state of confidence was introduced in order to fulfill a very specific role. And the conditions under which confidence is reasonable is linked to that specific role. One has the right to be confident in the falsehood of the defeater in the course of the first-order belief-formation. One has this right in the absence of evidence for the falsehood of the defeater, because to require evidence for (or more generally a reason to believe) each defeater to be false would lead to requiring evidence for the falsehood of ever new defeaters. But nothing exactly similar can be said about the right to being confident in a reflection where a reason for believing *H* is supposed to be provided by the confidence that *H*.

There is another line of reasoning speaking against the possibility of confidence playing this role in reflection.⁵¹ The idea is that the reason for being confident that *H* is not of the right kind to be a reason for believing *H*. And if the reason is of the wrong kind, then it is implausible that confidence that *H* transmits its reason to belief in *H*.

As said, the reason why it is reasonable for the subject to be merely confident in *H* in the first-order belief-formation is that she would otherwise be engaged in a regress. This consideration does not speak in favor of the truth of *H*, therefore it does not provide or constitute evidence (or an “evidential reason”) in favor of *H*. In this respect the reasonability of confidence in *H* is a bit like the reasonability for believing something derived from the practical utility of believing it. For instance, for an applicant for a job in a tobacco-company, it is useful (let us suppose) to believe that tobacco is harmless.⁵² In this sense it is more reasonable to believe that tobacco is harmless for the applicant than for someone for which believing it has no practical advantage. However, it is a controversial issue, whether such practical utility can constitute a reason

⁵¹I take this consideration from an argument by Shah [2006] to the effect that there are no pragmatic reasons for belief.

⁵²I take the example from Harman [1999, 16].

for belief. In fact, most people, even those moderately favorable to practical considerations⁵³ playing some role in providing reasons for belief, agree that the applicant is unjustified in believing that tobacco is harmless (on the assumption that he has no evidence that it is harmless, or even evidence that it is harmful). But the reason for being confident in H is not exactly of the same kind as the reason the applicant has. For the reason for being confident is not derived from practical utility apart from the the expected utility of having true beliefs. It is derived from the aim of believing the truth about (3) that it is reasonable to merely be confident that H . So, perhaps the reason for being confident that H , although it is not an evidential reason, is in fact a good epistemic reason for H .

But if it is agreed with Shah [2006] that the following “deliberative constraint on reasons to believe” holds, then it appears that the reason for being confident that H cannot be a reason for believing H . I quote from Shah [2006, 487]:

- (B3) $[r]$ is a reason for [subject S] to believe that p only if $[r]$ is capable of disposing $[S]$ towards believing that p in the way characteristic of $[r's]$ functioning as a premise in doxastic deliberation.

The sense in which $[r]$ must be capable of disposing $[S]$ to believe that p is that there must be no unalterable feature of $[S']$ psychology that prevent r from disposing $[S]$ to believe that p in the way characteristic of $r's$ functioning as a premise in doxastic deliberation.

By “doxastic deliberation” Shah means here a deliberation in which the subject engages in the intention of determining whether she should believe p . The idea is thus roughly that some consideration can only be (or provide) a reason for believing p , if it is in principle possible to reason in doxastic deliberation from that consideration to the conclusion that it is right to believe p .

The “deliberative constraint” has in itself not yet the consequence that the consideration supporting confidence in L cannot support belief in L . For this Shah needs to appeal to a psychological phenomenon called “transparency” expressed in the following quote:

When we ask ourselves the deliberative question whether to believe that p , this question gives way to the question *whether p is*

⁵³E.g. Harman [1999], Owens [2000].

true, and so the only way for us to answer the former question is by answering the latter.

Taking the “deliberative constraint” and “transparency” together, it follows that no consideration not pertaining to the truth of p can provide a reason for believing p . This is the epistemological thesis of evidentialism. It seems that we can test the claims on the case of the consideration in favor of confidence in H . Could one reason in deliberation from this consideration to the claim that one should believe H ? The considerations pertain to avoiding a regress, but not to the truth of H . Thus, it is according to “transparency” not possible to adduce this consideration in deliberation whether to believe H . And from the “deliberative constraint” it follows that the consideration does in that case not constitute or provide a reason for believing H . And, we can conclude, if the consideration supporting confidence in H cannot provide a reason for believing H , then confidence in H cannot provide a reason for believing H .

So, if Shah’s argument for evidentialism is right, confidence in H cannot provide a reflective reason for believing H . So these different lines of reasoning support the claim that confidence does not provide a reflective reason. In that case the sensitivity account is not a version of Inferential Internalism.

However, the sensitivity-account implies some sort of reflective control over the first-order belief-formation. As said, on the sensitivity-account the subject is required to have a conception of her reason. She has such a conception in virtue of being sensitive to a specific set of defeaters. Having such a conception of her reason is a precondition for being capable to reflectively assess whether she is justified. For in the typical case the reflective process is prompted by doubt about the falsehood of some defeater. When there is sufficiently strong evidence against such a defeater the belief in (3) is taken back. But sufficiently doubtful evidence will rather prompt a reflective process. Even if the so prompted reflection is a non-internalist belief-formation in the sense that it has to take new evidence into account in order to justifiably arrive at H , the sensitivity account at least requires that the reflective process is prompted by such evidence. In a sense, the conception of her reason, provides the subject the knowledge of how to justify H . Even if to do this she needs to acquire the evidence for the claims of which she already knows that they will be required to justify H , i.e. the negations of the defeaters.

The sensitivity-account requires that the subject is disposed to reflect when some evidence against H is present. It does not imply that at each moment the subject has the “ingredients” available in reflection for a positive outcome of such a reflection. In this sense, it is not a version of Inferential Internalism. It does thus not imply that the first-order belief-formation is under the (most

of the time sub-personal) control by reasons for H . However, it does require that no evidence against H is present,⁵⁴ and it requires that the subject is disposed to react to such evidence. This is more than other accounts of believing for a reason require.

⁵⁴This is so on any account, since H is a defeater for the reason provided by (1) and (2).

Chapter 5

Internalism, Epistemic Responsibility and Pragmatic Factors

5.1 Introduction

The upshot of the discussion of chapter 4 was that inferential internalism in the sense of a requirement of reflective access to a higher-order belief about the inference is subject to two powerful objections, namely the sceptical argument and the Lewis-Carroll Problem. These arguments refute at least any explanatory version of inferential internalism. It was also argued that the psychological view does not commit one to the requirement of reflective access. Rather the psychological view's requirement of a dispositional state of confidence in the falsehood of higher-order defeaters merely constitutes, in sufficiently sophisticated reasoners, a precondition, a "trigger-sensitivity", for engaging in reflective assessments of one's reasoning.

However epistemological internalism in general and requirements of reflective access to one's being justified are theses with considerable pre-theoretic appeal. The catchword in recent times for motivating internalist views is "epistemic responsibility". Reflective access to one's being justified is a way to ensure that one behaves in an epistemically responsible manner.

The psychological view has not been explicitly motivated in this way in chapter 3. It has been introduced as the best account of believing for a reason, e.g. one that does avoid the problem of deviant causal chains. Where does this leave us with respect to the important question of the "epistemic responsibility" of deduction and inference in general? It has been admitted that the sensitivity-attitude needs to be backed up by reasonable confidence in the proposition in question. This admission has been made on intuitive grounds, meaning here because reasonable confidence in the falsehood of the defeaters seems to be a necessary condition when thinking about particular cases. However, it is clear that something like the notion of epistemic responsibility plays some role here: It would be epistemically irresponsible to be confident in the falsehood of the defeaters if it were not reasonable to do so. It has also been argued that the condition of reasonableness at play cannot require there to be evidential reasons for believing in the falsehood of the defeaters. But the idea of epistemic responsibility of belief-formations that are not grounded in evidence in favor of such propositions as *that the reasoning is truth-conducive* evidently is in need of elucidation. The present chapter is a contribution to recent discussions on how to account for epistemic responsibility in the absence of underlying evidence.

In particular, in recent years a number of unorthodox suggestions about how to account for that kind of demanding epistemic standing —the one associated with epistemic responsibility— have been put forward. A common feature of these suggestions is that *pragmatic* considerations, as opposed to

considerations pertaining to truth and truth-conduciveness, are given a major role in the task. In this chapter a common strategy based on common motivations and assumptions is first extracted from these proposals. Then it is argued that epistemic responsibility cannot be accounted for in line with the common strategy. It is hoped that some progress in our understanding of epistemic responsibility can be made in course of the argument. Unfortunately the critical results arrived at in the end of this chapter do not permit one to see just how epistemic responsibility is to be obtained. It certainly leads one to discard one option for accounting for the epistemic responsibility of the kind of states involved in deduction according to the psychological view. However this does not constitute a special problem for the psychological view, but for all views that try to accommodate epistemic responsibility. Actually the problem seems to lie with the notion of epistemic responsibility than with the psychological view.

Many people believe that there is epistemic responsibility. They believe that we are in some sense accountable for our cognitive acts in a way that animals and very young children are not accountable for their cognitive states. It is a very difficult task to specify the sense in which we are accountable. A number of people have suggested that the epistemic responsibility of our most fundamental cognitive acts obtains in virtue of pragmatic features —as opposed to truth-related features. In this chapter, in a first stage, the common central claims and assumptions are extracted from these unorthodox proposals. It is thereby established that the proposals form a rather homogenous group. This warrants the introduction of a common label and a unified treatment. For reasons that will become apparent shortly the view is called “pragmatic epistemic foundationalism”.

The epistemological view in question promises to solve a problem that arises for foundationalism. Very roughly, the problem is the following: A subject's foundational cognitive acts are not supported by a prior take on the question whether they are truth-conducive. As a consequence, a challenge about their epistemic responsibility can be raised. One is clearly (*prima facie*) epistemically responsible when one holds a belief of which one (responsibly) believes that it is truth-conducive. By contrast, holding a belief that from one's point of view could just as well not be truth-conducive does seem to be epistemically irresponsible. The challenge for a foundationalist is to ensure that foundational beliefs are nevertheless epistemically responsible.

The general form of the solutions that pragmatic epistemic foundationalists propose is the following: In the absence of a subjective take on the question whether the foundational cognitive act is truth-conducive certain pragmatic features of the cognitive act ensure that it is not irresponsible. The specific

solutions proposed differ with respect to which pragmatic feature they appeal to. They appeal to the psychological irresistibility of the act, to its role as a presupposition of rational inquiry, and more. This chapter focuses on two proposals: on the one hand on Dretske's account of "epistemic entitlement" in [Dretske, 2000a], on the other hand on Enoch and Schechter's account of "the justification of our basic belief-forming methods" in [Enoch and Schechter, 2008]. The former appeals to psychological irresistibility, the latter to a Reichenbach-style "best option" consideration. These proposals are chosen because they can be interpreted in such a way that together they cover a wide enough range of attempts to account for epistemic responsibility by appeal to pragmatic features. If none of the conceptions that can be extracted from these proposals work, then probably no other conception in line with pragmatic epistemic foundationalism works.¹

It is here argued that it is very doubtful that pragmatic epistemic foundationalism can solve the problem of epistemic responsibility. Starting from the proposals three conceptions of epistemic responsibility are developed. The first associates epistemic responsibility with defensibility from the subject's point of view. It is suggested that the pragmatic epistemic foundationalist could use this conception in order to argue that foundations are pragmatically defensible. It is argued that this is incompatible with the assumption that foundations are basic or fundamental (in senses to be specified). The second conception associates epistemic irresponsibility with unexcused violations of epistemic obligations. It is suggested that the pragmatic epistemic foundationalist could use this conception in order to argue that the pragmatic features provide excuses for our reliance on foundational acts despite our ignorance concerning their truth-conduciveness. The pragmatic feature that promises most in this respect is the involuntariness of foundational acts. It is argued that the strategy fails because it relies on a misconception of cognitive acts. In particular, it relies on the very controversial claim that some of the central cases of cognitive acts are sometimes voluntary. According to the third conception epistemic (ir)responsibility obtains in virtue of the epistemic (ir)responsibility of evidence-related non-cognitive acts and omissions thereof. While this seems to be a promising conception of epistemic responsibility, it does not serve pragmatic epistemic foundationalism. For, again, it is incompatible with his conception of foundations as in some sense

¹Other authors who have proposed views which at least have some of the central ideas in common with pragmatic epistemic foundationalism are Wright [2004b] and Williams [1991]. For extensive criticism of the former see Jenkins [2007] For a short criticism of both, see Brueckner [2007]. The objections raised in the present chapter are independent of these criticisms.

basic and fundamental.

In section 1 pragmatic epistemic foundationalism is set against the background of current epistemological mainstream. This highlights the unorthodoxy of the view. In section 2, two specific proposals are summarized and a general characterization of the view is proposed. Section 3 first characterizes the problem pragmatic epistemic foundationalism is devised to solve. It then develops a first account of epistemic responsibility in line with that view. It is argued that this account fails. Section 4 develops a second account of epistemic responsibility in line with pragmatic epistemic foundationalism and rejects it. In section 5 a third account is developed. It is tentatively endorsed, but it is also argued that it does not serve the pragmatic epistemic foundationalist's purpose.

5.2 Mainstream and Dissidents

Some people think that there is no single notion that can capture everything rightly associated with the term “epistemic justification”. In particular, they think that the various proposed externalist and internalist criteria, e.g. reliability, objective probability, evidence— and access-conditions, etc., are not to be seen as the application-conditions for one single notion. They endorse pluralism about epistemic justification.² Others disagree and think that there is one notion with more or less heterogenous application-conditions. Still, even if there are several kinds of epistemic justification, something distinguishes them from non-epistemic justification. A cognitive act can be positively evaluated in a number of ways, but only some are truly epistemic. Mainstream in epistemology holds that the epistemic notions are united in their concern for truth. Reliability is epistemically good because it relates an act to truth or likelihood of truth. It is epistemically good to fulfill access-conditions because the act thereby (potentially) subjectively appears to link up with truth.

Mainstream: Any evaluative property of cognitive acts (associated with our use of “justification”) that is truly epistemic is mainly a matter of the act's connection to the truth-value of the proposition that is the object of that act.

²This view is defended for instance by Alston [2005]. The opposed “monism” is the traditional view implicitly held by many people.

Even most “monists” about epistemic justification, i.e. those who think that there is one single notion of epistemic justification, can agree with this. But the formulation is meant to make room for two broad categories of conditions on epistemic justification —whether they are united in one notion or not. One associates the act’s positive standing with an *objective* truth-connection, the other with a *subjective* truth-connection. It is worth going into a bit of detail. For the nature of subjective truth-connections in particular is highly relevant in characterizing and motivating the position to be introduced shortly. (For the sake of simplicity I focus —here and in what follows generally— on the case of acceptance).

objective truth-connection: a cognitive act of acceptance is objectively truth-connected, if and only if it is objectively likely that the act’s object, i.e. the proposition, *qua object of that act* is true.

The relevant likelihood of the proposition that I accept is likelihood conditional on the fact that the proposition is the object of that act —hence “objectively likely *qua object of that act*”. For instance, if the act is reliably formed, then its object is likely to be true conditional on it being the output of that reliable method. It is not sufficient that my acceptance’ object is likely to be true conditional on just any sort of further facts. For instance, conditional on the truth of the proposition, the proposition is likely to be true (!). But this does not imply that it is likely to be true *qua object of that act*. If my acceptance is an instance of wishful thinking that happens to yield a true proposition, then it is not objectively truth-connected. (The criterion given here is an intuitive, imprecise one. When exactly is the proposition likely *qua object of that act*? To give a precise answer, one would no doubt have to confront the notorious generality-problem for reliabilism [Conee and Feldman, 1999, cf.])

The formulation in terms of objective likelihood is here only chosen in order to draw a terminologically simple contrast between an objective and a subjective kind of relation. Paradigmatically the act’s reliability is an objective truth-connection of the act. Other such connections are counterfactual connections such as tracking and safety. I do not mean to say that all these different sorts of connections are best captured in terms of —or even less that they are fully analyzable in terms of— objective probabilities. But objective and subjective probabilities are a sufficiently familiar contrast. It is therefore useful for expository purposes.

subjective truth-connection: a cognitive act of acceptance is subjectively

truth-connected, if and only if it is subjectively likely that the act's object *qua object of that act* is true.

Again, the relevant subjective likelihood is not merely subjective likelihood of the proposition that I accept conditional on just any other things I accept (or reject). A subjective truth-connection obtains only when the proposition that I accept is likely to be true conditional on what further propositions *which are about that act* I accept. A subjective truth-connection requires that the subject has a perspective on her own act and that from that perspective the following is true: given the proposition is the object of that act, it is likely to be true.

The formulation is intended to leave room for a wide variety of views. It means, roughly, that the subject has some positive attitude towards the proposition that the act is truth-conducive. But what sort of attitude this is may vary from view to view. On some views—very intellectualist views—the subject has an actual occurrent acceptance of the proposition that the act is truth-conducive. On most views the acceptance is somehow implicit in her willingness—e.g. in the case of an inference—to infer the conclusion from the premises, her willingness to put these considerations forward when asked about the truth of the proposition, or when asked to justify her acceptance of the proposition. Thus an act may be subjectively truth-connected without the subject possessing sophisticated concepts such as *act*, *truth-conduciveness*, *probability*, and so on. But on any account of the epistemic standing of an act in terms of a subjective truth-connection there will be an “imminent” acceptance by the subject of the proposition that the act is truth-conducive.

The characterization of subjective truth-connection is meant to paradigmatically include evidentialist views. These views require that I *possess* considerations (evidence) in favor of the truth of the proposition that I accept. But they typically also require that what I possess, i.e. the consideration, *speaks in favor of the truth of the act's object by my own lights*. Thus I accept, however implicitly, that the considerations speak in favor of the truth of the acceptance. And thus I implicitly accept that the act based on these considerations is truth-conducive.

For instance, suppose that I accept that there is boat near the coast on the basis of my perceptual experience. Suppose that my perceptual experience provides me with the consideration *It perceptually appears that there is a boat near the coast*. And I am strongly disposed—I actually manifest the disposition now—to take this considerations to bear on the question *whether there is a boat off the coast*. I would perhaps even appeal to the consideration

It perceptually appears that there is a boat near the coast in order to claim that it is true *that there is a boat near the coast*. Thus I implicitly accept *that my acceptance* that there is a boat near the coast *on the basis of it perceptually seeming-to-be-so is truth-conducive*.

Of course this is not meant to be the uncontroversial story about the epistemic standing of perceptual belief. But it is a story on which the epistemic standing is dependent on a subjective truth-connection.

This somewhat demanding conception of subjective truth-connections is here adopted for the following reason. It is on this conception that subjectively truth-connected acts can be seen as epistemically responsible. For it is guaranteed that the act appears in a positive light from the subject's perspective.

The key feature of what is here called “mainstream” is that it associates epistemic justification with subjective or objective truth-connections. But mainstream merely holds that epistemic justification is *mainly* a matter of a truth-connection. Other features may be allowed to play some role. For instance, consider “agent reliabilism” [Greco, 1999, cf.]. On this view reliability is not the only relevant feature of a belief-forming process. In addition the process must be a manifestation of an “intellectual virtue” (where this means more than simply that it is a reliable process). For instance the disposition underlying the process must have a certain history, been acquired in certain ways and not in others; it must be stable and integrated in the subject's cognitive set-up; and so on. Still this is a mainstream view for the objective truth-connection is an essential ingredient in epistemic value.³

If mainstream views apply the specific notion of epistemic responsibility to cognitive acts, it will be applied mostly in virtue of truth-connections. By contrast, according to the unorthodox views discussed in this chapter non-truth-connection features play a central role with respect to epistemic responsibility. A dissident of this kind will most plausibly be a pluralist with respect to notions of epistemic justification: epistemic responsibility is only one—but a very important one—of the notions associated with the term “epistemic justification”. Here is a first, rough characterization of the view.

Pragmatic Epistemic Foundationalism (PF): There is an epistemic standing, epistemic responsibility, which up to a point is mainly a matter of a subjective truth-connection, but underlying it are mainly other, pragmatic features. (“pragmatic foundationalism” for short.)

³Thus the versions of virtue-epistemology defended by Sosa [1991b,c,d, 2003] and Greco [2002] are mainstream views.

What needs to be elucidated is evidently the notion of *features underlying subjective truth-connection*. Whether or not a subjective truth-connection can convey positive standing depends on the standing of further actual or potential acts. Here is the thought in favor of this claim:

First, as defined, if an act of acceptance α is subjectively truth-connected, then α is likely to be true from the subject's point of view. The subjective point of view is constituted by the subject's other acts already taken, non-act-like seemings (e.g. perceptual states) and her dispositions to take acts. The point of view thus specified either already includes an act to the effect that α is truth-connected or such an act is "imminent". For present purposes it is not necessary to specify the exact sense in which such an act is "imminent".

Next, this actual or potential act has a standing on its own. And it cannot confer good standing on α , unless its own standing —and the standing of any act it might itself depend on— is good. Thus the standing conveyed by subjective truth-connection depends on an underlying standing.

It is an assumption of pragmatic epistemic foundationalism that there is "a bottom". Some standing which conveys the standing associated with subjective truth-connection is not itself a standing associated with subjective truth-connection. The motivation for this assumption is evidently a classic worry about regresses [fn 5 Dretske, 2000a, cf.], [549 Enoch and Schechter, 2008, cf.]. Notoriously there are several such worries.⁴ One is that finite minds as ours could not "contain" the infinity of states necessary to provide a subjective perspective on the acts, a subjective perspective on the subjective perspective and so on. Another worry is that some standing has to be underived, least we are incapable of giving an illuminating account of epistemic standing. An account of a kind of standing of act α in terms of the same kind of standing of act β can presumably not be the last word on the matter.

5.3 Pragmatic Epistemic Foundationalism

(PA) is not a merely possible view. It has been defended. In this section it will become apparent that it has at least three proponents: Dretske and Enoch and Schechter. Their versions of (PA) will be briefly summarized. It

⁴For a classic paper in which some of these regresses are disentangled, see Sosa [1980]. See chapters 2 and 4 of this thesis for a disentanglement of the issues with respect to deductive justification.

will then be possible to refine the characterization of (PA) at the end of this section.

Dretske's "epistemic entitlement":

According to Dretske what has here been called "epistemic responsibility" comes in two guises. On the one hand in the guise of "justification", on the other hand as "entitlement". In the following passage Dretske introduces these notions.

I am using justification (for believing P or accepting P as true) [...] as the reasons, the propositions one already accepts as true, to which one can appeal in support of P. [...] Justification is only one of the ways of securing a right to believe. Certain facts about one's circumstance, facts one may have no awareness of and, therefore, facts that are not one's reasons for thinking P true, may also give one this right. [Dretske, 2000a, 592]

Thus "justification" is a standing associated with what has been introduced as a subjective truth-connection. "entitlement" is introduced as a right not due to a subjective truth-connection but due "to certain facts about one's circumstance".

Furthermore, in the following passages "entitlements" are claimed to provide the foundations for "justifications".

[...] The propositions we are entitled to accept may be thought of as given. [...] Entitled propositions are the facts (or, see below, the putative facts) one is given to conduct one's cognitive affairs.[Dretske, 2000a, 593]

[...] There must be a given—some propositions we have a right to accept without justification. How else would it be possible to justify scientific and commonsense beliefs about the world?[Dretske, 2000a, 594]

[...] I here assume [...] that internalists [who take only justification to confer epistemic rights] are also subject to a justificational regress they can only halt by appealing to something like entitlements.[Dretske, 2000a, fn 5]

In the following passage Dretske explicitly denies that entitlement depends on an objective truth-connection, and thus denies what has here been given the label of "mainstream":

If one's interest in accepting P as true is to be regarded as epistemic, though, one would think the primary—indeed the only grounds for that right would be the truth, or probable truth of P.

I will later reject this idea—the idea, namely, that it is only a relation to the truth (or probable truth) that can render a belief [epistemically rightful]. [Dretske, 2000a, 594]

The following quotation gives the passage in which Dretske states the central idea about what does account for the foundations epistemic responsibility. The foundation in question is a perceptual belief to which one is entitled:

We have no choice about what to believe when we see (hear, smell, feel, etc.) that things are thus and so. [...] Is it possible that it is this feature of perceptual beliefs—their unavoidability—that gives one the right to accept them? If you have no real choice about what to believe, [...], then you have—don't you?—the right to accept P as true. Ought implies can, and if you cannot do otherwise, it surely can't be true (as skeptics and internalists [i.e. those who think that only justification can confer an epistemic right] maintain) that you ought to do otherwise. We have a right to accept what we are powerless to reject. [Dretske, 2000a, 598]

The general idea, is that in my given current, un-sceptical frame of mind, I cannot but accept what presents itself as true via my perceptual states. This unavoidability of the acceptance is claimed to render it epistemically responsible. Later in the paper Dretske qualifies this claim as follows [Dretske, 2000a, 599-601]: Unavoidability in a given frame of mind can only confer a right if it is not by an epistemic fault of mine that I find myself in that frame of mind. The full story goes roughly as follow (Dretske's line of thought will be discussed in quite a bit of detail in later sections): In my current frame of mind I have no doubts about perception, I have no belief which undermines my confidence in perception, nothing indicates to me that this could be an illusion. In that frame of mind I can't resist believing what I seem to see. And if I can't resist, then it is not the case that I ought to resist—at least if it's not my fault that I can't resist. Thus the full entitlement-conferring feature can be characterized thus:

D-feature is the (conjunctive) right-conferring feature as follows:

D-feature₁ the act is psychologically irresistible in the given frame of mind, and

D-feature₂ there is no epistemic irresponsibility with being in that frame of mind.

One conspicuous feature about the passage it is worth noting. In the passage—and in many other passages of the paper—Dretske appeals to an analogy with rights to ordinary (non-epistemic) acts. Thus: “If you have no real choice about what to believe, [...], then you have—don’t you?—the right to accept P as true. Ought implies can, and if you cannot do otherwise, it surely can’t be true [...] that you ought to do otherwise.” Dretske switches from talk about belief in the first sentence to talk about what to do in the second. And the second sentence is supposed to establish what is asserted in the first sentence. The main principle he seems implicitly to rely on could perhaps be stated thus:

D-Principle If S has no choice doing X and S is faultless about being in the situation of having no choice about doing X, then S has a weak right to do X.

There may be some immediate doubts about this principle. For instance, one may ask, what kind of right is it such that I have a right to do X while actually not having the choice not to do X? This worry will be discussed in section 5.5.

The main point to be made at present is that the account appeals to a principle which in the first instance seems to be a principle of practical rationality. This justifies in my opinion calling the feature to which he appeals “pragmatic” —although Dretske never himself applies the term to his account. This is of course only a terminological point. The substantial point is that (i) truth-connections play no role in the account “entitlement” and (ii) the account appeals to principles of practical rationality.

Justifiably employing a belief-forming method as basic according to Enoch and Schechter

According to Enoch and Schechter [2008] cognitive acts are *instances of following a belief-forming method*. Some belief-forming methods are “employed as basic”, others not. They do not provide a precise characterization of this distinction. But given what they say, it seems safe to assume that what they

have in mind when a method is said to be “employed as basic” implies that the corresponding cognitive act is *not subjectively truth-connected*. (The interpretation of “basicness” will play a role in the argument to be given in section 5.4. It is therefore extensively discussed there.):

The belief-forming methods that are basic for a thinker are those methods that are the most fundamental in how the thinker reasons. All other belief-forming methods employed by the thinker are derivative.[Enoch and Schechter, 2008, 551]

[...] Given the *ex hypothesi* basicness of the method for the thinker, possessing a justification is impossible.[Enoch and Schechter, 2008, 555]

If a method is subjectively truth-connected, then intuitively the subject does “possess a justification for employing it” and intuitively the method is “supported by other methods”. Therefore when a method is employed as basic, it is not subjectively truth-connected. They mention as examples (something like) inference to the best explanation, reliance on modus ponens, reliance on normative intuitions and the method of forming beliefs from perceptual experience. Nothing depends on the claim that these are basic methods, provided there are *some* basic methods.

In line with the characterization of (PA) Enoch and Schechter think that methods employed as basic are the foundations on which methods employed as non-basic rest:

IBE [inference to the best explanation] is plausibly a belief-forming method that is basic for us, a method that supports our use of other belief-forming methods but that is not in turn supported by any other methods.[Enoch and Schechter, 2008, 447]

And the reason there have to be such foundations, according to them is that otherwise a vicious regress ensues (see quotation below on page).

But just as Dretske, they reject the idea that the reliability of the method itself could account for the good standing of the methods we employ as basic. Instead they appeal to the following feature:

The guiding idea of our account is simple. Consider the explanatory project, the project of understanding and explaining the world around us. This project is of fundamental importance

to us. [...]; a thinker who does not inquire about the world around him is intuitively doing something wrong. This counts in favor of employing whatever methods are necessary for successfully engaging in the explanatory project. It is plausible that employing IBE (or a close relative) is needed for successfully engaging in the explanatory project. And this explains why we are justified in employing IBE as a basic rule in our thought.[Enoch and Schechter, 2008, 549]

According to Enoch and Schechter something similar can be said about the other methods we employ as basic. These include among others something like *modus ponens* (a deductively basic method) and the method of forming beliefs from perceptual experience. The general claim is something like the following:

We are justified in employing a method as basic, (mainly) in virtue of the

E&S-feature: employing the method is necessary for successfully engaging in a project we are rationally required to engage in.

They give a detailed account of what is meant by the quasi-technical “the method is necessary for successfully engaging in a project”. What is worth noting here is that this does not imply that the method is objectively truth-connected. It only means that there is some possibility that the method is effective, e.g. yields (mostly) only good explanations. And that if *it* is ineffective, then it is impossible for the subject to successfully engage in the project: “if even this method fails, then the thinker cannot successfully engage in the relevant rationally required project”. So the method need only be potentially truth-connected, but it must in addition be such that if any (available) method is truth-connected, then this one is. The idea is that since the project is rationally required, what is perhaps merely potentially a means to achieve the project, but in a way “the only hope”, is good enough.

The terminology of employing a method and engaging in a project suggests that the relevant principles at play in the background are principles that are in the first instance principles of practical rationality. It seems that the intuitive appeal of the main idea stems from our acceptance of something like the following principle of practical rationality:

ES-Principle If P is a rationally required project, and method M is indispensable (“the only hope”) for rationally⁵ achieving P, then using M is in good standing.

This is a special-case-version of some principle to the effect that one should use a means if the benefits of achieving the end outweigh the costs of employing the means weighed by the chance of succeeding by these means. The case is special because the end is rationally required. And this has the consequence that even means that represent a dim chance of success, if they are the only hope, are good enough.

Before giving a general characterization of pragmatic foundationalism, it is useful to try to reduce Enoch and Schechter’s talk of “employing a belief-forming method” to talk about cognitive acts. This will considerably simplify and unify the discussion that is to follow.

To translate their talk of “employing a belief-forming method” into talk about cognitive acts requires simply to adopt a “thick” conception of cognitive acts. We should understand a cognitive act as individuated partially by what it is based on. By “inferential act” one should understand the second of the two following things: (a) the acceptance of the conclusion, or (b) the acceptance of the conclusion on the basis of the premises. If we think of the inferential act in way (b), then it is possible that an inferential act is unsupported. If we adopted the other way, (a), of individuating the inferential act, then it would be odd to say “the act is unsupported” —for the premises do support it. But the premises do not “support accepting the conclusion on the basis of the premises”⁶. If we agree to take the inferential act to be (b), then it

⁵Not just anything necessary to engage successfully in a rationally required project could have good standing derived from this principle. For instance, in some possible world I (psychologically) could only successfully engage in the explanatory project by associating a range of possible explanations with randomly chosen people; furthermore I psychologically could only discard the bad explanations by killing the person associated with that explanation. But arguably killing these people would not even have *prima facie* good standing in this possible world, for it would be outright irrational. Thus some sort of restriction to rational methods for engaging in a project would have to be made. For instance, one could require that the method must be a method that is indispensable for rationally successfully engaging in the project. Thanks to Torfinn Huvenes for providing a predecessor of this counterexample and Crispin Wright for ideas for responding to it. I do not claim that —once all the things Enoch and Schechter say in order to refine the notion of “indispensability” are taken into account— these counterexamples still apply to their view. They do arise against my appeal to what I call the “E&S-Principle” in my rendering of the general idea behind their account.

⁶Except on a very specific view on the epistemic status of inference. This would be the view that the premises support not only the conclusion, but also the proposition that the premises make the conclusion probable.

makes perfectly sense to say of an inferential act that it is unsupported (or not subjectively truth-connected). An act as in (b) would only be supported (or subjectively truth-connected) if the subject accepted that the acceptance based on the premises is truth-connected. And this is what a subjective truth-connection as introduced in section 5.2 requires.

Thus, we should take “foundational acts” to be all those acts, whether inferential or not, that are not subjectively truth-connected. Dretske does not consider the inferential ones, but his proposal may simply be taken as one about a more restricted class of foundational acts.

This way of characterizing foundational acts is more useful in the present context than the more classic conception which assimilates foundational with non-inferential. For as explained, an inferential act can just as well fail to be subjectively truth-connected as a non-inferential act.

These two examples help to give a general characterization of the views grouped together under the label of “pragmatic foundationalism”. These views implicitly or explicitly appeal to principles that in the first instance are principles of practical rationality. This is the reason why the features to which these views appeal can be called “pragmatic”.

Pragmatic Foundationalism (refined): There is a specific epistemic value associated with a subjective truth-connection that has foundations as follows:

1. The principles accounting for the epistemic value of the foundational cognitive acts are principles that are plausible in the first instance for ordinary actions; and
2. the cognitive acts do not satisfy the principle in virtue of objective (and subjective) truth-connection.⁷

5.4 Responsibility and Defensible Stand

In the first part of this section the motivation for (PA) and the assumptions on which it rests will be made explicit. In the second part a first conception

⁷The second clause is necessary not to rule out too much. For instance, some hold that epistemic rationality is a form of instrumental rationality (for discussion see Kelly [2003]). But they hold that cognitive acts are instrumental to the epistemic aim because they are truth-connected. Such a view is obviously not a version of “pragmatic foundationalism”.

of epistemic responsibility will be extracted from the proposals. And it will be argued that it is incompatible with the motivating assumptions of (PA).

Pragmatic foundationalists deny that epistemic standings associated with an objective truth-connection exhaust the class of epistemic standings. While most of them would probably readily acknowledge that there is a value associated with something like reliability, they insist that there is some other independent epistemic value. “[...] there may be several different senses of epistemic justification. The sense of epistemic justification we are after is the one closely related to the notions of epistemic responsibility and blameworthiness. [...] Whether there are other, more externalist notions of epistemic justification is an issue on which we can remain neutral.” [Enoch and Schechter, 2008, 551] Thus, objective truth-connections lack the capability to confer the epistemic standing associated with epistemic responsibility and blameworthiness.

(PF₁) An act’s objective truth-connection cannot confer epistemic responsibility on it.

Furthermore pragmatic foundationalist claim that a subjective truth-connection, “possessing a justification”, does confer epistemic responsibility.

(PF₂) Cognitive acts that are subjectively truth-connected are *prima facie* epistemically responsible —provided the cognitive acts underlying the subjective truth-connection do not involve epistemic irresponsibility.

As said, pragmatic foundationalists claim that not all cognitive acts can be subjectively-truth-connected and for each subjectively truth-connected act there is one or more underlying cognitive act that is not itself subjectively truth-connected.

(PF₃) Underlying each act that is subjectively truth-connected there are other acts that are not themselves subjectively truth-connected.

(PF₁) — (PF₃) give raise to the threat that cognitive acts are globally epistemically irresponsible. They imply that epistemic responsibility has a foundational structure and that the foundations are neither epistemically responsible in virtue of a subjective truth-connection —for there is none— nor in virtue of an objective truth-connection —for that cannot confer epistemic responsibility. And epistemic irresponsibility at the foundations contaminates the whole of our cognitive acts (see the proviso-part in (PF₂)).

The pragmatic foundationalists deflect the threat of thoroughgoing epistemic irresponsibility —or “responsibility-scepticism” as one might call it— by claiming that cognitive acts can be epistemically responsible in virtue of pragmatic features. There is epistemic responsibility established neither by a subjective nor on an objective truth-connection.

(PF₄) Cognitive acts can be epistemically responsible in virtue of features other than an objective or subjective truth-connection (for short: in virtue of pragmatic features).

Thus: “ [...] although employing a belief-forming method is typically only epistemically responsible only if the relevant thinker is antecedently justified in believing that the method is a good one, and although in the case of basic belief-forming methods no such justified belief is antecedently available, nevertheless employing such a method is epistemically responsible.”[Enoch and Schechter, 2008, 555] The general desideratum that (PA) is supposed to satisfy is the following:

Desideratum: Establish and account for the epistemic responsibility of the foundational cognitive acts, despite their lack of a subjective truth-connection.

The first way in which this desideratum can be fulfilled is as follows: There is a feature in virtue of which subjective truth-connection confers epistemic responsibility and this same feature is present when the proposed pragmatic features are present. This common feature is that the subject is in a position to defend her cognitive act and to seeing herself as doing the right thing. The presence (or absence) of defensibility is the feature in virtue of which all cognitive acts are epistemically responsible (or not). Thus this strategy aims at providing pragmatic features that secure for the subject a defensible position.

Defensibility Strategy: The pragmatic features and principles secure a defensible position for the subject, in the absence of her having available considerations speaking in favor of the truth-connection of the underlying states and transitions.

Defensible of course means that the subject *could* defend her position, and the kind of modality here is an important issue. How readily available must this defense be? Must the actual subject have antecedently reasoned through

the defense, having accepted all the premises required for the defense? Or is it enough that an idealized version of the actual subject would have these premises and steps of reasoning available? Or is it something in between these two extremes that is required? This issue is addressed below.

Enoch and Schechter could (against their intention, see below) be taken as adopting the Defensibility Strategy. They propose what they call “a vindication” of our basic belief-forming methods along the following line:

- (1) If the environment cooperates to some extent (IBE is conditionally reliable), we successfully engage in the explanatory project by employing IBE.
 - (2) If the environment does not cooperate at all, then any other method fails too.
 - (3) Engaging in the explanatory project is rationally required.
-
- (4) Employing IBE is among the best options calculated on the uncertainty whether it is reliable/truth-conducive.

There are some worries about this vindication that should be put aside. They are briefly mentioned .

One worry that some readers will find devastating is the following: What are the *epistemic* credentials of such a vindication? How could it establish a truly epistemic standing for the foundations? This is a vindication all right, one might say, but in what sense is it epistemic, if it is independent of a truth-connection? One way to flesh out this worry is as follows: The vindication does not support the proposition that the conclusion of a given instance of IBE is likely to be true. Therefore there is no rational route for a subject from that vindication to the act of accepting the IBE-conclusion on the basis of its premises. For nothing except considerations in favor of the likelihood of truth of an acceptance’s object can rationalize that act.⁸ What the vindication can at most rationalize is the act of bringing it about (by influencing all sorts of further factors) that one accepts. But this is not the cognitive act of accepting itself. Therefore, whatever merit there is in using IBE by the light of the vindication, it is not *epistemic* merit at all.

⁸For a detailed general argument in favor of evidentialism along these lines, see Shah [2006].

This is a worry which might be devastating. But it depends on a substantial background theory about epistemic value. I take it that it is not *obvious* that the vindication is purely pragmatic. It does not obviously parallel cases of clearly merely pragmatic standing of cognitive acts. One such case is the one in which it would be good if I believed that smoking was not unhealthy in order to get a job at a tobacco company. Surely there are all sorts of differences between this case and the case of IBE evaluated according to the vindication above. The vindication does not establish that sort of merely pragmatic advantageousness for using IBE.⁹

It is not the aim of this chapter to assess pragmatic foundationalism from the standpoint of whatever is the correct theory of epistemic value. The target here is the claim that pragmatic foundationalism can account for epistemic *responsibility*. The main aim of this chapter is to challenge pragmatic foundationalists to provide a satisfactory account of something worthy to be called “responsibility”.

Another worry slightly more relevant to the objection to be raised in a minute concerns the epistemic status of the premises. Surely, the vindication should not circularly rely on IBE itself. But it is not obvious that (1) and (2) are not supported by IBE. These seem to be claims about human capacities and the relative likelihood of certain environments. Such claims are *prima facie* epistemically on a par with many other empirical claims about humans and their environment. In particular, it is not obvious that their epistemic standing depends less on IBE than our claim that IBE is truth-preserving.

But again, while this seems to be a legitimate worry, it depends on certain constraints on a good vindication —such as non-circularity. But this is a constraint which is to some extent independent of the particular use the vindication is put to. Here the focus is on the particular use of the vindication in a development of the Defensibility Strategy. As such it has to satisfy certain constraints too. And the aim here is to argue that it is these constraints that it cannot fulfill.

In line with the Defensibility Strategy, this vindication must be in some sense available to the subject herself. For it is in virtue of the availability of a defense that the subject is not irresponsible in employing IBE as basic.

But there is a fundamental problem with such a proposal. If the the weighing-considerations are available to the subject herself, then the act (employment of IBE) is not foundational (resp. IBE is not employed as basic). For in that case the standing of our use of IBE depends on the standing of further states

⁹Enoch and Schechter [2008, sec 5.1] address this worry.

and transitions, in particular of the weighing method and the methods by which the premises of the weighing consideration are given. And if the act is not foundational, then we simply have not reached the bottom —the standing of which the proposal is supposed to account for. Now we are simply pushed to account for the standing of the weighing-consideration and its premises.

As it stands, this objection is mistaken. Nevertheless a proper refinement of it, or so it will be argued, is right. What is wrong about it as stated is that it assumes a different conception of foundation than the one used by the pragmatic foundationalist. Foundations were introduced in order to stop a regress (or avoid circularity) of subjective truth-connections. All this requires is that the foundations are not subjectively truth-connected. It does not imply that the foundations' epistemic responsibility does not depend on the standing of any other acts at all. Foundations can depend on the standing of acts that do not provide a subjective truth-connection. And it is clear from the vindication that the piece of practical reasoning does not establish that the employment of IBE is truth-conducive.

However, the proponent of (PF)'s fear of regress and circularity, which motivates his endorsement of foundationalism, also motivates a requirement to the effect that the foundations are in some wider sense *fundamental* —in other words, that there is a sense in which the foundation's responsibility does not *depend* on further acts. It will be argued that if a foundational act is pragmatically defensible as required by the Defensibility Strategy, then it cannot be fundamental in the relevant sense.

Consider a given candidate for being a foundational act, e.g. an instance of IBE. A proponent of the Defensibility Strategy is committed to the claim that there is a relevant difference between

- (a) requiring that this act is subjectively truth-connected and
- (b) requiring that it is pragmatically defensible.

He is committed to claiming that while the former gives raise to a vicious regress or malign circularity, the latter does not. But pace that, it will be argued, there is no reason to expect that there is a relevant difference.

Consider an instance of IBE, called now for simplicity's sake an "IBE-act". Suppose that it is subjectively truth-connected. According to how this notion has been introduced, this implies that the subject "imminently" accepts that the IBE-act is truth-preserving. Let us say that the the subject therefore has an available truth-connection defense.

So, it is possible to compare the available truth-connection defense with an available pragmatic defense. The pragmatic defense might be one along the lines of the vindication given by Enoch and Schechter. The proponent of the Defensibility Strategy denies that the subject has an available truth-connection defense. But his reason for denying this should not be a reason also to deny that she has an available pragmatic defense.

One possible worry concerning a further subjective truth-connection is the following: We are about to give an account of epistemic responsibility, that is, we are to explain why a given cognitive act is epistemically responsible. If the account satisfies the relevant explanatory standards, then for some cognitive acts the epistemic responsibility must be explanatorily fundamental. This means it must be fundamental in the sense that its responsibility is not explained in terms of the responsibility of some other of the subject's act. Now we are accounting for the responsibility of a given IBE-act. But if we appeal to an available truth-connection defense, we appeal to the responsibility of a potential, imminent cognitive act. But it is not the case that that further act (or, if any, the further acts it relies on) are explanatorily more fundamental. On the contrary these acts are explanatorily less or equally fundamental than an IBE-act. Perhaps some of them are IBE-acts themselves. Therefore our account risks to fall prey to an explanatory regress explaining something in terms of what is to be explained. At the very least the appeal to an available truth-connection defense does not allow us to make any explanatory progress. Everything remains to be explained.

But if this is a legitimate worry (the objector can remain neutral on this), then the Defensibility Strategy commits one to the following: the potential act of the pragmatic defense and, if any, the acts it itself relies on are explanatorily more fundamental than the foundational cognitive acts.

It cannot here be given a precise account of what it means to be explanatorily more fundamental (with respect to epistemic responsibility). A plausible requirement is that if an act's epistemic responsibility is explanatorily more fundamental than another's, then one can understand why it is responsible without first understanding why the less fundamental act is responsible. This requirement is obviously violated when the supposedly more fundamental act is of the same kind than the less fundamental act. Perhaps one could argue that a defense of IBE along a subjective truth-connection would necessarily be circular relying at some point at least on IBE itself, while the pragmatic defense does not. That the weighing consideration above does not rely on IBE is not that clear, since we do not know how the premises could be supported. At least the argument form does not seem to be an IBE. But be that as it may, it is very difficult to contend that a similar pragmatic

defense for the basic deductive method would not rely on that method itself. (The parallel pragmatic defense of MP —assuming that this is one of our basic deductive methods— would be a similar weighing consideration. The only difference between the vindication for IBE and MP is that they are the best options with respect to different rationally required project.) It is very plausible that practical reasoning exploits the same connections between contents that deductive reasoning does. For instance, means-end reasoning can be brought in MP-form.

And even if all the support relations involved in the pragmatic defense were of a different kind, the question whether the reliance on these methods is responsible does not seem to have an easier answer than the original question about IBE, modus ponens, perception, and so on. I can see no reason why the acts and support relations involved in the pragmatic defense would not give rise to an explanatory regress as well.

This obviously does not definitively refute the claim that there is any relevant difference. But it raises a challenge for a proponent of this line of thought. She must provide good reasons to think that the pragmatic defensibility is less subject to an explanatory regress than a truth-connection defensibility. Perhaps there are such reasons, but they can only lie in a detailed account of practical reasoning. For it seems that the intuitive view of the interrelation between theoretical and practical reasoning does either not give priority to either one, or, if it gives a priority, then it lies with theoretical reasoning. Practical reasoning is not, it seems, more explanatorily fundamental or self-standing, than theoretical reasoning.

Consider now another worry about a further subjective truth-connection. This would involve, as said, an imminent act of acceptance that the IBE-act is truth-preserving. This act is imminent in virtue of the subject's further mental states, that is experiential states, cognitive acts already taken and dispositions to engage in cognitive acts. If this imminent act is to help explain epistemic responsibility —as subjective truth-connections do in the case of non-foundational acts, then there must be a psychological explanatory connection between the imminent defense and one's taking the IBE-act. For if the potential defense were psychologically ineffective, then how could it account for responsibility? It must be in virtue of the defensibility that the subject takes her act. Therefore the further mental states which constitute the defensibility's psychological implementation must psychologically explain (in part) the IBE-act.

But this precludes the possibility that the IBE-act is psychologically fundamental in the following sense: An act is psychologically fundamental if and

only if it is not taken *because of* any further actual or potential cognitive act. It may be argued that some cognitive act must be psychologically fundamental. For if there are not, then a vicious regress of cognitive acts ensues. It requires that there is an infinity of actual or imminent cognitive acts. And this, it may be argued, is impossible for limited human minds.

Whatever may be thought of this worry, it again does not seem to allow to point to a relevant difference between the availability of a truth-connection defense and the availability of a pragmatic defense. For if the pragmatic defensibility is to account for responsibility then it has to be psychologically implemented too. And if psychological implementation poses a problem for truth-connection defensibility, why should not there be the same problem for pragmatic defensibility.

In sum, it is hard to see a sense in which pragmatic defensibility is less problematic for an account of epistemic responsibility than a thoroughgoing truth-connection defensibility. If the latter gives raise to a regress or circularity problem, then so does the former.

Enoch and Schechter clearly agree, as is witnessed by the following passage:

[...] A thinker may, for instance, be justified in relying upon her favorite thermometer because she is antecedently justified in believing that it reliably indicates the prevailing temperature. But holding a belief about the reliability of a belief-forming method cannot be a necessary condition for being justified in employing it as basic [...]. [...] since the relevant reliability beliefs must themselves be justified, the threat of an infinite regress or vicious circularity looms large. And *analogous problems* face views that ground the justification of our employment of basic belief-forming methods in the justification of other beliefs. [...] we account for the justification of employing basic belief-forming methods directly, and not via the justification of any belief. [emphasis added] [Enoch and Schechter, 2008, 549]

In other passages they explicitly reject the idea that their vindication is available to the subject [564 Enoch and Schechter, 2008, cf.]. It is clear that they do not endorse the Defensibility Strategy. (And the same is true of Dretske.)

But in what way does their vindication ensure that the subject employs the basic method in an epistemically responsible manner, if not by endowing her with a defensible position with respect to her cognitive act?

How can the pragmatic features account for epistemic responsibility—but an objective truth-connection would not, while the pragmatic features are just as unavailable to the subject as an objective truth-connection is? Enoch and Schechter appeal to Reichenbach’s analogy between the blind man’s choice to follow the path, although he does not know that it will lead him out of the wood rather than near to a precipice. [567 Enoch and Schechter, 2008, cf.] They say that just as the blind man should follow the path because it is his only hope, so should we rely on our basic belief-forming methods as our only hope. But, if the blind man has nothing at his disposal to assess whether following the path is his only hope, then his behavior is not particularly responsible. If from all he knows it is just as likely that a helicopter will find him only if stays where he is than that this is actually a man-made path leading somewhere, then from his point of view following the path is not the right thing to do. *We* might say that he does the right thing by following the path. And we can say that even if *we* do not know where that path leads. For we think that it is his best chance of getting out. But thereby we evaluate his behavior with respect to our best guess of what its objective consequences are. We do not evaluate whether his choice of following the path is a responsibly made choice.

One may fail to see this point if one thinks of epistemic responsibility by way of the usual objections to pure reliabilism.¹⁰ Pure reliabilism is at odds with common intuitions about several cases: the new evil demon scenario (envatted brain otherwise similar to me), Bonjour’s clairvoyant Norman, Boghossian’s (and other’s) logician who takes the “short route” to a very non-obvious logical implication of what he believes. These cases establish that there are kinds of epistemic standings for which reliability is either not necessary or not sufficient. One may think that there is one single notion for which reliability is neither necessary nor sufficient and that this is the notion of epistemic responsibility. It is true that the criterion proposed by Enoch and Schechter does better than reliability with respect to these cases. But this alone does not suffice to account for epistemic responsibility. There may be several kinds of epistemic standing around. Some have refined reliabilism to account for the insufficiency [Greco, 1999, cf.]. And some reliabilists account for the new evil demon by a derived notion of epistemic standing: it may be legitimate to apply “justification” to the envatted brain otherwise similar to me, because the brain’s methods are methods that are reliable in the actual world [Greco, 2002, cf.]. To account for epistemic responsibility one needs to provide a

¹⁰Both Dretske [2000a] and Enoch and Schechter [2008] proceed in this way. This is quite common, see also Boghossian [2003] who also addresses the problem of the responsibility of foundational acts.

standing that deserves the deontological term “responsibility”.

The focus of much of the discussion in this section has been on Enoch and Schechter’s account. But it is clear that the problem raised is a problem for anyone who endorses the Defensibility Strategy. Having an available defense implies that the defensible act’s standing depends on the standing of some further actual and imminent acts. But it is not clear at all why this should not lead to the same regress problems that motivated the appeal to pragmatic features in the first place.

If what has been argued in this section is right, then the following claim should be added to the pragmatic foundationalist’s set of claims, (PF₁)–(PF₄):

- (PF₅) The pragmatic feature of the foundational act does not depend on the subject’s other actual or potential cognitive acts (where this includes instances of practical reasoning).

5.5 Blame and Excuses

It has been argued that the Defensibility Strategy fails. But it has also been admitted that neither of the proponents of (PF) at the focus of this chapter endorses that strategy. Both deny that the pragmatic features and principles are in any relevant way accessible to the subject. Are there other ways in which the pragmatic features could account for epistemic responsibility?

In this section the following idea is discussed: Although a lack of a subjective truth-connection normally implies epistemic irresponsibility, the foundational acts’ pragmatic features render the subject excusable in this instance. The subject is exempt from blame, because the *foundational* acts are special in a way such that one is excused for lacking a subjective truth-connection.

Excuse Strategy: Given the foundational act of acceptance is not subjectively truth-connected, the subject ought to suspend judgment. But the pragmatic features provide an excuse and the subject is exempt from blame.

According to the Defensibility Strategy epistemic responsibility is ensured by defensibility. Defensibility was supposed to come in two guises, on the

one hand as a subjective truth-connection, on the other as the availability of a pragmatic vindication. On the Excuse Strategy epistemic responsibility consists in either acting cognitively according to the act's subjective truth-connection *or in being excused for not doing so*. This allows the two responsibility conferring features to be very dissimilar: what provides an excuse, the pragmatic feature, need not resemble what positively accounts for responsibility, the subjective truth-connection.

This is a promising idea. Furthermore Dretske can plausibly be read as implicitly endorsing the Excuse Strategy. The main feature of his proposal is that it appeals to the psychological irresistibility of the foundational acts. But lack of voluntary control is in a general a condition under which one is —given certain further conditions are fulfilled— excused for behaving in ways one ought not. For example, when I am provoked, I may behave in ways I ought not. But when I am provoked I may find myself in a state in which I am powerless to control my reactions. My behavior in that case may be excusable.¹¹

The main steps of Dretske's reasoning in the passage quoted on page 179 are the following:

- (D-feature₁) In my current frame of mind, I cannot psychologically resist accepting what I seem to see.
- (Step 1) I have no obligation not to accept what I seem to see when I am in that frame of mind —except if in being in that frame of mind I violate an obligation.
- (Step 2) I have a (“weak, liberty-”) right to accept what I currently seem to see —except if I am blameworthy for being in my frame of mind.

After having gone through this line of thought, Dretske appeals to (D-feature₂), i.e. that one is blameless in being in the frame of mind, and concludes that one is blameless simpliciter to accept what one seems to see in the usual circumstance. This further step is irrelevant for the discussion in this section. I return to it in the next section.

The main steps explicitly stated by Dretske leave room for at least three different interpretations. The psychological irresistibility affirmed in (D-feature₁) is supposed to (at least partially) establish in the end that I am blameless to accept what I seem to see. But there are three different routes

¹¹Thanks to Jonathan Schaffer for suggesting the example.

from (D-feature₁) to this conclusion. According to these routes the role played by (D-feature₁) differs.

First, psychological irresistibility can be taken to establish that obligations do not apply to foundational acts at all: Foundational acts are mere happenings, not things I do. Therefore I do not have obligations pertaining to them. This line of thought will be called “interpretation (A)”. It will be developed and rejected at the outset of this section.

Second, psychological irresistibility can be taken as a condition under which I am excused for violating an epistemic obligation of mine. It thereby establishes that I am not to be blamed. This line of thought will be called “interpretation (B)”. It will be developed and rejected in the main part of this section.

Third, psychological irresistibility can be taken to establish that obligations (and blame) apply to foundational acts derivatively: Foundational acts are not to be understood as decisions to accept, reject or suspend judgment. But they are *consequences of some decisions*. Obligation and blame pertaining to foundational acts is therefore derived from these further decisions. This line of thought will be called “interpretation (C)” and developed and discussed in the next section.

The first interpretation runs as follows: (D-feature₁) establishes that foundational cognitive acts are not my proper acts of mine but things that happen to me. Events that occur independently of one’s proper acts are not proper objects of one’s obligations. On this interpretation, the proposition *I have no obligation not to accept what I currently seem to see* is trivially true in the sense that the concept *obligation* does not apply to happenings, but only to proper acts. An obligation is an obligation for a subject to act, events that are not proper acts of a subject (or consequences thereof —see below) are not objects of obligations.

According to this interpretation the event constituting my accepting what I seem to see is comparable to the event that my heart beats right now or the event that the moon passes position XY at this instant. But mere happenings —whether they are in the universe at large or inside my body or inside my mind— are not proper objects of obligations. On this interpretation “foundational act” is a misnomer.

But there is a problem with this line of thought. If it were correct that foundational acts are mere happenings not subject to obligations, how could they be subject to rights as affirmed in (Step 2)? If accepting what I seem to see is not something I do, but merely something that happens, how can there be a “right” for me “that it happens”? One of the weakest forms of a right

is a permission. So, (Step 2) affirms that *I am permitted to accept what I currently seem to see*. But, on the present interpretation, this is a funny thing to say. For the idea of permission involves the idea of the possibility of doing something else. It does not make much sense to say that it is permitted that my heart beats right now. Having *no obligation not to*, when it is trivially true, does not amount to *having the right or being permitted to*.

For the moment then, this interpretation of Dretske's line of thought is not a very promising one. For if (D-feature₁) establishes that foundational acts are not proper acts but mere happenings, then it establishes not only (Step 1), but also that the concepts of epistemic responsibility and blameworthiness do not apply to foundational acts.¹² But then the proponent of (PA) would rather explain epistemic responsibility away than provide an account of it—as for instance Dretske claims he does.

There is a further problem with interpretation (A). Arguably obligations do not only apply to my proper acts, but also to certain consequences thereof. Psychological irresistibility can at most establish that foundational acts are not proper acts, it does not establish by itself that it is not a consequence of a proper act. Thus (D-feature₁) cannot by itself establish that obligations do not apply to foundational acts. It can only establish that either obligations do not apply, or if they do, then they are derived from proper acts of which the acceptance is a consequence. This line of thought will be developed as interpretation (C) in the next section.

Let us now put the idea that obligations do not apply to foundational acts aside. There is another available interpretation of Dretske's line of thought. It runs as follows: Foundational acts, just as any other cognitive acts, are proper objects of obligations. Furthermore, the cognitive act that is appropriate when one lacks subjective truth-connection is *suspending judgment* and not *accepting*. Thus, normally, I *have* an obligation not to accept what is not subjectively truth-connected. But (D-feature₁)—i.e. the fact that I lack control in the current circumstance—provides me with an excuse.

On this interpretation the case of foundational acts is similar not to the case of the heartbeat, but to the following case mentioned earlier: I am provoked and hit the person who provokes me—an act which in the circumstance is morally wrong. Suppose that I am under the moral obligation not to hit this person. But given one's lack of control over one's emotions and behavior when provoked—just suppose that this is the case, or replace the example by another one where it is the case—my disproportionate reaction is excused.

¹²For an influential argument from general doxastic involuntarism to the claim that there is no epistemic responsibility, see [Alston, 1988]. See also later in the text.

There is a question about how best to describe such cases. Should one say that the obligation persists or should one say that the obligation is suspended? The most natural thing to say it seems is that I am excused from a persistent obligation. Some might prefer to say that my excuse suspends the obligation. Not much depends on this for the present purpose. (The issue is however relevant in the debate whether ‘ought’ implies ‘can’. For if (i) I am excused for not suspending judgment because I cannot do otherwise, and (ii) the obligation to suspend judgment persists, then (iii) I have an obligation I cannot fulfill. Therefore, a proponent of ‘ought’ implies ‘can’ will want to treat the case as one where the obligation is suspended [Ryan, 2003, cf.]. Here the opposed way of speaking is adopted, according to which I have an obligation I cannot fulfill.) If I am excused from a persistent obligation (Step 1) should then be reformulated as follows:

(Step 1’) I have an excuse for accepting what I currently seem to see when in that frame of mind —provided I have not violated an obligation in being in that frame of mind or have an excuse for having done so.

On the current interpretation (Step 1’) establishes that a positive evaluative concept applies to my accepting what I currently seem to see. It is a conceptual truth that when I am excused, then I am blameless. Thus we can derive some positive evaluative status, blamelessness or responsibility, from psychological irresistibility.

(Step2’) I am blameless in accepting what I currently seem to see —except if I am blameworthy for being in my current frame of mind.

However, the Excuse Strategy fails because it implicitly relies on an implausible conception of cognitive acts. It tries to treat epistemic responsibility in an analogous manner to moral responsibility. But morally evaluated actions differ in a crucial respect from epistemically evaluated cognitive acts.

The objection is best brought out by making the analogy as explicit as possible.

The Moral Case: In order to keep the comparison as simple as possible assume the principle as follows: I never ought to hit a person, unless I have a very good reason to do so. Suppose now that I am provoked by someone, but not sufficiently to acquire a reason to hit that person. Whether I hit someone or not is usually something I decide to do or

not. Therefore, when I decide to hit a person and I have insufficient reason to hit that person, then I am blameworthy. However, in the present circumstance I am incapable to act on the basis of a decision to do this rather than that. Rather, I hit the person in a state in which I am powerless to act otherwise. Provided I am blameless for being in that state, I have an excuse for acting against my obligation not to hit.

Consider now the analogous account of epistemic excusability:

The Epistemic Case: Assume (O): I never ought to accept when the acceptance is not subjectively truth-connected. Whether I accept a proposition or not is something I decide to do. Therefore when I decide to accept a proposition and the acceptance is not subjectively truth-connected, then I am blameworthy. However in the present circumstance (my frame of mind and the occurrent perceptual experience) I cannot decide whether to suspend judgment, to accept or to reject. I accept in a state where I am powerless to act otherwise. Provided I am blameless for being in that state, then the fact that I have lost control over my cognitive acts provides an excuse for acting against my obligation to suspend judgment.

In both cases, one is excused for violating one's obligation when a particular condition for blameworthiness does not obtain. In both cases, this condition is that one can decide to act in one way or another and act according to that decision. That is, one can bring the act about by a decision. One is excused if that condition does not obtain. But the interplay between blameworthiness and excuse is slightly more complicated: it must in principle be possible for acts of the kind to be brought about by decision. Suppose it were in principle psychologically impossible to hit a person based on a decision. Suppose that hitting were like the growing of my nails. I cannot be excused for the event of the growing (just this moment) of my nails. For there is no condition on blameworthiness pertaining to the growing of my nails. Rather the growing of my nails is not a proper object of the deontological concept *blameworthiness* and therefore it is not a proper object of the concept *excuse*. The difference between my hitting and the growing of my nails is that it is in principle possible for me to hit or not according to how I decide.

Thus the application of excuses depends on a contrast among acts of a given kind. On the one hand there are psychologically possible circumstances in which an act of the kind is taken on the basis of a decision. On the other hand there are circumstances in which acts of the kind are not the result of

decision. The case where I have an excuse because I lack the power to act otherwise is contrasted with the (at least in principle possible) case where I am blameworthy because I have taken the wrong decision. Without that contrast lack of power to act otherwise cannot constitute an excuse.

There is the following major obstacle to running the Excuse Strategy: While it is *prima facie* plausible that one can in principle decide to hit another person or not, it is *prima facie* plausible that one *cannot* decide to accept, reject or suspend judgment about a proposition. Cognitive acts are the mental events more commonly singled out as *belief*, *disbelief* and *being neutral* and perhaps others. There may be some cognitive acts which properly involve a decision, such as accepting for the sake of argument. And there may be acts usually involving a decision which are not cognitive acts but are easily confused with them, such as acting on the assumption of. But belief generally does not involve a decision or an intention to believe. And similarly for the other mentioned attitudes, disbelief and the neutral attitude. And these cases are the cases central for epistemology and they are the cases to which the Excuse-Strategy is supposed to apply. It cannot here be argued for the psychological impossibility to decide to believe, but there is a widespread agreement among epistemologists and meta-ethicists that this is the case. The point is sufficiently well entrenched to pose a very serious threat to the excusability-strategy.

It might be objected that if one cannot decide to act cognitively in this way or that, then the whole idea of epistemic responsibility is undermined. For epistemic responsibility is equivalent to epistemic blamelessness. But if there is no possibility of blame for cognitive acts because they are not intentional, then they cannot be epistemically (ir)responsible. But this conclusion is too strong. The objection merely depends on the point that there is no possibility of blame for cognitive acts *in virtue of a wrong decision to accept, reject or suspend judgment*. But blame for a cognitive act may have a different source than a supposed decision to act cognitively in this way or that. The act may be a consequence of other decisions and may be blameworthy or blameless in virtue of these other decisions. This idea will be explored in the next section.

The objection does not rely on the claim that there is no distinction with respect to (some sort of) psychological irresistibility between foundational and non-foundational acts. Dretske thinks that perceptual belief and acceptances of principles of inference are irresistible to a higher degree than inferential belief. Although this seems questionable, the objection raised here does not depend on that point. It may be granted to Dretske, for example, that a reflective inference, say, leaves more possibilities for further judgments to intervene in the belief-forming process, than the usual perceptual belief: "The

causal process —from experience of lights to a judgment that they are on— runs its course before rational processes can be mobilized”. The objection here depends on the point that whatever rational processes may be mobilized in the inferential case, none amounts to the intervention of the subject deciding to accept, reject or suspend judgment. And this point suffices to undermine the idea of blameworthiness in virtue of a decision to accept and of excusability in virtue of lack of power to decide.

At this point a proponent of the Excuse Strategy might respond as follows: “The analogy to the moral case is not to be taken so strictly. The possible blameworthiness of a cognitive act does not depend on the possibility to decide to accept, reject or suspend judgment. Rather it depends on the possibility of rational processes of evaluation to intervene in the formation of the act. Perhaps you think that blame implies ‘can not’ and that therefore the mere possibility of the intervention of rational processes is insufficient to allow for blame. Be that as it may. If you don’t think that such blameworthiness is true *blame*, then just call it *quasi-blame*. The foundational acts are special because they do not allow rational processes of evaluation to intervene. This means that a condition for quasi-blame is not fulfilled. And just as for the case of true blame where involuntariness suspends blameworthiness, here the impossibility for rational processes to intervene suspends quasi-blameworthiness.”

Of course this response depends on how to interpret “intervention of rational processes” in such a way that it is psychologically impossible in the case of foundational cognitive acts, but possible otherwise. The idea seems sufficiently awkward to warrant looking for alternative conceptions of the grounds of epistemic blameworthiness and epistemic responsibility. Perhaps one has in the end to reject the notion of epistemic responsibility, as some have done. But there are other options one can explore before that.

It has been argued that the Excuse Strategy fails. The argument relied on a conception of blameworthiness according to which an act is blameworthy only if it can be traced back to a decision. The Excuse Strategy was rejected because it assumed wrongly that the decisions in question are decisions to accept, reject or suspend judgment —that is, the cognitive acts themselves. But if cognitive acts are not decisions, what are the decisions in virtue of which cognitive acts are blameworthy or blameless, irresponsible or responsible? The next section provides an answer to this question.

5.6 Cognitive Acts and Real Acts

Dretske does not only appeal to the psychological irresistibility of perceptual belief in a certain frame of mind. He also appeals to the (alleged) fact that one is normally blameless in being in that frame of mind. This (alleged) fact was referred to as (D-feature₂). In interpreting Dretske so far his appeal to (D-feature₂) has been circumvented by leaving the conclusions, (Step 2) and (Step 2'), with a proviso: One is blameless *provided one is blameless in being in that frame of mind*. But this formulation as a proviso suggests that (D-feature₂) plays a minor role in the establishment of blamelessness for the foundations.

However, this suggestion might be misleading. (D-feature₂) may be taken as the “source” of epistemic responsibility and (D-feature₁) as the ground for a principle about how responsibility transmits from the source onwards. On this new interpretation Dretske’s line of thought develops as follows:

(D-feature₁) In my current frame of mind, I cannot psychologically resist accepting what I seem to see.

(Step 1'') I have no obligation {not to accept what I seem to see when in that frame of mind}.

(Step 2'') I am blameless {not to accept what I seem to see when in that frame of mind}.

(D-feature₂) I am currently blameless in being in that frame of mind.

(Step 3) I am currently blameless to accept what I seem to see.

The parenthesis in (Step 1'') and (Step 2'') indicates a wide scope reading of the normative and deontological terms “obligation” and “blameless”. The wide scope reading of (Step 2'') contrasts with the following narrow scope reading:

When in that frame of mind I am blameless {not to accept what I seem to see}.

From the proposition rendered by the narrow scope reading, and the proposition that I am currently in that frame of mind, it follows that I am currently blameless not to accept what I seem to see. Thus, from the narrow scope reading of (Step 2''), (Step 3) would be detachable independently from (D-feature₂). It therefore yields the wrong result. For one may be in a un-

sceptical frame of mind when one should not, as will become clear in what follows.

Now (Step 1”) and (Step 2”) can be read as transmission principles. They state that any obligation and blame applying to the cognitive act of acceptance is derived from obligation and blame that applies to the frame of mind. This disposes of the main worries raised against the previous interpretations of Dretske’s line of thought.

First, on interpretation (A) cognitive acts were no proper object of obligations at all. This disqualified immediately any attempt to account for epistemic responsibility. For if the notion of an obligation does not apply, then the notion of responsibility does not apply either. This is not the case with the interpretation currently under discussion. (Step 1”) is not trivially true. Some obligations do apply to cognitive acts (of the kind). If I had an obligation not to be in the frame of mind, then I would have an obligation not to accept what I seem to see. If then I did accept, I would be blameworthy. Thus, (Step 3) is not trivially true either. I could be blameworthy for accepting what I seem to see, namely if I were blameworthy for being in the frame of mind.

Second, there is a straightforward route from (Step 1”) to (Step 2”). If there is no obligation, then there is no violation of an obligation, and then one is not blameworthy. There is no need to appeal to excusable violations.

Therefore, the problematic distinction between cognitive acts that result from a decision to accept and are therefore capable of blame and those that are involuntary and therefore excusable is avoided. (D-feature₁) can now be seen as an instance of the general involuntariness of cognitive acts. It need therefore not be assumed that some cognitive acts are decisions to accept, reject or suspend judgment. Epistemic blameworthiness and epistemic responsibility do not obtain in virtue of decisions to accept, reject or suspend judgment.

The present interpretation is in line with a conception of blame according to which it is decisions for which one is to be blamed in the first instance. In slogan form: ‘to be blamed’ implies ‘can’.¹³ It is not *only* decisions for which one can be blamed—for transmission principles such as (Step 2”) transmit blame from “sources”, which are decisions, to involuntary mental events and states such as cognitive acts.

¹³The responses to Alston [1988] by Feldman [2000], Kornblith [2001], Ryan [2003] do not touch on that principle. They are directed against the principle that epistemic ‘oughts’ imply ‘can’. They therefore do not refute the core of Alston’s view, namely that doxastic involuntarism undermines deontology.

A brief aside is in order. The transition from (D-feature₁) to (Step 1'') appears to assume that there cannot be an obligation when one does not have a choice. This is a version of the controversial 'ought'-implies-'can'. But note that a proponent of the currently considered line of thought need not claim that this is in general true —true for all kinds of epistemic 'oughts'. The important principle is (Step 2''). So, the important point about (Step 1'') is that there is no obligation *such that if one violates it, one is blameworthy*. On the present conception of epistemic responsibility, one is ultimately blameworthy in virtue of choices. As said, 'to be blamed' implies 'can not'. This is compatible with allowing for 'oughts' that do not imply 'can' and are not associated with blame. For instance, there may be an 'ought' for the ideal of rationality [Kornblith, 2001, cf.], that no one fulfills. But violation of such an ought does not give raise to blame, even though it is negatively evaluated in some other way: it is not conform to the ideal.

(Step 2'') allows to derive the blamelessness of an acceptance from the blamelessness of the frame of mind. But it is not plausible that one decides directly to be in one or another frame of mind. Thus, if we are to trace blamelessness back to a decision, we need to look further. It will be argued in a moment that there are such decisions that result in one's being in one or another frame of mind. There are decisions, it will be argued, that result in one's being in a certain frame of mind which in combination with certain uncontrolled events (e.g. that it perceptually appears to one that such and such) results in certain cognitive acts. The act is blameworthy or blameless according to whether these decisions are.

My frame of mind in circumstances in which I responsibly form perceptual beliefs can be mainly characterized by the absence of doubts and undermining beliefs about my cognitive performance and the environment. For instance, I do not currently suspect that my tea contained hallucinogenic substances, or that someone has swapped the things in my flat with fakes. On the present view of cognitive acts, whether I have such doubts and undermining beliefs is not something I decide —anymore than whether I accept that there is a cup of tea on my desk. However, there are things that I can decide to do by which it is brought about that I acquire, loose or avoid acquiring undermining doubts. That is, there are many decisions that influence whether I am at a given time in a certain frame of mind.

Of course, if I had decided to sleep longer this morning, then I would not be in the unsceptical perception-friendly frame of mind I am in now. For I would be sleeping. This is not the kind of influence which is relevant here. The relevant sort of influence must be such that it determines which of two possible frames of mind I am now in, such that were I in the first I would

accept, whereas were I in the second I would suspend judgment or reject. The relevant decisions influence whether I am in a perception-friendly as opposed to perception-unfriendly state of mind right now —when I am sleeping I am in neither. Decisions that determine whether I am sleeping or awake, dead or alive, here or somewhere else determine whether I have now a perceptual experience, but not what my reaction to it will be.

The relevant choices are choices to take up or omit activities by which one acquires or avoids undermining beliefs and doubts. Let us call them “choices regarding evidence-related activities”. For one acquires undermining beliefs by acquiring new undermining evidence. This is here meant as an uncontroversial conceptual claim. Evidence is just whatever allows for the acquisition of belief and the other cognitive attitudes. It is not a here a normatively loaded notion such that only *rational* belief-acquisition is prompted by evidence. (A fortiori, not only that which provides considerations in favor of the truth of a proposition counts as evidence.) Evidence is whatever can trigger the involuntary cognitive acts. At present only the *psychological* possibility of influencing *by decision* the acquisition of undermining beliefs is relevant. The deontological and normative standing of the decisions and processes is discussed later.

There are some decisions by which I may *in the long run* influence whether I acquire undermining beliefs and doubts. For instance, suppose I think that life as a sceptic is much more rewarding, that I could then take everything more lightly and be much more serene and open-minded about my (mental) life. I therefore decide to train myself to become a sceptic. I could for instance decide to avoid reading epistemology-papers by anti-sceptics and thus avoid evidence against scepticism. I could also try even more self-manipulative strategies such as rewarding myself whenever I notice that I have doubts about my cognitive performance. Perhaps by taking certain drugs I could make hallucinations so much more common that I would loose the now somewhat natural prima-facie unsceptical attitude towards perceptual experience. So, there are some long-term decisions by which I can control my frame of mind.

But there also decisions that have a more immediate influence on whether I acquire undermining beliefs and doubts. I can choose to take up certain activities that may or may not result in a change of frame of mind, and I can choose not to take up such activities. For example, I can choose to pursue a line of thought, I can choose to pursue or abandon an argument with a (possibly imaginary) opponent. I can choose to look for further considerations bearing on a question or I can “make up my mind”, i.e. decide to come to a conclusion on the basis of the considerations available to me now. For

instance I can choose to check my tea or to check whether there are fake objects in my flat. I can choose to reflect on my cognitive performance or not. Depending on what I will find if I take up these activities, I will switch frame of mind. I can intentionally pursue or avoid activities which (I believe) may result in acquiring or losing doubts about my cognitive performance.¹⁴

Do I have the right to be in my unsceptical frame of mind? This depends on whether all decisions which could have brought a switch in frame of mind about were blameless. As a consequence, (D-feature₂) must be established with respect to such choices.

Consider my perceptually formed acceptance that there is a cup of tea on my desk. There are certainly some evidence-related activities that I have omitted. For instance, I have not checked whether there was some hallucinogenic substance in the tea I drank earlier this morning. So, if I am rightfully unsceptical now, then my earlier omission must have been blameless.

This seems to be the case. Here are (some of) the considerations that are relevant: First, the subjective probability of finding such a substance is low. Mainly because the subjective probability that there is such a substance in my tea is very low. Second, the costs in time and energy required for such a check are quite high. Third, the benefit of acquiring a true undermining belief (a defeater) and thus to avoid mistakenly accepting that there is a cup of tea is relatively low.

In general, evidence-related activities are blameless, when they satisfy the following principle: (For the sake of simplicity, I treat omissions as a sort of activity. According to this way of speaking, when I continuously omit checking for certain undermining evidence, I “pursue an evidence-related activity”.)

- (P) If the expected benefits outweigh expected costs both calculated on the relevant uncertainties, then I am blameless for intentionally pursuing an evidence related-activity

This principle explains why the things mentioned earlier are relevant. For instance, the subjective probability for finding a defeater (partially, see below) determines the relevant uncertainties.

There is a question of what renders evidence-related activities specifically *epistemically* responsible. One idea is that the costs and benefits mentioned

¹⁴That such evidence-related activities are responsible for some intuitions concerning epistemic justification has been claimed by Kornblith [1983]. See also [Montmarquet, 2007] for a related view.

in principle (P) are somehow epistemic costs and benefits. That is, they are costs and benefits with respect to specific epistemic aims as opposed to moral or prudential aims. Another idea is that the relevant costs and benefits involve a specific interplay between all sorts of concerns.¹⁵ On this view too, the benefit of finding a true defeater is that of avoiding an epistemic mistake (avoiding a false belief). But how important a mistake that is depends on the relevance of not being mistaken on the particular matter at hand. It is sometimes morally important not to be mistaken. Most of the time it is prudentially important. Again, the costs are mainly time and energy which are general goods that are then missing for activities that may be beneficial in all sorts of respects. Not *just everything* is relevant on this second view. Maybe having a certain belief about tobacco is beneficial for my career in a tobacco company, thus not finding defeaters is beneficial. But this cannot ensure the epistemic responsibility of my omitting to look for such defeaters. It is the benefits and costs of *being mistaken or not* that are relevant, not the benefits and costs of *having* a belief *whether it is mistaken or not*. It is here not the place to develop and discuss criteria for the specifically epistemic character of the responsibility.

Let us now see what follows if we apply (P) to a circumstance in which my cognitive act is subjectively truth-connected. It is plausible that under this condition I can responsibly omit checking for undermining evidence. If my acceptance, is subjectively truth-connected, then the subjective probability of there being a true defeater is low (or nil). Thus the subjective probability of finding a true defeater is low (or nil). In that case looking for a defeater is just a waste of time. (Perhaps the complete story is quite a bit more complicated. For it probably necessary to introduce *degrees* of being subjectively truth-connected. An act may then be *insufficiently* subjectively truth-connected to render not looking for undermining evidence responsible, given it is very important not to be mistaken.) Thus, it seems that a blamelessly subjectively truth-connected act, α , will come out blameless. For first (P) is applied to the evidence-related activities as just suggested. This yields the result that the omissions were blameless and thus that my unsceptical frame of mind is blameless. Then the transimission principle (Step 2'') is used to derive blamelessness for α . This far everything is as as it should be according to pragmatic epistemic foundationalism.

What if my cognitive act is not subjectively truth-connected? Imagine for instance that I believe that a given acceptance of mine has a 0.5 chance of being certain sort of reliable blind-sight, and a 0.5 chance of being unreli-

¹⁵For a somewhat similar view, see [Montmarquet, 2007].

able wishful thinking. Let us assume that this implies that the subjective probability of there being a true defeater is 0.5. Suppose further that the importance of not being mistaken is not negligible. Under that circumstance it seems that I cannot responsibly have omitted checking whether there is a true defeater. Therefore I am not blameless in being in an unsceptical frame of mind and my acceptance is blameworthy. Again, this seems to be the wanted result. Cognitive acts that are not subjectively truth-connected are normally epistemically irresponsible.

What now about a *foundational act* that is not subjectively truth-connected? Let us assume that this implies that the subjective probability that the act is truth-conducive is 0.5. So, again, there cannot be a presumption in favor of not finding a true defeater. Does this mean that I should have checked? Does it mean that the weighed benefits outweigh the costs —again, assuming that the importance of not being mistaken is not negligible? This is not clear at all. For (P) introduces several further factors besides the subjective uncertainties of finding a defeater. Thus equal chance with respect to finding and not finding a defeater does not prevent an imbalanced verdict. For instance, among the costs does not only figure time and energy, but also the risk of finding a *misleading* defeater. If, for instance, the subjective probability that the activity turns up with a misleading defeater is equal to that of turning up with a true defeater, the weighed benefits are further diminished. Since positive evidence-seeking will, if it turns up with a piece of evidence, necessarily involve a further foundational act, there might be a problem here. If the subjective probability that the latter act is truth-conducive is also 0.5, then the chance of acquiring a false undermining belief (a misleading defeater) is equal to that of acquiring a true one. Therefore it might well be that in the circumstance it was responsible not to check for defeaters for the foundational act. Perhaps this sketch of a line of thought could be developed into a full vindication of the claim that foundational acts are blameless despite not being subjectively truth-connected.

So, does this mean that (PF) is vindicated after all? Does this conception of epistemic responsibility finally serve the purpose of pragmatic epistemic foundationalism? Not at all. For it is subject to exactly the same problems for (PF) as the defensibility-conception discussed earlier: The blamelessness of foundational acts is not fundamental. It again depends on the blamelessness of an imminent act, namely the subject's imminent application of (P) in order to determine whether the activity is worth taking up or not.

(PF) grounds responsibility in a weighing consideration that must in some form be available to the subject. There are the subjective probabilities that a positive or negative outcome occurs (i.e. that one finds a true defeater, that

one wastes time and energy, that one finds a misleading defeater). And there must be some sort of psychological implementation of the weighing itself—some disposition to reason in this way. And these potential acts must all themselves be blameless. If I am blameworthy in distributing subjective probabilities the way I do, then however responsibly I weigh benefits and costs on that basis, the resulting activity will not be blameless. (P) therefore should be replaced by the following principle:

- (P') If the expected benefits outweigh expected costs both blamelessly calculated on the relevant blameless subjective uncertainties, then I am blameless for intentionally pursuing an evidence related-activity.

As before, it is not an option to appeal merely to the objective benefits and costs of an evidence-related activity. For if the proponent of (PF) cannot accept that an objective truth-connection conveys epistemic responsibility, why should she accept that an objectively beneficial evidence-related activity can be epistemically responsible?

As said, the conception of epistemic responsibility currently under consideration does justice to the involuntariness of cognitive acts. And it still associates blame with a choice. Of all the conceptions of epistemic responsibility discussed in this chapter it is therefore the one that is most robustly deontological. For blame plausibly implies that there has been a decision to act in one way or another. But for the same reasons for which the defensibility strategy failed, that conception does not serve the pragmatic epistemic foundationalist's purpose. For it is incompatible with his fear of regress and circularity. If there is a regress problem concerning subjective truth-connections, then there is a regress problem concerning evidence-related activities which subjectively appear to be beneficial.

5.7 Conclusion

In this chapter it has been argued against pragmatic epistemic foundationalism. This view has two main tenets: First, epistemic responsibility is in general ensured by an epistemically responsible subjective truth-connection. Second, epistemic responsibility ultimately relies on foundational cognitive acts. Foundational acts are epistemically responsible despite the fact that they are not subjectively truth-connected.

In the course of the argument three conceptions of epistemic responsibility have been developed and discussed.

The first one associates epistemic responsibility with defensibility of the cognitive act from the subject's point of view. The problem with this conception is that it goes against the spirit of foundationalism. There is a potential regress problem for this conception.

The second conception best accommodates foundationalist inclinations. On this conception foundational acts are epistemically responsible because they have features which render them excusable. The problem with this conception is that it does not accommodate the general involuntariness of belief. At least it cannot do so if the notion of epistemic responsibility is robustly deontic.

On the third conception the epistemic responsibility of cognitive acts is derived from the epistemic responsibility of evidence related activities. This is the most robustly deontological conception of the three. For responsibility arises in connection with decisions to act. But this conception does not serve the pragmatic foundationalist's purpose. Indeed neither of the main tenets of this view is supported. First, there is no necessary connection between epistemic responsibility and a subjective truth-connection. It has been suggested on page that when a cognitive act is blamelessly subjectively truth-connected, then the omissions of evidence-related activities are blameless. But this is only a contingent connection. Second, the conception does not allow to account for epistemic responsibility of an act independently of the antecedent standing of other cognitive acts. Thus, the conception is not foundationalist.

No completely satisfying conception of epistemic responsibility has emerged from the discussion. It seems that we are lead to a difficult choice between the following: Allow epistemic responsibility to have a non-foundational structure (for instance by endorsing infinitism)¹⁶, or give up on a notion of epistemic responsibility with robustly deontological connotations.

¹⁶Such a view is held by Klein [1998, 1999]

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