

Not So Phenomenal!¹

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Abstract

Our main aim in this paper is to discuss and criticise the core thesis of a position that has become known as *phenomenal conservatism*. According to this thesis, it seems to one that p provides enough justification for a belief in p to be *prima facie* justified (a thesis we label *Standard Phenomenal Conservatism*). This thesis captures the special kind of epistemic import that seemings are claimed to have. To get clearer on this thesis, we embed it, first, in a probabilistic framework in which updating on new evidence happens by Bayesian conditionalization, and second, in a framework in which updating happens by Jeffrey conditionalization. We spell out problems for both views, and then generalize some of these to non-probabilistic frameworks. The main theme of our discussion is that the epistemic import of a seeming (or experience) should depend on its content in a plethora of ways that phenomenal conservatism is insensitive to.

Keywords: phenomenal conservatism, seemings, appearances, perceptual justification, the oomph view, probabilism, content neutrality

1. Phenomenal Conservatism

The core thesis of what has become known as phenomenal conservatism is the idea that there is a certain class of contentful mental states – call them *seemings* – and that at least in the absence of defeaters, being in a seeming-state with a proposition p as its content provides *prima facie* justification for believing that p .²

Standard Phenomenal Conservatism (SPC)

Its seeming to S that p provides S with enough justification for a belief in p to be *prima facie* justified.

¹ Thanks to Johan van Benthem, John Bengson, Christina Dietz, Trent Dougherty, Mike Huemer, Antti Kauppinen, Clayton Littlejohn, Matt McGrath, Bob Pasneau, Adam Pautz, Jeff Russell, Miriam Schoenfield, Teru Thomas, and to two anonymous referees as well as editors of *The Philosophical Review*. Thanks to audiences at the *Formal Epistemology Workshop* at the University of Washington, and at the University of Helsinki. Special thanks to Mike Bergmann, Cian Dorr, Yoav Isaacs, Adam Pautz, Jim Pryor, Susanna Siegel, and Tim Williamson for detailed comments on earlier drafts.

² See, for instance, Huemer (2001, 100; 103) and Tucker (2010, 529; 2013, 2). Pryor's (2001) *dogmatism* restricts the claim to perceptual seemings, which he equates with perceptual experiences: 'we have immediate *prima facie* justification for believing those propositions that our experiences basically represent to us' (2001, 529).

What, then, are seemings? They are not beliefs, and most phenomenal conservatives these days argue that they are not inclinations to believe.³ There is disagreement about the relationship between seemings and experiences. Phenomenal conservatives tend to agree that seemings are not raw feels or sense data. While Jim Pryor (2000), for instance, equates its perceptually seeming that *p* with having an experience as of *p* when describing his dogmatist position⁴, many others think that we should not thus equate seemings with experiences, even if seemings are a kind of experience.⁵ Phenomenal conservatives tend to agree that seemings are a *sui generis* class of conscious mental states with propositional contents and a distinctive phenomenal character.⁶ The phenomenal character comes in degrees, so that seemings can be stronger or weaker. Moreover, there is – it is assumed – a central use of the ‘it seems that’ construction that is used to report these seeming-states.⁷

Phenomenal conservatives agree that seemings play a fundamental and special epistemological role. We undergo seemings, it is urged, in normal operations of perception, intellectual reflection, and memory, and base our beliefs on those seemings. Indeed, many

³ See Huemer (2007, 30–1) for arguments against such views, though not everyone agrees – see Swinburne (2001, 141–142) and Sosa (2007, ch 3).

⁴ Similarly, John Bengson (2015) argues that both ordinary perceptual experiences and intuitions are what he calls *presentational* states. Such views don’t involve ontological commitment to a *sui generis* class of states distinct from ordinary perceptual experiences. However, such views still have the epistemic commitment that in the absence of defeaters, seemings (Pryor 2000) or presentational states (Bengson 2015) provide *prima facie* justification to believe their contents.

⁵ Lyons (2005), Tucker (2010), Tucker (2013b, 5–7), Brogaard (2013, 276–277) Cullison (2013, 33), Bergmann (2013, 158–159) – see also the discussion in Pace (2017). Some phenomenal conservatives (like Huemer 2001) think that seemings are *sensations*, understood as contentful, representational experiential states, whereas others (like Tucker 2010) argue that they are not, for sensations as mere ‘sensory images’ don’t provide even *prima facie* justification.

⁶ This phenomenology has been described as ‘forceful’ (Huemer 2001, 77–9), ‘assertive’ (Tucker 2010, 530) as ‘recommending’ its content, and as having ‘the feel of truth’ (Tollhurst 1998, 298). As Siegel pointed out to us, the idea goes back at least to Price’s 1932 book *Perception*. See further references in note 13 of Siegel (2017).

⁷ For the record, we are somewhat sceptical about this semantic hypothesis. An alternative idea is that ‘seems’ claims say roughly that a proposition has positive epistemic status (perhaps simpliciter, perhaps relative to a salient subset of the speaker’s evidence) from a certain subject’s perspective, while falling short of ascribing outright belief. (Here it is useful to compare it to various other so-called hedge constructions such as ‘I have the impression that’, ‘It strikes me that’ and so on. But we shall not pursue these semantic issues here

phenomenal conservatives think of their view as a general theory of foundationally justified beliefs, beliefs that don't depend for their justification on other beliefs. Perception provides foundations of justified belief by providing perceptual seemings, memory provides memory seemings, intuition provides intellectual seemings, and so forth.⁸ Many phenomenal conservatives think that 'it seems to S that p ' can be true for just about any proposition p . Indeed, one of the arguments given by phenomenal conservatives for their view is its simplicity: it can give a 'simple and unified account of the justification of our beliefs about the external world, about the past, about the future, about values, and so on'.⁹

Phenomenal conservatism (or some variant of it), it is urged, solves or avoids a whole host of sticky philosophical problems, many of which have plagued foundationalists. It is clear that seemings are supposed to escape the Sellarsian dilemma: by having propositional content, they can serve as the rational foundations of beliefs, while themselves not being beliefs.¹⁰ Seemings themselves allegedly cannot and needn't be evaluated as rational or irrational. In this respect, they are like pains. This allows them to serve as justifiers without themselves being in need of any justification. Furthermore, it allegedly explains why victims of evil demons can nevertheless be perfectly epistemically rational and justified, since such subjects can undergo exactly the same seemings as ordinary subjects. Phenomenal conservatism has become a prominent form of internalism about justification.

Our focus in this paper is on *Standard Phenomenal Conservatism*. There are various other ideas that are important to some phenomenal conservatives that we shall not explore for reasons of space, including notably the foundationalist thesis that every non-

⁸ For instance, Huemer (2001, 99) defends phenomenal conservatism as a general theory of foundational justification.

⁹ Huemer (2013, 346).

¹⁰ For a critical discussion of whether phenomenal conservatism can solve the Sellarsian dilemma, see Hasan (2013), and for a closely related dilemma to the Sellarsian one, see Bergmann (2013).

inferentially justified belief that p is based on a seeming that p .^{11 12} As we see it, a refutation of *Standard Phenomenal Conservatism* will strike at the heart of phenomenal conservatism – and so our goals, while somewhat limited, are by no means modest. Note also that many of our criticisms can in principle be detached from any commitment to a sui generis class of mental states, seemings. For example, even if one thinks that seemings include, or even just are, inclinations to believe or ordinary perceptual experiences, various of the worries outlined below will transfer.

Phenomenal conservatism has come under a flurry of attacks, but many still think that it provides a framework for constructing the most promising foundationalist epistemology available.¹³ And even those who don't identify themselves as phenomenal conservatives often defend very closely related views that grant specific kinds of seemings a fundamental epistemic role.¹⁴

Our main aim will be to argue that irrespective of the precise framework in which the position is embedded, phenomenal conservatism as captured by the core thesis of *Standard Phenomenal Conservatism* does not encode a plausible picture of how we ought to revise our doxastic states in response to seemings (assuming, for the sake of argument,

¹¹ See, in particular, Huemer (2001, Ch 5), who puts forth phenomenal conservatism as a general account of noninferential justification. There is also a further thesis according to which only seemings ever justify beliefs: a belief in p is *prima facie* justified if and only if it is based on a seeming that p . Bergmann (2013) argues that in order to have an internalist position, phenomenal conservatives must endorse this thesis – and he (2013, footnote 4) thinks that Huemer (2001), for instance, is committed to it. The view is in tension with the view that competent deduction extends knowledge (assuming that there is no seemings requirement on competent deduction). In later work Huemer (2016) extends phenomenal conservatism from non-inferential to inferential justification by invoking inferential seemings.

¹² A natural place to put pressure on the foundationalist thesis is via preservative memory. It is not plausible that the vast swathes of knowledge in preservative memory are accompanied by seemings that justify them. Nor does it seem right to classify all such knowledge as inferentially justified. The defender of the foundationalist thesis faces the uncomfortable choice of treating this as knowledge without justification or allowing non-inferential justification to proceed via states that are not synchronic with the belief justified, states that one may have no access to. The issue deserves a fuller treatment, but we leave that to another occasion.

¹³ A prominent line of attack is the objection from tainted sources: do seeming-states justify when they are the causal products of unjustified beliefs and biases, of wishful thinking or desires? (See, for instance, Markie (2005), Lyons (2011), Siegel (2012, 2013), McGrath (2013), and Pace 2017). The objection is that the phenomenal conservative's account of justification is too lenient, as seemings provide justification no matter what their genealogy. Ruling that seemings with a dubious genealogy can't provide justification won't help with the kinds of worries we raise.

¹⁴ See, for instance, Brogaard (2013) and McGrath (2013), Siegel (2017).

that such states exist). An auxiliary aim of the paper is to clarify and classify different ways in which the core thesis of *Standard Phenomenal Conservatism* can be cashed out, many (but not all) of which draw on the family of probabilistic approaches to epistemology (for short, ‘probabilism’).

The main theme of our discussion will be that in order to make good on SPC, the content of a seeming-state must be irrelevant in a specific kind of way to its epistemic import (a thesis we call *Content Irrelevance* below). Of course, the phenomenal conservative is not claiming that content doesn’t matter at all – if, for instance, a subject has good evidence that she is red-green colour blind, then its seeming to her that an object is blue may have epistemic import that its seeming to her that it is red doesn’t have, given the presence of a defeater. However, we outline a plethora of ways in which the epistemic import of any propositional mental state should depend on the content of that state that don’t involve anything that looks like the phenomenon of defeat.

It is worth making some remarks at the outset regarding how our project here relates to existing literature, especially literature that draws on Bayesian machinery. Roger White has mounted a prominent Bayesian line of attack against Pryor’s *dogmatism*, which is committed to a version of *Standard Phenomenal Conservatism* restricted to perceptual seemings, which Pryor equates with perceptual experiences. The gist of the objection is that Bayesianism is incompatible with a core commitment of the dogmatist view, which is that experiences provide *immediate* justification.¹⁵ Some of our discussion intersects with this objection – for instance, White assumes that updating would happen by conditionalizing on propositions about how things seem, which is the first Bayesian view we discuss below. However, our objections are importantly different from White’s. First, our primary concern is not with what is or isn’t immediate justification: we will argue that *Standard Phenomenal Conservatism* fails *whether or not* the role of prior probabilities blocks the immediacy of justification provided by seemings – indeed, SPC as we have formulated it makes no mention of immediate justification. While White’s argument leaves

¹⁵ Weatherson (2007) discusses a structurally analogous objection to the effect that a Bayesian model is incompatible with knowing *a posteriori* that one is not in a sceptical scenario.

open the option of conceding that seemings don't provide immediate justification but nevertheless maintaining SPC, our objections don't.

Second, some have argued that White's objection is a mere artefact of the Bayesian model (see Weatherson 2007). And several epistemologists (Pryor 2013, Weisberg 2009) question whether Bayesianism provides an adequate tool for modelling defeat.¹⁶ By contrast, our aim is to use Bayesian machinery to bring forth structural problems that are not, we argue, mere artefacts of the Bayesian machinery: we very much doubt that the kinds of challenges and counterexamples spelled out below can be faulted by appeal to problematic features of probabilism. For instance, we think there are some seemings the having of which *shouldn't* make one confident in their contents, where this is not to be explained by the presence of a defeater. Finally, a simple way of avoiding White's objection is to deny his assumption that updating happens via conditionalization on seemings (see Miller 2016). We discuss a much wider range of Bayesian ways of implementing phenomenal conservatism.

In §2 and §3 we embed the phenomenal conservative view in different kinds of probabilistic frameworks. Probabilism provides an elegant tool for modelling the justification or support-relation, and will help us get clearer on various candidate positions. If it turned out, for instance, that there is no viable probabilistic construal of *Standard Phenomenal Conservatism*, this would in itself be an interesting result. On the first probabilistic view we explore, the updating that happens when a rational subject undergoes a seeming-state takes the form of Bayesian Conditionalization on the proposition that it seems to her that p (§2). The other, perhaps more promising, option (§3), would be to hold that updating takes the form of Jeffrey Conditionalization given a partition induced by a

¹⁶ Pryor (2013) provides the richest discussion of this issue. The most central issues addressed in that paper are (i) whether Bayesian models conflict with the idea that some justification by evidence is immediate and (ii) whether and how Bayesian models can accommodate various kinds of undermining. In connection with each question Pryor raises a variety of interesting issues including (i) whether the claim that E justifies H in an immediate way is compatible with the idea that in any such case the material conditional $E \supset H$ is a priori justifiable, (ii) the ways that Jeffrey Bayesianism is limited in its capacity to model defeat and (iii) the possibility of Bayesian modelling certain kinds of defeat by allowing the priors to constrain which propositions can enter as evidential inputs. While these discussions are interesting, they do not provide phenomenal conservative with resources for answering the structural problems we raise.

seeming-state.¹⁷ We spell out problems for both views, and then generalize some of these to a non-probabilistic framework that cashes out the core phenomenal conservative theses in terms of the ideology of *prima facie* reasons.

Note that in what follows we ourselves use the noun phrase ‘seeming’, assuming that the phrase does indeed pick out the kinds of seeming-states posited by phenomenal conservatives. Though we are skeptical about the existence of such states – in so far as they are assumed to be distinct from experiences – in what follows we will assume for the sake of argument that they exist, arguing that seemings cannot do the epistemological work they were coined to do.

2. The Bayesian view: conditionalizing on propositions about how things seem

We first discuss a simple take on which, upon coming to be in the state of its seeming to her that p , the epistemic import of that seeming can be modelled by classic Bayesian conditionalization on the proposition that it seems to her that p .¹⁸ The idea will be that the (propositional) piece of evidence *that it seems that p* – a piece of evidence one acquires by coming to be in a seeming-state with p as its content – confirms p in the absence of defeaters. We then go on to discuss a view that is perhaps much closer to the spirit of phenomenal conservatism, one on which updating happens by Jeffrey Conditionalization.¹⁹ It will turn out that many of the problems faced by the Bayesian view, as well as some new

¹⁷ One might complain that both views fail to do justice to the view that seeming states themselves serve as evidence. We don’t think that this objection runs very deep. The ordinary language use of ‘evidence’ is flexible as to which categories of things count as evidence. One might say ‘The bloody knife is evidence’, or instead ‘That there is blood on the knife is evidence’, and neither speech will offend. We do not think that the problems we raise will be solved by quibbling over whether seeming states themselves (as opposed to propositions or probabilistic partitions relating to them) are evidence in the most fundamental sense

¹⁸ For instance, this is how White (2006) construes the kind of dogmatist view put forth by Pryor (2000).

¹⁹ Hence, our exploration of probabilistic approaches won’t rely throughout on the ‘proxy assumption’ that the epistemic effects of seemings can be modelled by conditionalization on propositions about seemings (see Tucker 2013b, 17).

ones, resurface in the context of the Jeffrey view.^{20,21} However, since the former is more familiar, and since it suffices to illuminate a variety of fundamental difficulties, we think it better to begin with it.²²

Here is Huemer's formulation of the phenomenal conservative view:

If it seems to S that p , then, in the absence of defeaters, S thereby has at least some degree of justification for believing that p .²³

The idea is that its seeming to S that p *always* provides some justification for believing that p – and not, for instance, only when a subject has sufficiently good access to her seemings.²⁴ In order to preserve this idea within a framework that assumes evidential

²⁰ Miller (2016) mentions a third alternative: the epistemic effects of a seeming that p (or in his preferred terminology, an experience as of p) can be modelled by conditionalizing on p itself. On such a view the prior conditional probability of p on an experience as of p is irrelevant, since the probability of p will go to 1 when one undergoes the seeming. Miller's main aim is to find a Bayesian model consistent with the idea that experience provides immediate justification for its contents. However, he also points out that this model is not very satisfying – most notably, it makes it difficult to model ways in which further information may defeat the deliverances of experiences (note that on this model, the probability of p goes to 1 whether or not an experience/seeming with p as its content is veridical). We do not think the model is sufficiently plausible to warrant extended treatment in the text. Miller briefly discusses the Jeffrey approach, to which he is more sympathetic. But he does not raise the kinds of issues we discuss at length later in this paper.

²¹ In standard Bayesian models, all evidential relationships are encoded in the priors and so are ill-placed to model how evidence might allow us to learn about those evidential relationships. In Appendix B we look at a model (see Weatherson 2007) that is flexible enough to allow for a more effective way to model this, and look at how it bears on our main lines of argument.

²² We are well aware of general complaints in the literature about ways that Bayesian frameworks are limited in their capacity to model various epistemic phenomena, such as some kinds of defeat (see White 2006, Pryor 2013, Weisberg 2009, Weatherson 2007, Christensen 2010). One response to these worries is to reject Bayesian models on the grounds that there are features of reality that they are insensitive to. However, it is important to bear in mind a general point about scientific models, which is that a given model can be useful for modelling certain phenomena even while being inadequate for modelling others. Even if Bayesian models have their limitations, they have proven extremely useful in uncovering certain kinds of fallacious or problematic reasoning, the base rate fallacy – which figures in our own discussion later – being a case in point. We think that Bayesianism provides valuable in just this kind of way when it comes to probing the merits of phenomenal conservatism.

²³ Huemer (2007, 30). There are various idiosyncracies that divide formulations of phenomenal conservatism in the literature. Our main lines of argument will not depend on such idiosyncracies of formulation.

²⁴ For instance, Huemer (2001, 201) writes: 'What makes you justified in believing P , under PC, is not that you believe or know that it seems to you as if P , and you thereupon get to conclude that P ; rather, it is the mere fact that it does seem to you as if P that makes you prima facie justified in believing P '. Declan Smithies (2012, 2015, 2019) has a view which is in the same spirit, as according to Smithies, the effect that undergoing a seeming has on propositional justification has nothing to do with access.

probabilities to evolve by classic conditionalization, let us assume that *whenever* a subject undergoes a seeming-state with p as its content, the proposition that it seems to her that p comes to be part of her evidence, and that in a case where that is the totality of her new evidence, the new evidential probability for a proposition q matches the old conditional probability of q on p .²⁵

Within a probabilistic framework, it is very difficult to make sense of the idea of gaining new justification to believe p without assuming that at least in somewhat standard cases, this involves raising the probability of p . Moreover, it is difficult to make sense of the idea that a seeming that p gives one sufficient *prima facie* justification to believe p without assuming that the probability of p is raised to a level above .5. In stating the standard phenomenal conservative thesis, we will focus on evidential ur-priors (evidential prior probabilities in the absence of any evidence).²⁶ Let ‘P (-)’ stand for such a prior probability function. Here, then is a rough construal of *Standard Phenomenal Conservatism* within the Bayesian framework: as far as such prior probability functions go, conditionalizing on the proposition that it seems that p raises the probability of p , and further raises it to a level above .5:

²⁵ This of course has the result that since the conditional probability of a proposition on itself is 1, the evidential probability of the proposition that it seems that p when it seems that p is 1. Any model of evidential probability that models evidential probability as evolving by conditionalization on a list of evidence propositions will have the effect of rendering propositions on the list probability 1. Below we will look at a probabilistic model that avoids this result, which to many will feel unwelcome (and particularly so if one takes epistemic probability to be a guide to ideal credences – one might think it fundamentally reckless and far from ideal to be completely certain that one’s seemings are a certain way). Note, however, that we should not quite endorse the inference from ‘ p has epistemic probability 1’ to ‘there is no epistemic possibility of not- p ’. A perfectly sharp dart may have epistemic probability 1 of avoiding a particular point on a dartboard and yet for each point it is intuitively epistemically possible that the dart hit it. This subtle gap between epistemic probability 1 and epistemic necessity will not bear significantly on what we have to say. But note that insofar as one thinks that epistemic probability 1 justifies certainty, one should not think that certainty involves a kind of commitment to epistemic necessity. For relevant discussion see Hajek (2003).

²⁶ There are foundational issues we must inevitably shy away from here: Is there such a thing as a single evidential ur-prior or should we be permissivists? The main structural point to bear in mind in this context is that ur-priors allow one, *inter alia*, to isolate the evidential impact of a piece of evidence in a way that brackets other evidence that one may have acquired. This gives the Bayesian a way of making sense of the claim that p , its own, is evidence for q even if one has additional background evidence B that, when combined with p , does not raise the probability of q . (It may even be that the conjunction B and p is worse news for q than B and not- p – most obviously when B includes ‘if p then not- q ’!)

$$\text{PC1} \quad \forall p \quad P(p \mid \text{it seems that } p) > P(p)^{27}$$

$$\text{PC2} \quad \forall p \quad P(p \mid \text{it seems that } p) > .5^{28}$$

A requirement that the new probability of p be above .5, while not all that demanding, is demanding enough for the points we wish to make. Restricting attention to the ur-priors is a way of setting aside, at least initially, the messy issue of defeat, as well as cases in which the evidential force of a seeming is screened off by other evidence one has.²⁹ (PC1) and (PC2) characterize how evidential probabilities evolve, but the Bayesian phenomenal conservative can transform them into theses about the credences of rational agents by invoking some bridge principle – for instance, one could simply assume that the credences of rational agents always match their evidential probabilities.

Phenomenal conservatives believe that seemings come in different strengths. In so far as the strength of a seeming is evidentially relevant, perhaps the simple Bayesian account should be amended by including information about the strength and vivacity of the seeming in the proposition conditionalized on. We set such complications aside for the time being.

With these clarifications in place, we will set out to evaluate the Bayesian view.

²⁷ We are reading ‘it seems that p ’ as tantamount to ‘it seems at some time or another that p ’. Of course, (PC1) will fail when p is a logical truth, since logical truths are always assigned probability 1. This is just an artefact of probabilism – perhaps it wouldn’t be too *ad hoc* to explicitly restrict (PC1) to propositions whose prior is less than 1 (and, perhaps, more than 0). Bayesian models are known to be of little use in modelling varying strengths of epistemic position with regard to logical truths, and so this particular problem is simply an artefact of modelling choice.

²⁸ This is closely related to Swinburne’s (see for instance 2012, 120) *Principle of Credulity*: ‘what seems to you to be so on the basis of experience, probably is so in the absence of counter-evidence’. Note that of course (PC2) doesn’t strictly entail (PC1). The probability of a proposition p could be over .5 conditional on its seeming that p even if the seeming lowers its prior probability.

²⁹ Couldn’t there be *a priori* defeaters, defeaters that are in place even prior to the acquisition of any evidence? It won’t do to characterize *a priori* defeat of seemings as the absence of high conditional probability of a proposition on a seeming and then add exception clauses to (PC1) and (PC2) stating that the theses only hold in the absence of defeaters, for that would completely trivialize them. A more fruitful approach might be to view *a priori* defeaters as defeating propositions that we (are in a position to) know or justifiably believe *a priori*. In any case, we very much doubt that such defeat could be appealed to in order to adequately deal with the various kinds of worries we raise below.

First, it is worth noting that the Bayesian view just sketched is committed to the thesis that whenever it seems to a rational being that p , the proposition that it seems to that agent that p is part of her evidence – and hence, it is certain on one’s evidence that it seems that p . Along with several other authors, we find it very plausible that the kind of epistemic access a subject has to her own mental states depends on features other than the intrinsic qualities of those states: it also depends, for instance, on the subject’s discriminative abilities.³⁰ If two seemings are similar enough, then a subject cannot come to know, justifiably believe, or become reasonably rationally confident just which one she has.³¹ However, in what follows we set this worry aside: our main aim here will be to outline multiple (other) ways in which the epistemic import of a propositional mental state should depend on its content.

2.1 Complex seemings

First, there are counterexamples to both (PC1) and (PC2) that involve more complex seemings. First consider a subject to whom it seems that there are no seemings. Conditionalizing on the proposition that it seems to her that there are no seemings shouldn’t, surely, raise the probability of, or make probable, the proposition that there are no seemings. Rather,

$$P(\text{there are no seemings} \mid \text{it seems that there are no seemings}) = 0.$$

³⁰ See, in particular, Sosa (2003). Our worry is certainly not alien to the literature. It has been raised repeatedly in the shape of Chisholm’s speckled hen problem (see Chisholm 1942). The problem was initially pressed against views on which we have a kind of infallible access to certain mental items, starting with Gilbert Ryle’s objection to Ayer’s views on sense data. More recently especially Pace (2010; 2017) has pressed the problem for foundationalist views that don’t require such access. For more discussions of the problem, see also Sosa and Bonjour (2003), Markie (2009), Schellenberg (2016), and Smithies (2019).

³¹ Here is not the place to offer a defence of such arguments, but we are convinced that, despite various attempts to resist them, the kind of anti-luminosity argument offered by Tim Williamson is essentially correct. See Berker (2008) for a defence of luminosity that challenges the safety principle that Williamson’s argument relies on, and Srinivasan (2015) for a reply.

It is difficult to see how the defeat move would work here. One might attempt to liberalize the notion of defeat so that *whenever* the prior probability of p conditional on its seeming that p is low, the priors themselves serve as a defeater (or else the seeming that p serves as a defeater of the proposition that p). But such moves would trivialize the core phenomenal conservative idea that undergoing a seeming with p as its content gives one justification to believe p in the absence of defeaters: if any counterexample to (PC1) or (PC2) involves defeat by the priors or by the seeming itself, then these theses are trivialized.

Consider also the proposition that everything that seems to be so is not so. The prior probability of this proposition is more than 0 and less than 1.³² But conditional on this proposition seeming to be the case, its probability is zero.³³

One very general issue has to do with the fact that the contents of seemings can be very rich. An object that seems red might also seem scarlet, round, and to have various dents in its surface; perhaps it can even seem to be surrounded by objects of various kinds, to be about a meter from the nearest door, and to have been recently bounced against a hard surface. If the contents of seemings are anything like the contents of experience (and many think of seemings as experiences with conceptual contents), then these contents will often be very rich. However, it is hard to reconcile the idea that rational subjects conditionalize on such rich contents with (PC2).

Take any view on which it can seem to a subject that q , where q is equivalent to a conjunction of propositions $p_1 \& \dots \& p_n$. The problem now is that as long as p_1, \dots, p_n are even somewhat independent conditional on its seeming that q , and as long as n is large enough, then in order for (PC2) to be satisfied, the prior probability of each of p_1, \dots, p_n on its seeming that q must be *massive*. Here is a very simple case that illustrates the point. Assume that it seems to a subject that there is something red and round in front of her

³² Suppose we accepted a (very tendentious) closure principle according to which, if it seems that p , and p logically entails q , then it also seems that q . Then, conditional on its seeming that p (for any p), it is certain that something that seems to be the case is the case (for by closure, any seeming guarantees various tautologies seeming to be the case). But even assuming closure for seemings, there is some prior probability of there being no seemings, and so of the universal generalization being vacuously true.

³³ For relevant discussion see Arthur Prior (1961).

(*Seems red-and-round*). The content of this seeming entails both that there is something red (*Red*) and that there is something round (*Round*). Just to have some numbers on the table, assume that:

$$P(\textit{Red} \mid \textit{Seems red-and-round}) = 0.6$$

$$P(\textit{Round} \mid \textit{Seems red-and-round}) = 0.6$$

Moreover, assume that the propositions *Red* and *Round* are independent conditional on *Seems red-and-round*. Then, it follows that

$$P(\textit{Red} \ \& \ \textit{Round} \mid \textit{Seems red-and-round}) =$$

$$P(\textit{Red} \mid \textit{Seems red-and-round}) \times P(\textit{Round} \mid \textit{Seems red-and-round}) = 0.36.$$

Hence, if (PC2) is to hold, the probability of both *Red* and *Round* on the complex seeming must be much higher. Of course, the same issue will also arise in numerous cases not involving complete independence. So here is where we are: in order to satisfy (PC2) for any seeming-state (including the kinds of rich states discussed), in some cases the relevant conditional probabilities involving more basic contents entailed by the richer one must be *massive*. At first sight, (PC2) looked like a fairly weak thesis, but it turns to have much stronger entailments. This raises various worries. For instance, it is plausible that the probability of *p* conditional on its seeming that *p* should be sensitive to information about one's own reliability (or, at the level of priors, to prior evidential probabilities concerning one's own reliability). However, if there is no in principle cap on how rich the contents of seemings can be (in particular, in how many probabilistically independent conjuncts the contents of such seemings can involve), then there is no cap on how high the probability of *p* conditional on its seeming that *p* must be for more basic contents.

Phenomenal conservatives typically don't restrict their views to a specific class of seemings: indeed, the main target of our criticism is views on which just about anything can seem to be the case, seemings providing the foundations for all knowledge and justified

belief. But wouldn't restricting the core theses to something like *basic perceptual* seemings help with the above worries? Indeed, this is how Jim Pryor formulates the position he calls dogmatism.³⁴ It's not clear, however, how appeal to basic perceptual seemings would help with the problem created by richer perceptual seemings. In so far as a seeming red can be basic, and seeming round can be basic, why couldn't seeming red-and-round be basic?³⁵ Pryor (2000), for instance, admits that contents that at first sight seem highly non-basic (like *that painting is expressivist*) can become basic through enough training. Moreover, insofar as phenomenal conservatives follow the general practice of epistemologists to put forth their claims as necessarily true, appeal to the fact that such seemings cannot be basic for us won't help, for who is to say that they cannot be basic for any possible being?³⁶ Perhaps appeal to basic perceptual seemings could at least solve some of the problems above. But it's not at all clear to us why propositions like *there are no seemings* simply couldn't perceptually seem to be the case for any possible being.

2.2 Reasonable priors and the evidential force of seemings

We'll now turn to a different class of worries, ones that we take to be especially important. Consider the following kind of case. You are shown two sticks, and asked to evaluate their relative length. You look very carefully, but just can't discern any difference between them. In fact, they seem *exactly* the same length. Or, you are shown a dartboard, and asked where the dart landed. You squint your eyes: it looks like the dart landed in the middle, *dead* middle, of the board. You look at a picture with a line dividing it into a left and a right half.

³⁴ See Pryor (2000).

³⁵ Might one not insist that basic seemings can never have such conjunctive contents? Note that this response is unavailable for views on which logical equivalence of content suffices for identity of content. Consider, for instance, the content expressed by 'red and round or red and not-round', which is logically equivalent to 'red'. If we think there is content equivalence here then we will likely allow that all contents have a conjunctive way of being expressed and no content is intrinsically conjunctive. (For more on this Boolean approach to content individuation, which comes short of demanding that all contents that are metaphysically necessarily coextensive are the same, see Bacon (2018)).

³⁶ The task of distinguishing between basic and non-basic seemings becomes even more pressing when we move outside the domain of perception. In the case of perception, the phenomenal conservatives might try Pryor's tactic of appealing to cognitive science to tell us which seemings are basic. But what about intellectual seemings, for instance?

The two halves look like perfect mirror images of one another. According to (PC1), you acquire at least some probabilistic boost for the proposition the sticks are, indeed, the same length, that the dart landed exactly in the middle of the board, and that the two halves of the picture are exact mirror images. And according to (PC2), the resultant probability (assuming there is no additional evidence) is over .5. Are these results defensible?

There are access issues raised by examples like this: even if it seemed to one that the sticks were the same length, one may be unable to access the seeming. But that will not be our worry in what follows. For current purposes, we shall simply assume that one has perfect access to the contents of one's seemings, and thus we shall set speckled hen type issues to one side in this section. The pressing question whether, even granting such access, it is plausible that evidential probabilities evolve in the envisaged way.

We want to suggest that the verdicts forced on us by (PC2) are very dubious. Let *Perfect* be the proposition that one's perceptual capacities for discernment of sameness in length is perfect, and *Imperfect* the proposition that one's power of discernment is imperfect. (For present purposes, think of *Perfect* as entailing that perceptually presented sticks will never seem to be the same length unless they in fact are the same length.) Let other relevant propositions be as follows:

<i>Seems match</i>	It seems that I am presented two sticks that perfectly match in length.
<i>Match</i>	I am perceptually presented with two sticks that perfectly match in length.
<i>Close</i>	I am perceptually presented with two sticks that are close to the same length, but don't perfectly match in length.
<i>Perfect</i>	I have perfect abilities of discrimination.
<i>Imperfect</i>	I have imperfect abilities of discrimination.

Now consider what the prior evidential probabilities of these propositions would have to be in order for (PC1) and (PC2) to be respected.

Perhaps (PC1) is not in terrible trouble here. (It would be in trouble if the rational priors were certain that no two sticks are exactly the same length, but the assumption that the prior probability of two sticks exactly matching is zero is admittedly controversial.) However, (PC2) looks extremely untoward from a Bayesian perspective. It is very natural to suppose that the prior probability of *Close* is *far* greater than that of *Match* (it is, so to speak, a lot easier to be close in length than to exactly match in length). Further, it is natural to think that $P(\textit{Seems match} \mid \textit{Imperfect} \ \& \ \textit{Close})$ will not be terribly small: the prior probability function should, it seems, regard two things seeming to be the same length in a situation where our perceptual powers are imperfect and they are in fact close to the same length as not at all extraordinary. (To simplify, we shall assume that it is certain that the sticks will not seem to match if the sticks are not even close in length. This does not stack things against the phenomenal conservative since this simplifying assumption helps, rather than hinders, the estimation of one's discriminatory capacities inherent in the priors.) Meanwhile, even if the prior probability of *Perfect* is substantial, the prior probability of *Perfect* and *Match* will be extremely small (owing to the fact that the prior probability for *Match* will be extremely small.)

How likely does *Match* become when it comes to seem to one that the two sticks perfectly match in length? In the present framework, it is assumed that one updates by conditionalizing on *Seems match*. There are three regions of one's prior epistemic space the ratios of which are pertinent here:

Imperfect & Close & Seems match

Imperfect & Match & Seems match, and

Perfect & Match & Seems match.

(*Perfect & Close & Seems match* is not an option: conditional on one's abilities of discrimination being perfect and the sticks being merely close in length, the probability that they seem exactly the same length is zero.) The prior extreme implausibility of *Match & Seems match* (inherited from the prior extreme implausibility of *Match*) as contrasted

with the relative prior plausibility of *Close & Seems match* (inherited from the relative prior plausibility of *Close* and of $P(\textit{Seems match} \mid \textit{Imperfect} \ \& \ \textit{Close})$), will spell big trouble for (PC2) when construed probabilistically.

To put some numbers on things, assume that:

- (i) $P(\textit{Perfect}) = P(\textit{Imperfect}) = .5$
- (ii) $P(\textit{Match}) = 1/100,000 = 0.00001$
- (iii) $P(\textit{Close}) = 1/100 = 0.01$
- (iv) $P(\textit{Seems match} \mid \textit{Imperfect} \ \& \ \textit{Close}) = .1$
- (v) $P(\textit{Seems match} \mid \textit{Imperfect} \ \& \ \textit{Match}) = .9$
- (vi) $P(\textit{Seems match} \mid \textit{Perfect} \ \& \ \textit{Match}) = 1$

(i) reflects an extremely optimistic take on one's perceptual powers. (ii) reflects assigning a relatively high prior probability to two sticks matching *exactly* in length; it is being assumed that it is merely 1000 times more likely that one will be presented with two sticks that are close in length, rather than exactly the same length. (iv) reflects the idea mentioned above: it is not unnatural at all to suppose that two things will seem to be the same length in a situation where our perceptual powers are imperfect and they are close to the same length. (vi) is generous, as it is compatible with *Match & Perfect* that one's perceptual system is silent on the issue of *Match*.

Finally, assume that from the perspective of the priors, whether or not one has perfect or imperfect abilities of discrimination is independent of whether the sticks in fact happen to exactly match in length (that is, *Perfect* and *Imperfect* are independent of *Match* and *Close*). In the case described, one's prior probabilities in the three pertinent regions of epistemic space are as follows:

$$P(\textit{Imperfect} \ \& \ \textit{Close} \ \& \ \textit{Seems match}) = 0.0005 = x$$

$$P(\textit{Imperfect} \ \& \ \textit{Match} \ \& \ \textit{Seems match}) = 0.0000045 = y$$

$$P(\textit{Perfect} \ \& \ \textit{Match} \ \& \ \textit{Seems match}) = .5/100,000 = 0.000005 = z$$

In this example,

$$P(\text{Match} \mid \text{Seems match}) = (y + z) \div (x + y + z) < 2/100$$

Hence, the probability of *Match*, conditional on *Seems match*, will be way below .5, contradicting the claim of (PC2).

It is important to note that the above remarks concern prior evidential probabilities. (We in fact have all kinds of background knowledge concerning limitations of perception. But such background knowledge, while relevant to various posteriors, is not relevant to the question of ur-priors.) In the kinds of cases presented two kinds of considerations come into play from the point of view of the priors that in turn serve to dampen optimism about various propositions conditional on them seeming to be so. First, it would be surprising for perception to exhibit extraordinary fine-grained levels of discrimination. Conditional on two sticks being close in length, it is not surprising for them to seem to be exactly the same length; conditional on a dart coming close to the centre of a dartboard, it is really not all that surprising for it to seem to hit the centre. But second, the prior probabilities conditional on it seeming that p need to be sensitive to the prior probability of p .

Someone might complain that we cannot have seemings with such contents as that the sticks are exactly the same length (or that a pair of horses finished in a dead heat or that a dart landed in the middle of the dart board). For example, one might claim that, at best, two sticks seem to have roughly the same length.³⁷ One point to note here is that even if we never in fact undergo such seemings, it is difficult to see why they are not possible. Insofar as phenomenal conservatism is offered as a necessary truth, such possibilities will create trouble. More importantly, though, this special pleading about the contents of perception is far too local a fix. The general structure of the problem above was this: our

³⁷ Not all authors feel this way. For instance, Williamson (2013, 85) writes: “To me, the black patch *looks* perfectly circular. It does not *look* imperfectly circular (almost but not quite perfectly circular). Nevertheless, in any actual case, the patch is at best imperfectly circular.”

prior in *Match* was low compared to *Close*. Moreover, even if one was highly confident in *Seeming Match* given *Match*, one's prior estimation of one's perceptual powers was not so immense as to make it the likelihood of *Seems Match* extremely low conditional on *Close*. And this combination will render the conditional probability of *Match* on *Seems Match* rather less than *Standard Phenomenal Conservativism* anticipates. In general, sensitivity to base rates combined with a small dose of humility about one's perceptual mechanisms will produce results that are at once rational but contrary to the demands of SPC. We shall illustrate this theme in the next section, appealing to contents that are far less tendentious.

2.3 Base Rates³⁸

One's prior probabilities conditional on its seeming that p need to be sensitive to the prior probability of p . This is related to the issue of base rates, which is standard fare in the Bayesian literature. Assume that I regard my seemings about whether someone is ill or well as fairly reliably tracking these states in the following sense: Conditional on them being ill I reckon it likely (say .9) that they will seem ill and conditional on them not being ill, I reckon it unlikely (say .1) that they will seem ill. However, I assign a low prior probability to a randomly selected person being ill in the first place (say .1). If you think that you should become roughly .9 confident that someone is ill once it seems that they are ill, then you are guilty of the so-called base rate fallacy, a standard (albeit natural) blunder in probabilistic reasoning. For your posteriors should also reflect the prior probability of a randomly selected person being ill in the first place: once it seems to you that someone is ill, you should only be 50% confident that they are.

To dramatize the point let us imagine that it seems to you that a certain painting is the most beautiful painting in the world. Let us suppose that the evidential priors have a very optimistic view of the discriminatory powers of your seemings: the prior probability that a painting will seem to be the most beautiful painting in the world conditional on its being such is .999 and the prior probability that a painting will seem to be the most

³⁸ Many thanks to Yoav Isaacs for emphasizing the general issue of base rates in numerous discussions. See also Isaacs (*forthcoming*).

beautiful painting in the world conditional on its not being such is .001. Still, so long as the priors expect there to be an awful lot of paintings in the world, and there is no particular expectation of confronting the most beautiful painting, the probability for a painting's being the most beautiful conditional on its seeming to be so will not be particularly high. As a toy model, suppose that you expected there to be 100,000 paintings, and the prior probability of encountering the most beautiful one on this occasion was 1/100,000. Then, conditional on the seeming, the probability of being presented with the most beautiful painting is just below .01.

Note, once again, that it will not do to try to protect (PC2) by claiming that when the priors render p unlikely on a seeming that p , the priors serve as a “defeater”. Implementing such a qualification of (PC2) within the probabilistic model under discussion would turn (PC2) into the banal thesis that the prior conditional probability p on a seeming that p is over .5, except in cases where it isn't. Allowing additional evidence to defeat is one thing. Allowing pessimistic priors to defeat is quite another – it strips (PC2) of substantive content.

The above examples relied on some assumptions about evidential prior probabilities. The illness case involved the assumption that the prior probability of a certain person being ill is low. And the painting case worked on the assumption that it is likely, by the lights of the priors, that there are a good number of paintings in reality. Might one challenge the examples by systematically challenging the assumptions about priors that are needed to drive them? For the strategy to be effective it has to be general: if the prior probability that a certain individual x had a certain property F , or that a certain pair x and y stood in some relation R , was extremely low, then one could exploit that aspect of the priors as a basis for making trouble, so long as the contents Fx and xRy could figure as contents of perception. In those cases, even a reasonably optimistic conception of the reliability of the relevant aspects of perception would not deliver a decently high probability of the content of the seemings, owing to the dampening effects of the prior.

In order to block trouble for *Standard Phenomenal Conservatism*, one might try to limit the contents of possible seemings, while insisting on priors that build in a very

optimistic take on the reliability of one's seemings. Of course this is not impossible in principle. Consider a simple model. Only two objects, Jack and Jill, can enter as singular contents of seemings. Meanwhile, the only properties that can figure as contents of seemings are three colour properties – red, blue and green – and two shapes – squarish and circularish. Moreover, each possible content of a seeming involves exactly one of Jack and Jill, exactly one colour property, and exactly one shape property (so that only twelve proposition are available as contents of seemings). It will then be relatively easy to construct priors that are friendly towards phenomenal conservatism. But once the domain of contents for seemings is suitably enriched, it is hard to see how this friendliness will carry over. The dart-style cases of the last section illustrate one aspect of the problem: very specific properties like being Red₂₇, or being exactly the same length as another stick, will tend to be accompanied by very low priors and so will demand much more ambitious views of perceptual reliability to deliver conservative friendly results. But there are also other sources of difficulty. Multiply the individuals and allow contents such as 'x is the only F' and one will get similar problems (as evidenced by the beautiful painting case). In short, it seems excessively optimistic to suppose that the configuration of reasonable priors and available contents of seemings will be tailored so as to validate SPC.

Of course, phenomenal conservatives do not proceed in explicitly probabilistic terms and so are not explicitly guilty of the base rate fallacy. However, sensitivity to base rates is one of the most important lessons to be learnt from probabilism. We should strongly suspect that any thesis along the lines of *Standard Phenomenal Conservatism* is not properly attuned to the issue. In some situations reasonable priors about base rates will induce pessimism about the likelihood of the relevant propositions conditional on the relevant seemings, which will in turn put considerable pressure on SPC.

2.4 Content irrelevance

As was noted above, the simple Bayesian account will need to be supplemented to take into account the strength and vivacity of a seeming. Most phenomenal conservatives think that undergoing a very weak seeming that p and undergoing a very strong seeming that p

have different epistemic import. Indeed, a particularly natural basis for defending especially (PC2) is the idea that at least as far as the ur-priors go, the *prima facie* epistemic import of a seeming is exhausted by its force and vivacity: its precise content doesn't matter.

According to what we shall call *Content Irrelevance*, the result of updating the ur-prior probability function upon undergoing a seeming that p with a given force and vivacity, and the result of updating the function upon undergoing a seeming that q with the same force and vivacity, must be equal confidence in these two propositions. In this respect, the contents of the seemings are irrelevant.

All of the problem cases for (PC1) and (PC2) discussed above make trouble for such a thesis of *Content Irrelevance*. This pressure is obvious in the case of rich seemings: How confident a subject is to end up in the content of her seeming must, it seems, vary according to the richness of that content. When implemented in a probabilistic setting, the *Content Irrelevance* thesis is also guilty of the fallacy of ignoring base rates or, more generally, prior probabilities: the prior probability of a proposition should impact its posterior probability in a way totally out of line with *Content Irrelevance*. Once one realizes content neutrality is unsustainable, it becomes extremely difficult to continue to maintain phenomenal conservatism, and especially (PC2).

In sum, though the straightforward Bayesian construal is a natural way of embedding phenomenal conservatism in a probabilistic framework, the resulting view faces very serious objections. Might the Bayesian phenomenal conservative recast their view, interpreting (PC1) and (PC2) as merely generally true? The problem with such a view is that it begins to undermine the idea that seemings are epistemically *special* in *always* providing at least a *prima facie* reason to believe their contents. Consider the following schema, and various different ways of completing it:

$$\forall p P(p | x) > P(p)$$

- (i) $x =$ I am inclined to believe p .
- (ii) $x =$ I believe p .

- (iii) $x =$ An intelligent being believes p .
- (iv) $x =$ I have a perceptual experience with p as its content.

None of these readings of the schema are altogether implausible once the schema is weakened to something along the lines of “It is generally true that”: for instance, from the perspective of the ur-priors, the fact that one is inclined to believe p at some time does seem like at least weak evidence that p is true.

The classical Bayesian framework does not yield much hope for phenomenal conservatism. We will now move on to a probabilistic version of phenomenal conservatism on which the kinds of updates that result from undergoing seeming states are instances of Jeffrey Conditionalization. Such a view at least avoids the obvious worry, mentioned at the outset, having to do with access to seemings, for according to the Jeffrey model updating doesn't happen by (classical) conditionalization on propositions about seemings. Rather, being in a seeming-state results in a re-distribution of probabilities over a salient partition of propositions. We will argue, however, that many concerns articulated in this section also resurface for the Jeffrey view.

3. Jeffrey updates

On the Classical Bayesian views that we have been looking at, it is propositions about seeming-states that serve as (foundational) items of evidence. Consider instead views on which updating of evidential probabilities happens by some form of *Jeffrey conditionalization*: when a seeming occurs, the evidential upshot is a certain partition of propositions. There is a re-distribution of probability amongst the members of the partition, and a re-normalization within each partition cell.³⁹ Here is a toy example. An object seems red. A partition dividing up states according to the colour of the object becomes salient (though we discuss other ways of partitioning below). Perhaps, for instance, it is {Red, not-

³⁹ As with the discussion of Classical Bayesianism we can transform ideas about evidential probabilities into ideas about the credences of rational agents by hypothesizing bridge principles connecting evidential probabilities to rational credences. But as before, the merits of such bridge principles are not our primary focus.

Red}.⁴⁰ The seeming induces a redistribution of probabilities among members of the partition. The other probabilities are set by renormalization (so for example if the old probability for Red is 0.3, and for not-Red is 0.7, and the old probability of Red and Apple is 0.1, then if the seeming induces a 0.9/0.1 distribution for the partition {Red, not-Red}, then the new probability of Red and Apple is 0.3). Apart from the probability axioms, Jeffrey conditionalization in itself imposes no constraints on just what the input-partition is, or how probabilities are re-distributed among the partition cells.

In what follows, we will set aside general criticisms of the Jeffrey framework that have been raised in the literature, focusing instead on how the framework plays out in the current context. First, let's see how to formulate the core phenomenal conservative theses in the context of the Jeffrey framework.

Start with the thesis of *Minimal Phenomenal Conservatism*: at least when there are no defeaters, its seeming that p will lead to an increase in the evidential probability of p . As above, in connection with the Bayesian view, focus for now on evidential ur-priors in order to set aside the issue of defeat.⁴¹ Let “ $P_{+SEEMS,p,t}$ ” designate the evidential probability function that results when the ur-prior probability distribution is updated on a state of its seeming to one that p (at a time t), and no other state (either at t , or at earlier times). That is, it is the evidential probability function that results from a full Jeffrey update made appropriate by the relevant seeming-state (a re-distribution of probabilities among members of the relevant input partition and re-normalization). Here, then, is a rough construal of *Standard Phenomenal Conservatism* within the Jeffrey framework: at least when updating from the starting position of an ur-prior probability function, the result of

⁴⁰ We will use ‘Red’ as shorthand for ‘The object is red’, and ‘Seems red’ as shorthand for ‘It seems to be the case that the object is red’.

⁴¹ What if it comes to seem to me that p , but I have excellent evidence that in my present situation my seemings are not to be trusted? In the framework of the Jeffrey view, such a defeater must prevent the Jeffrey update whereby the members of a salient partition get assigned new probabilities – or, if I merely have evidence that my seemings are not fully trustworthy, such a defeater might dampen the effect that undergoing the seeming has on the members of the relevant partition. On a fully developed view, the partitional effect of a seeming will have to be sensitive, among other things, to one's background evidence regarding the reliability of the seeming. The idea that background evidence can affect Jeffrey inputs in this way is explored at length by Pryor (2013).

undergoing a state of its seeming to one that p will boost the evidential probability of p to a level above .5.

(PC3) $P_{+\text{SEEMS}_{p,t}}(p) > P(p)$

(PC4) $P_{+\text{SEEMS}_{p,t}}(p) > .5$

(Notice that commitment to (PC3) and (PC4) is in principle compatible with denying (PC1) and (PC2)).⁴²

Without any additional constraints on input partitions and probability distributions over the partition propositions, Jeffrey's rule is almost vacuous. After all, the rule does not in itself prohibit using as input a partition that is maximally fine-grained. In order to make use of the Jeffrey framework, the phenomenal conservative will want to say something principled about how seeming-states relate to the inputs of Jeffrey updates. Three somewhat natural options present themselves. Assume that it comes to seem to a subject that an object before her is red. On the *first* view, we can usefully represent how the evidential probabilities evolve by using as input a partition that divides possibility space according to which seeming state she is in. The partition might, for instance, be {Seems red, \neg Seems red}.⁴³ On the *second*, the partition divides possibility space according to the

⁴² How does the view handle cases in which a subject simultaneously undergoes multiple seeming states? Take a simple case in which at a time t it simultaneously comes to seem to x that p and it comes to seem to x that q . If we think of the effect as tantamount of two different consecutive Jeffrey updates, we run into the problem of commutativity, where the order of these updates matters (see Weisberg 2009). To avoid the problem, it is best to wrap both seeming-states together into one partition. However, we doubt that simply treating the two seemings as one would treat a single seeming with the conjunctive content p and q would work. For instance, sometimes the contents of seeming-states can undermine one another. Perhaps it both seems to me that my friend is surfing (based on my visual experience), and that she is standing at the beach (based on my auditory experience). Such a case is surely different from one in which something impossible seems to be the case: she seems to both be standing at the beach and surfing. We mention this in order to note one more complication that the probabilistically oriented phenomenal conservative will have to deal with, but will set the problem aside.

⁴³ Of course, the partition might be divided up further, to include cells for various seemings that are alternatives to the red seeming, as well as a cell including those possibilities in which one experiences no seeming. Further, perhaps yet more cells are needed to represent seeming red states with different forces and vivacity. We set such complications aside, for they do not affect the main points to be made below.

contents of her seeming states. Perhaps, for instance, the relevant partition is {Red, ¬Red}. It is much more straightforward for such a view to respect (PC3) and (PC4), for one can simply require that the cells of the input-partition be assigned new probabilities that respect these theses. The *third* option is to partition according to both the seeming-states and their contents. Then, the partition might be {Seems red & Red, Seems red & ¬Red, ¬Seems red & Red, ¬Seems red & ¬Red}. Any Jeffrey update that is possible given either of the two previous views is possible on the third view. We will discuss the first two views, arguing that the second is the most sympathetic implementation of phenomenal conservatism.

3.1 Partitioning by seeming-states

Let's work with the simplifying assumption that when it seems that p , the relevant partition is between two cells: {Seems p , ¬Seems p }. (Enriching the partition makes things more complicated, but will make little difference to most of the points below.) How does such a view make good on (PC3) or (PC4)? The view can retain (PC3) if two assumptions are made. Here 'P' denotes an evidential probability function that is prior to undergoing a relevant Jeffrey update at a later time t with the input partition {Seems p , ¬Seems p }; we can assume it to be the ur-prior evidential probability function. First, assume (1):

$$(1) \quad P(p \mid \text{Seems } p) > P(p),$$

which is an instance of (PC1), already familiar from our discussion of the Bayesian view above. Second, assume (2):

$$(2) \quad P_{+\text{SEEMS}_{p,t}}(\text{Seems } p) > P(\text{Seems } p).$$

That is, when it comes to seem to a subject that p at a time t , the evidential probability that it seems that p *increases*. Merely having a seeming always gives one *some* evidence that

one is having that seeming. (PC3) follows from the assumptions made: when it seems to the subject that p , the evidential probability that p goes up, even if only slightly.⁴⁴

(1), of course, faces any problems that (PC1) does. But even setting such problems aside, the assumptions made do not entail (PC4). In order to satisfy (PC4), one must require both that the ur-probability of p , conditional on its seeming that p at the relevant time, is sufficiently high, *and* that the evidential probability that it seems to one that p is reasonably high (just how high it must be will depend on the parameters of the case.) But now a host of worries raised above crop up.

First, there is the access worry briefly mentioned in connection with the Bayesian view: if the evidential probabilities of propositions concerning one's seemings depend on one's discriminative abilities, the assumptions needed to make good on (PC4) are sometimes bound to fail. Assume, for instance, that Red₁, Red₂, Red₃, Red₄, and Red₅ are five close shades of red. Because these shades are so similar, a subject cannot perfectly discriminate between the respective seemings. She in fact undergoes a Red₃ seeming. Perhaps the evidential probability that the object seems Red₃ is higher than for each of the other four shades; it might, for instance, take the form of a curve that peaks on the proposition that the object seems Red₃ (it would be so configured if the evidential input took the form of a very fine-grained partition that distributes probabilities in a curve-like fashion over colour-seeming states). Nevertheless, the evidential probability that it seems Red₃ might be significantly below .5. There may be no hope of satisfying (PC4).⁴⁵ Anyone

⁴⁴ Note that (PC3) does not follow from (1) and (2) alone, but only together with the assumption that upon its coming to seem to the subject that p , the relevant partition is just {Seems p , \neg Seems p }. We won't pursue the complications that result from allowing for more fine-grained partitions, since these make it even harder for the phenomenal conservative to make good on (PC3).

⁴⁵ Assume that at a time t , it might seem to one that there is a Red₁, Red₂, Red₃, Red₄, or Red₅, object before one, or one might undergo no seeming whatsoever. Prior to looking, one is indifferent between these possibilities; hence, $P(\text{Seems Red}_3) = 1/6$. Assume that $P(\text{Red}_3 \mid \text{Seems Red}_3) = .8$ (similarly for any other shade of red), that $P(\text{Red}_2 \mid \text{Seems Red}_3) = .05$ (similarly for any other combination of shade X and shade seeming Y), and that $P(\text{Red}_3 \mid \text{There is no seeming at } t) = .2$ (similarly for any other shade of red). The subject undergoes a Red₃ seeming, and does a Jeffrey update by boosting her confidence that it seems to her that the object is Red₃ at t from $1/6$ to $1/2$ (let us assume). Assumptions (1) and (2) above hold, but (PC4) is not satisfied: given the assumptions made, the subject could become *at most* .5 confident that the object is Red₃.

who agrees with us will find even the seemingly weaker access conditions imposed by implementing (PC4) in the context of the present construal of the Jeffrey view problematic.

Let us return to the case of its seeming to one that two sticks are exactly the same length, or that a dart hit the very center of a dartboard. Here the discussion of such cases in the context of the Bayesian view can be more or less reiterated. Since the relevant partition concerns my seeming-states, how probable it comes to be that the two sticks match exactly in length (*Match*) is a function of how likely *Match* is conditional on various propositions about how things seem to me to be. But we argued that given plausible candidate evidential ur-priors, the conditional probability of *Match*, conditional on *Seems match*, is not at all high. There were two pertinent considerations here. First, it wouldn't be at all surprising, from the perspective of (some) rational priors, for two sticks that are merely close in length to seem to me to be exactly the same length. Second, the prior probability of *Match*, compared with the prior probability of *Close*, is low. In the example discussed above,

$$P(\textit{Match} \mid \textit{Seems match}) < 2/100$$

Moreover, $P(\textit{Match} \mid \neg \textit{Seems match})$ will be *very* low – significantly lower than $P(\textit{Match})$. As a result, a Jeffrey update on propositions concerning how things seem will yield an even *lower* probability for *Match* than conditionalizing on *Seems match* would.

As in connection with the Bayesian view, one trouble-creating aspect of the case involving two sticks has to do with an issue closely related to that of base rates: one's prior probability of *Match* is low. Depending on the exact features of a case, in order to respect (PC4) within the context of the present view, the prior probability of p conditional on its seeming to one that p must be sufficiently high. But such conditional priors should be sensitive to the prior probability of p . Indeed, our discussion of base rates above could simply be reiterated here.

The reader might think that it is not too surprising that in many respects a version of the Jeffrey view on which partitions concern seeming-states mimics the Bayesian view on which one updates on propositions concerning seeming-states. Let us now consider how

partitioning not by what seeming-state one is in, but by the contents of one's seeming-state, shifts the dialectic.

3.2 Partitioning by the contents of seeming-states and the Oomph View

Consider again the example in which it comes to seem to one that two sticks are exactly the same length. The problem created by the case for (PC4) was especially poignant in a context in which the input-partition concerns the seeming-states themselves. By contrast, if the input-partitioning happens by the *contents* of seeming-states, one might simply insist that upon its seeming to a subject that two sticks are exactly the same length, the probability of *Match* (the proposition that they match exactly in length) shoots to some value above .5. (Similarly, one could simply insist that upon a certain object seeming Red₃, the evidential input partition assigns more than .5 to the proposition that it is Red₃.)

Assuming a reasonable prior, such an update would be *oomphy* in a way to be explored further in Appendix A: the subject's conditional probability of the sticks matching in length conditional on them seeming to do so might be low, but once the subject comes to have the seeming, the probability that they are exactly the same length shoots above .5. The key idea is that even though the conditional probability of a certain proposition on a certain seeming is low, the proposition may come to have high probability once one actually *undergoes* that seeming. If one's evidence is a new partition over the contents of seemings, then the Bayesian mechanics allow the probability of p to shoot up when one has a seeming that p even though the probability of p conditional on that seeming is low. Using this technique one could opt for a model according to which, in general, when one undergoes a seeming that p , this induces a partition in which p has a high probability. Within the broad probabilistic framework, this implementation of the Jeffrey approach is arguably the most sympathetic way of modelling phenomenal conservatism.

Or, consider the possible case involving a seeming that there are no seemings. As we saw, the case is very tricky for an implementation of the Jeffrey view that partitions by the seeming-states themselves. However, equipped with one of the other input-partitions, the phenomenal conservative might insist that upon its seeming to a subject that there are

no seemings, her probability that there are no seemings simply shoots up.⁴⁶ Again, such an update would be *oomphy*.⁴⁷

We think the Oomph View is the most promising probabilistic implementation of phenomenal conservatism. However, the view is far from unproblematic. In particular, we don't think it encodes a plausible conception of how evidential probabilities evolve.

Consider again the problem of rich seemings. Let q be a rich content that is logically equivalent to a long conjunction of largely probabilistically independent propositions p_1, \dots, p_n . By (PC4), the result of undergoing a seeming that q is that the probability of q is above .5. But then, however the Jeffrey update in question happens, each of the propositions p_1, \dots, p_n will have to end up having a high probability – extremely high, as n increases. Again, (PC4) is far less modest than it might at first sight look.

Further, consider a subject who has rather low prior probability that two sticks are exactly the same length conditional on them seeming to be exactly the same length. It just does not seem plausible that in this situation a seeming that they are the same length would make it epistemically likely for that agent that they are. Compare this with learning that it seems to another subject in a similar situation (or perhaps that it seemed to oneself in the past) that the two sticks are exactly the same length. Knowing this would hardly render the hypothesis that they are exactly the same length likely. Why, then, should currently undergoing a seeming induce a shift in evidential probabilities completely out of line with this judgment?

Again, this connects with the issue of base rates. Given the kind of flexibility inherent in the Jeffrey view, subjects who undergo oomphy updates cannot be accused of committing a formal base rate fallacy. However, some updates mandated by the oomphy version of the Jeffrey view, and *required* in order to respect (PC4), are insensitive to base

⁴⁶ Similar remarks apply to the case of its seeming that everything that seems to be so is not so.

⁴⁷ Of course, if one then learnt that it seemed to one that there were no seemings, the probability would shoot right back down, but that in itself is no problem. Perhaps the best way of developing the view is to think that a seeming that p in itself induces a Jeffrey partition that boosts p . Certain kinds of access to seemings would then amount to extra evidence. The phenomenal conservative could restrict her thesis to the case where the seeming has its minimal effect in the absence of extra evidence.

rates – and, more generally, to prior probabilities – in a highly problematic manner. Consider again the case in which I open my eyes, and a painting in front of me seems to me to be the most beautiful painting in the world. The prior probability that I would see the most beautiful painting on that occasion was, we were assuming, very low. Had I been told, before opening my eyes, that it will seem to me that I am looking at the most beautiful painting, this information would not have made it at all likely that the most beautiful painting is in fact in front of me. However, once I open my eyes and it comes to seem to me that I am looking at the most beautiful painting, on the Oomph View envisaged, the evidential probability that I am looking at the most beautiful painting shoots above .5. Evidential probabilities that evolve in this way are insensitive to base rates in a highly problematic manner.

Indeed, such insensitivity to base rates – and, more generally, to prior probabilities – is an integral part of how the Oomph View is able to deliver verdicts that respect (PC4) and hence, *Standard Phenomenal Conservatism*. For instance, as discussed Appendix A, the Oomph View can make good on the thought that experiences have anti-sceptical punch: when it comes to seem to me that I have hands, the probability that I am not a handless brain in a vat who merely seems to have hands can in principle go up. (The problem with conditionalizing on the proposition *it seems to me that I have hands* is that this proposition is entailed by such sceptical hypothesis. As a result, conditionalizing on the proposition *confirms* such sceptical hypotheses – see White 2006). But these anti-sceptical powers are intricately tied up with a kind of insensitivity to priors: upon its coming to seem her that she has hands, a subject can have increased evidential probability both that she does indeed have hands, and also that she is not a handless brain in a vat to whom it merely seems that she has hands, *irrespective* of her prior probability in such skeptical hypotheses. Similarly, upon its coming to seem to a subject that p , the probability that p becomes over .5, irrespective of prior probabilities regarding the discriminatory powers of her seemings.⁴⁸

⁴⁸ Note finally that the kinds of access worries mentioned above are not avoided just by insisting that the relevant partition concerns not how things seem, but the contents of one's seemings themselves. If the seeming that an object is Red₂₇ and the seeming that an object is Red₂₈ are similar enough, there may not be

It should be clear by now that natural developments of the Jeffrey view face obstacles accommodating (PC4), and even (PC3) is far from plain sailing. The same kinds of pressure points keep popping up, ones that we witnessed already in connection with the classical Bayesian framework.

We have argued that probabilism is a useful tool for bringing forth structural problems with phenomenal conservatism, problems are not mere artefacts of probabilism. Nevertheless, one might worry that the most charitable framework in which to spell out phenomenal conservatism is not a probabilistic one. By way of illustration, let us briefly look at a prominent alternative to probabilism, one that makes use of the ideology of reasons.

3.3 Reasons

Rather than thinking in terms of prior probability functions and updating, begin instead with the rough idea that a belief in p is justified just in case it is based on a sufficiently strong, undefeated reason to believe p . According to *Standard Phenomenal Conservatism*, in the absence of defeaters, a seeming that p provides a reason that is strong enough to make a belief in p *prima facie* justified. We shouldn't assume that the relevant reason-facts can be reduced to facts about probabilities.

On one way of thinking, all reasons are propositional. Then, being in a seeming state will deliver a reason by delivering a propositional reason concerning how things seem to one.⁴⁹ Perhaps a better way of developing the view would be to accept seeming-states themselves (as opposed to propositions concerning them) as reasons, the idea being that when it seems to one that p , the state of its seeming to one that p becomes one of one's

enough sensitivity to the exact content of one's seeming-state for the evidential probability of Red₂₇ to shoot above 0.5, in which case (PC4) would fail.

⁴⁹ Here one could raise the access worry, since it is hard to maintain that a fact about seemings will play the relevant reason-giving role unless one has access to it. We might mention in passing that a strong case can be made for the generalization that a proposition is possessed as a reason (to believe or to act) only if it is known. See Hawthorne and Magidor (2018). Of course it is a familiar point from the literature on so-called "external reasons" that a proposition can be a reason in some sense even if it is not possessed: that there is poison in a glass is a reason in some sense not to drink it. But this is not the kind of reason at issue in the literature on reasons to believe.

reasons, and that state itself is a *prima facie* reason to believe *p*. Indeed, this is how proponents of the reasons-based view like John Pollock construe reasons provided by perceptual experiences.⁵⁰

Such a view is still committed to a version of content neutrality: very roughly, the epistemic force of a seeming depends on its content only through the phenomenon of defeat. But we have presented a cluster of worries that put pressure on content-neutrality. These include, notably, those relating to base rates and complex seemings, worries that also resurface in the context of the reasons-based view. Consider, for instance, the problem of rich seemings. Is it really plausible, even in the context of the reasons-based view, that both a seeming that *p*₁ and a very rich seeming entailing *p*₁ always provide one with enough justification for a belief in their contents to be *prima facie* justified? Or, consider the base rate problem. Is it really plausible that a seeming that two sticks perfectly match would provide a strong enough reason for *prima facie* justification? An excellent explanation of our seeming – one that we have plenty of reason to take seriously – is that the sticks are merely close in length, and our visual acuity has its limits. The reasons framework ought not to be a license to indulge at will in belief formation that completely ignores base rates.

4. Conclusions

The thought that seemings occupy an epistemically special role is at the very heart of the phenomenal conservative view; it is in virtue of their distinctive nature that they are supposed to be able to solve a host of problems that have long plagued epistemology. Many phenomenal conservatives view seemings as unique in two ways. First, they have a special kind of epistemic *import*, as merely undergoing a seeming always provides *prima facie* justification to believe its content (recall the thesis we labelled *Standard Phenomenal Conservatism*). Second, seemings are special in acting as the *foundations* of justification and knowledge, the idea being that a seeming-state is *necessary* for non-inferentially justified belief. We have here set aside the issue of foundationalism, and focused on the

⁵⁰ Pollock and Cruz (1999, Ch 7).

special import seemings purport to have, for this idea forms the very core of the phenomenal conservative outlook.

In a nutshell, we have argued that the epistemic import had by a seeming depends on a number of factors that phenomenal conservatism is insensitive to. Where *Standard Phenomenal Conservatism* is sensitive to the contents of seemings only *via* the phenomenon of defeat, there is a plethora of other ways in which the import of a seeming (or experience) should depend on its content. For instance, the import of a seeming that p should depend on how discriminating the evidential priors regard a seeming with p as its content to be (recall the example of the two sticks), as well as the prior probability of p (base rates). Even if a subject regards her seemings as reliable in the sense that conditional on p , it is highly likely to seem to her that p , and conditional on not- p , it is highly unlikely to seem to her that p , how confident she should end up in p upon its coming to seem to her that p should depend on the prior probability of p . In light of the problems discussed, we concluded that *Standard Phenomenal Conservatism* can, at best, be construed as a generic with exceptions. But a plethora of other states also plausibly satisfy such generics. Very little remains of the special epistemic import that seemings promised to have.

APPENDIX A: The Oomph View

In this appendix we would like to discuss a particular way of developing the Jeffrey framework, one that we briefly described in the main text. It is what we call the *oomph view*. Such a view vindicates the idea that actually undergoing a seeming has a distinct kind of first-personal epistemic force – more potent, for instance, than learning about the seemings of others. It also has various theoretical advantages. For one thing, it allows us to spell out a dogmatist view that avoid the kinds of problems that Roger White has raised, allowing seemings to have anti-sceptical punch.

Let us begin with a first pass statement of the view:

$$P_{+SEEMS_{p,t}}(p) > P(p \mid \text{Seems } p)$$

In other words, for any proposition p , the probability of p that results from the Jeffrey update on the partition delivered by the seeming-state that p is higher than the probability of p conditional on undergoing such a state. (Since a Jeffrey update yields a probability function, “ $P_{+SEEMS_{p,t}}(-)$ ” is a probability function).

Obviously this need to be restricted. Let p be the proposition that something seems to be the case. The conditional probability of that proposition on the proposition that it seems to be so is 1. And given that, the above generalization is false. At the very least, the generalization needs to be restricted to that class of propositions p such that the probability of p conditional on the proposition that p seems to be the case is less than one. In what follows, we shall assume that the domain of quantification is restricted in some such way.ⁱ

To see how oomphy updates can be instances of Jeffrey conditionalization, assume, for instance, that the prior conditional probability that an object is red, conditional on its seeming red, is 90%. But assume that upon coming to experience the seeming-state, the relevant partition consists of propositions about the colour of the object and that the proposition that the object is red is one of the cells of the partition. As a result of undergoing the seeming-state, one's evidential probabilities are redistributed over the cells of the partition in such a way that it becomes 95% likely that the object is red. The resulting update is oomphy, but counts as an instance of Jeffrey conditionalization.^{ii iii}

It is worth flagging one merit of the oomph view already adverted to. Recall the kind of problem for dogmatism raised by Roger White. Take any skeptical hypothesis h that entails that one has certain seemings (for instance, the hypothesis that one is a handless brain in a vat who seems to be typing at her desk). If, upon experiencing such seemings, one simply updates on the proposition that one is undergoing the seeming, then the result is having to boost one's confidence that the sceptical hypothesis h is true. One solution for the non-sceptic is to accept that the *a priori* evidential probability of skeptical hypotheses is low. However, dogmatists and phenomenal conservatives typically have more ambitious anti-sceptical aims, for they hope that our perceptual experiences or seemings themselves have leverage against skeptical hypotheses. On the oomph view, the reasons or evidence provided by seemings doesn't consist in propositions about these seemings: there is no reason to think evidential probabilities evolve by conditionalisation on propositions about how things seem (as White assumes).^{iv} As a result, there is no reason to think that the evidential probabilities one ends up with match results of the kind of update White envisages. Indeed, it is difficult to see how a phenomenal conservative who *doesn't* opt for

ⁱ Note that the generalization could be restricted in a way that fails to vindicate the ambitions of phenomenal conservatism while still promoting the idea that the having of a seeming gives a boost rather different to anticipating it. Suppose, for example, that one maintained the schema merely for fundamental ethical propositions. That would hardly encourage any phenomenal conservatism. Still, much of the discussion that follows would be relevant to such a view.

ⁱⁱ A view like this was entertained, but not endorsed, by Adam Elga in conversation.

ⁱⁱⁱ It may be possible to defend the oomph view even assuming a propositional view of evidence and that updating happens by Bayesian conditionalization on propositions about one's seemings. One might, for instance, argue that conditionalizing on the *de nunc* proposition that it seems to me that p *right now* gives me a boost that conditionalizing (at an earlier moment) on the proposition that it seems to me that p *at noon* doesn't. However, trying to embed such indexical propositions in the standard Bayesian framework raises a whole host of problems that we do not want to get into.

^{iv} This point is emphasised by Miller (2016). He briefly mentions something along the lines of the Oomph View described here, but does not explore it in any detail. The view is also touched on in Pryor (2013), though the issues that we raise for it are not discussed.

anything like the oomph view can maintain that seemings themselves do anti-sceptical work against sceptical propositions that entail them.^{v vi}

The oomph view also has further advantages. For instance, it might explain why it is rational for a subject to give more weight to her own opinions in cases of peer disagreement. First, contrast the oomph view with *egocentrism*, according to which we should give more weight to our seemings *just because they are ours*. One's prior evidential probabilities about a proposition p are egocentric just in case:

$$P(p \mid \text{It seems to me that } p) > P(p \mid \text{It seems to you that } p)$$

Egocentrism is one explanation for why we should give more weight to our own judgments. However, the oomph view gives an alternative, perhaps more appealing, explanation: One shouldn't give more weight to one's seemings just because of the fact that they are one's seemings, but because one is actually having them. Assume that S and her friend are about to judge a horse race. S has no prior information about the horses, and S oughtn't to regard S's seemings as more reliable than her friend's. Suppose then, prior to judging the race, that S's evidential probability that Horse A wins, conditional on its seeming to S's friend that Horse A wins equals S's evidential probability that Horse B wins, conditional on its seeming to S that Horse B wins. S and her friend then judge the race. It comes to seem to S that Horse B won, and S learns that it seemed to S's friend that Horse A won. The oomph view can explain how it is that S can be justified in giving S's own seeming more weight: there is an asymmetry, since S's evidence consists in the Jeffrey partition provided by her own seeming state, together with the evidence about her friend's seeming state (a state that does not induce a Jeffrey partition concerning the outcome). Thus the asymmetry can be explained without an egocentric assumption.^{vii}

^v Without the oomph view, the only way that seemings can themselves do anti-sceptical work against, say, a brain in a vat hypothesis, is *via* rather eclectic priors. Here is a simple model: suppose that one has prior certainty that one will either appear to have hands or appear to have paws. Suppose further that the prior probability of being a pawed being that appears to have paws is much lower than that of being a pawless brain in a vat that appears to have paws, but that the prior probability of being a handed being that appears to have hands is much higher than that of being a handless brain in a vat that appears to have hands. Then mundane Bayesian conditionalization on the proposition that it seems to one that one has hands will lower the probability of being a brain in a vat. Of course even in this case seemings will do no anti-sceptical work against skeptical hypotheses that entail those very seemings (in this case the hypothesis that one is a handless brain in a vat, a proposition whose probability goes up upon its seeming that one has hands).

^{vi} Of course one might retain the idea that evidential probabilities *sometimes* evolve in an oomphy way. This would also allow seemings to do anti-skeptical work but may provide little solace to the phenomenal conservative's vision. Here is a simple model: Suppose that the prior probability of having hands conditional on seeming to have hands is less than .5. Suppose that when one comes to *know* via such a seeming that one has hands, the evidential probability that one has hands shoots to one. But in a case where one comes into the world and one has the seeming without knowledge the evidential probability stays at less than .5.

^{vii} Of course there are further decision points concerning the epistemic impact of it ceasing to seem that p . On one approach, the epistemic boost provided by a seeming can continue even after the seeming ceases. On another, the epistemic boost can survive only so long as the seeming does (see Descartes on clear and distinct perceptions). On a third view, the boost can survive the seeming so long as the seeming is remembered. (One

Assume that it is certain that in exactly one minute, at noon, it will seem to you that there is a red object before you (r). Perhaps the epistemology deity tells you this, describing in minute detail the experience you will undergo. The deity is no liar: at exactly noon it seems to you that there is a red object before you. There are no defeaters. As a result, according to the oomph view, the evidential probability of r will go up. Actually experiencing a seeming has epistemological oomph that cannot be gained by merely anticipating it. But if you were certain that you were going to undergo a specific seeming-state, how can merely undergoing the very state you already anticipated give you an epistemic boost?

In effect, the oomph view easily leads to rather egregious violations of the principle of *Reflection* where not only is your expectation of your future evidential probability higher than your present evidential probability, but you know that *no matter how* things seem to you in the future, the evidential probability of a certain proposition will go up. To see this, assume that it is evidentially uncertain whether at a time t it will seem to you that p_1 , or whether it will seem that p_2, \dots , or whether it will seem to you that p_n . Perhaps, for instance, you are now sitting in front of an object with your eyes closed, and it is uncertain (by the lights of your evidential probabilities) what colour it will seem to you to be upon opening your eyes. Further, it is possible that you undergo no seeming whatsoever. However, this possibility is not *massively* likely – perhaps, for instance, the prior probability that you will undergo no seeming is 0.2. The different hypotheses about how things will seem to you, together with the hypothesis that you will undergo no seeming, form a partition. Assume for simplicity that at no point is there any uncertainty about what time it is; at t you will know that it is time t , and you now know that you will know this (Note that in this context we are assuming knowledge entails evidential probability of 1. Those who repudiate this entailment should replace ‘know’ by ‘have evidential probability 1’.) Moreover, at t there is evidential certainty concerning how things seem to you (in case you have no seeming, it will be evidentially certain that you are undergoing no seeming), and you already know this.^{viii} Assume that it is evidentially certain that the oomph view holds, and that evidential probabilities evolve in accordance with it. Finally, to make the calculation simple, assume that the probability of things being as they seem is the same for each type of seeming. Perhaps, for instance, for any p_i , $P(p_i \mid \text{Seems } p_i) = 0.9$.

Now consider the proposition that your seemings at t are not deceptive. That is, at t things either are as they seem, or you experience no seeming whatsoever. Call this

pertinent question for the third view: if remembering a past seeming state has as much oomph as the seeming-state itself, why doesn't anticipating the state? Note also that even if memory always required its own seeming, the oomph view thus described does not predict that a seeming that one had a seeming that p gives a special boost to p (as opposed to the proposition that one had a seeming that p). We shall not pursue this issue here.

^{viii} The assumption that it is ever rational to become certain of anything can be contested. However, for now we assume certainty about how things seem to one for the purposes of demonstrating in a maximally vivid way how the oomph view violates *Reflection*, and in order to pull apart such violations from those that essentially rely on imperfect access to evidence. Relaxing the certainty assumption by, for example, maintaining that we are only close to certain about our current seeming, would offer no promise of restoring *Reflection*.

proposition *No deceit*. We can write *No deceit* down as a disjunction: either p_1 and it seems that p_1 or p_2 and it seems that $p_2 \dots$ or p_n and it seems that p_n or you have no seeming. Because the different hypotheses about how things will seem at t form a partition, the prior probability of *No deceit* is given by

$$\begin{aligned} & P(\text{Seems } p) \times P(p_1 | \text{Seems } p_1) + \\ & P(\text{Seems } p_2) \times P(p_2 | \text{Seems } p_2) + \dots + \\ & P(\text{Seems } p_n) \times P(p_n | \text{Seems } p_n) + \\ & P(\text{There is no seeming}). \end{aligned}$$

Since $P(p_i | \text{Seems } p_i) = 0.9$ for any seeming that p_i , your prior credence in *No deceit* is $0.9 \times 0.8 + 0.2 = 0.92$.

Compare this with the expected evidential probability of *No deceit* at t , as estimated by your prior evidential probabilities. By the oomph view, for any p_i , if it comes to seem to you that p_i , your evidential probability in p_i will be boosted to some value above 0.9. Again, for simplicity, assume that all of the different seemings have the same effect on your credences: for any p_i , upon its coming to seem to you that p_i , your evidential probability for p_i will be 0.95. Since at t there is evidential certainty concerning how things seem, as long as you have some seeming at t , your rational credence in *No deceit* will be 0.95. And in case you undergo no seeming whatsoever, you will be evidentially certain that you are undergoing no seeming, and *No deceit* will come to have evidential probability 1. Moreover, you know all this in advance. Again, let “ $P_{+\text{SEEMS}p_i}$ ” designate the evidential probability distribution you will have (at t) upon experiencing a seeming that p_i (and undergoing no other new experiences), and let “ $P_{+\text{NOSEEMING}}$ ” designate the evidential probability distribution you will have (at t) upon having *no* seeming. Then, your expectation of your future credence in *No deceit* is given by:

$$\begin{aligned} & P(\text{Seems } p_1) \times P_{+\text{SEEMS}p_1}(\text{No deceit}) + \\ & P(\text{Seems } p_2) \times P_{+\text{SEEMS}p_2}(\text{No deceit}) + \dots + \\ & P(\text{Seems } p_n) \times P_{+\text{SEEMS}p_n}(\text{No deceit}) + \\ & P(\text{There is no seeming}) \times P_{+\text{NOSEEMING}}(\text{No deceit}) \end{aligned}$$

We assumed that for any p_i , $P_{+\text{SEEMS}p_i}(\text{No deceit}) = 0.95$. Moreover, $P_{+\text{NOSEEMING}}(\text{No deceit}) = 1$. Since $\{\text{Seems } p_1, \text{Seems } p_2, \dots, \text{Seems } p_n, \text{There is no seeming}\}$ form a partition, your expectation of your future evidential probability is $0.95 \times 0.8 + 1 \times 0.2 = 0.96$. There is a mismatch between your current evidential probability in *No deceit* and your expectation – as judged by your current evidential probabilities of your future evidential probabilities.

The kind of violation of Reflection described seems particularly egregious. In effect, you violate not only Reflection, but *Dominance*:

Dominance

Ceteris paribus, if it is evidentially certain that no matter what evidence you will have in the future, the evidential probability for p will be above some value r , then your current evidential probability for p is above r .

The “*ceteris paribus*” clause is needed to rule out, for instance, cases of losing of evidence. At least a first-stab diagnosis of what seems so problematic about the oomph view is that it easily leads to violations of *Dominance*: you now know that no matter how things will seem to you in the future (even if they don’t seem any way at all), you will have increased evidential probability that you are not undergoing deceptive seemings.

We should note that the oomph view does not *entail* violations of *Dominance*. Consider the fact that if we change the above example so as to make it evidentially likely enough for the subject, prior to experiencing the relevant seemings, that she will undergo no seeming whatsoever at t , *Dominance* can be respected. For instance, if we keep everything else fixed, but assume that she is 0.6 confident that she won’t have a seeming at t , then her prior evidential probability for *No Deceit* will be 0.96. Her expectation of her future credence is 0.98. This example still involves a violation of *Reflection*, but at least the subject isn’t evidentially certain that no matter what evidence she gains at t , she will have increased evidential probability in *No Deceit* at t , since should she undergo a seeming that p_i , her evidential probability for p_i will only be 0.95. But even if the proponent of oomph could rig the rational priors, case by case, in such a way as to avoid *Dominance* failures, the strategy doesn’t have much plausibility. In particular, it seems to require the rational prior function to assign a fairly high probability to the possibility that one will experience no seeming whatsoever, and it is difficult to see the rationale for this.

Even if the oomph theorist is pressed to admit violations of *Dominance*, it is not clear that this is in itself a damning concession, for we think that a plausible case can be made that *Dominance* is false. In particular, certain cases involving uncertainty about one’s evidence lead to violations of this principle. However, such violations have a distinctly different structure from those created by the oomph view. It is worth spending some time contrasting the kinds of violations of *Dominance* created purely by the oomph view, and those that have their source in uncertainty about one’s evidence. The kind of view we have in mind that seems to lead to violations of both *Reflection* and *Dominance* is a natural development of that defended by Williamson (2000), on which a subject’s evidence consists of the totality of propositions she knows. However, we need not assume $E=K$, as long as evidential updating takes the form of ruling out worlds or cases (for instance, the form of conditionalization), and there can be uncertainty about one’s evidence.

Consider cases with the following simple structure. At a slightly future time t_2 you might be presented with either a yellow, orange, or red object. The colour of the object will be randomly determined by a chancy process. Moreover, your abilities of colour discrimination will differ depending on the colour of the object. If the object is yellow or red, you will have fairly poor abilities of colour discrimination; if it is orange, your abilities of colour discrimination will be normal.

<i>Colour of object:</i>	<i>Yellow</i>	<i>Orange</i>	<i>Red</i>
<i>Discrimination:</i>	Poor	Good	Poor
<i>Cannot rule out:</i>	Y, O	O	O, R

When presented with either red or yellow, you cannot sufficiently well discriminate between that colour and orange, though you can tell it is not the member of the triad furthest away in the colour spectrum. Meanwhile, if presented with orange, you can tell it is neither yellow nor red. Moreover, you know these facts about your discriminatory capacities.

Dominance fails in the kind of case described, for you know, in advance, that no matter which object you will be presented with, your evidential probability that it is orange will increase. What we have, in effect, is a general recipe for creating *Dominance* failures: find a “sweet spot” case such that in no case can you rule out being in that case, but in every case you can rule out some things in such a way as to increase the evidential probability that you are in the sweet spot case. The example involves no losing of, or possibility of losing of, evidence: you are certain that your future self will be better informed by having more evidence – though, at least in some possible future evidential scenarios, you won’t know exactly what your evidence is. For instance, if the object you are presented with is either yellow or red, you won’t be able to rule out being in a different evidential scenario from the one you are in, since you won’t be able to rule out the possibility that you are looking at an orange object – and, therefore, that you have evidence making it certain that the object you are looking at is orange.

Our main aim in this appendix has not been critical – our central concerns about a Jeffrey-style phenomenal conservatism are voiced in the main text. We have rather tried, as sympathetically as possible, to portray certain potential merits of the oomphy development of the Jeffrey framework, and to make vivid certain structural affinities between that approach and Williamson’s framework. That said, one line of attack against the oomph view flows naturally out of the above discussion, albeit one that we lack the space to pursue in detail. As we see things, one can substantially soften the blow of dominance violation in the Williamsonian setting by reminding oneself that the relevant cases crucially involve epistemically possible ignorance about one’s evidence (at the time one possesses the evidence). (It is important to emphasize that while these cases involve epistemically possible ignorance about one’s evidence, they need not involve actual ignorance. Suppose one knows the relevant facts about one’s discriminatory capacities. Then, if one is presented with an orange object, one will know that one knows that it is orange, and so there will be no evidential uncertainty about one’s evidence. Still, prior to being presented with an object, it is epistemically possible that the object will be either yellow or red, in which case there will be uncertainty about one’s evidence). But in the oomphy setting described, that way of softening the blow is not available. Insofar as dominance violation can only be tolerated insofar as it is grounded in ignorance about evidence, the oomph view is in trouble.

APPENDIX B: The Dynamic Keynesian Model

One issue some authors have with Bayesianism is that neither Bayesian nor Jeffrey updating can get off the ground without a prior probability function, a function that already encodes all facts about evidential relationships. One might think that such frameworks are too inflexible, for they cannot be used to model learning about evidential relationships themselves; moreover, one might find it strange that rational agents should assign probabilities to various propositions in the absence of any evidence.ⁱ One might worry, then, that many of the objections we have raised are an artefact of an unwelcome feature of the Bayesian model, namely committal priors.

Here is not a place to evaluate or defend Bayesian views about priors, but it is instructive to briefly discuss a less committal alternative that still operates with probabilistic tools. Weatherson (2007), drawing on work by Yalcin (2007), discusses what he calls the *dynamic Keynesian model*. In this model, the credal state of an agent is represented not by a single probability function, but by a set of probability functions – a *representor*. New evidence then plays two roles. The first role – one that is the key feature of this model – is that some of these probability functions are discarded. This is modelled by a function U (which we can call the *discard function*) that “takes two inputs, a representor and a piece of evidence, and returns a representor that is a subset of the original representor” (Weatherson 2007, 178). Second, each probability function in the representor, insofar as it survives, updates by standard Bayesian conditionalization.ⁱⁱ On Weatherson’s vision, the rational agent will be maximally uncommitted in the absence of any evidence whatsoever: any probability function that assigns 1 to a priori certainties and which is probabilistically coherent gets to be in the representor.

What is the character of the discard function? Weatherson provides some vague guidance: “The effect of U is to shrink our representors to sets of probability functions which are broadly speaking epistemically appropriate to the kind of world we are in.” (p. 182). But he demurs from saying anything very systematic. Indeed, it is crucial to his vision that we do not try in advance to provide a detailed formal model for how U works, since if we were able to do that, we could see in advance of getting evidence which elements of the representor would be discarded and which not: “The whole point of the model is that we can only learn which propositions are supported by certain evidence by actually getting that evidence. If we could say just what U is, we would be able to know what was supported by any kind of evidence without getting that evidence.” (p. 181)ⁱⁱⁱ

ⁱ Weatherson (2007).

ⁱⁱ Insofar as evidence is propositional and each proposition updates by classic Bayesian conditionalization, each probability function will evolve to 1 on any evidence proposition. But one could of course combine the apparatus with a Jeffrey conception of evidential updating.

ⁱⁱⁱ It is worth noting that on an E=K approach, a distinctive spin on dynamic Keynesianism is available. We can take the idea that one learns about evidential relationships at face value as a thesis about knowledge, and thus think of one's entire body of evidence at a time as including knowledge about what the permissible priors are (or perhaps what the unique permissible prior is). One begins with no knowledge about the permissible

There is thus no general characterization of the discard function to use as our guide. Still, we can see what U would have to be like in order to be friendly to *Standard Phenomenal Conservatism*. Consider the example of two sticks seeming to be exactly the same length. Let us think through what an update would have to look like, on the dynamic model, in order for the proposition that they are the same length (*Match*) to end up as probable. The initial representor will include probability functions that assign low probabilities to *Match* conditional on *Seems Match*, ones that assign middling probabilities, and ones that that assign high probabilities. For *Standard Phenomenal Conservatism* to be vindicated, the discard function must take an initial evidential input of *Seems Match* and the representor prior to *Seems Match* to a subset that only includes those prior probability functions in the ur-representor that assign above .5 to *Match* conditional on *Seems Match*. But this is quite a strange way for the representor to evolve. A prior probability distribution that assigns low probability to *Match*, and decent probability to *Seems Match* conditional on *Close* seems to be eminently respectable at the outset. Why should merely learning *Seems Match* serve to eliminate it? It is strange to think that this mere seeming should make one confident that a dart's hitting the exact middle conditional on its hitting the board, or that perfect match with sticks is to be expected. And it also seems strange to think that such a seeming would by itself render unacceptable initial probability functions that reckoned *Seems Match* on *Close* to be not all that unlikely. In short, while the dynamic Keynesian framework indeed affords a good deal more non-committalness at the level of priors, a development that vindicates phenomenal conservatism seems very eccentric indeed (and hardly one that is 'broadly speaking epistemically appropriate to the kind of world in which we live'). The simple Bayesian model of the stick case was structurally revealing. Assuming that the relevant seeming can happen, it leaves an uncomfortable pair of options: refuse to have high conditional probability of *Close* conditional on *Match or Close* or else reckon *Seems Match* conditional on *Close* to be fantastically unlikely. The uncomfortable menu of options survives in the current framework.

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priors, one's representor including all probabilistically coherent distributions, and then, as one acquires new evidence, the representor is narrowed to those functions that, for all one knows, are permissible. Here we can say quite clearly how U works: survival in the representor is a matter of compatibility with what one knows about which ur-priors are permissible, though we will not be able to know in advance what will be discarded, since we will not know in advance what we will later know about permissible priors. It is a further question of course whether the representor, so conceived, is normatively important – an issue we will not get into here.

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