Reply to Ori Beck

The Rationality of Perception thesis is that both perceptual experiences and the processes by which they arise can be rational or irrational. A prime example of a process that can modulate the rational status of the mental states they produce is inference. If perceptual experiences can arise from inference of this kind, then the Rationality of Perception is true.

Beck takes for granted that a subject's perceptual experience could result from an inference only if the subject herself did not perform the inference. ("*I* plausibly cannot draw these experience-producing inferences. Only my subpersonal subsystems can (perhaps) draw them.") His assumption is the negation of a thesis that entails the Rationality of Perception. None of Beck's observations speak to whether his assumption is correct.

Many different phenomena are labeled by the term of 'inference', and only some of them redound well or badly on the rational standing of subjects who perform the inferences. Why think that perceptual experiences could in principle be conclusions of inferences that redound on the subjects' rational standing? At a minimum, what's needed to answer this question is an account of why nothing in the nature of either inference or experience precludes the possibility that experiences can be conclusions of inferences.

My paper makes the case that nothing in the nature of experience precludes this possibility. To show that nothing in the nature of inference precludes it, either, it's useful to focus on inferences to belief that do not include conscious deliberation. In taking for granted that experiences couldn't possibly result from inferences, perhaps Beck is assuming that inference always arises from conscious deliberation, and fixating on the fact that we can't explicitly deliberate our way to perceptual experience. I agree that we can't, but not every inference takes that form. In fact, few inferences do.

If Vivek forms the belief that the clerk at the Post Office is kind, just from observing her brief interactions with the person ahead of him in line (and without his visual experience presenting him with the property kindness), he need not be able to specify the reasons why he concludes that the clerk as kind. He may never have been able to specify any such reasons. It is enough for inference simply to respond to information (or misinformation) one has in the distinctively inferential way.

Vivek ends up with the belief that the clerk is kind and that his audience likes him via processes that feel passive to him (or that don't feel like anything at all), but are in fact inferences that he performed. From the case of memory color, we know that perceptual experiences can in principle (and perhaps in fact) result from stored generalizations, such as that banana-shaped-and-textured things are yellow, that combine with incoming information about a scene. Nothing in the nature of inference precludes analyzing such processes in terms of inference that redound well or badly on the subject. And analyzing them that way can explain why the epistemic power of experiences is sometimes reduced by their relationship with the psychological precursors that influence them.

Reply to Raja Rosenhagen

Rosenhagen asks whether there could be a world Z in which "hijacking is a ubiquitous phenomenon". Since experiences are hijacked in having a specific content, a first way for hijacking to be ubiquitous is for every experience to be hijacked with respect to some of its contents. A second way for it to be ubiquitous is for there to be a class of experiences, such as color experiences, such that all experiences in that class are hijacked. I'll interpret Rosenhagen's scenario in this second way. Here is an illustration.

In the Z-world, things are colored in much the same ways they're colored here. The sky is blue, strawberries are red, and so on. Perceivers native to the Z-world (Z-perceivers) have perceptual experiences that attribute colors to things. And their color experiences often correspond to the true colors of things.

Despite often being accurate, Z-perceivers' color experiences are hijacked because they are primarily explained by background beliefs, and not by the impact on the perceivers's minds by the colors of things. Z-perceivers believe that the colors things have reflect God's outlook on those things. This theory began as willful deception by people who wanted to rule the Z-world in its early days, and thought the populace would be more governable if they believed in such an omnipresent God. The theory was culturally transmitted in a way that preserved its ill-foundedness.¹

Z-perceivers are highly opinionated about what God's outlook is. According to Zperceivers, tables are brown when and because God feels neutrally about them, strawberries are red because God thinks they should be noticed, the sky is blue because God thinks it should recede, bananas are yellow because God thinks they will illuminate things, and so on. Z-perceivers have beliefs like these: "God thinks strawberries are meant to be noticed" and "God thinks the daytime sky is meant to recede". These beliefs, in turn, have come to play a role in generating their color experiences. They believe that God thinks strawberries are meant to be noticed, and things meant to be noticed tend to be red. Due to these beliefs, when they see strawberries, they end up with color experiences that present those strawberries as red. The pale green parts of unripe strawberries look redder to the Z-perceivers than the pale parts of unripe blueberries, even when those parts are the same shade of pale green.

Rosenhagen's three questions about "ubiquitous hijacking" can be applied to the Zworld. His first two questions are, first, whether ubiquitous hijacking is coherent, and second, whether the ability of experiences to provide justification depends on the scope of perceptual hijacking. Granting for the sake of argument that a single color experience E would be epistemically weakened by being hijacked by

¹ On the difference between well-founded and ill-founded cultural transmission, see *The Rationality of Perception*, chapter 10.

someone's beliefs about God, would the fact that such influences on color experiences in general are pervasive make any difference to the E's epistemic powers?

On the face of it, there is no reason why the epistemic downgrade of E would disappear, just because other color experiences are perceptually hijacked in the same way. Once it's granted that the experience is downgraded by virtue of its relationship to the beliefs about God and color, the facts about whether other color experiences stand in similar relations to similar beliefs seem irrelevant.

If color experiences in the Z-world in general are downgraded by their relationship to the beliefs that subjects of those experiences have about God and color, then the Z-world is a skeptical scenario in which color experiences do not provide justification for the corresponding beliefs about the colors of things. Unlike skeptical scenarios in which experiences are influenced by a force outside the subject's mind, such as an evil demon, in the Z-world, the crucial influences come from inside the subject's mind.

Since the factor responsible for the epistemic downgrade comes from the perceiver's own outlook, it could in principle be removed by adjusting that outlook. For instance in the Z-world, if the perceivers gave up their ill-founded beliefs, then the crucial factor leading to perceptual hijacking would be gone.

Rosenhagen's third question, when applied to the Z-world, concerns the epistemic role of hijacked experiences in revising these beliefs. Perhaps Rosenhagen has in mind a scenario like this: the offending beliefs about color could be rationally revised, only by relying on color experience. But if the color experiences are precluded from supporting rational revision, then Z-perceivers would face an epistemic start-up problem. They could not rationally revise their color beliefs in a way that would end the hijacking, because that revision would have to depend on hijacked experience. Perhaps Rosenhagen is worried that revising the offending beliefs would replace one set of irrational beliefs with another.

Ubiquitous hijacking is a skeptical scenario where the skepticism can come to an end if the perceiver's outlook is appropriately adjusted. Rosenhagen gives no reasons to think that this start-up problem would necessarily stymie the evolution away from ubiquitous hijacking. Z-perceivers could rationally shed the offending beliefs by gaining evidence against the existence of the Z-world God, and this change of belief wouldn't rationally rely on color experiences. Or they could be subject to collective permanent amnesia about God, and thereby cease to have the offending beliefs. There may be other skeptical scenarios stemming from the configuration of perceivers' own minds that those perceivers can't evolve out of. But if there are, that predicament would stem from specific circumstances of hijacking, not from ubiquitous hijacking itself.

Reply to Declan Smithies

Let p be the proposition that there's mustard in the fridge. In Smithies's scenario, the perceiver has reason to believe that he has reason to believe p. The ground for the higher-order reason is the perceiver's belief that conditions are normal. This higher-order reason is at least partly misleading, because the experience is hijacked, and thereby does not contribute to his reason to believe p, and so conditions are not normal.

Smithies's perceiver also has reason to believe (2). Claim (2) entails $\sim p$, and I'll assume with Smithies that the testimony supporting (2) also supports believing $\sim p$.

Smithies argues that when combined, the two pressures he describes makes it rational to infer the conjunction of (1) and (2). He then argues that since believing this conjunction could never be reasonable, the prediction that it is reasonable is absurd. He blames the absurd prediction on the thesis that experiences can lose epistemic power from perceptual hijacking.

The conjunction of (1) and (2) is a form of (4): p but it is reasonable to believe ~p. Smithies argues that instances of (4) are always unreasonable, but this claim seems to have counterexamples. If you believe p but acknowledge reason to believe otherwise, as people sometimes do in philosophical discussion, then an instance of (4) could be reasonable to believe. Conjunctions of form (4) differ from standard Moorean conjunctions, whose problematic nature arises from the first-personal nature of belief and assertion.

Even granting Smithies's assumption that it's not rational to infer conjunction (3) from its conjuncts, nothing in Smithies's scenario predicts that the inference would be reasonable to draw. Several factors could make the inference unreasonable, consistently with Smithies's scenario.

First, supposing that my belief that conditions are normal gave me reason to believe (1), absent testimony supporting \sim p, why think that it would continue to do so, once I received such testimony? Perhaps the testimony gives me reason to think that conditions aren't normal after all.

Smithies may be imagining a case in which, absent perceptual hijacking, we'd favor experience over testimony. If we'd favor experience over testimony absent hijacking, on this view, then it could be reasonable to do the same, even with hijacking, purely on the strength of the belief that conditions are normal. The trouble is, as he sees it, that the rational force of testimony is not at all weakened, either by the belief that conditions are normal, or by the higher-order belief in (1) that Smithies says it supports.

This brings us to the second factor that could make the inference unreasonable. Smithies assumes that the pressures from (1) and (2) do not weaken each other. He assumes that they are mutually normatively insulated. If they are not so insulated, then either pressure could weaken the other, and that would make it unreasonable to draw the inference in their conjunction. Here's how.

According to some philosophers, even when it is misleading, higher-order reason that you have reason for p exerts some normative pressure to believe p. This view is analogous to the idea that evidence of evidence is evidence. When this view is applies to Smithies's scenario, the higher-order reason for (1) is also (backdoor, non-perceptual) reason for p.

On this view, the higher-order reason and the testimony in Smithies's scenario exert conflicting normative pressures, in either of two forms (or both). In the first form, the testimony pressures the perceiver to believe $\sim p$, so when combined with the higher-order reason, the perceiver is simultaneously pressured to believe p and to believe $\sim p$, which someone could do only on pain of irrationality. In the second form, testimony pressures the perceiver *not* to believe p, so when combined with the higher-order reason, the perceiver *not* to believe p, so when combined with the higher-order reason, the perceiver is simultaneously pressured to believing p and not believing p, which is logically impossible.

If you have reason to believe that p, but also have reason to believe $\sim p$, you don't thereby have grounds to infer (p& $\sim p$). From the fact that absent reason to believe $\sim p$, you have reason to believe p, it doesn't follow that given reason to believe $\sim p$, your reason to believe p survives.

In Smithies's scenario, by giving the perceiver reason to believe p, the higher-order reason also gives him reason to back off from $\sim p$. He thereby ends up with reason not to infer the conjunction. He'd have reason to infer the conjunction, only if the opposing normative pressures were mutually normatively insulated. It's this insulation thesis that's responsible for predicting that it's rational to believe a supposedly problematic conjunction. The conjunction won't be rational to infer if at least one of the opposing normative pressures is weakened by the other. The culprit is the insulation assumption, not the thesis that perceptual hijacking weakens the epistemic power of experience. That thesis does not entail the insulation assumption.

Reply to Mazviita Chirimuuta

In two ways, the Rationality of Perception thesis is discontinuous with the inferentialist tradition that Chirimuuta identifies.

First, it does not entail the empirical hypothesis that perceptual experiences are actually formed by inference. It says they could be so formed. By contrast, the inferentialist tradition consists of theories about the nature of perceptual processing, often focusing on localized processes, such as calculating shape from shading, distance from visual angle, or edges from light contrasts.

Second, my thesis concerns the kind of inference that redounds on the perceiver's rational standing, whereas much of the inferentialist tradition has no theoretical need to distinguish between that kind of inference and other kinds.

Given these differences, my position is not a platitude for the inferentialist tradition. Even if inferences culminating in perception used the same cognitive mechanisms as those used in epistemically appraisable inferences between non-perceptual states, it wouldn't follow that the inferences to perception redound on the subject's rationality. It's not in general true that sameness of cognitive mechanism entails sameness of normative status.²

Perceptual hijacking is defined in terms of failing to give perceptual inputs proper weight and giving too much weight to prior outlooks. Chirimuuta highlights three cases she calls describes as hijacking that nonetheless redound well on the perceiver, by the lights of her Basic Bayesian approach.

In her first case, Vivek's belief that people like him is properly reflected in his perceptual experience because the faces in the audience were poorly lit. Chirimuuta is assuming that if the faces are poorly lit, then it is reasonable to rely more heavily on the prior assumptions about what they look like. But given this assumption, this situation is not a case of hijacking. In perceptual hijacking, prior outlooks are given too much weight, whereas in this example, by Chirimuuta's lights, they're given proper weight.

In Chirimuuta's second case, Vivek's prior belief is initially unwarranted, but this status is insufficient for producing an irrational perceptual experience. Being unwarranted doesn't make a prior any less fit to determine the content of experience, according to Chirimuuta's Basic Bayesian approach, because what matters is whether the prior is updated in response to new evidence. But it's natural

² For instance, if episodic memory of crossing a finish line used the same cognitive mechanisms as my imagining crossing the finish line, my memory can justify my belief that I crossed the finish line whereas my merely imagining it cannot.

to assume that Vivek's belief got be unwarranted in the first place because he was insensitive to evidence that supported a more measured view. His kind of belief is not an arbitrary start-up assumption of a learning system. It's the product of responses to his environment. In addition, if we accepted Chirimuuta's description of the case, then as before it wouldn't be perceptual hijacking (and therefore it wouldn't be rational hijacking), since the prior belief can properly determine the content of experience.

The substantive issue Chirimuuta raises is whether the outputs of inference in her second case redound well or badly on Vivek, when his prior belief is unwarranted. Chirimuuta's verdict that the perceptual output redounds well on him is counterintuitive. Suppose I consider you incompetent at something that matters to us both because I haven't got a close look at what you can do, and I unjustifiedly assumed your were incompetent before I could observe your actions. The fact that I will update my belief over the long run may vindicate my practices of belief adjustment, but does not stop my belief as it stands from being unjustified. Chirimuuta's Basic Bayesian theory of rationality may be more plausible for belief dynamics over the long run than it is for local transition to belief or perception.

Chirimuuta's third case draws on the idea that if Vivek's belief's impact on perception keeps his performance anxiety in check, then it is Bayes-rational because it facilitates his goal of performing by sustaining his self-conception. Assimilating this kind of prudential consideration to epistemic appropriateness blurs the distinction between epistemic and practical rationality, and that conflation has implausible consequences. If it will facilitate my sense of superiority to you to perceive you as dangerous, that does not make my prior belief that you are dangerous epistemically rational, even if believing that facilitates my goals. Some philosophers try to assimilate epistemic rationality to practical rationality, but they acknowledge that they have a lot of explaining to do (Rinard 2017).

Chirimuuta recommends Basic Bayesian as more nuanced account of perceptual hijacking. But the Basic Bayesian notion is less nuanced than standard epistemologies that distinguish between epistemic and practical reasons for belief, and between the epistemic status of beliefs at a time and the epistemic status of cognitive dispositions to adjust beliefs.

Reply to Alison Springle

I pointed to beliefs that are unadjustable by deliberation to support my claim that adjustability by deliberation is not necessary for being rationally evaluable. I concluded that the fact that perceptual experiences are so unadjustable doesn't preclude them from being rationally evaluable.

Springle claims that my route to this conclusion entails that "perceptual experiences will win the status of possessing epistemic charge at the cost of being systematically irrational". Here she seems to reason as follows. If unadjustability by deliberation makes a belief irrational, then unadjustability by deliberation of experiences would

make them irrational. I reject this reasoning. It assumes that beliefs and experiences are similar with respect to all the factors that can explain why they might be unadjustable by deliberation. Nothing in the reasoning forces that assumption. And it seems false.

Springle objects to my appeal to pathological beliefs as examples of rationally evaluable states that are also unadjustable by deliberation. What makes those states beliefs, she thinks (assuming that the delusional states in question really are beliefs), is that they belong to a class of states that are adjustable by deliberation when they're not pathological. "[W]ere [the delusional beliefs] non-deviant they *would* be so adjustable", she writes. But how would this show that these beliefs aren't both rationally evaluable and unadjustable by deliberation? Springle seems to grant that delusional beliefs have both features. And that is all that matters, if we want to know whether rational adjustability is necessary for belief.

Springle suggests that what makes beliefs beliefs is that they are normally adjustable by deliberation. A related idea is that what makes beliefs rationally evaluable is that they are normally so adjustable. Applying this idea to delusional beliefs, the result is that those beliefs are rationally evaluable only because normal beliefs are deliberatively adjustable.

At this point two questions arise. First, (i) is this hypothesis about the ground of rational appraisability of belief correct? Second, (ii) if it is correct about belief, must an analogous hypothesis be correct about perceptual experience as well? If so, then perceptual experiences would have to follow the same pattern: they'd have to be rationally evaluable only if normally they are so adjustable. And if they were unadjustable by deliberation, that could only be because they are pathological.

Regarding (i), examples abound of normal beliefs that are not adjustable by deliberation, due to the limited capacities of the believers, such as a young child who concludes from the fact that their coat is being removed from the hook that their babysitter is going to bring them to the playground. Cooperation with a caretaker's gentle urgings is as close to deliberation as young reasoners come. This observation is a reason to think that the hypothesis is incorrect.

In reply, someone might propose that what makes this belief rationally appraisable is that *other* normal beliefs are adjustable by deliberation. But why are those other beliefs the ones whose status as adjustability or unadjustable makes it the case that *any* belief is rationally appraisable? A more plausible idea is that the child's beliefs are rationally appraisable because *the child* is rationally appraisable. But that more plausible idea does not justify including beliefs among the rationally appraisable states while excluding perceptual experiences.

I've argued against the hypothesis that beliefs are rationally evaluable only because normal beliefs are adjustable by deliberation. This brings us to question (ii): even if the hypothesis were correct, would an analogous hypothesis about perceptual experience have to be correct as well? There's reason to think not. Rational appraisability need not have a single ground. It might be surprising if the ground of rational appraisability for beliefs and experiences were completely disjoint. But a belief's property of being adjustable by deliberation might bring with it other properties that are shared by experience, such as belonging to an overall outlook of the subject and belonging to a rationally appraisable subject, where those properties help explain what makes a state rationally appraisable.