

A hesitant defense of introspection

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Published online: 5 June 2013
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Abstract Consider the following argument: when a phenomenon P is observable, any legitimate understanding of P must take account of observations of P; some mental phenomena—certain conscious experiences—are introspectively observable; so, any legitimate understanding of the mind must take account of introspective observations of conscious experiences. This paper offers a (preliminary and partial) defense of this line of thought. Much of the paper focuses on a specific challenge to it, which I call Schwitzgebel's Challenge: the claim that introspection is so untrustworthy that its indispensability for a genuine understanding of the mind only shows that no genuine understanding of the mind is possible.

Keywords Introspection · Phenomenology · Cognitive science · Context of discovery · Context of justification

1 The epistemic indispensability of introspection

Zoologists who study zebras pay close attention to the impact of zebras on their environments, the environment's own impact on zebra populations, various correlates and indicators of zebra presence, and so on. But in constructing their theories of zebras, zoologists use not only observations of zebras' causal traces, conditions of zebras' presence, and zebra correlates. They also use observations of zebras themselves. Indeed, given that it is possible to observe zebras, it would be folly for zoologists to refuse to take into account observations of zebras in constructing their theories of zebras. When studying leptons, we must construct our theories without taking into account direct observations of leptons, since we *cannot* observe the leptons themselves. But given that we *can* observe zebras, it would be

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perverse to construct our theories thereof without taking zebra observations into account. More generally, whenever we *can* observe a type of phenomenon, it is perverse to insist on developing our understanding of it in complete disregard of our observations of tokens.

This general principle has immediate implications for our understanding of the mind. If *some* mental phenomena can be observed, it would be very odd indeed to insist on bracketing all such observation in developing our mature understanding of the mind. It is of course controversial whether we *can* observe any mental phenomena in something like the sense in which we can observe zebras. There is a tradition, going back at least to Locke, that considers introspection a kind of inner observation, whereby some mental phenomena are observed in much the same sense in which zebras are observed. This tradition has been under sustained attack for much of the twentieth century. Nonetheless, I have argued elsewhere (Kriegel 2011a, Ch. 1) that it is fundamentally correct: introspection does afford us a sort of observational contact with (some) conscious experiences.¹ If so, the following argument suggests itself:

- (1) When a phenomenon P is observable, any legitimate understanding of P must take account of observations of P.²
- (2) Some mental phenomena—certain conscious experiences—are introspectively observable. So:
- (3) Any legitimate understanding of the mind must take account of introspective observations of conscious experiences

This is an argument for what one might call the *epistemic indispensability* of introspection.

It is possible to resist this argument by rejecting the observational model of introspection (Premise 2), but as noted I have defended it elsewhere. Another option is to deny the general principle that observation is crucial to our understanding of observable phenomena (Premise 1). It might be claimed, for example, that the principle holds only where the relevant type of observation is minimally trustworthy, and that introspective observation is not even that. One might be tempted to read Schwitzgebel (2011) as pressing this sort of challenge to the epistemic indispensability of introspection. A more accurate interpretation, however, is that Schwitzgebel concedes this epistemic indispensability but concludes from it that a scientifically respectable understanding of the mind must be beyond reach, given that introspection is so utterly untrustworthy. The main goal of this paper is to address this challenge from Schwitzgebel (§3). Before doing so,

¹ The argument is too complex to rehearse here, but the broad outlines are as follows. In a first stage, I argue for a certain asymmetry between our ascription of experiential mental states to ourselves, on the one hand, and our ascription of mental states to others and non-experiential states to ourselves, on the other. In a second stage, I argue that the best explanation of this asymmetry is that we have direct observational contact with our own experiential mental states but not with any other mental states. For details, see Kriegel (2011a), pp. 9–43.

² Let us say that an understanding of P is legitimate just when it is constructed or arrived at in an epistemically responsible manner. There is also the question of what is meant by an ‘understanding’ of a phenomenon. I propose that we think of this as a substantial conjunction of theoretical (i.e., not entirely observational) claims about a phenomenon that may or may not amount to a *theory* of the phenomenon.

however, let me consider a more straightforward objection to the above argument: that introspection cannot be epistemically indispensable given that cognitive science has flourished without it (§2).

2 Introspection and cognitive-scientific practice

To my mind, there are two problems with the idea that cognitive science is doing fine without introspection. The first is that it is not doing fine. The second is that it is not doing without introspection. It is a familiar comment—though admittedly a controversial one—that cognitive science has met with limited success when it comes to phenomenal consciousness.³ This is the sense in which cognitive science is not doing fine without introspection, and I will not belabor the point here. Let me focus rather on my claim that cognitive science is not doing without introspection to begin with.

To appreciate the enduring role of introspection in cognitive science, let us start with the distinction, often attributed to Reichenbach but present already in Bolzano (1837, §15), between the ‘context of discovery’ and the ‘context of justification.’ A dramatic example is provided by the German chemist Friedrich Kekulé’s discovery of the molecular structure of benzene. The evidence Kekulé (1865) cited in justification of his model of benzene had to do with isomers, derivatives, and so on. But a quarter-century later Kekulé recounted that his initial discovery was due to a daydream in which he ‘saw’ a snake biting its own tail. Clearly, in this case, the manner in which the model was discovered is irrelevant to the manner in which it is justified. Thus the contexts of discovery and justification can come apart, even if typically the gap between them is not this dramatic.

My claim in this section is that even *if* introspection has been purged from the context of cognitive-scientific justification, it certainly continues to underlie large segments of research in the context of cognitive-scientific discovery. In fact, significant portions of modern cognitive science strike me as based on introspective discovery paving the way to non-introspective justification. Often the scientist, being a reflective introspector, experiences an initial introspective insight into some psychological phenomenon, and on its basis forms a hypothesis; s/he then proceeds to devise experimental tasks that ingeniously use exclusively third-person measures (often reaction times) to generate non-introspective evidence for the introspectively formed hypothesis.

A fine example of this is Roger Shepard’s seminal work on imagery and the phenomenon of mental rotation (Shepard and Metzler 1971). That we use mental rotation of private images to compare shapes of objects imaged is of course what introspection teaches. The ingenuity in Shepard’s research was to devise an experimental paradigm in which pairs of similarly shaped but differently oriented three-dimensional ‘objects’ with varying angles of putative rotation were to be

³ According to many, there are principled reasons for this limited success. For example, Chalmers (1995) has argued that while standard cognitive science is suited to explain structure and function, the phenomenon of phenomenal consciousness is not exhausted by structure and function. Other diagnoses are possible.

judged for similarity by subjects. The fact that subjects took longer to judge the shapes to be similar when the angle of putative rotation was greater suggested that these subjects were indeed engaged in mental rotation. Thus the purely 'objective' (read: third-person) measure of reaction time served to ratify what was already known on the basis of 'subjective' (first-person) introspective impression.⁴

A more recent example is Vilayanur Ramachandran's ingenious demonstration of number-color synaesthesia (Ramachandran and Hubbard 2001). Ramachandran used panels of numerals printed in a way that made it difficult to distinguish different numerals. Normal subjects took significantly longer to identify incongruent numerals than number-color synaesthetes, to whom the incongruent numerals presumably appeared incongruently colored. Of course, that number-color synaesthesia exists we know on the basis of synaesthetes' introspective reportage since at least the nineteenth century (see Galton 1880). But Ramachandran's reaction-time-based demonstration had the advantage of purging appeal to introspection in ratifying this knowledge.⁵

From casual observation of cognitive-science conferences and colloquia, my impression is that this sort of gambit is pervasive in vision science and throughout cognitive (neuro-)psychology. Scientists often devise ingenious experimental designs that circumvent explicit appeal to introspection, but the original hunch underlying the research is founded on personal introspection.⁶

It is an open question just how far cognitive science would get if it purged introspection not only from the context of justification but also from the context of discovery. Suppose cognitive science insisted, from its inception, not only on devising non-introspective justification of introspectively formed hypotheses, but also on exclusively non-introspective hypothesis formation. In fact, consider a possible world otherwise like ours but where cognitive scientists lack (and always have lacked) any introspective capacities. My own suspicion is that we would be shocked to find out just how skeletally poor the scientific understanding of the mind is in such a world.⁷ If so, the role of introspection in our own scientific understanding of the mind is greatly underrated in the 'official narrative' about cognitive science. For the gap between the state of our knowledge and understanding and the state of

⁴ This is a case in which the scientist uses his or her own introspection to form the relevant scientific hypothesis. As we will see in the next paragraph, this is not always the case.

⁵ Here the scientist is using others' introspective reports to form his or her hypothesis—unlike the case of the Shepard experiments, for example.

⁶ In fact, often an introspectively *obvious* claim is established in such a third-person way, so that no real increase in humanity's knowledge is effected in the process: the entire purpose of the exercise seems to be to showcase the scientist's ingenuity in devising a task that allows for the relevant third-person measure of what was already introspectively manifest. I am tempted to say that the operative goal of cognitive-scientific research is thus not always to increase our understanding of the mind; often it is rather to devise increasingly ingenious introspection-purged ways of ratifying ('legitimizing') knowledge we already have. In saying this, however, I assume that introspectively formed beliefs can qualify as knowledge, which means that they can qualify as epistemically justified. This may of course be rejected by the opponents of introspection.

⁷ Sadly, however, I am unsure how to go about arguing for this grim suspicion.

knowledge and understanding in that counterfactual world is owed entirely to our implicit ('unofficial') use of introspection.

To conclude, the claim that cognitive science is doing fine without introspection is doubly problematic: not only for its insistence on the success of cognitive science when it comes to phenomenal consciousness, but also for its suppressed assumption that cognitive science conducts its business without appeal to introspection. I have presented a (somewhat subversive!) picture of cognitive science according to which appeal to introspection is rife in cognitive-scientific research, though at the level of discovery rather than justification. My contention is that introspection is not only epistemically indispensable, but also not really dispensed with in cognitive-scientific practice.

3 The reliability of introspection: schwitzgebel's challenge

Whatever the case for the operative role of introspection in cognitive science, the greatest challenge to the legitimacy of that role is surely that introspection is simply feeble and unreliable. For if it is, it would be irrelevant whether or not introspection is dispensable or dispensed with. An understanding of the mind founded upon it would be thoroughly discredited, regardless of whether a better alternative is available. Thus Schwitzgebel (2011, p. 118) writes: "[I hold] that the introspection of current conscious experience is both (i) possible, important, and central to the development of a full scientific understanding of the mind and (ii) highly untrustworthy, at least as commonly practiced." Here Schwitzgebel does not deny that appeal to introspection would be indispensable for anyone who wishes to produce a scientifically respectable understanding of the mind. Rather, he puts in question the attainability such a respectable understanding, in light of the 'untrustworthiness' of introspection. Call this sort of challenge to the use of introspection in understanding the mind *Schwitzgebel's Challenge*.⁸

To be sure, there is a long philosophical tradition of over-trusting introspection. In its strongest form, this tendency can be articulated as a conjunction of two converse theses, one asserting the *perfect reliability* of introspection and one the *omnipotence* of introspection. According to the first, introspection is *infallible*:

(II) If subject S introspects having phenomenology P, then S has P.⁹

According to the second, introspection never misses anything that passes within its purview, rendering phenomenology *self-intimating*:

(SI) If subject S has phenomenology P, then S introspects having P.

⁸ As I have presented a detailed critical discussion of Schwitzgebel's (2011) sustained argument for his untrustworthiness claim elsewhere (Kriegel 2011b), I will restrict myself here to a more general response to Schwitzgebel's Challenge, endeavoring to articulate a position on the trustworthiness of introspection that is neither so pessimistic as to undermine legitimate appeal to it in cognitive science nor too sanguine to be plausible.

⁹ Needless to say, in this formulation (and all sequels) 'introspect' is used as a non-factive verb. In other words, the claim is not meant to be trivial. If one cannot hear 'to introspect P' as non-factive, we would have to introduce the notion of 'seeming-introspection' and the claim would have to be reworded thus: If S seemingly-introspects having P, then S has P.

The conjunction of II and SI casts introspection as perfectly trustworthy. We may call the conjunction *introspective dogmatism* (or perhaps *introspective maximalism*, since it portrays introspection as maximally powerful).

Unfortunately for all involved, introspective dogmatism (or maximalism) is highly implausible. Introspection is far from perfectly reliable and far from omnipotent. However, the fact that introspection is not maximally trustworthy does not show that it is thoroughly unreliable and/or entirely impotent.¹⁰ For our present purposes, what matters is whether introspection could be shown to be *minimally justificatory*, that is, have the least demanding epistemic properties that would be needed for it to play a legitimate role in the context of justification (and not just discovery). This requires that we identify these minimal epistemic properties, concerning both reliability and potency.

On the side of reliability, plausibly what is required for introspection to be minimally justificatory is that it enjoy *above-chance reliability*. To a first approximation, we may formulate the claim as follows:

(ACR) If subject S introspects having phenomenology P, then S is more likely to have P than if S does not so introspect.

On the side of potency, meanwhile, being minimally justificatory would plausibly require that introspection enjoy *non-negligible potency*:

(NNP) If subject S has phenomenology P, then S is more likely to introspect having P than if S does not have P.

Let us call the conjunction of ACR and NNP *introspective minimalism*. I contend that introspective minimalism, or something very much like it, would resist extant criticisms of introspection, while also undergirding the legitimacy of appeal to introspection in *justifying* hypotheses about consciousness. Something stronger than minimalism may yet be true, but the truth of minimalism would suffice to legitimize introspective appeal. Importantly, minimalism is so weak that it is very likely to be indeed true. Thus to make the case for introspective minimalism is effectively to meet Schwitzgebel's Challenge.

Suppose, for instance, that introspection turns out to be as trustworthy as our sense of smell, that is, as reliable and as potent as a normal adult human's olfactory system.¹¹ Then introspective minimalism would be vindicated. Normally, when we have an olfactory experience as of raspberries, it is more likely that there are raspberries in our immediate environment (than if we do not have such an experience). Conversely, when there are raspberries in our immediate environment,

¹⁰ Consider the following view, which we may call *introspective skepticism*, and which can be factorized into these two theses: (a) A subject S introspecting phenomenology P is no indicator of S having P; (b) A subject S having P does not tend to make S introspect P. The conjunction of (a) and (b) casts introspection as entirely untrustworthy. But of course, nothing in the implausibility of introspective dogmatism supports the plausibility of introspective skepticism. More plausibly, the right view is somewhere in the middle, casting introspection as usefully but not awesomely trustworthy.

¹¹ I remind the reader that here I assume without argument a broadly perceptual model of introspection (but am fully aware that such a model requires defense).

it is more likely that we would have an olfactory experience as of raspberries (than if there are none). So the 'equireliability' of olfaction and introspection would support introspective minimalism. Such equireliability is highly plausible.

It is worth noting that introspective minimalism can be refined in various ways. Thus, ACR and NNP do not explicitly contain any quantifiers, suggesting that they are intended as doubly universal, applying to *all* subjects and *all* phenomenologies (all values of S and P). This may turn out to be too strong. Perhaps it would be wiser to restrict these claims to normal subjects normally circumstanced. For it may be that under conditions of cognitive overload, or in psychologically malformed subjects, introspecting a phenomenology does not increase the probability that the phenomenology is in fact present (and/or the presence of a phenomenology does not increase the probability that it be introspected).¹² Likewise, there may be reasons to exclude certain special types of phenomenology from ACR and/or NNP. That is, various 'exemptions' may need to be carved. For example, according to many phenomenologists, a person's field of consciousness typically involves a 'fringe' or 'margin' that contributes to one's overall experience very lightly and unimposingly.¹³ Arguably, however, fringe phenomenology cannot in principle be introspected, since introspecting it would render it focal rather than fringe.¹⁴ Likewise, consider the phenomenology of experiential immersion or engrossment, such as a basketball player experiences when 'in the zone.' This phenomenology of engrossment may also be non-introspectible, insofar as turning one's introspective attention onto it would require taking a step back from it, so to speak, disrupting its characteristic feelings of rightness and flow.¹⁵ More generally, there may be a class of phenomenologies whose very essence requires the absence of introspective attention; we may call these (doubtless sub-optimally) 'elusive phenomenologies.' If so, ACR and NNP would probably need to be restricted to the complement class of non-elusive phenomenologies.¹⁶

Taking into account the just-discussed restrictions, we would obtain the following doubly refined thesis of introspective minimalism:

(RIM) For any (normally circumstanced) *normal* subject S and any *non-elusive* phenomenology P: If S introspects having P, then S is more likely to have P (than if S does not so introspect) & If S has P, then S is more likely to introspect having P (than if S does not have P).

¹² Thanks to Jay Garfield for pressing me on this.

¹³ As I sit in front of my laptop and visually experience it in an attentive and focused manner, I am also aware, much more peripherally and as it were almost imperceptibly, of the tactile sensation of soles of my shoes, a low-humming anxiety about a looming appointment with a plagiarizer, and so on.

¹⁴ For fuller discussion of this idea, see Kriegel 2009, Ch. 5.

¹⁵ According to Annas (2008), this phenomenology of flow is in fact the experiential signature of virtue: what it is like to be a virtuous agent is to enjoy this un-conflicted, un-bifurcated phenomenology of flow. If so, the phenomenology of virtue itself may be non-introspectible.

¹⁶ There may also be a class of extraordinarily esoteric phenomenologies (say, the phenomenology of sky-diving, if such there be) that for one reason or another evade clear introspection. If so, ACR and/or NNP might need to be restricted to relatively ordinary phenomenologies, the kinds of phenomenology most of us experience routinely.

Other restrictions may be called for upon closer examination. Still, the fully refined minimalist thesis would very likely be non-trivial yet in a position to undergird the legitimate scientific use of introspection not only in the context of discovery but also in the context of justification.

4 Objections and replies

One form of objection to introspective minimalism, refined or not, is to produce a counterexample. This would require identifying a circumstance involving a (normal) subject and a (non-elusive) phenomenology, such that the subject's having that phenomenology does not probabilify her introspecting it and her introspecting it does not probabilify her having it. Certain intense emotions might serve here. When one is infuriated with X, one tends to be consumed by one's fury. One's rage thus does not dispose one to introspect one's phenomenology of fury, which introspecting would require a certain degree of detachment. This puts in question *any* kind of self-intimation in the phenomenology of fury or rage.¹⁷

There are several possible responses to this sort of objection. First, one may deem that in virtue of its consuming quality, the phenomenology of fury is precisely an elusive phenomenology in the above sense, and is therefore outside the scope of RIM. Secondly, while the phenomenology of fury may not dispose one to introspect it, it may still make it more probable that one introspect having it than if one did not have it at all.¹⁸ Finally (And more controversially), it is worth remembering the distinction some introspectionists have drawn between direct and indirect introspection (Titchener 1912): the former occurs simultaneously with the introspected; the latter occurs later and involves an element of memory. Even if the phenomenology of fury does not dispose one to enjoy direct introspection of it, arguably it does dispose one to enjoy indirect introspection of it.¹⁹

Another traditional objection targets the *replication* of introspective 'findings.' Introspective disagreements about standard phenomenal experience are rife, and there appears to be no procedure for moving beyond any initial disagreement. More than anything, this was the behaviorists' most fundamental and most effective criticism of introspectionist psychology.²⁰

¹⁷ Thanks to Eric Schwitzgebel for pressing this objection on me.

¹⁸ The question is not whether feeling infuriated makes it more likely that one introspect fury than that one not introspect fury; it is whether feeling infuriated makes it more likely that one introspect fury than not feeling fury does. Thanks to Brie Gertler for making this clearer to me.

¹⁹ Admittedly, however, this may stretch the notion of introspection beyond what the proponent of introspective minimalism would want.

²⁰ Watson (1913, p. 163) writes: 'Psychology, as it is generally thought of [i.e., by introspectionists], has something esoteric in its methods. If you fail to reproduce my findings, it is not due to some fault in your apparatus or in the control of your stimulus, but it is due to the fact that your introspection is untrained... In [the natural] sciences a better technique will give reproducible results. Psychology is otherwise. if you can't observe 3–9 states of clearness in attention, your introspection is poor. If, on the other hand, a feeling seems reasonably clear to you, your introspection is again faulty. You are seeing too much. Feelings are never clear.'

In addressing this objection, it is important to distinguish two claims: that introspective judgments are not replicable in principle, and that they are not replicable in practice. The in-principle claim is surely too strong to be plausible. For one thing, introspective agreements greatly outnumber the disagreements, we just take them for granted.²¹ More speculatively, it is hard to imagine that lifelong phenomenal duplicates would encounter many introspective disagreements. If so, it may be the great variation in, and complexity of, individuals' conscious life (hence of the phenomenological facts about them) that leads to phenomenological disagreements.

This complexity and variety does raise the specter of in-practice irreproducibility, which poses a genuine challenge to introspective appeal in cognitive-scientific practice. There are two potential approaches to it that ought to be pursued, however. One, pursued vigorously by *fin-de-siècle* introspectionists, involves systematically honing subjects' introspective abilities, in the hope that greater introspective competence would lead to eventual convergence of reports. The thought is that accurate and attentive introspection is actually fairly difficult, especially when subtle phenomenology is concerned, and introspective disagreements are often due to performance failure. Once we apply the performance/competence distinction to introspectors, and make sure to cull data from only the most competent introspectors,²² introspective disagreements will be limited; or so it is predicted. Notoriously, however, in practice even highly demanding introspective training did not eradicate disagreements among introspectionist psychologists.²³ The other potential approach to the problem, then, is to focus on reports not by subjects with introspective expertise, but by subjects with particularly vivid phenomenology. The thought here is that the vivacity of experience would render it more readily and accurately introspectible, making otherwise subtle phenomenal nuances more manifest to subjects, who in consequence will encounter fewer introspective disagreements; or so, again, it is predicted. This approach was not pursued by introspectionists, and requires much preliminary work on criteria of phenomenal vivacity and other issues.²⁴ But it is worth trying all the same.²⁵

²¹ On the whole, there is virtually no disagreement on whether the sense of taste has a distinctive phenomenology, whether phenomenal pink is experientially more similar to phenomenal red than to phenomenal blue, whether the phenomenology of toothache feels unpleasant, and so on.

²² These would be rigorously trained subjects. Just as one's sense of smell can be developed so that one becomes a 'nose'—i.e., an expert smeller—so one's introspective faculty can be developed so that one becomes an expert introspector.

²³ Thus, Titchener and his students all maintained that competent introspection reveals that there are no imageless thoughts, while Külpe and his students all maintained that it reveals that there are. The two labs also disagreed on the number of introspectively simple experiential elements in our stream of consciousness: Titchener required 42,415; Külpe managed with only 11,000. Such disagreements, and their persistence across labs, has suggested to many that the introspective judgments of rigorously trained subjects may lie downstream of their prior theoretical commitments. This too points in the direction of the second approach to the problem at hand, which approach I sketch in the second half of the paragraph.

²⁴ It also requires that some assurances be produced that such particularly vivid experiences are still otherwise representative of the type of phenomenology they betoken, that is, that they differ from other experiences *only* along the dimension of vivacity.

²⁵ For more detail on, and an application of, this approach, see Kriegel forthcoming, appendix. In relevant research I have attempted to study the phenomenology of freedom by closely examining dozens

A very different objection is that introspective minimalism already represents a major departure from pre-theoretic 'naïve' optimism about introspection. For example, the folk view considers introspection *easy*: if one experiences a certain phenomenology, one is expected to effortlessly appreciate that this is so.²⁶ Likewise, the folk tend to be highly *confident* in their introspective impressions, apparently regarding introspection as relatively close to infallible, at least in ordinary circumstances. The folk view is thus much closer to introspective maximalism than minimalism. To that extent, introspective minimalism represents a revisionary approach to folk psychology here.²⁷

My response is twofold. First, I am sometimes tempted to question the account of folk psychology just sketched. The account casts introspective confidence statements as truth-apt descriptive ones: 'I am highly confident that what I am feeling right now is frustration' is taken to attempt to represent an observer-independent fact of the matter. But for many occurrences of such statements expressivism seems more accurate than descriptivism. Charles Siewert once pointed out to me that our privileged access to our phenomenology is a ('the'?) central source of our sense of dignity as separate, inviolable, self-possessing individuals.²⁸ This is why telling someone what they *really* feel, overriding their own claims about what they feel, often seems *morally* and not just *epistemically* wrong. Conversely, being told what one really feels over one's protestations tends to elicit moral rather than epistemological indignation. The full case for this would have to be prosecuted elsewhere, but my suspicion is that the ethos of first-person authority is rooted in this sort of respect for the inviolable dignity of the other. If so, the primary function of 'I am highly confident that what I am feeling right now is frustration' may be to assert one's authority over one's own internal life, that is, to *demand* dignity and respect. This suggests a picture of introspective confidence judgments as primarily in the business of *demanding*, not *describing*. That is, it suggests that despite their surface grammar, they should not be treated as descriptive truth-apt statements. It is wrong, then, to suppose that folk psychology assumes that introspection is easy and confidence-imbuing—though the surface grammar of the relevant segment of the folk-psychological discourse does encourage that interpretation.

Footnote 25 continued

of unsolicited reports on their subjective experience by released and escaped prisoners, liberated and manumitted slaves, and concentration camp survivors. These are all subjects whose phenomenology of freedom is bound to be more vivid and intense than ordinary freedom experience allows for. As I attempt to show, examination of their unsolicited reports reveals surprisingly many recurrent themes and patterns

²⁶ Frustrated with the cacophonous debate on the existence of cognitive phenomenology, Schwitzgebel (2011, p. 128) writes: 'But introspection of current conscious experience is supposed to be easy, right? Thoughts occupied us throughout the week, presumably available to be discerned at every moment, as central to our lives as the seminar table. If introspection can guide us in such matters – if it can guide us, say, at least as reliably as vision—shouldn't we reach agreement about the existence or absence of a phenomenology of thought as easily and straightforwardly as we reach agreement about the presence of the table?'

²⁷ Moreover, the folk view is often inherited by introspection-friendly philosophers, who tend to take their introspective judgment to be *obvious*.

²⁸ This may not have been—indeed, probably was not—exactly how Siewert put it to me.

However, suppose folk psychology *is* committed to a view of introspection that is, upon reflection, unreasonably sanguine. Suppose, that is, that it is in need of revision when it comes to its take on the trustworthiness of introspection. This by itself does not undermine the legitimacy of appeal to introspection in theorizing about the mind. As long as the revision is not so drastic as to put in question something like the refined thesis of introspective minimalism, introspection enjoys the minimal reliability and potency required for its legitimate use.

In fact, cognitive science can partly *illuminate* why our introspective grasp of our inner world can be expected to be considerably weaker than our perceptual grasp of the external world. It is well-established that much of our perceptual grasp of the external world relies on calibration of information from different perceptual modalities.²⁹ Our observation of our internal world, however, is restricted to a single source of information, and not the most powerful to begin with. I have speculated above on the equireliability of introspection and olfaction. Imagine a race of creatures whose perceptual contact with the external world is limited to a sense of smell (as powerful as ours). Its perceptual grasp on the external world would be doubly weaker than ours: it would lack information from more powerful senses (such as vision), and it would lack the ability to calibrate information from multiple sources. Its perceptual grasp on its environment would consequently be much shakier than ours. It would parallel, I contend, our introspective grasp on our own internal world.

5 Conclusion

To conclude, much of our disappointment with introspection may be owed to undue expectations. In fact, all that is needed for introspection to be cognitively-scientifically valuable is (a) that introspecting a phenomenology would make it more likely that one is having the phenomenology than not introspecting it, and (b) that having a phenomenology would make it more likely that one introspect the phenomenology than not having it. This minimal requirement for usefulness is very plausibly met by our introspective faculty. Given that introspection affords us observational contact with our mental life, this means that introspection is in fact epistemically indispensable for any mature understanding of the mind. For it would be perverse to attempt to understand a phenomenon we can observe with minimal reliability in disregard of our observation thereof.

Acknowledgments For comments on a previous draft, I would like to thank Eric Schwitzgebel. This paper has benefited from fruitful exchanges with Will Leonard, Rachel Schneebaum, Eric Schwitzgebel, Charles Siewert, and probably many others. It has also benefited from a presentation at the 2012 Pacific APA meeting. I would like to thank the audience there, in particular Jay Garfield and Brie Gertler.

²⁹ Observe how unconfident you become of what you see when you are listening to loud music while biking, or of what you hear when you are wearing dark sunglasses.

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