Little or No Experience Outside of Attention?

Russell T. Hurlburt and Eric Schwitzgebel

Some of the things [Hurlburt] says suggest he thinks that it is fairly common for DES subjects to believe correctly they just saw and were looking at something, even while lacking visual experience *entirely*. More astonishingly still, he suggests that they (and we) are ordinarily actually like this for much of our day. For if I usually don't have visual experience while reading and talking, it's unclear to me when I do – but surely it can't be *very often*. Hurlburt's view of visual experience is radically "thin." (**Siewert**, *** ref)

When a subject denies that an experience of a certain sort occurred on a particular occasion, it may be that, as a result of the limits of attention, the subject has simply overlooked an experience that was present but not prominent. As a result, *negative* introspective reports should be accorded much less weight than positive reports. (**Hill**, *** ref)

Hurlburt tells us that the vast majority of his subjects deny the richness of their inner experience. In general, a sampled moment contains only one or a few experiences at a time. Schwitzgebel is skeptical. For the fact that randomly sampled reports are mostly sparse is consistent with richness plus quick fading. Although this is conceivable, we don't think that the suggestion is a plausible one. For in that case one would at least expect subjects to report that they have the *sense* that there was a lot more going on, but they can't remember what. (**Engelbert and Carruthers**, *** ref)

ERIC

In H&S¹ and in Schwitzgebel (2007) I expressed an inclination toward the rich view of experience, according to which, for example, we have constant tactile experience of our feet in our shoes and constant visual experience of the scene before our eyes even when our attention is directed elsewhere – though I endorsed that view with a substantial helping of doubt. Several of our commentators address the issue. **Charles Siewert** finds it incredible to suppose that we often entirely lack visual experience. **Mark Engelbert and Peter Carruthers**, in contrast, accept a thin view according to which inner experience is relatively sparse. **Christopher S. Hill** views the question as open, but argues that negative results (the denial of experience) should be accorded much less weight than positive results (the assertion of experience).

In more recent work (Schwitzgebel, in press) I find myself more even-handedly skeptical, in part because I feel the force of **Engelbert and Carruthers**'s criticism of my view. I find especially interesting their argument

Carruthers contra the rich view rt & Schwitzgebel (2007), the target book of this symposium. Items in bold face refer to contributions appearing in this symposium: bold face names identify authored contributions; bold face titles refer to contributions written by Russ and or Eric.

about "iconic memory" as a possible explanation of why those of us intuitively attracted to the rich view might think we have sensory experience of unattended events. My favorite example here is the chiming clock tower: You are paying no attention to the clock tower until you hear the fourth chime. Immediately after you hear the fourth chime you count back chimes in memory and correctly conclude that there have been four. But does this show that you experienced those first three chimes when they occurred? Not necessarily. As **Engelbert and Carruthers** say, information from those chimes will have been processed to some degree and might still be "reverberating" in some nonconscious memory system; as soon as attention is directed to the matter, that information might become conscious for the first time. I'm not endorsing that view; but neither do I feel comfortable dismissing it.

Engelbert and Carruthers's positive argument for the thin view, that people don't report having a sense that a lot was going on, I find less convincing. Some people do report such a sense, I've found, when questioned directly about it. And as I mentioned in H&S (Ch. 10.3), I think that the Descriptive Experience Sampling (DES) interview situation creates pressures against reporting richness: DES explicitly focuses on what is central, subjects may have the sense that reports on what is peripheral and not swiftly considered after the beep may not have much value, and asking for about six samples conveys the expectation that each sample shouldn't normally take more than about ten minutes to discuss. And Engelbert and Carruthers are more sanguine than I about the accuracy of introspection if they think that the theory-laden retrospective judgments of subjects who lean toward a thin view (or who are nudged, as I think DES does nudge them a bit, toward thinnish reports) should count as evidence strong enough to dismount a proponent of a rich view.

Here's why I think the issue is important: If the rich view is correct, then consciousness is very abundant. That should have a big impact on any general theory of consciousness – on any theory of the functional role of consciousness and of the kinds of brain structures in which it's instantiated. If the thin view is correct, then consciousness is sparse, with a consequent impact in the opposite direction on theories about the functional role and brain structures of consciousness. Or maybe experience is moderately abundant or moderately sparse. To some people – **Siewert**, perhaps – it seems obvious that consciousness (or visual consciousness specifically) is abundant. To others, I've found, it seems obvious the other way around. Attempts to settle the question by concurrent introspection founder on the possibility of the refrigerator light illusion (e.g., the possibility that attention to whether you have experience in your feet causes experience in your feet, where none was before; H&S, Box 4.18, p. 90). So immediate retrospection seems like the way to go – possibly through DES or some DES-like method, like I tried in my 2007 article. So the question becomes to what extent we should trust such retrospective reports.

RUSS

Imagine the following scenario:

A person named Mark is sitting across the restaurant booth table from his

example: looking without attention

friend/colleague Eric during an APA meeting. The conversation lulls at time t_1 , and Mark looks at Eric's hat, closely inspecting the pattern of its stitching. Mark does indeed have a visual experience of its stitching and pattern. While so looking, Mark overhears a

conversation in the booth behind him, recognizes the voices to be Dan's and David's, and notices that their conversation concerns an evaluation of Mark's own work. Mark is interested in this

seemingly confidential conversation, so he freezes, not wishing to add any creak of the booth or rustling of his own clothing to the ambient restaurant noise, and he strains to hear what Dan is saying to David. During this intent listening, at time t_2 , Mark's eyes happen to remain aimed at Eric's hat (exactly the same hat is projected onto Mark's retinas at time t_2 as at time t_1).

Now suppose that Mark undergoes a state-of-the-art interview about his experience at t_2 . Mark might say that he was entirely absorbed in what Dan was saying to David. If asked about the hat, he might say that *experientially* the hat ceased to exist – that of course in reality it persisted, but his experience of it had vanished. If pressed, he might say that yes, he understands that his eyes were aimed at the hat, but it certainly seemed that he had no experience of it whatsoever.

Now imagine a parallel universe identical to the one just described except that it is a person named Charles, not Mark, who happens to be sitting across from Eric. If asked to report on his experience at t_2 , he might not even think to mention seeing the hat. If pressed, he might say that yes, there probably was some slight or secondary or peripheral experience of it.

It seems to me that *if a state-of-the-art interview has been employed*, we can say the following with substantial confidence:

- 1. Mark had substantial visual experience (of the hat) at t_1 ; same for Charles.
- 2. Mark had little or no visual experience (of the hat or anything else) at t_2 ; same for Charles
- 3. Mark had substantially more visual experience at t_1 than he did at t_2 ; same for Charles.

It further seems to me that *even* if a state-of-the-art interview has been employed, we *cannot* say *any* of these with confidence:

- 4. Mark had *no* visual experience at t_2 ; same for Charles.
- 5. Mark had *a little* visual experience at time t_2 ; same for Charles.
- 6. Charles had more visual experience at t_2 than Mark had at t_2 ; or vice versa.

Perhaps if science can substantially improve the introspection art, the present analysis can be scrapped. But for now, it is not possible confidently to determine whether there is a difference in pristine experience – experience unaffected by beeping or other for-the-subject unusual form of self-examination (see **Clarifications of DES**) – between what one person (say, Mark) characterizes as "seemingly no inner experience" and another person (say, Charles) characterizes as something like "probably a little inner experience." The skilled DES

DES does not try to distinguish "little" from "no" interviewer, knowing that it is practically impossible to tease apart the "seemingly no" from the "probably a little" experience, *does not try* to do so, and therefore settles for concluding that Mark and Charles each had "little or no" experience. If I say, about a DES subject, that she had "no inner experience" of a particular kind at a

particular moment, that is a relaxed (some might say sloppy) way of saying that the subject had "little or no inner experience" of that kind at the time.

By setting aside the distinction between "little" and "no" experience, I am setting aside a distracting issue that we don't (yet) have the tools to address adequately. Instead of trying to distinguish between things that are impossible (or nearly so) to distinguish, I seek instead to distinguish between things that are straightforwardly possible to distinguish (that are easily observed with the right method and skills) but which have been overlooked by those who have not used an adequate method (and by those who have been distracted by trying to distinguish between things that are (nearly) impossible to distinguish). For example, most modern

introspection has overlooked unsymbolized thinking (Hurlburt & Akhter, 2008; though **Siewert**, 1998 is a notable exception) and sensory awareness (Hurlburt, Heavey, & Bensaheb, 2009), despite the DES fact that each occurs in about a quarter of all pristine experiences (Heavey & Hurlburt, 2008). Unsymbolized thinking and sensory awareness are, I think, robust phenomena, close to the center of the experiential target, but paying too much attention to difficult-if-not-impossible-to-distinguish fringes (such as rich/thin and no/little) can cause and probably has caused robust phenomena to be overlooked (Hurlburt, in preparation).

ERIC

I wouldn't entirely disagree with your cautious attitude, Russ, but I think you're missing the merit in **Hill**'s and **Siewert**'s criticisms.

Hill doesn't flesh out exactly what he means when he says that a subject might "overlook an experience that was present but not prominent," so let me develop the idea just a bit further.

Hill on overlooking experiences

At the last undisturbed moment of experience before the beep, there might be *N* different types of experience ongoing. (I'm nervous about counting up types of experience, but I don't think the argument turns on strict countability.) If consciousness is thin, *N* might be one

or a few, or even zero; if consciousness is rich, *N* might be a dozen or more, depending on how finely one individuates experience types. Then the beep occurs and the subject starts reflecting on what her experience was. She will think, first, of one particular experience – say a vivid image. What makes her think first of this experience might depend on any number of competing and co-operating factors, including: the vividness of the experience, her interest in that type of experience, her theory-driven expectation that such experience would be found, the fact that that experience has persisted (or not) into the moment after the beep, environmental cues, the ease with which that aspect of experience is conceptualized, the distinctiveness or appeal of the experience, habits governing what kinds of experience she tends to look for first, and so on. After at least a brief preliminary judgment about the presence of that type of experience, and presumably a few of its features, she will think about another one of the *N* experiences, or she will try to reach a judgment about the presence or absence of some particular type of experience – that is, whether that type of experience was among the *N*. And so on. At some point, probably pretty quickly, she will lose patience or her memory will have faded too much for her to feel like it's worthwhile to continue the process.

On this model of what's going on after the beep, one might expect regular denials of experience of various types, even if the rich view is correct. And since the vividness of the experience is only one factor influencing whether it is noticed, we cannot, I think, assume that the denial of experience implies that the experience was not vivid; we cannot assume (if this makes sense – see my comments on **Siewert** shortly to come) that there was only a "little" of that experience, or that there was "more" visual experience at t_1 than at t_2 in your example. Perhaps big elements of experience are regularly missed simply because they're not the kinds of things that the subject is inclined to look for, or to attend to, in the moment immediately after the beep. Thus, I'm inclined to agree with **Hill** that we should be especially cautious about negative reports.

RUSS

Eric, I agree that DES may overlook some types of experience, perhaps including some important types and perhaps including many types. But that is true of *all* forms of introspection,

iterative procedure reduces risk of overlooking and I think arguably *less* damning for DES than for other introspections because of the iterative and collaborative nature of DES (see Clarifications of DES). Consider Michael J. Kane's lack of inner speech in the DES sampling he did for this symposium.

Mike believed about himself, prior to sampling, that he "spend[s] a lot of time 'in my head', thinking about personal, political, and professional issues via inner-speech and inner-seeing simulations of events and exchanges" (*** ref). However, sampling revealed *no* confidently apprehended inner speech. Here is Mike's sample that includes his *most* confident report about inner speech:

<u>Sample 3.1</u> Mike is walking from his office to the bus stop and has three simultaneous aspects of his experience:

- 1. He has a sensory awareness of the pink of a crape myrtle bloom against the slate-gray of the building behind it. The pink was "popping" at him. He is confident that his focus was on the *contrast between* the pink and the gray. That is, his experience was pink-against-gray, not merely of strong pink that happened to be against a gray background.
- 2. He is innerly hearing the chorus from Paul Simon's "Mother and Child Reunion," apparently just like hearing it on the CD. As best he can tell it is an accurate rehearing, probably including the accompaniment, but he is focused on the singing, not the accompaniment. However, he is confident that it's not like an *a cappella* version of the song it sounds just like the original, as far as he can tell. This phenomenon is clearly an inner *hearing*, not a *speaking*.
- 3. He has little confidence about this third aspect: he thinks he was innerly talking to himself, or maybe hearing himself talk, but he's not sure. The topic was how to explain the beeper's earpiece to his neighbor Wesley if Wesley stops, as he sometimes does, to pick Mike up at the bus stop and give him a ride home. Mike had the sense that he was "just missing" catching fragments of a conversation he imagined having with Wesley, but he couldn't apprehend the words at all. He is pretty sure that the general topic was what to say about the earpiece (*** ref).

The question here is whether Mike is experiencing inner speech about (or to) Wesley in sample 3.1; I think it is not possible to answer that with confidence. Maybe Mike experienced clear inner speech but forgot it when beeped. Maybe Mike experienced only a very vague inner speech which was overrun by the clear sensory awareness. Maybe he experienced an intimation of inner speech but not speech itself. Maybe Mike's presupposition of frequent inner speech led him to believe he experienced a hinty inner speech when none is there. About this particular sample, we must concede that we can*not* tease those alternatives apart with confidence.

Consulting your list of factors, Eric, Mike's inner speech is just the kind of experience that Mike should *not* be expected to have overlooked: Inner speech is easily conceptualized; Mike was interested in and expected to find inner speech; it seems strange that he would tend first to consider the sensory awareness of color (about which he had no prior interest) before inner speech; it seems strange that inner speech would evaporate for Mike while it easily

continues to be present for other subjects; and inner speech is certainly distinctive and appealing. That is, the factors you list (except, perhaps, environmental cues, and even they seem likely to wash out across multiple randomly selected occasions) seem to suggest that Mike *would easily* spot inner speech if it were present. I accept, as you say, that surely there are other factors that might be invoked, but your own analysis seems to suggest that the most likely explanation is that Mike had little or no inner speech experience at the moment of this beep.

But more importantly, you and **Hill** seem to overlook that a DES *iteratively refined* report is substantially different from a one-shot (= first-day) report (see the discussion of iteration in **Clarifications of DES** and in Hurlburt, 2009, in preparation). I agree with you and **Hill** that if this were an unpracticed, first-day report, it would be of highly questionable validity.

But in the first sampling interview, Mike and I discussed his seeming lack of inner speech. (*Hmm! I have no inner speech! Is that really possible?!? I was sure I had frequent inner speech! I'll look closer next time!*) On the second sampling day, Mike still did not directly experience inner speech. (*Hmm! That's wild! I'll look* really *closely now!*) Third sampling day; still no inner speech; the closest we get to inner speech is sample 3.1 above.

Now we have a series of what might still be called "negative introspective reports," but these *iteratively refined* negative reports are *not*, as it seems to me, on an epistemological par with the first-day (= one-shot) negative introspective reports. Mike might have simply forgotten to report inner speech (because of the demands of working memory, as **Hill** suggests) on the *first* sampling day, but such a claim seems absurd about Mike's *third* day.

I fully accept that it remains possible that something about the beeping process scares away Mike's inner speech (on the third day as well as on the first day). But if one accepts that possibility, then it seems that one should accept about equally the possibility that the beep *creates* the sensory awareness that dominated Mike's experience on all sampling days. So I conclude that whereas DES reports (as probably all introspective reports) have limitations, iteratively refined negative reports do not deserve less credence than positive reports, and both deserve more credence than one-shot introspections. I don't place great faith in any one report (positive or negative), but instead rely on a randomly generated, iteratively improved group of reports which I continue to collect and examine as long as a particular issue is in play (e.g., Is there inner speech or isn't there?).

ERIC

I like that example, Russ, and for the reasons you suggest I'm inclined tentatively to accept that Mike doesn't have nearly as much inner speech as he expected. However, the factors governing the credibility of the reports might play out differently when it's peripheral sensory experience at issue, especially if the subject is disinclined to expect such experience and the interview is not designed to bring it out. [Russ says: I agree.]

Siewert is critical not only of your use of "no" experience but also of your use of "a

what does a "little" experience mean?

little" experience, and, like **Siewert**, I'm not sure, really, what you mean by "a little" experience. **Siewert** mentions three possible interpretations of what someone might mean by saying she had a little visual experience of something. One possibility is that one had

only a brief glance at that thing. A second possibility is that things looked relatively homogenous and undifferentiated (in the extreme case, like an evenly gray "Ganzfeld") – possibly because of poor lighting or visual defect. A third possibility is that there are few items

that "you can identify in the course of that experience" – for example, only a few of the shapes or patterns in a complex Persian rug that you are appreciating well enough to be able to identify, retrospectively, after the rug has been removed (*** ref). I might add a fourth possibility to **Siewert**'s list: that the size of experienced visual field is small, say ten degrees of visual arc, with blankness outside of that, as opposed to (say) 160 degrees of visual arc.

It seems, Russ, that you must mean something different by "a little" than any of those things. It seems that you are saying that at any particular moment, with respect to any particular part of the visual field or any particular object in the visual field, there is a quantity of consciousness pertaining to it, ranging from zero to a lot, with "a little" in the middle. I see some of the theoretical attractions in this view. For example, it seems doubtful that there is a single moment in evolution or in human development when we suddenly change from experienceless creatures to experiencing creatures. And if that's the case, then there must be some way for it to be a vague or in-between matter whether one has experiences, for transitional creatures; and if that is so for them, maybe it's also so for us, perhaps instantiated in a vagueness or inbetweenness in the perceptual experience of unattended objects. But despite my theoretical attraction to that view I can't wrap my mind around the concept of vagueness in experience. I can only conceptualize experience as on/off, as determinately present or absent. However tiny you make the experience – maybe it's visual experience of plain grayness over half a degree of visual arc, or maybe it's the fleetingest experience of an indistinct form I can say virtually nothing about in retrospect – that experience is either there or not there. I can't seem to conceive of its being a vague or in-between matter whether I had visual experience in such a case or not. While degrees of visually experienced arc is a scalable predicate, as is amount of memorable

experience not scalable?

detail, as is temporal duration, as is degree of homogeneity, I don't see how "experienced" itself is a scalable predicate in that way. I don't see, then, how you can have only "a little" experience of a visual scene, except in one of the ways that **Siewert** and I have

articulated, or a similar way. Either you had some visual experience, or you had none. (See also H&S Box 9.1, pp. 194-195; Antony, 2008.)

I readily admit that this might be a limitation only in my conceptualization of experience, or a flaw in my criteria of conceivability, not reflecting any fact about the world. As I said, it seems plausible evolutionarily and developmentally that there would be a scalable range of vague cases between having visual experience and not having it. But if so, I can't wrap my mind around that.

RUSS

Eric, let me first address one of **Siewert**'s arguments against my "little or none" view, then I will reply to your concern about the coherence of my view.

Siewert says that if a DES subject denies having visual experience, then he wants to ask, "Right before the beep, did things look to you just the way they look to you when you are in a tightly sealed lightless room – i.e., not any way at all?" And he says that he would interpret the subject as denying having visual experience if she said "yes, that's exactly how it was in the moment before the beep" (*** ref). He then states that he would be surprised if a DES subject like Melanie would say this; so he seems to think that DES reports, properly collected, would not provide evidence for the thin view.

I agree that DES reports, properly collected, do not provide evidence for the thin view (nor for the rich view), for the reasons discussed above. But in any case, **Siewert**'s question is a deceptive question, for two reasons. (1.) It implies, probably incorrectly, that Melanie is familiar with the details of her experience in lightless rooms. (2.) It presupposes what experience in lightless rooms is like as if it were a simple thing; but I think it is not at all simple. Certainly there is visual experience in lightless rooms, of blackness, of flashing lights, and so on (in fact, Eric discusses this issue at length in Schwitzgebel, in press, Ch. 8).

Eric, you and **Siewert** apparently imagine that I distinguish three ranges of experience (a lot, a little, and no) when actually I distinguish only two (some, and little-or-no). So I do not think it necessary (or possible) to define what I mean by "a little" because in fact I do not mean *anything* by "a little" separate from little-or-no.

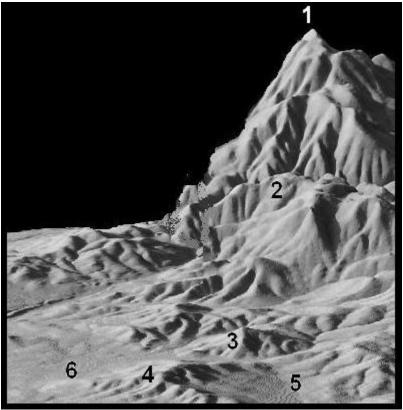
I accept that there are some arenas where a disjunction between "a little" and "no" applies – money, for example. There is an ontological distinction between having "no money" and "a little money": if you have one penny, you are in the "a little money" category (even if it is *practically* indistinguishable from being in the "no money" category). But there are other arenas where terms do not reflect ontological distinctions but instead have limited ranges of

the experiential landscape

convenience – "mountain" for example. How many mountains are there in Figure 1? One reasonable answer is "One – the one labeled '1'." Another reasonable answer is "Two – the one labeled '1' and

the one labeled '2'." Yet another reasonable answer is "Four – the ones labeled '1', '2', '3', and '4'." In fact, depending on the length of your ruler, the closeness of the inspection, and the flatness of the surrounding landscape, answers that range from "one" to "hundreds" can be defended as reasonable. It is *not* the case that there is a region of mountains, another region of little mountains, and another region of no mountains. Instead, there are peaks that everyone would always call mountains, and there are peaks that it wouldn't typically occur to anyone to invoke the term mountains (or, for that matter, not-mountains), not because there are two ontologically distinct landscape types but because the term mountain has a limited range of convenience.

Figure 1: How many mountain peaks?



I take the landscape of Figure 1 to be a reasonable schematic of typical pristine (undisturbed) inner experience, where the height represents salience (whatever that is) and the two horizontal axes represent only that there is more than one dimension where experience might occur. Figure 1 as experience-schematic illustrates that there are a welter of things (potential experiences or "experience-lets") clamoring or competing or jostling or whatever (the peaks in Figure 1) for <salience> (or <experiencedness>, <power>, <focus>, <attention>; I do not claim to know what I'm talking about here; hereafter I'll call it salience for short). I've numbered a few of these experience-lets (1 through 6), but there are hundreds more I could have numbered. At time t, the experience that I have numbered 1 has (for whatever reason) become highly salient - that is, far higher than any of the other potential (or actual but small) experiences. As I have gleaned from hundreds of very careful and iteratively refined interviews, most people, at most pristine moments, experience *one* (or a very few) dominances, and little or nothing else is experienced. Not all people are like this; Fran (H&S, Ch. 2.3.2.1) is a notable exception, as are the bulimic women of Hurlburt & Jones-Forrester (in press). That is, in typical everyday pristine experience, out of the hundreds or thousands of things in the welter of experience-lets or potential experiences that *could* rise to salience, most *don't* get very salient (the peaks don't get very "high") at any given moment.

The picture I'm trying to paint here is of an experiential "landscape" that is, in all its features, constantly changing, more or less like a three-dimensional version of the bars on the equalizer of your stereo. A few moments after the Figure 1 snapshot, peak #1 shrinks and (say) #4 grows dramatically. All the peaks are moving up and down, growing and shrinking, widening and narrowing, more or less independently of each other.

This experiential landscape illustrates why I think trying to distinguish between "rich" and "thin," and between "no" and "a little" is impossible. How many experiences are illustrated in this figure? Answers that range from "one" to "hundreds" can be defended as reasonable. How salient does an experience-let have to be (how high does a peak have to be) before we stop saying "a little experience" and start saying "no experience"? That dividing line is entirely arbitrary. Some would say this schematic gives evidence for "rich" – there are *lots* of peaks. But that ignores that some peaks are *far* higher than others. I can see no way out. My solution has been to try to develop a method that gets all (or almost all) of the 1s and nearly all of the 2s, and accept that it may well overlook the 3s, 4s, 5s, and 6s. Whether that is adequate depends on one's point of view. Most methods of introspection miss many of the 1s (unsymbolized thinking and sensory awareness, for example).

Thus I think **Siewert** has it wrong when he says, "I don't think DES supports—or has any prospect of supporting—the radical denials of [visual] experience suggested by many of Hurlburt's remarks" (ref***). I have not radically denied visual experience. Radical implies absolute, and that is not what I have thought or said. Visual experience is *often* a small peak (like a #3, 4, 5, or 6 in the Figure 1 schematic), or perhaps a number of such peaks, or perhaps no peak at all, far overshadowed by some other non-visual experience (peak #1). Visual experience often exists in the "little-or-no" minorly hillocky flatland along with lots of other experience-lets.

ERIC

Russ, I think you probably mischaracterize the issue when you imply that it's a matter of linguistic choice, like the matter of choosing what to label a mountain peak, given that we agree

difference between actual and potential experiences not a linguistic choice about the actual topology. We don't agree about the topology. And there's a real difference, it seems to me, between *potential* experiences, which are literally unexperienced, and *actual* experiences, regardless how "little" or un-"salient" the latter are. So I might adjust your schematization as follows: There is a threshold height – perhaps a vague and ill-defined threshold – above which

those hillocks are actually experienced and below which they represent only cognitive processes that could be experienced but are in fact not experienced. It is then a difficult empirical question how high that threshold is. Advocates of a thin view say it is very high, so that only one or a few prominences will cross it; advocates of a rich view say it is much lower, so that many prominences will cross it. And as it happens, neither DES nor any other contemporary method shines good light on this issue. People's best concurrent introspections, their best retrospective introspections, and their best general theories of consciousness diverge sharply on the matter, resulting in equally unjustifiable views anywhere from the radically rich to the radically thin, and I see no good way forward.

So it looks, Russ, like you and I agree that a DES-type project can't, at least in the near term, adjudicate the rich vs. thin question. (We weren't sufficiently clear about that in H&S, as **Spener** points out.) So we're left without knowing the answer to a fundamental question about consciousness – or rather, we're left without knowing unless we can justify that answer theoretically, by some means other than concurrent introspection or immediate retrospection. But, like you, I worry that no such theoretical answer is possible. A general theory of consciousness cannot, I suspect, be well justified independently of a prior answer to the question

of how broadly consciousness spreads. If we don't know whether most visual input is conscious or almost none of it is, how can we ground a general theory of visual consciousness?

Possibly, then, there's a tight little vicious circle here, which will frustrate any near-term rich/thin issue possibly irresolvable attempts at a general theory of consciousness: no well-justified general theory of consciousness without prior knowledge of roughly how abundant consciousness is; no knowledge of roughly how

abundant consciousness is without a prior, well-justified general

theory of consciousness. (I develop this argument in more detail in Schwitzgebel, in press, Ch. 6.)

RUSS

Eric, you say that you are amenable to a gradualist theory in principle but simply have trouble self-defeat in trying to imagine unclarity

conceiving of a what it would be to have a little experience. If that's really true, then maybe the following is the root of your problem: It is inherently self-defeating to try to visually imagine, in a clear way, a

vague case of visual experience – sort of like looking down the barrel of a gun to see what a bullet looks like on the way out or, in William James's (1890/1981) famous metaphor, turning up the light quickly enough to see the darkness. The problem is not specific to vision: It is inherently self-defeating to try to imagine in a clear way vague experience. The *trying* does you in. If you have to *try* to observe unclarity in yourself, then you will not be able to observe it because *trying* involves bringing together all your clarity resources and aiming them at the target. It is no more possible to try to observe unclarity in yourself than to try to observe not-trying in yourself. It *is* possible, however, to try to observe not-trying and unclarity in *someone else*. There is no self-defeat in that maneuver.

The problem (which is one reason I oppose armchair introspection; see **Methodological Pluralism**) is that most people, including apparently you, Eric, decline to observe unclarity in others *because they don't see it in themselves*. That is, they unwarrantedly generalize their self-defeat to other-defeat. It's like the opposite of the refrigerator light illusion. You're inside the refrigerator, and you say, "Man, it's dark in here. I can't see a thing. Therefore nobody anywhere can see anything."

I think you could learn to appreciate unclarity in others if you applied yourself assiduously to the task (instead of applying yourself assiduously to arguing against the necessity of the task), and then, perhaps, you could see it in yourself too because you would no longer have to *try* to see it. You would *know how* to see it when it presents itself without having to try.

Here's an example to illustrate how we can find unclarity by starting with others. Doucette, Jones-Forrester, and I have undertaken three DES explorations of the experience of

"tails" in the experience of bulimic women

women with bulimia nervosa. We have observed the phenomenon I call "tails" or "sensed thoughts or feelings: the 'tail' [is] the knowledge present in awareness that the particular thought or feeling was ongoing" (Hurlburt, 1993, p. 125-126). That is, the tail is the

directly-in-experience-but-small intimation that a thought is somehow "parked" or "waiting," while the thought itself is *not* in experience. Eric, you and I don't do this. If we think of *A*, and then for whatever reason turn our attention to *B*, *A* disappears entirely from our direct experience. At some later time, we may again think directly of *A*, and in the meantime some processing of *A* might have occurred. Our bulimic women, by contrast, think of *A*, and then

think of B while at the same time continuing to think, a little bit that is directly in experience, about A.

To grasp the concept of the tail requires the clear distinction between something that is indeed *a little* in experience (the tail), and something about which there is *little or no* experience (the thought itself). My claim in the bulimia studies is that the bulimic women and we *can* make that distinction with confidence.

As a practical matter, I think it is possible to make that distinction *only* if we accept the practical impossibility of distinguishing between a little and none. If we *always* press for the distinction between a little and none when that distinction is practically impossible to make, we will either learn a helplessness in the face of such distinctions or we will allow ourselves to impose a presuppositional (rich or thin) view that obliterates the actual phenomenon.

One final example will illustrate that "just like" is a corollary of our analysis of "little or none." At Melanie's beep 5.1 she described her inner seeing experience as being "just like" her

"just like" means
"little or no
discernable
difference"

visual experience of being in a real car. **Siewert** questioned what that meant, so let me clarify. Suppose I present you with Figure 1 for a second or so and then take it away. Then I present another figure (say, Figure X) for a second or so and take it away. Figure X in reality has basically the same mountain #1 but may have some

discrepancies in details—perhaps the shape of #1 is not quite identical, perhaps #5 or #6 is missing, and so on. I ask you whether the two figures are the same. You might say, "As far as I could tell, Figure X was *just like* Figure 1." The "as far as I could tell" portion of that locution is fundamentally important: It acknowledges that Figures 1 and X may have been different, but if so it was in ways you were not able to (or at least did not adequately) discern. By analogy, when Melanie said that her visual imagery was "just like" real driving experience, I understood her to mean, "as far as I could tell, there was little or no difference between my imagery experience and a real driving experience."

When Melanie is in a real car, there are lots of things ongoing in her inner and outer environment, that is, a welter of experience-lets or potential experiences: seeing the road, seeing the steering wheel, seeing the instruments, feeling the steering wheel, feeling the seat against her back side, hearing the engine noise, hearing the wind noise, smelling the leather, thinking about the appointment she is going to, being angry at her landlord, recalling her birthday party three years ago, seeking a new solution to Fermat's last theorem, and so on. She does not attend to all of the details of all of those experience-lets all the time – out of that welter, one or a few experience-lets become salient (peak 1), while about the remaining potentialities she has little or no experience (3, 4, 5, 6 or even smaller or nonexistent peaks). A bit later some other experience-let will become the high-mountain salience, and mountain 1 will more-or-less vanish (that equalizer bar will shorten into the 3, 4, 5, 6 range). That is, at some moment, her in-the-car experience is predominately visual—seeing the road beyond her hands on the steering wheel and she has little or no experience of anything else, including the pressure of the gas pedal, the smell of the leather, and so on; at the next moment she's angry at her landlord, and she has little or no experience of anything else, including the road, the leather, and so on. At any moment, none of those predominant experiences is a complete experience of being in the car. In fact, Melanie probably never (or at most rarely) has the experience of being in the car. She has a series of experiences that are consonant with being in the car, but "consonant with" is farreaching, extending to landlords, birthday parties, theorems, and so on. So it would not be possible for Melanie to answer compare in detail her imagery experience with her typical driving experience: There is no typical driving experience. Furthermore, there is no reason to believe that Melanie (like most other people) has a high fidelity understanding of her own actual experiences while driving. For example, it is likely that Mike (ref ***) has frequent specific and vivid sensory awarenesses of visual aspects of his surroundings while driving his car, but does not know it (or at least did not know it prior to his DES encounter). People often don't know some important characteristics of their real experience (Hurlburt, in preparation).

differentiating imagining from seeing

Perhaps Siewert would reply that Melanie "can, after all, ... generally tell when she's seeing a traffic light, and when she's just imagining one. And it just may be that part of what makes the experiences distinguishable is that the one in some sense contains a level and type of 'detail' that the other does not." Perhaps so. But I think it likely that there is often

little or nothing about the seeing/imagery experiences themselves that lets Melanie tell whether she's really seeing or innerly seeing a traffic light. Real experience is not as detailed as the real object; imaginary experience is not as detailed as the real object. I think there is no reason to believe that real experience is more or less detailed than imaginary experience. How, then, does Melanie tell that she is only *imagining* being in the car, and is not *really* in the car? The real Melanie is a complex bag of coordinations: one process coordinating her heart rate, another process coordinating the motion of her left foot, another process coordinating her eyeball movement, another process coordinating her smellings, another her hearings, another her secretion of thyroxine, and so on -a huge number of such processes that are to some degree independent, to some degree dependent (sharing the same bones, sinews, blood), to some degree inter-coordinated. All of these are experience-lets; some have the potential for becoming the main-mountain experiences, some (like the thyroxine coordinator) probably don't. When Melanie is in a real car, every one of these is to some degree coordinated with the facticity of being in the car: the heart rate coordinator is attuned to the driving task coordinator, the left foot coordinator recognizes the solidity of the adjacent door, and so on. That is, the heart rate coordinator is attuned to being in the car, the left-foot coordinator is attuned to being in the car. In fact, every fiber of Melanie's being is, more or less closely, more or less directly, attuned to being in the car. But at the moments of most beeps, Melanie would not be particularly interested in her heart rate or left foot coordinator or her smell coordinator, so they would remain in the little-or-no experience realm.

At the actual moment of beep 5.1, Melanie is at her breakfast table. Melanie can tell that she is *imagining*, rather than seeing, the road, because every fiber of her being is attuned, more or less closely, more or less directly, to the facticity of her sitting at the breakfast table, not in her car. Her left foot coordinator, under the influence of the tile floor and the table leg, is not in the slightest duped by her imagining of the road.

So I think it likely that Melanie's ability to distinguish imagining from seeing comes from the complex constellation of Melanie's processes, most of which are little-or-noexperience-lets that are so slight as to be overlooked along with all the other experience-lets that may exist at any given time.

In my view, the stakes of recognizing the difficulty or impossibility of distinguishing little-or-no from no experience are high. I think there are large individual differences in inner experience, many of which are not recognized by current consciousness science. Once science has firmly established those large differences, distinguishing little-or-no from no experience may well be the most important remaining task; but until then, it is a distraction that may well inhibit science's advance.

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