Definitely red

fter decades of quiescence the science of consciousness is enjoying a new lease of life, with numerous research groups devoting their resources to the search for the neural mechanisms underpinning consciousness. Of course, we have been here before. The late nineteenth-century "introspectionists" - Edward Titchener, Wilhelm Wundt and friends - were also looking for the neural basis of experience. Introspectionism, however, died an early death, and with it the young science of consciousness. According to one familiar tale, it collapsed not because it wasn't making headway on the question of how consciousness might be grounded in neural activity, but for lack of consensus about the deliverances of introspection; theorists couldn't agree on the very data that a science of consciousness was meant to explain.

In Describing Inner Experience, Russell Hurlburt and Eric Schwitzgebel address the question of whether the resurrected science of consciousness is doomed to the same fate. Hurlburt's answer is "no", Schwitzgebel's is "quite possibly", and the volume takes the form of a debate between them. Hurlburt is a psychologist who, over a number of years, has developed a method for studying experience called "Descriptive Experience Sampling" (DES). Subjects wear a beeper that is programmed to activate at various times during the day, at which point subjects are required to write down everything that they experienced when the beep occurred. Hurlburt insists that DES, unlike alternative methods, is a reliable method for identifying conscious states. Schwitzgebel, a philosopher, has built an impressive case for thinking that our first-person access to experience

TIM BAYNE

Russell T. Hurlbert and Eric Schwitzgebel

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is not nearly as secure as we tend to think: "the 'inner world' of conscious experience is reflected on only rarely and is known only poorly".

On first appearances, Schwitzgebel's scepticism might seem unmotivated. I write these words sitting in the Jardin des Tuileries. The day is cold and overcast. I have auditory experiences (I can hear the chattering of tourists as they make their way past the pond to the Louvre); bodily sensations (I feel the wind cold against my skin); and visual experiences (I see these words as they appear on the screen before me). Introspection might not be as easy as shooting fish in a barrel, but it doesn't seem to be that difficult, does it?

Schwitzgebel's pessimism is motivated not by the easy cases but by the hard cases. What is the nature of visual imagery? Is it rich, replete with detail about form, orientation and colour, or is it sparse? What is the nature of conscious thought? Is there a distinctive "phenomenology" or subjective character that is unique to thinking, or is there no phenomenology of thought other than that which it inherits from imagery? And what about our overall experience at any one point in time? Is it rich, involving numerous modalities, or sparse, involving at most one or two senses? These questions flummox not only the naive

but also those who have thought long and hard about them; even worse, those who think that they know the answers to these questions give different responses to them. The problem doesn't seem to be that of merely reporting (or conceptualizing) one's experiential state – rather, it seems to be a more basic problem of gaining access to facts about one's experiences.

Enter Melanie, a young woman whose DES reports form the backdrop for the debate between Hurlburt and Schwitzgebel. In many ways Melanie qualifies as the volume's third author, for the core of the volume is constituted by transcripts of interviews in which she elaborates on the experiences that she had at the time of the beep, and responds to the questions put to her by Hurlburt and Schwitzgebel. Hurlburt takes on the role of primary DES interlocuter and part-time advocate of Melanie's introspective veracity; Schwitzgebel, by contrast, adopts the role of the sceptic, generally unconvinced by Melanie's more controversial claims.

The disagreements between Hurlbert and Schwitzgebel are well illustrated by an interview in which Melanie describes herself as experiencing a kind of "rosy yellow glow" while enjoying a humourous thought. Schwitzgebel is not convinced that emotions are accompanied by colour experiences and suggests that Melanie may have been taken in by her own metaphor; Hurlburt, on the other hand, is willing to trust Melanie's introspective report in this matter. And so it goes, back and forth. Readers will not be surprised to discover that by the end of the sixth interview neither Hurlburt nor Schwitzgebel has modified his views to any noticeable degree. Hurlburt remains as committed to DES as

he was at the outset of the project, while Schwitzgebel remains pessimistic about our access to consciousness: "Psychologists and neuroscientists can't simply ask their subjects about inner experience and expect accurate, trustworthy reports representative of how experience transpires in everyday contexts".

Where does this leave the science of consciousness? Although there are certain forms of scepticism we can dismiss, others we ignore at our peril. Schwitzgebel has little doubt that scepticism about introspection belongs in the latter camp: "In every science . . . there is some dispute about what data to credit and dismiss, but in consciousness studies the dissent and divergence are so extreme as practically to cripple the enterprise". I'm not so sure; as I noted, there are easy cases as well as hard ones. I agree with Schwitzgebel that the hard cases are both plentiful and hard - indeed I suspect that they may be even more plentiful than Schwitzgebel thinks - but easy cases are not difficult to locate. Open your eyes and look at a double-decker bus. The fine-grained details of your visual experience may be hard to pin-down, but that you are aware of the bus as red, moving and bus-shaped seems to be beyond doubt.

Exactly how far the science of consciousness might get without worrying too much about the hard cases is a good question, but I suspect that we might be able to get quite a long way. At any rate, I see little reason to suppose that the science of consciousness is currently hamstrung by its inability to settle debates about the phenomenology of visual imagery, thought or emotion, as interesting as such questions are. Instead, the pressing problem of consciousness research concerns our inability to grasp, even in the faintest of outlines, how conscious states of any kind emerge from the grey porridge found between our ears.