A penny for your deepest thoughts

Is it possible to be too aware of our own consciousness? A psychologist and a philosopher teamed up to document inner experience.

By Gary Wolf

Jan. 11, 2008 | A few years ago a psychologist and a philosopher got into an argument over whether we can accurately describe our thoughts. "Yes," said the psychologist; with training and the help of my special technique, we can accurately describe our thoughts. The philosopher doubted it. To resolve their argument, they recruited a young woman who agreed to tell them her thoughts, so that they could argue over whether she was credible.

This is not an episode from a Preston Sturgis comedy, but the actual procedure through which Russell T. Hurlburt and Eric Schwitzgebel produced their remarkable book, "Describing Inner Experience? Proponent Meets Skeptic." The premise is so ludicrous that it might seem impossible for anything to come of it, but this underestimates the skill of the authors, particularly Schwitzgebel, the philosopher, whose talent for straight-faced mischief has been displayed in some of his other writing. For instance, his Web site contains a draft of a recent paper titled "Do Ethicists Steal More Books?" which examines data from leading academic libraries to show that professional ethicists are more likely than other people to behave badly. As Schwitzgebel sums up his research, he found that "contemporary (post-1959) ethics books were actually about 25% more likely to be missing than non-ethics books. When the list was reduced to the relatively obscure books most likely to be borrowed exclusively by professional ethicists and advanced students of ethics, ethics books were almost 50% more likely to be missing."

Schwitzgebel, who is generous as well as rigorous, specifically warns against taking his study as evidence that studying ethics necessarily means you are a bad person. He only means to suggest that we look into it.

Of course, for a great mischief maker to really shine, he must have a foil, and in "Describing Inner Experience?" the role is taken by Russell T. Hurlburt. Hurlburt is not only a psychologist, he is also an inventor, and he has developed a tool to allow us to capture our thoughts in their most raw and immediate form; fresh off the brain, so to speak. The device is a beeper that goes off at random intervals. At every beep, the subject of the experiment makes a note of whatever was passing through the mind at the moment just before being startled into self-awareness. As soon as possible -- preferably within 24
hours -- Hurlburt conducts a gentle but thorough interview, drawing out the details of these reports.

Hurlburt has shown that there is tremendous variety in the type of thinking that people typically do. While folklore has it that we think by means of an "inner voice" that comments upon the world, it turns out that some people have very few words in their thoughts. Instead, their inner experience might mainly consist of images; for others, consciousness is dominated by bodily sensations. The "stuff" of consciousness is far from uniform.

In the book's early chapters, which are academic but accessible, the philosopher and the psychologist declare their positions in advance, outlining them in some detail. In explaining his view that accurate descriptions of inner experience are neither impossible nor trivially easy, Hurlburt shows himself to be a watchful, experienced man, with a certain patient imperturbability. He is a collector of data, and the effect of his work is cumulative. A professor at the University of Nevada, Las Vegas, Hurlburt has been publishing the results of his research for nearly 30 years.

One fears, however, that he will be no match for Schwitzgebel, who is not the type of person to be deterred from doubting by academic respect. In fact, on his philosophical blog, the Splintered Mind, he argues that politeness is a major cause of error: "When we're asked questions about our 'inner lives' ('a penny for your thoughts') or when we report on our dreams, our imagery, etc., we almost never get corrective feedback. On the contrary, we get an interested audience who assumes that what we're saying is true. No one ever scolds us for getting it wrong about our experience. This makes us cavalier..."

Schwitzgebel has no such inhibitions. One of his techniques is to invite victims to imagine a simple scene -- their house, for instance, or the breakfast table where they ate that morning. Then he asks some hard questions: How stable is the image? Does it fluctuate as you think different aspects of the scene, as your attention waxes and wanes, or does it stay relatively constant? Does it have a focal center and a periphery, or is everything equally present all at once? How detailed is it?

Schwitzgebel boasts that with some rather basic interrogation techniques, he can impugn almost any person's credibility as a self-witness. This is entirely believable. Attend to your own mental experience, at this moment, if you'd like to feel the effect for yourself.

Before seeing what happens when the cross-examination of their unsuspecting volunteer begins, it's worth asking whether anything is truly at stake, beyond a demonstration of Schwitzgebel's skill in doubting. In fact, there is. The reliability of introspection is a hot topic in the study of consciousness, and consciousness is a hot topic in science.

In 1950, only five scientific articles in the biomedical literature used the word "consciousness," according to a review by the eminent psychologist Bernard Baars. In 2000, there were 1,400. What happened in the interval was the advent of cognitive
neuroscience, which combined psychological experimentation with new tools to measure activity in the brain. For the first time, consciousness seemed to become accessible to science. This is true in the most literal sense; the link in this sentence is to a commercially available consciousness monitor for judging the depth of anesthesia.

The classic account of the implications of neuroscience for philosophy is Daniel Dennett's 1991 book "Consciousness Explained," in which he argues that humans are complex machines, without any extra something -- soul, mind, spirit or will -- that does not have its basis in our biological components. Dennett's philosophy is summed up by a beautiful motto he later acquired from the Italian philosopher Giulio Giorello: "Yes, we have a soul, but it's made of lots of tiny robots!"

Dennett did not convince everybody right away. His opponents pointed out that to explain something is not the same as to experience it. Consciousness is not outward behavior, but an inner fact. If we built an automaton that imitated humans, it would still not be conscious, as long as nothing within it had been programmed for consciousness. And since consciousness is inward and subjective, how could we possibly learn to create such a program, or be certain it worked?

Well, the cognitive neuroscientists continued their research undaunted, and their skill at examining consciousness grew. There are now countless experiments showing how aspects of consciousness can be measured, manipulated and predicted. Even some psychoanalysts -- surely the most subjectively oriented of psychologists -- have gotten into the act, examining how different types of self-awareness correlate with the biological activity in specific regions of the brain. As the results piled up, the debate over the irreducible subjectivity of consciousness has come to seem increasingly old-fashioned, one of those entangling byways in the history of philosophy that future generations will treat as mere scholasticism.

Enter Hurlburt and Schwitzgebel. Although neither argues on behalf of a non-biological soul, they both find consciousness deeply mysterious. They don't quarrel with the idea that science could explain our inner states, but they wonder what, exactly, these inner states might be. When we say we are conscious, what do we mean? Consciousness seems ineffable when we look at it directly, and equally ineffable when we glance away. Hurlburt has devoted his life to catching bits of consciousness, snagging them with his beeps as they flit by. But Schwitzgebel says, just look more closely and you'll notice: They're already gone.

At the beginning of the book's central section, Hurlburt and Schwitzgebel meet their volunteer. Her pseudonym is Melanie. She is in her 20s, and she has an interest in psychology but no experience in these debates. Hurlburt explains the rules to her: She will simply tell them what was on her mind just before each beep, and they will try to figure out if her reports are accurate.

Hurlburt handles the direct questioning, then turns her over to Schwitzgebel for cross-examination. They have six sessions, each about an hour long. And over the course of
these sessions, something unexpected happens, a novelistic twist that is subtle, hilarious and hard to describe. A battle for interpretive credibility arises, as the doubt Schwitzgebel casts upon Melanie's self-understanding rebounds upon himself.

Typically, in these sessions Melanie makes a report, and Hurlburt helps her flesh it out. Hurlburt does not trust everything his subjects say about their thoughts. His focus is on clarifying their language, focusing their attention upon the proper moment just before the beep, and warning them against false generalizations that might distort the inner view. Schwitzgebel's attacks are quite different.

In one of their sessions, Melanie reports that she was reading a book when the beep went off, and visualizing a scene. She had a picture in her mind of a woman and soldier talking by the side of the road. She reports that the picture was somewhat incomplete -- she couldn't say anything, for instance, about how his legs were positioned.

"How can you be visually imagining some legs without imagining some particular way in which they're positioned?" asks Schwitzgebel. Melanie tells him that she just wasn't concentrating on this part of the image.

Schwitzgebel asks her if the feet she didn't see were occluded by a bush. "No," Melanie replies. And in the middle of his questions, she laughs. Schwitzgebel's expert process of interrogation is supposed to reduce Melanie's confidence, and as the sessions go on she indeed becomes more skeptical -- of Schwitzgebel.

"I hope my skepticism isn't too dispiriting or discouraging, or something like that," Schwitzgebel remarks in a later session.

"Nope," says Melanie, cheerfully.

"You seem to have a skin of Teflon about it, so that's good."

Then Hurlburt piles on. "She doesn't believe a word you're saying, Eric!"

Schwitzgebel and Hurlburt have put the audiotapes of their sessions online. I have listened to them. Schwitzgebel doubts Melanie. She doubts him right back. She laughs, is skeptical, tells him she's not sure what he means. His questions, sensible in form and structure, often seem ridiculous by the time they are spoken out loud. It is not that Melanie is incorrigible. She is perfectly willing to doubt. It is just that she is a participant as well as a subject here. She can't help collaborating in examining her mind.

Often, Melanie reports that at the beep she was not only having an inner experience -- of words, or an image, or a bodily sensation -- but also that she was aware of having this experience. She is simultaneously feeling or thinking, and noticing her feelings or thoughts. Schwitzgebel is skeptical of these multiple levels of experience. He guesses that by interrogating Melanie about how self-analytical she is, they have increased her curiosity on this topic, and damaged her naïveté.
In a side discussion with Hurlburt, Schwitzgebel remarks: "If she is wondering now whether she is generally self-analytical, that may itself create a presently occurring self-analyticity that seems to confirm her theory."

Is Melanie giving herself extra self-awareness, after the fact? Maybe she is. But the "tuning up" of self-reflection under conditions of random beeping is only a problem for those seeking purity in introspective report. For the rest of us it is a chief interest of Hurlburt's method. The random beep is a call to self-awareness. And self-awareness, for the lay reader, is not an artifact but a goal.

There is a famous poem by Chao-pien quoted in D.T. Suzuki's "Essays in Zen Buddhism":

Devoid of thought, I sat quietly by the desk in my official room, With my fountain-mind undisturbed, as serene as water; A sudden crash of thunder, the mind doors burst open, And lo, there sits the old man in all his homeliness.

The discipline of Zen is somewhat foreign to our sensibility now, but perhaps Hurlburt's lowly beeper, accompanied by an uninhibited skepticism and taste for the comic, can perform some of the same work as the old style of ritual contemplation. Melanie, who begins as the subject of these experiments, promotes herself to co-investigator. If, in reading these conversations, you can be seduced into following along, you will naturally become a co-investigator, too, suddenly aware both of the unexpected contents of your mind, and of how much of yourself is not really there.

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