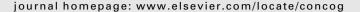
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Unsymbolized thinking

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ABSTRACT

Unsymbolized thinking—the experience of an explicit, differentiated thought that does not include the experience of words, images, or any other symbols—is a frequently occurring yet little known phenomenon. Unsymbolized thinking is a distinct phenomenon, not merely, for example, an incompletely formed inner speech or a vague image, and is one of the five most common features of inner experience (the other four: inner speech, inner seeing, feelings, and sensory awareness). Despite its high frequency, many people, including many professional students of consciousness, believe that such an experience is imposible. However, because the existence of unsymbolized thinking indicates that much experienced thinking takes place without any experience of words or other symbols, acknowledging the existence of unsymbolized thinking may have substantial theoretical import.

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1. Unsymbolized thinking

We believe that anyone who attends with adequate care to everyday experience as it is actually lived moment-by-moment will frequently come across experiences such as these:

Abigail is wondering whether Julio (her friend who will be giving her a ride that afternoon) will be driving his car or his pickup truck. This wondering is an explicit, unambiguous, "thoughty" phenomenon: it is a thought, not a feeling or an intimation; it is about Julio, and not any other person; and it intends the distinction between Julio's car and truck, not his van or motorcycle, and not any other distinction. But there are no words that carry any of these features—no word "Julio", no "car", no "truck", no "driving". Further, there are no images (visual or otherwise) experienced along with this thought—no image of Julio, or of his car, or of his truck. In fact, there are no experienced symbols whatsoever—Abigail simply apprehends herself to be wondering this and can provide no further description of how this wondering takes place.

Benito is watching two men carry a load of bricks in a construction site. He is wondering whether the men will drop the bricks. This wondering does not involve any symbols, but it is understood to be an explicit cognitive process (Heavey & Hurlburt, 2008).

Charlene is planning her introductory statistics lecture, deciding whether to use the U.S. Census Bureau data or the madeup data that she had used in class last semester. She is deciding between precisely those two data sets and is actively trading off the real-worldness of the Census Bureau data (a desirable feature) against the fact that it might take too long to describe in class. Despite the specificity and detail of this experience, there are no words, images, or other symbols involved in this experience.

Dorothy is tiredly walking down the hall dragging her feet noisily on the carpet. She is thinking, if put into words, something quite like, "Pick up your feet—it sounds like an old lady". However, there are no words, images, or other symbols experienced in that thinking. Despite the lack of words, the sense of the thought is very explicit: "pick up your feet" is a more

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accurate rendition of the experienced thought than would be "I should pick up my feet"; and "it sounds like an old lady" is more accurate than "I sound like an old lady".

Those four examples have some features in common, with each other and with thousands of other examples of inner experience from hundreds of people that we and our colleagues have examined over the past 30 years: each is the experience of an explicit, differentiated thought that does not include the experience of words, images, or any other symbols. We have called such phenomena unsymbolized thinking (Hurlburt, 1990, 1993, 1997; Hurlburt & Heavey, 2001, 2002, 2006); this paper seeks to describe those phenomena: how they present themselves, their manner of appearing, and so on.

Heavey & Hurlburt (2008) and Hurlburt & Heavey (2002) showed that unsymbolized thinking is a feature of roughly one quarter of all moments of waking experience, and is thus one of the five most common features of everyday inner experience (the other four: inner speech, inner seeing, feelings, and sensory awareness). Despite its high frequency of occurrence across many individuals, and despite (or perhaps because of) its potentially substantial theoretical importance, many people, including many professional students of consciousness, believe that a thinking experience that does not involve symbols is impossible; in fact, such phenomena are rarely discussed.

2. The appearance of unsymbolized thinking

The Abigail, Benito, Charlene, and Dorothy examples are typical products of investigations using the Descriptive Experience Sampling (DES). DES is described in the Appendix below, and more thoroughly by Hurlburt (1990, 1993), Hurlburt and Akhter (2006), and Hurlburt and Schwitzgebel (2007). Briefly, DES gives a subject a beeper that is carried into the subject's natural environments. At the beeper's random beep, the subject is to pay attention to the experience that was ongoing at the moment the beep began and then, immediately, to jot down notes about that experience. Within 24 h, the DES investigator interviews the subject about the (typically six) sampled moments from that day. Then the sample/interview procedure is repeated for several (typically five) more sampling days. The adequacy of the DES procedure has been discussed by Hurlburt (1993, 1997), Hurlburt and Heavey (2002, 2006), and Hurlburt and Schwitzgebel (2007).

Here is a typical example of the manner in which unsymbolized thinking appears in a DES interview. This verbatim transcript is from a second-sampling-day interview conducted with "Evelyn" by Sharon Jones-Forrester:

Evelyn: I was sitting on the couch watching TV. On the TV there was a commercial for NetZero. And I was listening to the commercial for NetZero, and thinking about, I wonder how much cheaper that is than Cox Cable? [1]. And the pager went off. So it... So as far as I can determine, in my awareness I was holding my coffee mug and y'know kinda wondering to myself, I wonder if Cox...how much cheaper this NetZero *could be* than Cox Cable [2]. And the pager went off.

Sharon: And is that, "I wonder how much cheaper this NetZero is than cable", is that in your awareness just right at that moment?

- E: Um hmm.
- S: And is that in words? Or not in words? Or are you saying that? Or thinking that?
- E: I was just thinking to myself, I wonder, y'know, if this is actually cheaper [3].
- S: And does that "I wonder if that is actually cheaper",... So it's possible to be thinking that in words or not in words, or in pictures, or in... How is that thinking coming to you right at that moment?
- E: [Looking powerless: palms turning slightly up, eyebrows raised, voice uncertain] I think just...just thinking about it. Not thinking in pictures or.... Just thinking to myself, I wonder if it's really that much cheaper? [4]. Because I keep getting bombarded with commercials for it.
- S: And, uh, you're holding the mug.
- E: Um hmm.
- S: Is that in your awareness or is that just kind of a fact of the universe: you're holding it but you're not paying any attention to holding it?
- E: I always pay attention to that mug, because it's crystal, and I usually use it only on the weekends, and I like the way it feels—it's real heavy.¹
- S: And so right at this split second, are you noticing the heaviness or the feel or the...?
- E: [Returns to the powerless tone of expression] It seems like just the thinking of the Cox Cable versus NetZero [5?] is what's... what I was actually aware of.

This is a typical early encounter with unsymbolized thinking by a DES subject. First, note that she gives four (five if one counts the final summary) different accounts of her experience, indicated by bracketed numbers in the transcript and restated here for comparison:

- 1. I wonder how much cheaper that is than Cox Cable?
- 2. I wonder if Cox. . . how much cheaper this NetZero could be than Cox Cable.
- 3. I wonder, y'know, if this is actually cheaper.

¹ This comment by Evelyn ("I always pay attention...") is what DES calls a "faux generalization" (Hurlburt & Akhter, 2006; Hurlburt & Heavey, 2006; Hurlburt & Schwitzgebel, 2007). Evelyn's statement is not likely to be true, and is largely ignored by the DES process.

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