Sadie's Results

Idiographic Description

[Comment: An "idiographic" description is an attempt to describe Sadie's experience as it exists in and of itself, without regard for any of her external characteristics/groups (e.g., bracketing the facts that Sadie is female, that she is XX years old, that she self-identifies as face-blind, that she works as a journalist, etc.) and without regard for the commonplaceness or unusualness of any internal characteristic (e.g., we will describe her "thinking-experience spectrum," bracketing any notion of whether that spectrum applies to all people, to some people, or to Sadie alone).]

Sadie participated in 8 days of DES sampling, collecting a total of 39 samples (just under 5 samples, on average, per sampling day).

Thinking-experience spectrum

Sadie's experience was often on what we came to call the "thinking-experience spectrum" (53.8% of all samples). This spectrum ranged from nothing at all in her direct experience at one end (17.9% of all samples) to a directly experienced and distinct thought or idea at the other end (aka unsymbolized thinking¹; 7.7% of all samples).

We came to separate two aspects of Sadie's thinking experience (as schematized in Table 1): the extent to which Sadie directly apprehended a thinking process as ongoing at the moment of the beep (as the rows show, ranging from *not at all* to *directly apprehended*) and the extent to which the content of thinking is directly apprehended (as the columns show, ranging from *none* to *directly apprehended*). For convenience, we number some of the cells (in the actual sequence of Sadie's interviews, the numbering scheme preceded the two-dimension scheme).

In this scheme, a "type 5" sample is what DES typically calls unsymbolized thinking, the experience of thinking a directly apprehended thought without that thought being expressed in inner words, pictures, or other symbols (7.7% of Sadie's samples). For example, at sample 7.5, Sadie is about to walk down the stairs and has in mind several unworded ideas, most prominently to not fall down the stairs and to not step on the cat. These ideas are clearly and distinctly present though not in words (i.e., not inner speech) or other symbols (i.e., not visual imagery).

¹ Hurlburt, R. T. & Akhter, S. A. (2008). Unsymbolized thinking. *Consciousness and Cognition, 17*, 1364-1374. doi:10.1016/j.concog.2008.03.021.

Table 1: Sadie's thinking-experience spectrum

		Content		
		(Direct apprehension of the "about what" of thinking)		
		None (Nothing was experienced)	Inchoate (e.g.,I have a sense I was thinking about my brother, but I don't know what)	Directly Apprehended (e.g., I was thinking that my brother looks mature in his Army uniform)
Ongoing-ness (Direct apprehension of the existence of ongoing thinking)	Directly apprehended (e.g., I directly apprehend myself as thinking) Inchoate (e.g., I have a sense that I am thinking)	3. There is the experience of thinking, even though the thought content is not at all experienced. 2. There is the experience of nothingness, of waiting for something, of openness to something, even though the something	4. There is the experience of thinking where the thought content is inchoately present.	5. There is the experience of thinking a directly apprehended thought content.
	Not at all (Nothing was experienced)	is not directly experienced. 1. There is nothing at all in (at least some portion of) the experiential field; on retrospect there is known or suspected to have been thinking ongoing.		

In a "type 2" sample (the most common occurrence on this spectrum; 30.8% of Sadie's samples), there is a directly apprehended sense of "churning," of musing or cogitating, without any directly apprehended content. Sample 3.1 was an instance:

3.1 [Sadie is writing—typing, really—at her computer.] She (50% of the total experience) apprehends herself as thinking, as being in some thinking/cognizing mode, yet the content is not directly present. [After the beep, she can say she was thinking about a book proposal, but those details were not present in her experience at the moment of the beep.] At the same time, she (50%) feels and hears (all sensory) the air rush out of her nose as she exhales with mild force.

Sample 7.2 was another instance of type-2 thinking:

7.2 [Sadie is about to type *Justin Bieber* into her phone, perhaps as part of a journal entry.] Present to her (50% of the experience) is *J* [the letter, not the "juh" sound made by the letter], which she experiences as only the letter [not as part of the word *Justin*]. The remaining 50% of her experience is a directly experienced but extremely inchoate thinking; she senses at the moment of the beep (before the footlights of consciousness) that she's engaged in thinking but the details/content/etc. are not at all clear, are very remote.

In contrast, in a "type 1" sample, there is nothing in experience, and yet, after the fact, it seems that some sort of thinking might have been ongoing. Here are two such instances:

- 4.3 Mostly, Sadie's mind "feels blank." [She retrospectively recognizes herself to have been thinking with no prominence and no details.] Simultaneously, she notices the black and white "lettery" shapes of text on her computer screen, a sensory awareness of the visual characteristics, not at all about the words.
- 8.1 [Sadie is throwing breadcrumbs into her brother's pond trying to attract minnows.] At the moment of the beep, mostly (70%), her mind is blank, a directly-experienced but completely unspecified/inchoate nothingness, like a waiting around for something to happen. At the same time, she (30%) notices the bright white (particularly the brightness) of a breadcrumb (floating in the pond), a visual sensory awareness.

The two thinking-experience-spectrum dimensions are not categorical; for example, it sometimes made sense to call an experience a "type 1.5," indicating that there was some slight intimation that a thinking process was ongoing.

Sensory awareness

Sadie experienced sensory awareness² in nearly half of all samples (46.2%), most often visual (69.4% of all sensory awareness samples). There was a range of sensory-awareness purity, in

² Hurlburt, R. T., Heavey, C. L., & Bensaheb, A. (2009). Sensory awareness. *Journal of Consciousness Studies, 16*(10-12), 231-251.

the sense that some samples were quite clearly garden-variety visual sensory awareness (for example, the black and white "lettery" shapes of the text in sample 4.3 or the bright whiteness of a breadcrumb in sample 8.1 above), whereas other visual sample seemed on the border between the noticing of a visual aspect for its instrumental value or simply for its sensory aspect. Sample 7.3 helps illustrate this:

7.3 [Sadie is watching a bird through a pair of binoculars.] She (50% of the total experience) notices the streaks on the bird's underbelly, a visual sensory awareness of the streaks' thinness, close-togetherness, and brokenness (almost as if dotted). At the same time (50%), she notices the absence of a dot on the bird's chest [She is searching for a dot that would confirm this is a song sparrow when, in fact, it turned out to be a house finch.]

Note the fine distinctions in Sadie's sensory experiences at this sample. Her noticing the bird's streaks is very clearly a garden-variety sensory awareness, an attending to the visual aspects for their own sake. However, whether her noticing the lack-of-dot on the bird's chest should be called *sensory awareness* is more ambiguous: Does she experience the dotless chest as simply a visual aspect of her seeing (and is therefore a sensory awareness) or does she experience the dotlessness for its instrumental significance, as part of her search for whether this is a song sparrow? Sadie and we could not be sure for this sample, but, nonetheless, the fineness of such distinctions was a noteworthy quality of her sensory-awareness samples.

Words

There were words present in one third of all samples (33.3%). For Sadie, words were often present while reading or typing (53.8% of all samples involving words). Sadie's inner words were usually present *without* being innerly spoken or heard. In fact, Sadie had only two examples of inner speech; however, they both occurred on day 2 and whether they were actually experienced as speaking seems suspect now, given that all the other worded instances in her sampling involved words present without being in a voice.

Her words could be experientially highly isolated or unconnected; fairly often she had in her direct experience only a single word (11.5% of all samples). For example:

3.3 Sadie is reading and, at the moment of the beep, reads *that*. Her experience is only of the word *that*, not of the rest of the sentence to which it belongs. [She apparently apprehends each word individually in a word-by-word reading. Sadie was somewhat surprised by this as she believes herself to be a fast reader and this word-by-word experience was not consistent with what she expected of fast readers.] Even if the word was actually part of a larger sentence, her experience was of the word as the word, not the word as part of the sentence.

Even more molecularly, she sometimes experienced a single letter (7.7% of all samples) such as the J [of Justin Bieber] in sample 7.2 above or even a single sound portion of a word (5.1% of all

samples) such as "th" (the beginning of the word she was reading in sample 4.6) rather than the word itself. Sadie made those distinctions with apparent ease and confidence.

Discussion

We have described three main characteristics of Sadie's experience: the spectrum of thinking (including the frequent directly apprehended experience of thinking without the apprehension of the content of that thinking); sensory awareness (mostly visual); and the fragmentary word-by-word or letter-by-letter experience of words and letters (rather than their more natural semantic chunks). Those are idiographic characterizations—descriptions of Sadie's experience without regard for any of her external or inner characteristics. That is, we intend those descriptions to faithfully characterize Sadie's experience equally well if she were the only individual on the planet or if she inhabited a planet where everyone was exactly like her (or anywhere in between). Without a doubt, we fall somewhat short of that intention.

However, we have sampled with some hundreds of individuals, and therefore do have some sense of how or whether Sadie's experience is commonplace or exceptional. Our across-person studies have revealed five frequent phenomena (5FP for short) that occur in the experience of many (but by no means all) DES participants: inner speaking, inner seeing, unsymbolized thinking, sensory awareness, and feelings.

Inner speaking³ (a.k.a. inner speech) is the experience of speaking, quite similar to the experience of speaking aloud except no external sounds are produced. Sadie had two examples that might be described as inner speaking. Both are from her sampling day 2, and we think it likely that those were mis-described as involving the experience of speaking when they were more likely the experience of the presence of words without the experience of *speaking* those words. We think it likely that Sadie had not learned how to make that distinction on day 2, and therefore it is likely that Sadie had little or no inner speaking experience. That is by no means unusual across people, despite the fact that many people (mistakenly) believe that inner speech is ubiquitous.

Many people (but by no means everyone) experience frequent inner seeing (a.k.a. seeing visual images); Sadie had no such experiences. The lack of ability to see visual images is sometimes called "aphantasia" and termed a "condition." Our DES investigations suggest that many people, like Sadie, experience visual imagery only rarely if at all, and there is no reason to consider this a "condition."

Unsymbolized thinking⁴ is the directly apprehended experience of thinking a specific thought, without that thought being expressed in inner words, pictures, or other symbols. In the

³ Hurlburt, R. T., Heavey, C. L., & Kelsey, J. M. (2013). Toward a phenomenology of inner speaking. *Consciousness and Cognition*, *22*, 1477-1494.

⁴ Hurlburt, R. T. & Akhter, S. A. (2008). Unsymbolized thinking. *Consciousness and Cognition, 17*, 1364-1374. doi:10.1016/j.concog.2008.03.021.

typology we applied to Sadie, unsymbolized thinking is a Type 5 experience, and it was relatively common for Sadie.

Sensory awareness⁵ is the direct apprehension of some sensory aspect without its having any instrumental significance. Many people (but by no means everyone) have sensory awareness experiences. Sadie's sensory awareness experiences were frequent but not exceptional.

Feelings⁶ are the direct apprehension of emotion. Many people (but by no means everyone) experience frequent feelings, whereas Sadie had no such experiences. The fact that Sadie did not directly apprehend emotion does not imply that she is not emotional: DES investigations show that much of emotion takes place without being directly apprehended. [However, like inner speech, some emotion researchers seem to imply that emotions are constantly ongoing.] So we take no position on whether Sadie is or is not an emotional person. Our investigation suggests that Sadie does not often experience emotion (whether or not it is ongoing). That is not at all unusual in our DES participants—many people, like Sadie, experience feelings only rarely if at all.

Sadie's directly apprehended experience of thinking without the content of that thinking being apprehended is indeed unusual in our participants. Nearly everyone who experiences thinking experiences the *about what* of that thinking—indeed, the *about what* is often (probably usually) more salient than the *how* or the *fact of* thinking.

Similarly, the word-by-word or letter-by-letter experience of semantic content is very unusual in DES participants⁷. In by far the majority of DES participants, words are handmaidens of meaning, not of particular interest in themselves. As far as experience is concerned, people generally speak (innerly or aloud) meaningful utterances, not strings of words. Sadie's experiences of words were frequently of the individual words themselves, stripped or separated from their semantic role. Of course she was speaking (or in many cases, reading) meaningful sentences constructed of skillfully strung together words, but her *experience* was of the words, not of the arc of meaning. That is quite unusual.

We happily accept the limitations of such generalizations and comparisons to Sadie—our participants have numbered in the hundreds, not the thousands; they have not been randomly selected; they are not adequately cross-cultural. But all of their sampling has been conducted with a level of care similar to that with Sadie, and that puts us in a rare position to be confident that we understood what Sadie and our other participants were saying about her experience.

⁵ Hurlburt, R. T., Heavey, C. L., & Bensaheb, A. (2009). Sensory awareness. *Journal of Consciousness Studies, 16*(10-12), 231-251.

⁶ Heavey, C. L., Hurlburt, R. T., & Lefforge, N. (2012). Toward a phenomenology of feelings. *Emotion, 12*(4), 763-777.

⁷ But for an example see Chapter II and later discussion in Caracciolo, M., & Hurlburt, R. T. (2016). *A passion for specificity: Confronting inner experience in literature and science*. Columbus: The Ohio State University Press.

For example, we are confident (and you can judge for yourself by watching the videos) that our description of Sadie's experience of thinking without experiencing the content of that thinking is *not in the slightest* based on a talking-past or unshared understanding of the terminology employed—we disambiguated that terminology repeatedly over the course of the interviews. It is of course possible that Sadie was having us on or was otherwise motivated to misrepresent her experience. We think that highly unlikely, and you may judge that for yourself as well.

We therefore think it likely that Sadie's experience includes little or no inner speaking (not exceptional), little or no inner seeing (not exceptional), some unsymbolized thinking (not exceptional), quite a lot of sensory awareness (not exceptional), no feelings (not exceptional), quite a lot of the experience of thinking without the simultaneous experience of the content thought about (quite exceptional), and quite a lot of the experience of words stripped from their semantic significance (quite exceptional).

Face-blindness

Sadie came to us because of her self-characterization as being face-blind. Is the pattern of experience we observed related to a self-perceived face-blindness? That is a nomothetic question, where our interaction with Sadie was idiographic. To be at all confident of a nomothetic answer, we would have to conduct a relatively large number of idiographic studies, each as careful as this one, with a variety of individuals each who self-characterizes as being face-blind. This, as far as we know, has not been done.

It seems fair to say that one of the dominant characteristics of Sadie's experience, a characteristic that is quite unusual, could be said to be her blindness to her own thought and emotional content: she often apprehends herself to be thinking without apprehending what that thinking is about; she often apprehends herself as producing words without directly apprehending the arc of meaning that connect those words. Might that be a superordinate characteristic to Sadie often apprehends herself as seeing a face without apprehending the person whose face it is? That is a wild speculation, made plausible by the linguistic similarity across categories. Without corroboration across people, the speculation remains wild. But it does present potentially important implications. If that speculation is in the ballpark of correct, then it is a mistake to say that Sadie is face blind; it would be better to say something like that she is cognitive-emotional-experiential-content blind, of which face-blind is one particular instance.

That is a wild N = 1 speculation. Correct or not, it highlights why a high-fidelity view of Sadie's and others' inner experience might lead to a substantial advance in the science of faceblindness and other psychological phenomena and "conditions."