

TRANSCRIPT WITH COMMENTARY

A Case of Face Blindness

Sadie Interview 9:

Sadie Asks Questions

Below in black is a word-for-word transcript of the May 6 interview with Sadie that is available on YouTube at <https://youtu.be/x2hiQtTDipM>. In green are comments about and explanations of the Descriptive Experience Sampling process. If you have corrections, suggestions, or questions, please post them as YouTube comments.

RTH = Russ Hurlburt

AK = Alek Krumm

Sadie = Sadie Dingfelder

Sadie is a journalist, writing for the *Washington Post* among others. Here she leaves her role as DES participant and takes on the journalist role, asking Russ and Alek some questions about the DES process and their involvement in it.

0:00 Sadie: Hey, great. Well, um, do you guys want to just jump into my interviewing questions?

0:06 RTH: I think that's the plan and I've got a recorder going and you have a recorder. You're gonna get it, you're gonna get a transcript of this.

How do Sadie's results compare to her pre-sampling notions?

0:15 Sadie: Yeah, yeah, I'll send you the transcript too. Great. Well, okay. So I called, when I called Russ like however long ago it was, you said that it was unlikely that I had any idea... You said that I probably didn't know what my conscious experience was like. And I said, I thought my conscious experience was probably mostly nothing, plus some music.

0:05 RTH: Plus some what?

0:46 Sadie: Music. And I mean I wasn't 100%, right, but I wasn't too far off. I just want...

0:55 RTH: No! You were, you were pretty close. [Sadie laughs] And in my own defense, I probably said, I probably *didn't* say, "Sadie, you don't know what your inner experience is." What I said was probably something like, "a lot of people *think* they know what their inner experience is and are wrong. And you probably don't have much reason to be confident one way or the other about which category you're in."

1:19 Sadie: Okay. How what have what, how many people do, are right, roughly, versus wrong.

1:27 RTH: Well, I think that's a slippery slope. It depends on how you define, right, and wrong. But I would say, most people are somewhat surprised. And some people are dramatically surprised. And wherever you put the slider in between *surprised* and *dramatically*

surprised you can have whatever percentage you would like about people who, who would be surprised.

1:48 Sadie: So, what did you guys...

1:50 RTH: So for example, in what you just said, you *didn't* say "I have quite a bit of sensory awareness," what we call sensory awareness.

1:57 Sadie: Yeah.

1:58 RTH: But it turns out you did have *quite a bit* of sensory awareness.

2:02 Sadie: Yeah! I didn't think of that as thinking because it seems more like just receiving.

2:02 Russ comments: Sensory awareness may *seem* like "just receiving," but it is far more active than that. Sensory awareness is a zeroing in on some detail, which entails a zeroing *out* of all or most other sensory and other details. For example, in sample 8.1, Sadie is drawn to the white brightness of the floating breadcrumb. That is not merely a passive reception of brightness but is also an active de-selection of the water, the minnows, the cool breeze, the nephew over there, the troops in Afghanistan, the technology behind mRNA, and the welter of other near or distant candidates for her attention. We find that many DES participants share Sadie's apparent tendency to overlook or minimize the significance of sensory awareness. That is likely why it typically takes a few sampling days for sensory awareness descriptions to emerge.

2:10 RTH: Well, that's, well, that's also part of why people are surprised. What, how you categorize what inner experience is, I guess, could differ from one person to the next.

2:21 Sadie: So did you guys do like a breakdown or like sort of a summary of like the different categories my experience fell into?

2:31 RTH: Yes. So, and we're engaged in that process right now. So what we have done is we met with you, and went through each of the categor, each of the samples, and tried to grasp what was going on, and wrote a few words about those, which we call a caption, or a green caption or something. And you were there for that, so you know how that happened. And, and then Alek has made a spreadsheet that has well, I guess, first off before that. Alek and I each independently wrote a characterization of what we thought we just saw. So on that same day, Alek wrote and I wrote a few words about what Sadie's experience was like. And it said there was a lot of nothing and there was sort of a range of nothing from absolutely nothing to just sort of partially nothing. And there was sensory awareness, and there was singing, singing and whatever. I don't remember exactly what Alek wrote or exactly what I wrote, but at any rate, we wrote those things and it seemed like we pretty much agreed. So then Alek prepared to spreadsheet which had those categories on it.

And now we're in the process of independently going back through the samples to try to indicate which of which of these categories apply to which samples. And we do that independently as a way of, of keeping ourselves honest. Basically, it's a sort of a complicated thing that we're trying to come across. So I don't remember how many

samples did you have—47 samples or 39 samples, or however many it is. We're trying to keep those awake. And when we do it, I might forget a detail or Alek might forget a detail. And, and it could be that when, when we go back through all of these things, we would find that the categories that we have defined need to be refined, and that's part of the process that we're into right now. (And Alek, I'm, I'm almost done with my portion of this. Probably later on today I will finish that off and send it to you.)

And then the next step is going to be then Alek and I will go through and, and look at every individual place where we would, where we were discrepant into how we how we transferred this written description into numbers like ones and zeros. And, and then we will talk about it. "Well, why did you say that, Alek?" And she will say, "Well, I did it for this reason." And maybe she'll convince me, or maybe we'll have to refine a category, or maybe it'll be that I overlooked something, or maybe she overlooked something. Or whatever. But the object is to be honest with ourselves about what, how we count things. Not so much that counting is the important thing, because a big part of this deal is *maybe we should refine*. So we have, so we have sketched a categorization of Sadie's inner experience, and, and maybe that's good, and maybe... Or maybe when we actually try to apply those categories, sample by sample by sample by sample *independently*, that then we will realize that, well, Alek thought we were talking about *this* and I thought we were talking about *that*, and we used the same words in the first place, but when we go back and apply them to individual samples, they get, the discrepancies manifest themselves. And then we'll try to figure that out.

Is DES idiographic science?

6:04 Sadie: So does everyone have their own set of categories?

6:08 RTH: Yes, everybody has their own set of categories.

6:10 Sadie: Oh, wow! So, basically there's like no way that you could sort of combine all the data that you collected over the years. Like everyone has their own sort of idiographic study.

6:21 RTH: Well, yes and no. I would say mostly yes, somewhat no. We have said over the years that there are five categories that occur pretty frequently and, and so we will rate every sample for everybody according to those five categories.

6:21 Russ comments: Those five categories are:

- Inner speaking (aka inner speech / self-talk)
- Inner seeing (aka visual / mental imagery)
- Unsymbolized thinking (the direct experience of thinking without experienced words, visual images, or other symbols)
- Sensory awareness (as defined in Comment 2:02 of this transcript)
- Feeling (the experience of emotion)

[RTH continues] But for *you* only one of those categories actually even counts. I think we're gonna find that four out of the five are zeros, *always*. And *one*, which is sensory awareness, is going to happen fairly frequently. And so we can say well according to sensory awareness Sadie had quite a lot of it. And according to all the other of the big, what we call the *five frequent phenomena* ("5fp"), Sadie, it just doesn't matter about

four of those. And one of them, she's got sometimes pretty darn garden-variety sensory awarenesses.

But I would... So in answer to your question, I don't think that the 5fp are *particularly* interesting. It's not like we have created five new categories and now everybody ought to be rated on these five categories. We do that because they're fairly frequent categories, that's why we call them the five frequent categ, the five frequent phenomenon. But Sadie is much more interesting in her idiographic—what we call ideographic, which means Sadie's particular particularization. So, in Sadie's case I would say the, the more interesting part is what we're trying to make sense of the degree to which thinking is present. Sometimes she thinks she's thinking and there's nothing present, and sometimes she thinks she's thinking and there is thinking present. And we don't have to worry about that for *other* people because most other people say, well, y'know, I was thinking about this and they can tell you exactly what it was like. So the ans, so the answer.. So your question is, is everybody is on his own track? And, and the answer is, until there's good reason to do it otherwise, yes, I think that's correct.

What have you learned from your DES investigations?

8:32 Sadie: Is there, um, is are there any sort of larger questions that your [inaudible] approach helps answer?

8:44 RTH: Well, I think the largest question, I think our research is aimed at the foundation of the largest question. What is consciousness? Well, it seems to me that you ought to know what's going on in inner experience before you can, *before* you can try to figure out what is going on in consciousness. I don't have a theory. I don't think Alek has a theory about what consciousness is. But, But I think we would probably (both of us) agree that, that you need to understand what inner experience... you need to do as good a job as we can do about understanding what Sadie's inner experience was like at this moment and at that moment and at that moment—and what a whole lot of other people's inner experience was like a whole lot of other moments—before you can start to make some kind of generalization about consciousness.

9:37 AK: And I think what drew you to us was the inner monologue, inner speech debates. Is that right?

9:48 Sadie: Yeah, definitely.

9:49 AK: So I mean, I think that's another question that we can lend some wisdom to right, as well, is the question, does everybody have constant internal monologue? Y'know, we've now, just as part of that, sampled with three different people, *none of whom* had constant internal monologue. So we can say, *No*. And here, but here are three very specific and very different results of that interest, y'know. Sadie's sampling, Sadie's inner experience characteristics was *nothing* like Lena's, but both of them to us out of interest in that question. And Lena at least *thought she had* constant internal speech. (I can't remember if you had a take on that, but....) So those kind of questions can be in a sort of sideways way, answered by, by studies like ours with you, I think.

10:43 Sadie: So it seems one general, one generalization you might take from all this research is that people have very different inner experiences, and most people are not consistently any one thing. Is that accurate?

10:58 RTH: Yes.

11:00 Sadie: What else have you learned? Anything else?

11:06 AK: Oh man!

11:09 RTH: That's a hard question to answer. So you could ask, well, what have you learned about *Sadie*? What have we learned about Sadie?

11:16 Sadie: Okay.

11:17 RTH: And the answer. And even the answer to that is sort of a hard thing to know. Because I think at one level we could say, I think we've done a pretty good job of trying to get at what Sadie's inner experience is really like. And have we done a perfect job? Absolutely not. We've only looked at 37 microseconds up for samples of her experience (or however many, however, many there are). It could be that those, that if we had done it, if we had done this in 2019, it would have been different. Or it could've been that it would have been the same.

11:47 Sadie: Yeah.

11:48 RTH: We don't really know the answer to that. We try to be honest about that. So, we have not gotten to the *essential* Sadie, the *essence of* Sadie. We have gotten to Sadie as we've gotten to Sadie. And more than that, we can't really say. But Sadie came to us with an interest in, or a self-characterization of face blind, as I recall the story, and...

12:11 Sadie: Yeah. It's not just self characterization. I got, I failed a lot of tests and got my brain scanned a lot.

What about face-blindness?

12:20 RTH: Well, it could be that we that we ought to get together and look at those results or we ought to get the scientists together to look at those results because now we have a view of Sadie and two very different ways. And that that would be another thing that I would say that we have that we have learned about, about this whole process, and that is that our *way* of looking is very different from what organized psychology is looking. So Sadie comes and says, I got this face-blindness stuff, and, and I can document it at Harvard and wherever else I've documented it. And, and I would say after having watched what's going on, is the Sadie's inner experience is probably *not primarily characterized* by face blindness. That's the, that is, I would *guess* (this is just a speculation having seen 37 things) is that face, blindness is one aspect of the way Sadie's inner experience is, and it's probably not the most important aspect. And, and it's sort of, I've been, I've been thinking about it in this face-blindness thing how to sort of characterize that, and, and

the best, the best metaphor that I've come up with is: in my garage I have a rubber abrading system.

13:44 Sadie: Why?

13:45 RTH: Well, because you have one in your garage, too, and, and so does Alek. Most people call them automobiles, but I prefer to call them rubber abrading systems because that they, in fact, do abrade rubber. I start out with with lots of rubber [holds up arms and hands in a big circle] and after a little while I've got less rubber. So you could say this is a rubber abrading system. But you might, but in the process of doing that, you say, well, that that's not the *main thing* that this system does, it, it's a transportation system. And, y'know, and, and yes, yes it is. So I'm guessing that face blinding, face blindness is sort of like that. That face blindness is one *probably more or less insignificant piece* of what Sadie's inner experience is really like. And, and it's *accurate to say* she has face blindness, just like it's accurate to say I drive a Honda Accord rubber abrader. But, but that, but that is not necessarily the best way to understand Honda Accords or Sadie Dingfelders.

What is Alek's take?

14:56 Sadie: That's uh... [laughs] I was like, Alek. I think is it accurate to say you're, you're gonna be a *clinical* psychologist or you already are one?

15:06 AK: I will be in like three months, I guess, four months, something like that.

15:11 Sadie: Congratulations. I was just wondering like, are you going to be able to take what you've learned from doing DES to, to your practice? And it was not really like and really but in the long run or

15:27 AK: Mhm.

15:27 Sadie: Just guessing.

15:29 AK: Well, I sure hope so. I mean, it's a hard thing to do outside the, the lab of Russ Hurlburt. But it's not an impossible thing to do, um, thanks to [inaudible reference to video technology]. I don't, I don't know. I, I think it, it infuses just about everything I do and think about psychology. And y'know, it in your earlier question about Well, what, what else have you learned from this? I think there's a sort of meta lesson to take from DES, too, which is: it does make you rethink the whole psychology machine, which I think Dr. Hurlburt was just kind of alluding to, right? If you... once you've done this, once you've, y'know, spent the time to get to know a Sadie in the way we have, it, it makes you skeptical of the other ways that we, we figure out people, or label, or categorize, or come to conclusions. And um, and not to devalue those things or, or whatever—I think they everything has its place—but, but it does make you rethink, y'know, neuroimaging studies and, and just all of these things that just seem too quick, too easy, too y'know, too neglectful of like fundamental elements of people, y'know, which took us eight days and 37 tries to just *start* to talk about y'know, Sadie's spectrum of nothing. And even then we haven't figured it out, y'know. So, it always makes me thoughtful about those

things. And, and maybe someday I'll do something about that. But as for doing more DES, I sure hope so. I, I don't think I would ever want to be done done. I dunno.

17:19 Sadie: Um, I was wondering like, my next thing, my next project for my book is to try to learn how to visualize. Do you think that it's worth trying to, like learn a new way of thinking?

17:32 AK: I think[inaudible] interesting [inaudible]

17:39 RTH: So, you broke up, you broke up for most of that.

17:42 AK: Okay, am I normal again?

17:45 RTH: Yeah, I think it's actually might come from Sadie. I think if Sadie makes any noises at all then she kills your audio.

17:53 AK: Yeah.

17:54 RTH: I'm not sure about that but that's the way it seems to me.

17:55 AK: Okay. Oh she muted. Oh well I just said I think that's a very interesting question and would be, would want to sample with you after you have learned to visualize if you think you have, or have not, or... But we had no examples of visualization in your sampling. Also we had no examples of feelings—emotional experience, which I thought was interesting. But yeah, I I don't know, I don't know about that, if you can or whatnot.

18:25 RTH: [Sadie appears to talk] You, you're still muted.

18:26 AK: Oh, you're still [points to screen]

What about emotion and visualization?

18:28 Sadie: Okay. Yeah, I learned that I am really out of touch with my emotions. Do most people have more experiences of, y'know, emotions?

18:39 RTH: There are big individual differences there. There are some people who at just about every beep, are saying, "well, I'm feeling this." And they'll tell you about this, that this is an anxiety or whatever. And I can feel the anxiety here and whatever. But there are *huge* individual differences there, and, and they're not well understood by the people who have them and by, by the science. So, so for some people, one person will say, for example, "I feel heavy hearted" and they mean that entirely metaphorically. That, that, what they mean is that they understood what, this phrase "heavy-hearted" means—and they take it to mean *sad over the long haul* or something like that. And other people when they say "heavy-hearted," they mean, *my heart feels like it's weighted down inside my body*. And the people who speak like that to each other, have no idea that one guy means *I feel this weight in my chest*, and the other guy is speaking entirely metaphorically! And, and the *science* doesn't know that either because the science is asking questionnaire questions, which, y'know, check off something about how sad you feel and they're inferring something about heavy-heartedness or whatever. But they're,

they're not *nearly* careful enough to understand that people, the individual differences with people.

And, and I guess I would say that is... you asked what I've what I've learned from doing DES for forty years, y'know, that's one thing. That you, if you really care about what, what people's inner experiences like you have gotta be *very* careful. Because people, people are just dead wrong about what they say about their inner experience. And if they're, and if they're right they don't know what, they don't know what *aspect* of what they say is right. And, and so if you're *interested* in what the way people are—which I think is sort of a fundamentally human thing to be interested in what people are like—you, you've gotta, you've gotta mind your *Ps* and *Qs*.

And I want to go back to your previous question which, which Alek answered, but I didn't get a chance to answer, which was about, could you learn to do visualization? And I don't know the answer that. That's a, that's a really good question. And I have no idea. If I, if somebody wanted to give me a million dollars to teach them how to innerly visualize, I don't know what I would do about that. And I probably know as much about what how inner visualization actually is experienced as anybody in the western planet, but the, but I still don't know how to how to train somebody to do that. I know in myself when I have more visualization and when I have less visualization, and so I could say well, now, if you're like me, then this is what it is that you should do. But, but I'm not, but I'm not sure that there's any rational reason why you I should generalize from me to you in that regard.

21:37 Sadie: So wait, what, what circumstances you have more visualization? And...

21:43 RTH: Well, I know, for example, that if I am weeding in my garden, and I'm trying to pull out a particular kind of kind of weed. Or if I if I'm pruning and I'm trying to prune off a particular kind of bud or whatever, and I do that for an hour or something like that, then when I'm done, I have quite a few visualizations of that. That my visual system has apparently processed how to see these kinds of weeds by comparison to those kinds of flowers or whatever. And when I'm done with that, I got a lot of visualization. And, and I think my own visualization is more frequent when I'm laying down than when I'm sitting up. But I'm not sure that either one of those is generalizable to the world, to the world. And I'm pretty sure that nobody in the west, in the western planet knows the answer to that better than I do. Which I'm not trying to be, y'know, self-aggrandizing or whatever about that, but I but I, but I know what it, I *know what it would take* to answer that question. And I don't think that there are people out there who have done what it, what *I think* it takes to answer that question.

22:58 AK: Um hmm.

Why do people mistake your results, which are about experience, for differences between people?

23:00 Sadie: Um, y'know, an interesting thing I thought in terms of sort of people interpreting your research, like on, y'know, on Twitter and Facebook and things like that, is that they your study where you found, y'know, the five categories and you had percentages. Those were percentages of *experiences*, but most people saw decided that they were actually percentages of *people*. [AK: Um hmm.] Like, they people seem to want to be grouped into categories, which is kind of interesting because that's almost the opposite of what

you're doing. So anyway, I was just wondering if you had any thoughts about like, sort of this like sort of neuro-tribalism that has been sort of imposed on your work.

23:49 RTH: Well, I have been thinking actually quite a lot about that, and, and it might very well be that, that's the genesis of my next book. And what's bubbling up in me, in terms of a book, is actually something like the answer to that question. Because I think, I think DES more than, maybe most, or maybe even all of other psychology tries *not to do* that. I would say I across my career, and people who have been working with me—we are not categorical, categorization people. That's... our in our interest is fundamentally *not* categorical. And maybe that was what Alek was alluding to earlier on when she said she has a different view of what psychology is about. And, but, psychology *is* categorical. Either it's universalist, in which case it wants to say, well *everybody is like this*. Or it's categorical, in which it wants to say, well, *women are like this and men are like that*; or *Black people are like this and white people like that*; or whatever. And I don't, I don't I think there is precious little evidence to believe that that is wise scientific strategy. It is dead center in the *target* of scientific strategy, and it may very well be that that is not... that, that urge is, uh, is destructive.

And, and I would say that it isn't like 40 years ago, I set out, like, well, *let me try not to be categorical*. I don't think that's how this came about. It came about it, it came about, y'know, I started out as categorical as everybody else, I think, probably. But I, it came, it came from *let me try to be faithful to the phenomena*. And when you do that for 40 years, you end up not being impressed by categories. And that and that sort of naturally falls away, because, because every time, every time you believe in a category (which y'know, I've, I've believed in my share categories of across my lifetime) it fucks you up every, every step of the way, I think, because, because the cat, whatever category I would have applied to Sadie, doesn't really apply to Sadie. I could have come at Sadie with *does she have inner speech or not?* And I wouldn't have heard a word that Sadie had to say. And I could have come at Sadie by having, well *is Sadie face blind or not?* And I wouldn't have heard a word that Sadie had to say about, about her inner experience! And even if I had come to Sadie with, well, *Sadie's got a lot of nothing in her experience*, that would have screwed things up in terms of actually confronting the phenomena that Sadie presents.

Now there, which is not to say (and now I think I'm saying what Alek said a little bit ago too), which is not to say that that categorization might not be a useful thing. I'm thinking categorization might be useful. So if I, if, if we had sampled with several thousand people who are face blind, in the same way that we sampled with Sadie, at the end of that, we might be able to say something about face blindness as a real thing, as a real phenomenon. But we are *so far away from that* that now I'm pretty sure (rightly or wrongly, I could be totally screwed about this), but, but people who try to say something about face blindness when they don't really know anything at all about the phenomena of face blindness, are like me to screw things up. And it doesn't matter whether they put you in a neuro, in a scanner or run you through the state of the art, high-falutin-university-approved programs. They still don't know anything about the phenomenon of Sadie's experience.

Even though face blindness has got to be thought of as an experiential category. When you're, when you say "I'm face blind," you're, you're saying something about your everyday experience. You're saying I see people and I don't recognize them as people or something. Something like that. I don't recognize who they are. But, but if (and so here

again it's what I what I've learned, I guess) it is: if you want to say something about everyday experience, you better know something about your everyday experience.

More about face-blindness.

28:36 Sadie: So, the way you would study face blindness would be to capture people's experiences when they look at faces, for instance?

28:47 RTH: I *wouldn't*! That's the whole deal! What I would do is I would do exactly what, what we did with you. Somebody came with some, with, we had, I could, we have, we have selected people, chosen people, encouraged people to, who have some kind of a characteristic. The biggest group we have is of bulimic women, women with bulimia nervosa. And, and I think we've got something to say about bulimia nervosa. (We haven't been able to say it to anybody, but I think we have something to *say* about that.) And it comes from what I call *fishing in the bulimia pond*. Which is to say, if we want to know something about the inner experience in, in bulimia, we should do the same kind of sampling as we did with Sadie in people who are bulimic. And if we do that with enough people, after a while we're going to learn something about the kind of fish that swim in a pond that has a bulimia sign outside. And if we, if we did that with face-blind people, if we had enough of face-blind people, people who, who are certified face-blind by some external like expert, whatever that means, then at the end of the day, we might have something interesting to say about face-blind people. And it might very well be (probably would be) that face-blindness is really some subset of some other much bigger, kind of a deal.

28:47 Russ comments: RTH's "some subset of" comment is an instantiation of the rubber-abrading metaphor he spun at 12:20ff.

30:21 Sadie: Can you expand on that?

30:24 RTH: Well, it could be that *nothingness* is more important than face-blindness. That there's something about nothingness—and we won't, we really don't even know much about nothing. We got 30, we got 37 samples and 16 of them (I'm just making up numbers here) but 16 of them have nothing, nothing in them. And they all come from the same person, and she's got her idiosyncratic way of describing things. And we've got our idiosyncratic way of hearing things, so, we don't, we know precious little about even that (even though we know way more than anybody else does, but it's still not much). And if we knew more about that, we might find that, y'know people who have this *nothing* experience—whose thinking is sort of abstract even to *them*—that a subset of that is face blindness. They're face blind. And it's *not* that the face blindness makes them think! It's the other way around. It's that the fundamental-er thing, the more fundamental thing, is the, is the blindness to my own thought process. And one, one *aspect* of that might be face blindness.

And that's where, that's a not-so-colorful way of saying what I was saying about the rubber abrader in my garage. Y'know, if you want to get from here to there on the real, on the real planet, the chances are good you're going to abrade rubber. But you don't, you're not doing that as the *primary thing*. And if you're the kind of person who has the kind of neurons (whatever that means), or the kind of experience (whatever

that means), or the kind of childhood upbringing or trauma or whatever it is that you have that, I don't know nothin' about, or the kind of atmosphere that you've lived in or the lead that you've imbibed, or whatever that has made you the way you are, which I don't know anything about any of that, that maybe one of the (and so there's genetics and environment and whatever), it could be that that leads, both to thought, thought blindness and face blindness.

I'm not claiming that to be true, because I've only got a sample of 1. What I'm saying is that we, we need to have, we need to have more of the basic data before we make some kind of a pretty high level judgment about something as arcane as face blindness. Now, that's, that's a... Why would, why would you pick face blindness as the most interesting thing to characterize Sadie with? And y'know what the answer to that is? The answer is it makes a great story. [Sadie laughs] And, and I would say another, you, another thing that I've learned over the over the years is that the better the story, the less likely it is to be really true. [Sadie: Oh!] That's of course, a little bit of an exaggeration and in the over-the-top way that I generally am. But, but it's, it *is* a reasonable thing: when somebody tells you a really good story to be skeptical of something in that story.

33:50 Sadie: Yeah.

33:54 AK: I, I have a maybe a gentler view of face blindness. I've had a couple of patients who I ultimately diagnosed with face blindness and was very skeptical. And that's a hard thing to agree to it. I think there's something quite distinct about that presentation, as you well know. Um, but I would say that I often find there's a, there's a kernel of truth in our hasty kind of psychological theories that I think we, we can, we understand better in DES. So, so as an example, we're talking about the women with bulimia. And the broader, y'know, psychology literature would tell you, well, these women are really emotionally dysregulated. That's a big phrase, right there. There's a busyness to their emotionality. They are overwhelmed. Um, y'know, they have, they feel very overwhelmed before they purge or before they binge, for example. Based on sampling, our sampling, there is some truth to that. We had, these participants had almost always really busy chaotic experience, y'know, 20 separate threads of things going on at once. I mean, way beyond what we saw with you, for example. And some of them would say that that was relieved, so to speak, after they would purge. We don't have y'know beeps timing that out. But they would say that [inaudible] will draw a relationship there, I think, between face blindness and like, emotional experience. There's thought to be something funky about your emotional sense of people or something like that. Is that right?

35:35 Sadie: Actually, I, on tests of like sort of [inaudible] emotion, most face-blind people are normal, are pretty normal. We're also just as good as regular folks at like guessing gender and age.

35:35 Russ comments: Would Sadie have been one of those face-blind people who are "pretty normal" on tests of emotion (assuming she had taken the test prior to her DES experience)? Recall that at 18:28, Sadie said believably, "Yeah, I learned [from my DES sampling] that I am really out of touch with my emotions."

35:50 AK: Yeah.

35:51 Sadie: It's really just seems to be like, facial recognition.

35:57 AK: Okay, other thing about like, emotional, whatever feeling sort of people, but, but it is interesting to me that like you didn't have any feelings and it would be, I mean you have feelings, y'know, [they laugh]

36:09 Sadie: No.

36:09 AK: [inaudible] sampling. And it would be interesting to see if a group of a thousand folks with, with face blindness *have* something about feeling, or to some degree, if they share that.

What are your contributions to inner experience research (on categorization in science)?

36:24 Sadie: And it seems like that kind of research will never happen, because you, y'know, it takes forever! But I was just wondering like, do you have more practical ideas for doing some kind of bottom up research, or if that's, that's how we have to do it.

36:43 RTH: So I think I think your mistaken about that. I think... First off, I don't think we really need a thousand. I've said a thousand, and you probably need a thousand, but, but I think we've got something pretty strong to say about the bulimic women and I think we're in the low 20s or high... Alek probably knows how well probably knows more, what more what that number is.

37:02 AK: 24. Yeah.

37:05 RTH: How many?

37:05 AK: 24.

37:06 RTH: Yeah. And so, so it doesn't, it doesn't take *huge* numbers, but it, but each one of those 24, we spent the same amount of time as we did with you (or approximately). So there's, there's an investment. But that but that investment is *not that great* when you really stop to think about it. So we spent eight or ten hours with you. And another eight or ten hours between Alek and me trying to figure out what was going on, and, and however, and how long you wore the beeper, if you want to count that. So we're, we're into 100 hours, let's say, invested in Sadie. And if we wanted to do 25 Sadies, that's 2500 hours, which is what a working year or something like that. It's in the, it's, it's *not* insurmountable. And, and for the price of one fmri scanner, you could hire *a lot* of people and train them in how to do it. If you had the, *if* you thought you needed to do it. So, so your question is, I think maybe the same question as before, because it and so with.... The two questions that I'm trying to put together here are a, some kind of a belief in categorization, and that science can't possibly operate without categorization. And I don't think that, I don't think either one of those is true. I, I think, I think it's a matter of investment, I guess you could call it infrastructure—probably not; I take that back; it's probably not infrastructure. But, but you, you need a mindset that says, I, we

can, with fidelity, explore people to the extent that we can explore them, and then admit that into science as a useful thing. I, that, I would say, is another of what I learned. I think, I think I have established, we have established (Alek and I and other people in my lab) have established that it's, it's possible to, to say something useful about people's inner experience, and science ought to be doing it.

39:33 AK: Yeah, I think it is largely a matter of what science values right now. I mean, I think, there's some interesting stuff that came out this year on like how much the National Institutes of Health has spent on imaging studies over the last decade or something like that. And the, I mean these were critiques, but the folks were saying, No! We really learned nothing new about mental illness or treatment from these studies. Y'know, we don't have better medications for serious mental illness. We've, we have not found the brain regions that cause schizophrenia—like we haven't done what we said we would do in ten years and millions or billions of dollars. And that's just a matter, I think, of what we value in psychology and in science. And if a fraction of that could, could go towards *slower* psychology, more *basic* psychology, like this.

39:33 Russ comments: Correcting AK's remark about NIH, a research team led by Al Galves is in the process of exploring how the National Institutes of *Mental* Health (NIMH) spends its \$1.7 billion annual budget. The team has said they suspect that as much as 80% of the budget is spent on studying the brain, including brain-focused treatments such as psychiatric drugs and magnetic brain stimulation. By comparison, there have been very few brain-focused treatments to emerge as viable and evidence-based options in the world of mental health over the past decade.

40:25 RTH: Well, think of what we could, what we could do with *one percent* of the of the imaging study.

40:32 AK: Yeah. Right.

40:33 RTH: I mean that's in a multi-millions of dollars.

40:36 AK: Yeah and it's a categorical thing. I think we're, I don't know, y'know Dr. Hurlburt's had a longer view of the field, but it's it seems to me we're in this *heavy* heavy categorical time which I think speaks to what you were saying about, like that term, you said neurotribalism, I think. (I've read the book *NeuroTribes*, so I suppose that came out of a similar group or whatever) but, but there is like such a *strong pull*. I mean, look at our political landscape and the, the division and just it is just part of the Zeitgeist. It is just *in the water* right now. And I think there has to be a shift. And it's unfortunate that that might be in 100 years or whatever, and maybe I won't be doing DES anymore and I'll miss it. But, but, y'know, humanism or like humanistic psychology did that at one point, y'know, push back against psychiatry and said, let's actually listen to people. And we've lost that already, y'know, it's hardly been 60, 70 years and we've lost that again. And we're in the categorical... In the clinical world, anyway, you get a diagnosis, you're diagnosis determines *exactly* what evidence-based treatment will *work for you*! And of course it doesn't for a great chunk of people. And many, many, many clinicians, many I work with myself at times, are just totally blinded by the category, are just doing what the [inaudible] tells them to do and missing *everything* important. And I think it's very

similar to the, y'know, the research side of things. It *all* comes back to that *love of categories* and, and how destructive they can be.

42:17 Sadie: So can you give me examples or just an example? Because I've been steeped in this category psychology all my life. But can you think an example of, from any science, that sort of made great progress without categories? Like a priori categories?

42:38 RTH: Well, I, I think that the advances in science are, are usually methodologically driven. So I think biology came of age when, when van Leeuwenhoek or whatever, whoever that guy was invented a microscope. And, and he, he had all kinds of categories and the categories were wrong! His categories were wrong. Y'know, he thought that his "animalcules" were, that the cells that he was observing were total, total miniature versions of the adults or whatever, whatever it is that he thought (I forget). But he was, he was wrong about that! But what he was *right* about was that there were little things out there that you could look at if you put, if you ground your lenses in the right way. And so biology has come a long way since, since before the microscope was invented.

And, and so I, I see DES as being sort of that way. I think probably most of what we *say* about what we have *found* is probably wrong. But the, but *that it is there to find* and that it is *not* a figment of Hurlburt's imagination or Alek's imagination, that—or, or Sadie's imagination—that there, that, that there is some *pretty real* distinction between seeing a visual image and thinking a thought with no thought, that having nothingness behind my thinking. That that, I think that's, that's a palpable distinction. And it's not a mere verbal gloss on *well everybody's experience is the same way*. *Sadie's exactly the same as I am. I got lots of visual images. Sadie's got no visual images, she says, but we're really the same. We're really the same.* I just don't think that's true. I think that the psychology business has, has come to believe that in a defensive kind of maneuver, and, and it hides their, it hides the fact that they have, that psychology in general has turned its back on careful observation. Like Alek has just come through a middle-of-the-road PhD program, and, and you could ask you could ask her, "Well, how many hours did you, how many class periods did you have that, that taught you how to do good observation?" And I'm guessing that she would say zero. [AK: Right.] And, and I think that's true from... that's not a University of Nevada, Las Vegas thing, that's a worldwide psychology thing. We're not teaching people how to do good observation.

45:28 AK: Right. Yeah. I think. Not to be like too poetic or philosophical or something about it, but I think psychology's subject matter is *people*, human beings, and that is a different, very different endeavor than a lot of other sciences. But yet we insist that it isn't, which I find to be just the most bizarre and backwards and confused way to go [inaudible]. But when I think as I sometimes think more about sciences like anthropology or archeology, y'know, the finding of what is already there, the, the excavation, the just, y'know, description really right. Like those sort of sciences appeal to me and they make tremendous, y'know, discoveries of what is really there, which in this case, I think there is for most something really there. And we're just finding a way to *find* it and *tell* it and make it available. And I think that's part of what you *have to do* when your subject matter is human beings.

46:34 RTH: We have, we have an advantage over the archaeologists in that the bones that we're looking for are present, present all around us. And we can have as many of them as we

want. We don't have to, we don't have to spin a theory on the basis of 12 bones that we found scattered across three continents. We've, we can have as many of Sadie's bones as she's willing to willing to give us. And yet, we don't do that. I mean there's, there are very few people on the western Planet who are carefully looking at inner experience (in what I would call carefully looking at inner experience). [AK: Yeah.] And that is remarkable to me.

But the Zeit, the Zeitgeist is totally impersonal. I mean, the, the, the, what is *valued* is Big Data. And Big Data is the impersonal piled on the impersonal piled on the impersonal, and then applied in a statistical way back to some other impersonal group. And it's effective, you make a lot of money that way, y'know, if you can figure out on the basis of how much how much time you spend Googling these sites, what kind of what kind of product you're likely to buy, and then you can distribute advertisements or whatever. And that's, that, that I would say your average psychologist lusts after that. And that is, I dunno, sick.

48:17 AK: Yeah. As many data points as they can get. And as sophisticated of statistics as they can do. It's, we're very much, we worship the statistics in psychology, and really people become data points. And we prefer it that way.

48:35 RTH: And data points on the way in and data points on the way out. So Alek a bit ago was talking about the therapy as being guided by evidence-based treatments or whatever. And that's true, and it's a sin or whatever. And I'm not holding myself up as the judge, as the judge of what is a sin and what is not. But it's, it is blinding of the increase in understanding as well. It's not only do we have to apply the categories that we already have *as if they were good*, which they're not, but *as if* they were good we have to apply them. But we can't build new studies because the categories are still, are driving, are driving the new studies as well.

Why did you say that psychology is 'defensive'?

49:28 Sadie: You mentioned that, that sort of the psychology's turn towards this current state was a defensive maneuver, and I was wondering what's it defending against.

49:47 RTH: [pauses and sighs] The money. It's economic, I think, primarily. It's to publish, which you need to do if you want to be an academic psychologist. If you want to publish, then you gotta look like you are a statistician, and if you're gonna look like you're a statistician, you gotta not look like you're too interested in the individuals.

50:14 Sadie: And can you say anything about what you found with your bulimic population? Or are you like working on a paper or something?

50:24 AK: If only you knew, Sadie, how many papers we have been working on.

50:27 Sadie: Oh no!

50:29 RTH: We have, we have... So Alek, Alek was not involved in actually the studies of bulimia. Her predecessors were. But, but we have, Alek and I have together submitted an article

about bulimia to every bulimia journal, every eating disorder journal, and can't get it published.

50:50 Sadie: Whoa.

50:52 RTH: And we've, and we've rewritten and rewritten it. It's not like we sent the same journal article every time. We've, we've worked at trying to get what we have to say about bulimia out there. [AK: Yeah.] And everybody says well, y'know, that's not that doesn't line up with my theory and therefore, it can't be true. So the defensive maneuver is: if you listen to what we have to say, you have got to think, *well, maybe what I think about bulimia isn't right*. And people aren't, people don't do that easily. [Sadie: Yeah.] And we're happy to say, y'know, we only we only know what we know about from, we only got from 24 people and, and, y'know, we, we got lots of limitations here. But, but y'know, there is something to be, there, might very well be a kernel of truth in here somewhere. That's, I would say, the spirit of the papers that we have been trying to write, but nobody wants to listen to that.

51:56 AK: I think part of the defensiveness might be, or probably, is that if we let go of the categories or if we, y'know, adopted a slower approach we'd have to admit that we don't know as much as we claim to know. I think, Dr. Hurlburt and I know this intimately. People will ask... Well *you* were asking us now: *What do y'know? What have you learned?* And a lot of times you have to say, *Gol, not that much*, but we're doing our best, y'know, and maybe in a couple hundred years we'll somebody will say something and, and it humbling and infuriating and but it is the honest truth, y'know. And, and the rest of psychology would have to do that, and I think it's too painful.

52:40 Sadie: Yeah, I can see that. Gosh, I think like all my questions. Um, Do you have any questions for me? Or is there anything you'd wished that I'd asked that I didn't?

Sadie's reflections on participating in DES.

53:01 AK: I... Are there reflections that you've had on, on what it was like to do DES that you haven't kind of told us about or that you've been sitting on?

53:12 Sadie: Y'know, I feel like if we weren't currently in a pandemic, I would not have had the patience to do it. It would have driven me crazy. But since I don't have a lot else going on and you were like my only social interaction (I'm so grateful that you'll talk to me an hour a week!), um, but I think that even so I did like the first or second time, well even towards the end of sessions, like I'm like, "oh my God, they are splitting hairs! Like, who cares?" Um, but that's the process, y'know? So and I wanted to learn about it. And, and I'm just like extraordinarily impressed and surprised by how hard you guys work to understand specifically what people are saying. So honestly a lot of the time I wasn't trying to be specific [laughs] and then what we, y'know, as you know.

53:12 Russ comments: A large part of the DES art is the ability to enlist participants to *want to be specific*. The advantage we have is that inner experience is *of interest* to most people, and *their own* inner experience is of *extraordinary* interest once we have overcome the presupposition that they already know all about it. Surely there must be

people who just don't care, but they are very rare (or are very good actors able to fool me).

[Sadie continues] And the other thing that I was really struck by is the difficulty of communication. Because everyone is so different in terms of communication style. Like, or not communication, just like different in terms of our mental world. Um, it's kind of like, shocking that we're able, that we're ever able to communicate anything, y'know, at all to each other. Um. Yeah, I feel like I had something else to say about that. Oh, yeah. And like, sort of, that's why Twitter and in Facebook is getting obsessed with these sorts of qualitative questions about people's experience, I think, is because it *is* natural to think that everyone else's experience is basically like yours. So, when you hear someone say something, like, I count sheep at night, I'm like, yeah, but that's just counting right, y'know, and I don't really listen to the person or even think to ask the question of like, *what do you mean by that?* Yeah, so yeah, those are my random thoughts.

55:05 RTH: So when you, you said a minute ago, when you started out that that it was like splitting hairs, these guys are really splitting hairs. Did you feel that on day 7 and 8 as well as on day 1 and 2?

55:17 Sadie: Hmm, I didn't feel. I thought like, I still felt like you were splitting hairs, but that was the point, I guess. Um, I, I the difference? Yeah. [laughs]

55:31 RTH: So, how... Can you say more about how you came, how that splitting hairs thing seemed different, seemed to change across time?

55:41 Sadie: Yeah, I well I think it was more just like I was on board with it. [RTH: At the end.] Um, like yeah, at the end. But like so I started up feeling [inaudible] and then, and then I was like, okay I trust these guys; they're smart; they're working really hard at this. Like the least I can do is split hairs *with them*. And then by the end I was like: *Okay, like we've actually come up with some meaningful subcategories of nothingness and that never occurred to me to divide up*. I don't know if that's a useful thing to have done, but it does make me feel a little better about the fact that I don't, I dunno, it feels like, yeah. So did I answer?

On accepting ignorance.

56:26 RTH: Well, that's a very valuable thing to hear, I think. Because I think that's the way it is. Because uh to a large degree, everything that we have said about categories and whatever today comes from your first-day kind of experience, y'know, like well, why the hell would I want to split that kind of a hair?!? What's that about? And I have I have said, probably to you or in public a lot of times, that the hardest thing about DES is getting past the first day! Nobody wants to do the first day! It's, it's hard for the interviewers to do the first day, and so I think interviewers bail out. And it's hard for subjects to do the first day and, and you gotta have the faith that there's, there's something on the other side of the first day! And, and most people don't have that faith.

And, and it *is*, it *is* hard because you gotta come into an interview—Russ and Alek have to come to Sadie on the first day saying, "I don't know anything at all here,

and if I pretend that I know anything, then you... And Russ should say to Alek, "if I pretend like I know anything, Alek, then you should ding me for that, because you're not as smart as you think you are or whatever. And, and I should do the same service for Alek. And, and people don't often take kindly to that.

And then the defensive maneuver (you asked, what is the defensive maneuver), the defensive maneuver is, well, let's see what, how can we, how can we operate so we don't have to do that to each other. And the way we'll do that is, we'll develop really powerful statistics that we don't understand, and we'll collude that we don't really, we'll pretend like we understand what we're doing but we won't really understand them. And we won't admit it, because if I admit it, then you'll admit it, and if you admit then everybody we'll admit and the whole house of cards will fall down. And, and so we, we will agree that will provide these highly sophisticated dodges, and what is, the defensive maneuver, is it really is a way of avoiding *coming to Sadie in ignorance*.

58:49 AK: I think you're saying something like: it's amazing that people are able to communicate at all, given how different our internal worlds are and the way we have to translate [inaudible] the metaphors. And I think there's really something [inaudible] to that. And I think it's kind of the journalist's art as much as it is the DES interviewer's art to embrace that, that you have *no idea* what people are saying.

59:15 Sadie: It is definitely humbling [inaudible], humbling and it kind of like almost makes you want to give up on the whole endeavor.

59:23 AK: Yeah.

59:25 RTH: Well, so let me push back against that, because I've been doing this endeavor for 40, 50 years or something, pretty, a lot of years, pretty close to 50 actually. And, and it is as interesting to me today as it was then, or moreso. I would, I would say my interaction with Sadie in 2021 is as interesting and fresh and vital as any interaction that took place in 1970-whatever, or whenever. And, and I'm not sure that most scientists can say that. I, I think if they're honest with each other they're, they're, they're going through the motions and the best that they, the real goal for most scientists is to get their graduate students to do the work so then they can collect the grant money. [Sadie laughs] And, and it's not exciting to them, I don't think. Maybe there's a kernel of excitement in there, in there somewhere. But, but, y'know, I think people are, I, I think the heart of the matter is that people are interesting. And *everybody* who is a psychologist, I think, believes that people are interesting. That is the motivation of psychology. And, and I have been lucky enough to have figured out a way to keep that center in my professional life. And I don't think I'm... It's not that I'm unique. Other people could do it, but it takes some guts and some foresight and some self-effacing humor, and some....

61:29 Sadie: Great. Well, thank you guys so much. Um, I really, really appreciate it. I can't wait to see your breakdown of what you learned about me. Um, and

61:42 RTH: And I, and I will be interested in seeing what you write about this, 'cause I think you have some things to write about that nobody else, hardly anybody else on the planet has to write. And whether you can bring yourself to write it and find somebody and find somebody who will take it, I don't know. But

61:58 Sadie: [inaudible] so. I have a really good agent now. So that's [inaudible]

62:03 RTH: Say that again.

62:04 Sadie: Oh, I said have a really, I got a really good agent [inaudible].

62:11 RTH: But I think there, y'know, you said earlier on I think that you were talking to somebody at the Atlantic or whatever. I think you have articles to write about what happened here that could be totally interesting, if you could figure out how to say it.

62:27 Sadie: Yeah, and definitely keep me update on your bulimia submissions. Or if you get an acceptance. Yeah.

62:38 AK: You got it.

62:39 Sadie: Okay, send me a paper, if you feel like it. I promise I won't forward as anyone.

62:45 RTH: Now we can, we can do that. We haven't, we haven't submitted a bulimia paper lately because we don't have nobody left to submit it to. I've written, I've written a little bit about it in my books, I guess. My 2011 book maybe has a bulimia article,...

63:01 Sadie: Oh cool.

63:02 RTH: ...bulimia chapter.

63:02 Russ comments: My 1993 book also has a bulimia chapter.

63:03 AK: Yeah.

63:05 Sadie: Great. Well, thanks again. And yeah, let's be in touch. You guys are [inaudible]

63:09 AK: Yeah.

63:11 RTH: Alright. Nice, nice meeting you and spending time with you.

63:14 Sadie: Yeah! Likewise.