

Gualtiero 2.
Gualtiero Sampling Interview 2

Below in black is a word-for-word transcript of the May 19 sampling interview 1 with Gualtiero that is available on YouTube at <https://youtu.be/JXaS1farMto>. In green are Russ's comments, and in blue are Gualtiero's comments about and explanations of the Descriptive Experience Sampling process inserted after the interview. If you have corrections, suggestions, or questions, please post them as YouTube comments.

RTH = Russ Hurlburt
GP = Gualtiero Piccinini
LG= Lauren Graf

ABOUT ADDING COMMENTARY TO TRANSCRIPTS

- 0:03 RTH: The recorder is going, and Gualtiero said he wants, he wants to add a comment. And I think that's good. And, and what I would, what I would say is that I think among the most interesting discussions possible *on the planet*, maybe I, I don't wanna make any, I don't wanna be too, too strong about that, but, but, but commentary about, about spec-about how to understand a *specific experience*, what is said, what is not said, but something that's tied to,... tied to Gualtiero's (in this case) Gualtiero's particular experience. And whether he saw it the same way I saw it. Or, or those, those, [pause] those colloquies, I guess you would say, are I think totally interesting. And, uh, and, and I think I could argue that among the most interesting conversations that you can have. Because they're, and the reason for that, the reason *I think* that is because I think that there's a more-or-less true answer to the question, *well, what was in Gualtiero's experience at the moment of a beep?* And to, and to refine the more-or-less-ness of that—and to make sure that we understand each other, that we're not talking past each other about that—well, that's in the realm of *know thyself* and *know somebody else*, and, and whatever, which for however many millennia people have said is, is, uh, an important deal. So I'm looking forward to what Gualtiero has to say about this.
- 1:46 And, uh, and Lauren too. So, so I'm not trying to put pressure on you *at all*, Lauren. You can look at 'em or not look at 'em or whatever. [He refers to the transcripts, commentaries, and videos.] That's, we're, one of the features of, of this interaction from my point of view, is that we're all free agents. We, we can either do it or not do it and do it however it is, we wanna do it. And I might have comments about *how* we do it. I'm happy to have those comments. But, but we gotta be, we gotta be free, free participants if it's gonna be interesting. That's what I think.
- 2:26 So that's my opening gambit. Anything else that we should be talking about before we take a look at Gualtiero's samples?
- 2:38 GP: I, I have some reflections on this, on this whole enterprise, but it might be easier if I bring them up in the context of the beeps and [RTH: Okay.] the experiences.

- 2:49 RTH: I, I, what I think, I think the answer to that is from my point of view is *yes*, and that's what I was trying to say. Conversations about specific moments. [GP: Yeah.] Not general conversations. General conversations I think are, are like planets revolving around each other, y'know—they never, they never get down to the, never get down to the ground. But the, about *specific moments*, I'm a hundred percent in favor of that.
- 3:21 GP: Well, we'll see.
- 3:22 RTH: See. We'll, we'll see.
- 3:23 GP: [laughs] Does it matter in which order I, uh, I, I describe the experiences or?
- 3:29 RTH: I, if you have a preference, I'd say, I'd say go for it. I generally go 1 through 6, but I don't, I don't have a strong feeling for that.

SAMPLE 2.6 DISCUSSION STARTS HERE

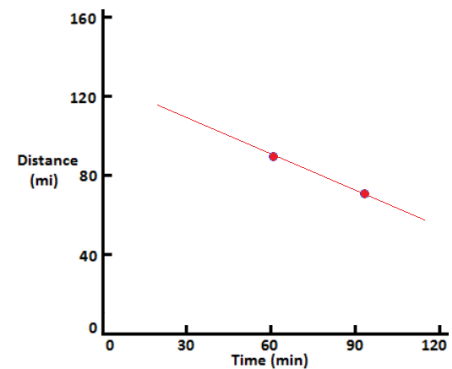
- 3:39 GP: Okay. Well, there's one that matters to me more than the others because I, um, I was curious to see if I could repeat the, the experience that the, the, the [inaudible], with while I was asleep. So I, and there was a whole discussion about that last time [see interview 1, sample 1.3, from about 35:00 to 45:00], and maybe we can keep it brief this time. It is just to say that I felt, I took it up again with the earpiece in my ear, and it woke me up again. And it was similar to what happened last time. Namely, I could tell in the moment that I was thinking about something and maybe I even had some faint images, uh, but then by the time I, y'know, stopped the beep and I got the notebook and I got the pencil (I had them like right next to me, but...) I could not remember anything about the content of the experiences. [RTH: Okay.] So really that's it. But—

- 3:39 Russ comments: RE "And it was similar to what happened last time."
 Short of nirvana, all recollection is an impure amalgam of what had actually been experienced at the moment of the beep and presuppositions (distortions due to self-concept, theories about consciousness, etc.). What seems "similar" is at least in part the presuppositions involved rather than the experiences themselves, and focusing on the similarities before focusing on the experience is likely to *amplify the presuppositions* and weaken the importance of the experiences themselves. So...

Gualtiero comments: This is another place where our attitudes differ. I'm interested in more than the content of experiences at a time. Whether two experiences are similar may be a useful clue about which experiences are possible under which conditions and how they are processed (e.g., during sleep vs wakefulness) so this is useful information. What's funny is that in the RTH-Schwitzgebel exchange, Schwitzgebel was the skeptic of the two but between me and RTH it seems that RTH is going to be the skeptic ;-)

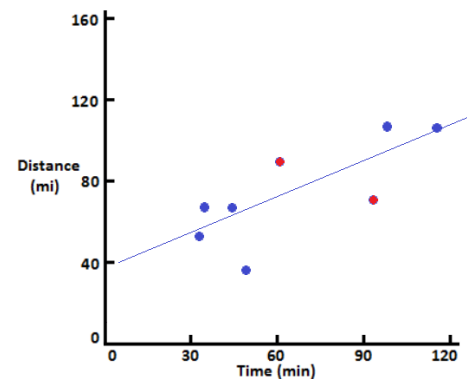
Russ comments: “I’m interested in more than the content of experiences at a time. Whether two experiences are similar may be a useful clue about which experiences are possible under which conditions and how they are processed (e.g., during sleep vs wakefulness) so this is useful information”

I agree, but it is also true that the two experiences may be the exception rather than the rule, or that the two experiences were not understood correctly, and so on. At right are two points, and the line that we might theorize as connecting them:



But if we collect some more data, we might see that the entire data set looks like this, and the first two data points just happened to be heading in the wrong direction.

The problem for the science of experience (as it seems to me) is premature theorization. For example, Gualtieri said in his comment at 44:59 in interview 1: “I, however, am interested in theorizing about what is the physical basis of experience.” The problem is that in experiential science, that theorization affects subsequent data collection. So one of the DES handrails (see Russ’s comment at 44:59 Gualtieri 1) is to bracket any interest in (that is, cultivate a relative disinterest in) the first few data points. Eventually, when enough points are accumulated, then a legitimate pattern may emerge. That doesn’t mean that the first few points are wrong; it means that patience is a good policy.

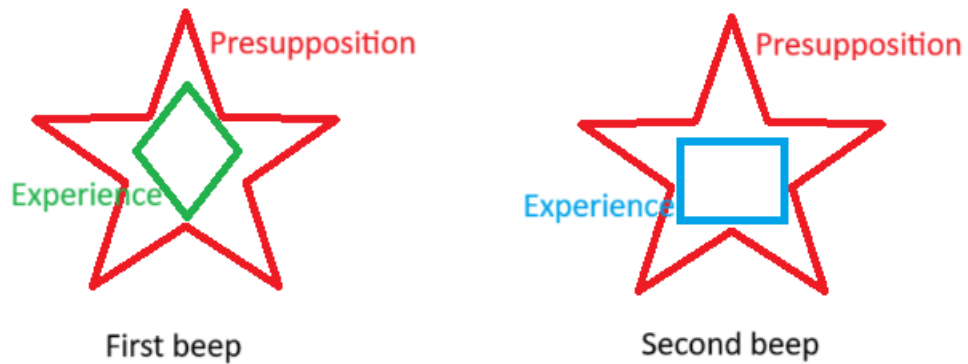


In my opinion, experiential science has been held back by premature theorizing. It is not the theorizing that is problematic; it is the prematurity that is problematic.

4:53 RTH: So let, let’s set aside whether this is similar to or different from the, from beep, whatever it was last time [it was sample 1.3], and, and try to, and try to understand this one. So what I understood was that as, in awakening, uh *while* awakening, I understood myself to have been thinking about something. [GP: Yes.] My mind was not blank. It seems to me that my mind was not blank, that I was not just a void, devoid of experience.

4:53 Russ comments: RE “let’s set aside whether this is similar to or different from” sample 1.3

...RTH’s invitation is to “set aside” any similarity and encourage us to bracket the presuppositions, thus allowing each individual experience to be encountered with as much fidelity as we can muster. Here’s a crude schematic; start at the left side:



At the first beep, the green experience feels like a pretty good match for the (perhaps unseen but powerful) presuppositions—three of the green experience’s pointy parts sort of match the points of the red presupposition. At the second beep, the confirmation is even better—*four* pointy parts match!

However, we can’t know at this stage (we have only two instances) whether experience is really (schematically) four-sided, in which case the star-shaped presupposition is mistaken; or whether experience is really (schematically) five-sided, but our first two apprehensions either failed to notice the fifth side, or experience is really five-sided but any particular instantiation reveals only four of the sides.

To the extent that that distinction is important, there is only one way that I know of to proceed, and that is to bracket the presupposition (to set aside the red-star-ness) and try to examine this (green diamond) experience, and then this (blue rectangle) experience, and then this yet another experience, until we have done as good a job as we can do of noticing the regularities of the experiences. *Then* (and only then, in my view) we may be in a position to determine whether experience should be understood as five sided (in which case our presupposition has received invaluable support) or four sided (in which case, our presupposition will have to be adjusted).

Bracketing of presuppositions is (in my empirical observation) hugely difficult because people are generally inclined to confirmation bias. An essential (and so obvious as to be almost entirely overlooked) feature of DES is that it provides a series of occasions (random beeps) at which bracketing can be practiced, and practiced again, and practiced again and again, each time with new facts on the ground (new experiences). As that bracketing is practiced across sampling days, we may become more effective at amplifying the *experiences* and weakening the presuppositions.

Eventually we will indeed be interested in similarities across samples and their implications for theory, but that interest is best served by *postponing* it (patience!) until we have a batch of individual experiences, each examined as carefully (meaning as presupposition-free) as we can muster. Said another way: the intention (recognized or unrecognized) to validate a theory destroys the ability to apprehend experiences with fidelity and, as a consequence, destroys the opportunity for those experiences actually to contribute to the theory.

Gualtiero comments: RTH makes a good point, and I agree with what I understand to be his point. My point is that there is a significant similarity between the two experiences I had while asleep in the following sense. Both experiences involved unsymbolized thought and in both cases I forgot most of the content of the

experience by the time I was ready to take notes, even though I remember being aware of such content at the time of the experience. To me, this suggests that our ability to retain memories of unsymbolized thoughts is significantly impaired while sleeping, which fits with what we already know about memory of experiences during sleep (we rarely remember dreams). I find this interesting and it might be a valuable observation.

Russ comments: There are two branches possible here. The theory-validation branch is: Conduct a study that seeks to validate the theory that people's memory of unsymbolized thoughts is impaired while sleeping. The bracketing-presuppositions branch is: Sample a bunch of people while sleeping, apprehend their experience with fidelity, and see what you get. In my opinion, experiential science is far too invested in the theory-validation branch at the expense of the bracketing presupposition branch. There is nothing wrong with theory validation; it's premature validation that is problematic.

5:24 GP: Um, yeah. The way I would put it is that at the mo—the beep itself, as it woke me up, made me realize in that moment that I was having some stream of thought slash faint images right before. And then the beep itself, but mostly interrupted in there, made me think about the fact that I needed to write notes about it. And, um, probably I had some excitement over the fact that my ex, little experiment was successful. Um, but yes. So, but then by the time I, I tried to write it down, I, I couldn't remember anything about the content that was going on when I, but when I, when the, the beep came, I was aware of some thought content that was going on.

5:24 Russ comments: RE "I had some excitement over the fact that my ... little experiment was successful"

Here's a personal account; take it or leave it. I know that feeling of excitement, which for me is something like *I'm right!* I have learned from long and painful personal experience that that feeling is a reliable indicator that a presupposition is operating in the vicinity. That is, for me, the feeling of *I'm right!* is a pretty good sign that I am actually wrong.

Here's why: Apprehending an experience with as much fidelity as I can muster is genuinely satisfying and authentically nourishing, but it is not exciting. The aim toward fidelity always involves the recognition and acceptance of the falling short of perfection: Do I really understand? What can I do to improve the process so that next time we can grasp with higher fidelity? There is nothing exciting about that. Beautiful, maybe. Privileged, certainly. Exciting, not so much.

The feeling of *I'm right!* comes from the fact that the star (referring to the schematic of comment 4:53) stays the same across samples: *I'm right—same star!* But to the extent that I am attracted to the star, I have distracted my ability to see the quadrilaterals.

In short: I can say that for me, the feeling of *I'm right!* is a reliable and valuable guide that I am heading in the wrong direction.

6:31 RTH: Okay. And, and you said something about faint images. Can, do you have, can you, is there something more specific about what "faint images" means?

- 6:43 GP: Um, I'm guessing they were visual... But I didn't write it down, so it's, it's a kinda mostly a guess that I'm, but it's just these, because if I wrote "faint images," and that's, it's an inference that I'm making now that it, it was probably visual.
- 7:04 RTH: Okay. So as a general rule, I'm, I don't want us to confuse inference with, with direct, what I call *direct apprehension*. And, [GP: Fair.] and I'm, and I'm recognizing the sort of the inchoate-ness of this experience. So, and, and, and I, as a general rule rely, would prefer to rely on the iterative method rather than to try to grasp what was happening about this particular beep. Y'know, there are, there are some investigators who think that they can go backwards and ask you to relive *this* experience or whatever, and try to figure out whether this is, whether this visual, whether these were visual images or auditory images or whatever other kinda images they might have been. I don't do that because I don't trust it.
- 7:59 GP: It would not work for, for me. I would not be able to do that.
- 8:02 RTH: Okay. Well, I don't think anybody's able to do that. [laughs] Or I, I, I think it's fraught, let's put it that way. I think it's fraught. And, and I, there, there's, there's enough debate about whether you can, whether it is possible to grasp a fully awake experience, uh, without, and so I try to do, I try to do that as basically as well, as well as I can. And, and I'm willing to say, well, y'know, there's some other stuff out there that maybe that is beyond my ability to reach or our ability to reach. So— [GP raises his finger] go ahead.
- 8:41 GP: Do how much experience or, um, yeah, how much of this have you done with people who were sleeping?
- 8:46 RTH: Never.
- 8:47 GP: Never. Oh.
- 8:49 RTH: Well, I shouldn't say "never" because obviously you're one, and other, and other people have warned the people when they're, when they're accidentally asleep or whatever, they fall asleep during the process. But I have never, I, I, I, I have never done a sleep study in in particular.
- 9:06 GP: So when, if people fall asleep, what, what do they report experiencing when the beep arrives?
- 9:12 RTH: It's pretty variable. Some pretty much like you. Some I was asleep and that's all, I can't remember anything.
- 9:19 GP: Does anybody ever say my mind was completely blank and then the beep woke me up and there was nothing there?
- 9:26 RTH: Yes.
- 9:28 GP: Um, cuz I would like, I would like to see if that happens to me.

- 9:31 RTH: And other, and other people report a full-on dream that they, they can wake up and it was, there was a dream on.
- 9:39 GP: Right, right, right, right.
- 9:39 RTH: But I don't, I have never investigated it, investigated it.
- 9:45 RTH: No.
- 9:47 RTH: And the, and the, the reason, the rationale for that is that it is remarkable to me. If you, if you read, for example, an introductory psychology book (probably an introductory philosophy book too, but I'm not, I'm not so familiar with them), you'll find a chapter on the phenomenon of dreaming. [GP: Mm-hmm.] And you *won't* find a chapter on the phenomenon of awake, awake experience. And that to my way of thinking, is absolutely remarkable. [GP laughs] And, and I think it comes from the fact that everybody believes that they know what the, they know about awake experience. (I think they're mistaken about that, but everybody believes that.) And so it doesn't seem like it's a good idea to have a chapter about that. I'm *amazed* at that. But I, so I have put most of my, or all of my eggs, most, most, most of my eggs into the *awake* basket, rather than the *asleep* basket. Which is not to say that sleep isn't important. I think sleep is important, I'd love to know about more, more about sleep and beeping people while they're asleep would be fine with me. It has, has never made it to the priority list for me.
- 10:58 GP: Okay. Should we, do we have more to say about this one, or?
- 11:02 RTH: I think I'm good about that.
- 11:04 GP: Okay.
- 11:05 RTH: Well, what number was that? Just so that I can...
- 11:08 RT GP H: Well, that was the last.
- 11:10 RTH: So that was like number 6?
- 11:13 GP: It might even have been number 7.
- 11:17 RTH: We can figure, we can figure that out when we get there. [GP laughs]. So should we go back?

SAMPLE 2.1 DISCUSSION STARTS HERE

- 11:21 GP: Yeah, let's go back to the beginning. [RTH: Okay.] Um, the, the, the first beep was seeing a small leaf on the deck in front of me, while also experiencing a unsymbolized thought that was part of a train of thought, but I can't remember the content of that thought. [laughs] Um, [pause] one thing I noticed, um, and that seems to be a general

phenomenon, is that, um, I, I, I think I talked about this a little bit last time also, but it just seems even more clear to me now that at any time, including at the time of that one beep, that first beep, um, there's, there's one item at the center of my attention, or at least more that I'm focusing on more than others, especially with the, when it comes to sensory experiences, and that's, but it's surrounded by other items that are also there in experience to some degree of vividness or focus.

12:53 Um, and I am some, at least somewhat aware of other things, not just that leaf, y'know, a leaf is not like isolated like in the middle of nothing. It's on the deck. So even though maybe I'm focusing on that leaf at that very moment, I'm also seeing some of the surrounding deck, and then there's a bunch of other, y'know, the deck expands in, in the visual field and there's other things, um, that I might not be focusing on, but at least they're like still somewhat there.

13:29 And, um, and I, I wondered at that, after that beep, I wondered if the beep itself might have sometimes pushed me to select something as being the focus more than it actually was before the beep itself. Because I know I have to report on this, so I have to say, *what am I experiencing?* So like, *oh, what am I experiencing here at this moment?* Um, and so then I have to like pick something, whereas my, and so there's a slight artifact of the fact that I'm trying to report on what was in the experience [laughs], and it makes me select one thing to a degree that it wasn't quite as central to my attention, um, before the beep, if that makes sense.

14:28 RTH: Well, that makes sense. And all that's hugely important to me (as well as everybody else). And, and there's a lot of, there's a lot that I have to say about that, cuz there's, there's a lot of, there's a lot of stuff there.

14:42 So one, one of the things that I would say about that is I would like us to be as clear as we can about the fact that we are interested in Gualtiero's experience, and we're gonna do as best a job as we can to get to that. And that will be short of perfection, uh, because Gualtiero is not perfect. Also, Russ is not perfect. Lauren too for that matter. But the, but, but that's, that's, that's the accepted foundation on which, on which we're gonna work. But I would like us to *aim relentlessly* at Gualtiero's experience. [GP: Mm-hmm.] That's one thing.

15:26 Another thing is, it is possible that Russ would squeeze Gualtiero in the direction of *one thing*, and it's also possible that Gualtiero would feel, incorrectly, that Russ is squeezing him in the direction of one thing.

15:47 RTH: I don't have a preference. I'm, I'm, I'm not, I'm *by no means* trying to say that my locations have been perfect because I'm, I'm well aware of my own imperfections here. But what I, what I would like to say is I don't wanna push us in the direction. I, I don't want to push us in the direction of one thing. I think it's quite possible for there to be multiple things present, including one primary thing and others at some smaller inchoate-er level. And so I'm, I'm happy, I'm happy with that. *But*, so that's, that's number two, I guess.

16:29 Number three is, I don't want us to confuse Gualtiero's *experience* with what we *think* about visual perception or whatever, because it is no doubt the case that if we were, if we could examine Gualtiero's retina or LGN or wherever else, the, the neural processing goes, that there is the leaf, and then there's the deck around the leaf, and then there's the yard around the deck around the leaf, and then there's the, the, what Trump said today about the, that was still there, about what, y'know, (without,

without meaning to take any kind of political position about that). But all the, all the stuff that is in the penumbra of Gualtiero's experiences is definitely there impacting Gualtiero in some way. I'm, I'm fully accepting of that. [GP: Mm-hmm.] The question is whether Gualtiero's *experience at a particular moment*, somehow, some-somehow admits of that or accepts that or brings that into his experience. Because it's quite possible that, at a moment, Gualtiero would be about one leaf. All the rest of that stuff is there, neuro-ly, memorially, whatever. But at the moment, I'm interested in this leaf, for whatever reason. That would be fine with me. [GP: Yeah.] And it would also be fine with me for Gualtiero to be, Gualtiero's experience to, to say, well, I'm interested in the leaf, but I'm also interested in the deck and the yard and the politics and the, and whatever.

18:14 GP: Right. Right, right. Yes.

18:16 RTH: And the, so that, that's part three, which I guess is the visual perceptual nature. And then part four is the presuppositional theoretical nature. Gualtiero, no doubt, has some philosophical views on these, on these subject matters. And, and his experience may very well be in contradiction to those things or in assent to those things. And our, our goal is to bracket that, because that's what's, that's what's interesting (to Russ, I guess, and Russ would like it to be interesting to Gualtiero and to Lauren as well). And because if, if we, to the, to the extent that we can get Gualtiero's experience right, well then that, that would be a data point about experience in general and consciousness and whatever else we want to be thinking about. To the extent that we allow ourselves to infect Gualtiero's experience with our presuppositional theoretical point of view, well then we're just, we're just orbiting around our theories rather than allowing ourselves to get the experience right.

19:47 I don't think there's any perfect answer to any of those things, except that we can work at it and see how good we can do at it and be try to be honest with each other about how good we're doing about it. And at the end we might say, well, we were crappy at it. Or at the end we might say, well, we, I think we could, we could try to set all that stuff aside. And, *and* we might also be able to say, well, this is the extent to which we could set that stuff aside. Maybe we did a pretty good job, we think, or maybe we didn't, didn't do a very good job. Or maybe we did a hundred percent good job. I, *for me*, the interesting thing is to be as genuinely forthcoming with each other about it as we can be. Because I think that's what's interesting.

20:45 GP: Yes. And I, and I was trying to be honest about the possibility that the, the, my process of thinking and getting ready to write notes right after the beep influenced my recollection of what I was experiencing beyond, y'know, a, um... yeah, the most straightforward possible description. Um, and so I tried to be mindful of that after that.

21:31 RTH: So that, that reminds me of, of I guess number five in my, in my little lecture here, that the, and, and that is I, what I would encourage us to suspend as part of (it's part, excuse me, part of the bracketing deal for me) to, to suspend generalizing too much from our, our, our samples. So, so far we've had five or six or seven samples that we've looked at. [GP: Yeah.] Let's not try to make too much of a deal about that. I think it's much better to try to get each sample right, and we can talk about the

process. I'm happy to have this conversation about the process, but I, what I *don't* want us to do is on the basis of this process of this sample or this four samples that we've had so far or whatever that, however many there are for us to, to draw a general conclusion about that.

22:23 GP: Yeah.

22:25 RTH: What I would like us to do is to, is to keep the pressure on trying to do it well—keep the relentlessness on that—without, and then— so we, we, we've got all the information here so we can always go back and, and figure out what we, what we thought here. But I think if we, if we keep the pressure on trying to do it right, which does *not* mean trying to do it one thing or trying to do it, whatever, trying to do it awake or trying to do it asleep or whatever, trying to do it with fidelity.

22:25 Russ comments: RTH's last two turns state the same principle that is discussed in the comments at 3:39 and 4:53.

23:06 GP: Yeah.

23:08 RTH: And I would say, now I've been prattling on here for fifteen minutes probably, and, and not so much aimed at, at yesterday's beeps or today's beeps whenever they were, but as, as part, part of the general process here, that, and, and: I think DES is almost always more aimed at *tomorrow's* sampling than it is about *yesterday's* sample. But I want us to get, so I, what I think I'm doing (to the extent that I know what I'm doing here) not— what I think I'm doing is trying to keep us on the path of becoming better at apprehending Gualtiero's experience with fidelity. Even though we're gonna fall short at, at it, at every step, including today, but I think we may, might be able to get better at it. So all that's about tomorrow. So about the, about yesterday or today, are these beeps from yesterday? Are these? [GP: this morning.] This morning, beeps from this morning?

24:20 So there was a leaf, and the leaf is somehow occupying my experience. Maybe all of it, maybe some percentage of it. Can we, can you say more about what the leaf, what, what, what your experience was of the leaf?

24:37 GP: Yes. Uh, so it's a, it's a small roundish, uh, curled or concave brown leaf. Uh, I call it a leaf. I'm not even a hundred percent sure it was a leaf, but it was some kinda vegetable, y'know, um, plant matter on the deck, y'know, I, I, my deck is surrounded by trees, so there's always stuff falling from the trees. Um, so it was, it was roundish very small, maybe the size of a dime, and it was concave and it was brown, and it was just lying on the, on a board on the deck.

25:21 RTH: Good! So now let me say that what you have just said about the is, is about the leaf. You have given us a good description of the leaf, which is *not* what I care about *at all*, really! And it, but my experience is, my interest is in your experience. So is your experience, for example, of the *concavity* of it, or of the *smallness* of it, or of the, *it fell from the trees*-ness of it, or none of the above,

- 25:51 GP: Or not the fall, not that they fell from the tree, but the, but the size and shape and color and concavity? Um, yes. So I, I, I was there in the experience, not, but not as separate elements of the experience. It was all bound together, if you will.
- 26:17 RTH: So I'm interested—
- 26:19 GP: These properties were, y'know, presented visually together.
- 26:23 RTH: I'm interested in... Is this true, I'm asking, and, and, (and I would say that everything I ever say is always a question at one, at one level or another). But the is, is it true that my experience is of the visual characteristics of the leaf as opposed to the, it's trash and I gotta get rid of it aspect? Or the—
- 26:44 GP: Yes, yes, yes.
- 26:46 RTH: So I'm involved with the way the leaf *looks* to me, and not in any particular aspect of it. It's not the greenness of it or the curled-ness of it, or the concavity of it, but the, is that true?
- 27:02 GP: Um, yes. y'know, it was a, it was just a fleeting experience. So as usual, this beeping process and then the description makes it sound like there was some, y'know, it, it almost makes, makes it sound like it was a static experience that occurred for a period of time. And it gave me, y'know, gave me all this time to, y'know, understand what I was experiencing or whether I was having any, any further thoughts about the experience. But in, in reality, it was just a fleeting moment. I was maybe walking on the deck or moving, I was moving on the deck, and it just happened that at that moment, right before the beep, I, my eyes were, or, y'know, my, the leaf was present in my experience just for a very small fraction of a second. So it didn't really, y'know, I didn't have time to like, think about, *oh, like am I experience, y'know, this leaf, oh, it's concave, it's brown, it's this, it's that*. It was just the visual presentation of the leaf itself for just a very fleeting moment.
- 28:22 RTH: So I guess I got a couple of things to say about that too. That, what.... So let me ask a couple questions first. The s-so when, what I'm understanding is that for at least, at least at the moment of this, before whatever reason, my eyeballs have fallen on this leaf and I am in somehow regarding or attracted to or interested in or whatever the visual characteristics of this leaf. And my interest is not in the botany of it. I don't really care what kind of a leaf it is, and I—
- 29:05 GP: And I don't, I'm not even sure it is a leaf.
- 29:08 RTH: It doesn't matter to me.
- 29:09 GP: It could be a leaf, but it's some kind of thing that must have, must have come from a plant. That's the look of it.

29:19 RTH: So what I, what I would notice about that is that you, you, you are quite confident about your experience here. Your experience is *not* of the leaf-ness of it. You don't even give a shit whether it's a leaf.

29:31 GP: No, I'm not even sure it is a leaf. No. Right? I mean, I'm using the word leaf just because I need to use some word for it.

29:31 Gualtiero comments: This is an example of how there is always going to be a gap between the experience and our description of the experience, because when we describe experience we have to use words, and words by nature select some aspect of experience and ignore others. For example, calling an experience an experience (as) of a leaf projects a category onto the experience, a category ("leaf") that may not have been part of the experience itself. In philosophy there is a debate about whether sensory experience is conceptual or nonconceptual, where "conceptual" means, roughly, involving representations expressible through words. This whole debate might be somewhat misconceived. Perhaps what sensory experience does is present things to us within a sensory modality in ways that make it relatively easy to activate certain words as applying to what the experience presents, but there are still choices to be made in selecting the right words and sometimes we are confident about the choice of words while at other times we are not and might be just guessing (as in the case of my choice of "leaf").

Russ comments: I absolutely agree that word choices have influence, and one of the characteristics of DES is to make it as little about the words as possible. For one example, my closing statement of today's interview (1:03:41) was "What I would like us to do is to, is to say, well, whatever it is that we talked about today, and whatever Hurlburt said about it, and whatever I said about it, whatever anybody said about it, let, let's, let's bracket that away." In the present context, that statement can be interpreted as: whatever words we used today, let's forget them, and next time perhaps start with new words.

I gave as an example seeing the boards move across the visual field, and tried to undermine any connection between the experience and what we said about the experience: I said "I don't know what I said about that, whether that was true. I don't know whether what Gualtiero said about that, whether that was true. Let's, let's see whether we can *start fresh* next time; ... let's see whether we can get at Gualtiero's experience as best we can get at Gualtiero's experience *without prejudicing it* with any specifics of what we said or didn't say today. Which is not to say that what we said today isn't important. It, it, it's that it, it might not have been perfectly, perfectly stated."

I could have used the leaf as an example. The point I was trying to make is that *next time*, when we have different (randomly selected) experiences, let's *not* presume that any word choice we happened to use today was a good one (or a bad one); next time let's start fresh, again trying to let words rest easily on experiences, but trying not to be influenced too heavily by today's word choices.

29:37 RTH: Fine. I'm totally happy with that. [GP: Yeah.] And, and, and so I guess the, the second, the second thing is, I would say that most people when they describe what, what, what I would take as being a sensory awareness here and by, in my lexicon, a *sensory*

awareness is an interest in or attraction to, or whatever, some characteristic of the world (whether that's in the inner world or the outer world), which doesn't have any, any necessarily instrumental nature to it. It's not like I'm trying to figure out something about this. It's not like I'm trying to sweep it aside. It's not like a, but I just, I just, it interests me at this particular moment.

30:26 And what I would say about people who describe sensory awareness like this for the first time, they do it pretty much like you have just done it. And what that, what I would say about that is you're a little bashful about it or shy about it or whatever you, you wanna say. Well, this is not a big deal. This is just a, y'know, a transitory thing. It's, I just happen, happen, happened to it. That's the, that's, that's the way people describe sensory awareness. And the, and what I think about that, that why, why, why people do that, which it's not my job to, to actually to try to figure out why people do things. But what I *think* is that you are, for whatever reason, attracted to this leaf for the moment. You could have been attracted to a whole lot of other stuff. There's, there's trees out there and there's wood out there, and there's, uh, upcoming conversation with Russ, and there's what Trump said, and there's all, all different kinds of stuff that could have been occupying you at that moment, but you were attracted to this leaf for whatever reason.

31:28 And I would say that attraction is very close to the, or the sense-the sensuality of attraction is very close to the sensuality of sexuality. This is what Gualtierio is interested in. This is what appeals to Gualtierio at, um, at a particular moment. And people are shy about saying what attracts them. People don't go around saying to other people, I, you, I, I'm, I'm attracted to you. And I think for good reason, people don't do that. And genetically, y'know, if you say that about the king's wife, then you're, your, uh, genetic material ends or whatever. So there's, there's lots of, lots of reasons why we don't, why, why we are reticent to describe sensual aspects. So that's a theory. We can take or leave that theory, we can bracket that theory away like every other kind of a theory. But what I, what I, and, but, and, and my, my interest is not in the theory. My interest is in helping Gualtierio *accept* that a sensory interest is a important part of the human condition.

32:53 GP: Yeah, yeah, absolutely. I would just, uh, add is a qualification that, in this case, I wouldn't describe what happened as me being interested in the leaf, um, or attracted to the leaf, but more as the leaf being more or less by accident in the, the main foveal area of my visual attention at the time of the beep. So it felt more like an accident than a, the result of any kind of selection of the leaf on my part or more focused attention.

32:53 Gualtierio comments: One thing that working with DES is making me more aware of is how fleeting and dynamical our experiences are. When philosophers talk about experience and do armchair introspection, they tend to focus on stable experiences that we can describe with care because they are stable, and they are stable because they are usually stabilized either by a stable stimulus (e.g., a visual stimulus that we can focus on) or by our attention. But DES is teaching me that stable experiences are exceptions. Most experiences are very fleeting and in constant flux.

33:43 RTH: Okay. I'm happy, I'm happy with that. But as, as long, as long as we don't give it any more significance than about this particular beep, it seemed like I was sort of

accidentally attracted to or accidentally regarding, accidentally noticing the leaf. [GP: Mm-hmm.] That's the way it seems to me. That's fine. What I want, what I *don't* want us to do is to prejudice any *future* beeps one way or the other about that. [GP: Mm-hmm.] Because it could be that a whole, whole lot of things are accidental, or it could be that they're not. And either one of those things is fine with me.

33:43

Russ comments: RTH doubtless thought he had given too long a lecture already, but he could have added here that the fact that the leaf fell on Gualtiero's foveal region does *not* explain Gualtiero's experience—lots of things (thousands or maybe hundreds of thousands) fall on Gualtiero's foveal region over the course of a day that are *not* directly apprehended—not made the figure of Gualtiero's experience.

Gualtiero comments: it's true that lots of things fall on my foveal region without being directly apprehended but all that needs to happen for something in my foveal region to be directly apprehended is that, for example, I'm looking at where I'm going as I normally do when I'm moving my body (because otherwise I would lose my balance or bump into things) and some random object happen to be in my foveal region right before the beep.

Russ comments: I'm not sure I understand what you are saying. This is my understanding:

I'm moving across the deck; as I do so, lots of photons from different regions/objects fall successively on my foveas as part of my walking/navigation skill; if the beep happens when the leaf-photons hit my fovea, then I directly apprehend myself as seeing the leaf.

I will respond (a) as if that is what you said (if that's not correct, please let me know); and (b) as if experience is actually directly apprehended (not brought into existence by the beep).

I think your description is not at all what happens. Your photon-on-fovea patterns change on the order of 20 to 50 times *per second*, as your eyeballs saccade. Your directly apprehended experience patterns change 20 to 50 times *per minute* as your interests wander. (Don't hold me too tightly to the numbers—the point is that foveal changes are one or two orders of magnitude or two faster than experiential changes. So directly apprehended experience *cannot* be simply the result of whatever happens on your fovea at that particular time. Your direct apprehension of the leaf has to be the result of Gualtiero's processing hundreds (of fifties or thousands—the numbers don't matter) of saccades, and out of those organizing them into the leaf. So...

RE "all that needs to happen for something in my foveal region to be directly apprehended is..."

I just don't think that is true. What needs to happen is that Gualtiero has, for whatever (historical, neurological, social...) reason undertaken the experientialization of a large number (hundreds) of foveal impressions into this leaf-thing.

RE "some random object happen to be in my foveal region right before the beep"

I don't think that is what happens. Objects do not fall on foveal regions. Objects are created by Gualtiero's neural processes out of a large number of foveal

impressions. At the same time, Gualtiero's balance and not bumping into things is a neural processing of the same series of foveal saccadings. I think Gualtiero's skillful walking does *not* depend on Gualtiero's seeing of the leaf with its curled edges. His walking processing takes place in parallel with his object-making processing. I don't know the extent to which those processes overlap neurologically, but I think it makes sense to think of Gualtiero as a parallel processor rather than a sequential processor.

Gualtiero comments: There is certainly a lot of parallel processing and there may well be more saccades than "direct apprehensions", at least in some cases. But I think the situation is more complicated than how Russ describes it. I am not an expert, but I'm inclined towards something like the following. Under many circumstances, our eyes saccade about 3 times per second, on average, although they also make tiny vibrating movements much more frequently than they saccade. That said, our eyes do not always saccade. Sometimes they do smooth pursuit (to track a moving object) or move smoothly for some other reason. In addition, and perhaps more importantly for our case, when we move, our head or whole body (or both) move and that changes what our eyes are pointed to in a more or less continuous motion. Our eyes can saccade even while we move, but they don't have to. As a result of all of this movement, including saccades but also all sorts of other movements, especially when we move our body, lots of things end up in front of the foveal region for an instant or a small fraction of a second more or less by accident, and perhaps we also briefly saccade on them, and if the beeper beeps at that moment, that is what we remember as what we visually experienced right before the beep.

This points segues into what Russ means by "direct apprehension". I think it's supposed to be what we experienced right before the beep to the best of our ability to recollect and describe it. I have questions about that. I am not sure about what is "direct" about direct apprehension. In my own attempts with DES so far, I find it very difficult if not impossible to distinguish between what was "truly" in my experience right before the beep and what I reconstruct as being in my experience based on (1) what I can retain in memory during the time it takes me to go from hearing the beep to turning off the beeper and then to getting the notebook, (2) shifting my attention during that time to some describable portion of what I can retain in my memory, (4) selecting language to describe some describable portion of what I have retained and restricted my attention to, and possibly (4) assumptions or expectations I might have about what I can and cannot experience within a given moment. There is a lot of processing that occurs after the experience has passed and that influences my report. I am doing my best but given how much potentially "indirect" and extraneous stuff can influence my reports, I find the term "direct apprehension" a bit problematic.

That said, I'm no Schwitzgebel and I do think we can learn a lot about experience this way.

34:22 GP: Yes.

34:27 RTH: Is there anything else to be said about your experience at the moment of this beep?

34:33 GP: No.

34:36 RTH: Okay. Lauren, you got questions about that? [Lauren shakes her head] Number 2.

34:44 GP: Okay, next beep?

34:45 RTH: Yep.

SAMPLE 2.2 DISCUSSION STARTS HERE

34:47 GP: Good. Um, so the next beep, uh, caught me while I was walking on the deck while talking to my dog Cinnamon. And I was saying the word *sbagliatus*, which is a made-up word that, y'know, is inspired by the Italian word *sbagliato*. Um, but I have this, these words that I make up with my dog, and I talk to her that way. But I didn't complete the word. I stopped at *sbaglia*, um, because of the beep. So the beep kind of caught me mid-word and I didn't complete the word because, y'know, the beep, uh, beeped and I started thinking about, okay, so where was I experiencing? So I was aware of saying the word, I was *hearing* the word being spoken by me, um, my body walking on the deck. So I had kind of a kinesthetic sense of me walking on the deck.

35:45 And the floor of the deck. Um, I was, I think I was looking at the floor. Um, so I had, I was seeing it, so I was seeing it. So I had a visual experience of the, of the, of the, of the deck and of my own body walking and of the word I was saying, um, both in terms of feeling like I'm, that I'm speaking and hearing the result of that.

36:21 Um, so in this case, I think I tried, I tried to avoid what worried me about the previous beep, that the excessive focus on the leaf might be partially an artifact of me trying to report what was the content of my experience in particular, as opposed to a wider range of things that I might have been experiencing. So here I have a list, a whole list in this case, um, cuz I was trying to be more, more inclusive, um, not miss anything.

36:58 Um, and then it occurred to me that it would, it might be easier to do this if the beep stopped by itself because, y'know, there's this extra operation of turning off the beep that might contribute to distracting me, at least, from remembering what I was experiencing.

37:21 RTH: Okay. Let's, let's go back to the beginning here and we'll come back to the stopping of the beep. So in, in the current rendition, it seems like there were five-ish, I guess, things that were candidates for experience (let's leave it at that). One was saying *sbagliato*. One was hearing myself say *sbagliato*. One was my body walking kinesthetics of my body walking, and one was seeing the floor.

37:21 Russ comments: RE "we'll come back to the stopping of the beep"

We never did come back, so here is an answer: Historically speaking, my 1976 patent that created a random beeper depended on the participant's stopping the beep—the invention was a way of transforming the variability in the participant's stop-the-beep reaction time into the randomness of the interval. (The current beeper does not depend on that—the current beeper has a computer with a random number generator.) But my opinion is that for most people, the requirement to stop the beep is actually a good thing—it gets them into immediate DES action. A beep that stops by itself is too easy to ignore.

Gualtiero comments: It would be interesting to test this hypothesis by comparing beepers that stop by themselves with the current beeper, to see whether self-stopping beeps get ignored more often and whether subjects find it easier to remember experiences if they don't have to stop the beeper.

- 37:54 GP: Yes.
- 37:57 RTH: And if, can you, is it, does it make sense for me? Is it reasonable for me to ask what percentage of my overall experience I was engaged in any of any of these things? And I don't really care about the accuracy of numbers, but are, are we talking 25–25–25–25? Are we talking about 90–5–4–3 or whatever?
- 38:26 GP: Um, yeah, I, it does make sense. I would say that the word (both speaking it and hearing it), which were not really distinct in my experience, this is sort of my attempt at being comprehensive and capturing both aspects, cuz y'know, in, in the way I experienced it, it was probably just one thing. But within that one thing, I think we can, we can list both the sense of *saying* and the sense of, and the *hearing* of the, of the result of the saying cuz I don't think those are the same things, even experientially, but they, y'know, but they're kinda fused together, y'know, in the experience. Um, so that part, I would say, was more than 50%, maybe 60%, let's say. And the other, um, two aspects, the, the, the sense of walking and the deck were maybe more like 20% each, something, something a little bit smaller.
- 39:54 RTH: Okay. So let's start with the *sbagliato* word.
- 40:00 GP: Yes.
- 40:02 RTH: The fact, the, the fact of the universe is that Gualtiero is saying *sbagliato*.
- 40:10 GP: Should we spell, should I spell it just for-
- 40:13 RTH: Yeah. Um, that'd be good.
- 40:15 GP: Having an accurate, um, transcript. It's, it's spelled, well, the, the Italian words *sbagliato* is spelled S as in Sam, B as in Bob, A, G as in George, L as in Larry, I, A, T as in Tom, O.
- 40:36 RTH: That's pretty much what I had, except I didn't have the S actually. [laughs]
- 40:39 GP: Yeah. There's a S at the beginning. Yes. That's a little tricky in this case.
- 40:46 RTH: So I, I would say as an aside, since we're talking about method kind of a thing as aside, is I *didn't* ask you to spell it. And the reason that I didn't ask you to spell it is that I didn't wanna say that I *really care* about how it's spelled. What I care about is what your experience is. Sooner or later, I would've had to have asked you how it's spelled. But, but part of, part of the relentless, what I would call the relentless focus on the experience is, I, it's not of primary interest to me how it's spelled. Because that way to, to ask about that would be to awaken some kind of a conversation about the silent

S and, and silent G, or whatever. And, and the etymology and how, and, and I think all that stuff doesn't really matter as far as what Gualtiero's experience is concerned at this moment. Might matter at some other time. So that's one thing. And again, that's a comment aimed at tomorrow, not so much about today. I'm, I'm, I am wanting to articulate and, and model the skill of focusing on Gualtiero's experience. There's a lot of things that are interesting in the world: et, etymology of quasi-Italian phrases is one of them, but it's not Gualtiero's experience. Uh, so that's one thing.

42:14 Another thing is about the distinction between *saying*, well, saying *sbagliato* and *hearing* it. [GP: Mm-hmm.] I think that it is possible to have the experience of saying *without* having the experience of *hearing*. In the, in the perceptual, in the world of perception, the world of perception involves both the... The world of speaking involves both articulation and hearing and feedback among those. And it's obvious, it's, it's easy to demonstrate that you can put earplugs on and people start talking louder if they, if they got earphones on. So it's, it's clearly, there's clearly a, a feedback neurologically, I guess you could say, or perceptually whatever. But that does not, that was, that does not necessarily mean experientially. So I think it's possible for speaking to be experienced as both a speaking and a hearing.

43:18 And I think it's also possible for speaking to be experienced *just as speaking*, and I don't experience myself really as hearing it. Obviously I am hearing it, but I don't experience it.

43:30 And, and this is maybe the one that's the most surprising, I think it's also possible to experience speaking entirely as hearing. So I obviously am speaking, these words are coming outta my mouth and I'm driving it or whatever, but I think it's fairly common experience for that to be *apprehended as heard*. I hear myself saying it. And that hearing is very much the same experience as Gualtiero hearing Russ speak or hearing Lauren speak or hearing his own voice coming out of a tape recorder. Those are experientially very different. So this is another lecture aimed at tomorrow, basically, but I would like us, I would like us to *not take for granted* this is a bracketing and presuppositions lecture. I would like us to *not take for granted* the perceptual realities that of the physical world, which, which do in fact involve both hearing and speaking and aim us at the, at the experience. And so the question is: at this particular moment, do I feel myself to be saying something to my dog? Or do I experience myself to be *hearing* myself say something to my dog? Or both? Or the question doesn't make sense? Or-

44:52 GP: Yes, I mean I think it makes sense. And that's why I described the experience that way as including both.

44:59 RTH: Okay. So I, I understand myself to be both speaking and hearing myself speak. And that is an experiential expression, not a driven-by-theory expression?

44:59 Russ comments: Note that RTH is not crediting Gualtiero's understanding as being true, nor is he discrediting it as being false. This is the honest bracketing of presuppositions. We have now (in the 43:30 turn) made more clear the experiential distinctions as being separate from the perceptual distinctions; those distinctions will now perhaps be more readily at hand on subsequent sampling days. RTH does *not* attempt to apply those distinctions retroactively.

- 45:16 GP: Uh, to the extent possible. Yes. Mm-hmm.
- 45:19 RTH: Well, I, I think the, the, *to the extent possible* is always an important deal. And, *and* I think having these conversations will, will perhaps make it easier for us to separate those things apart on our *next* sampling day. [GP: Mm-hmm.] Which is why much of the conversation about sampling has to be about tomorrow, and why DES interviews have to take place over the long haul. We can't, can't just do 'em on one, one or two days. Cuz we've, we've gotta figure out,... So Ru-Russ is trying to figure out what Gualtierio's trying to tell him, and, and he's trying to sort through, is Gualtierio telling me something based on his understanding of auditory perception or based on presuppositions about the theory or based on experience? And Russ has no way of knowing that, cuz he's not a mind reader. He is trying to get Russ and Gualtierio into a position where they can talk to each other in a way that both of them know what the other guy's saying.
- 46:29 GP: Yeah, and I don't think it's even entirely possible to discriminate between all these options for myself, because the thought process itself is largely non-transparent. So the thought process of, or the process of generate the description of the experience. So it's not like I can sort of identify every thread in the process that led to the description of that experience before the beep and say, *Oh yeah, okay, here's like theory influencing the, or this particular theory is influencing my output here at this point*. I'm, I'm doing the best I can to tell you what I was experiencing.
- 47:19 RTH: So I totally buy that. I, I what I, and, and what I would, I guess what I would say is that, that what I would like us to do is to recognize that it is possible to be, to be saying something *as the result of theory*. And it's possible to be saying something *as the result of direct apprehension of experience* and all kinds of mixtures of those.
- 47:47 GP: Well, partly because even the experience *itself* could be influenced by, um, theories that you'll have in the sense that your concepts, your assumptions might allow you to experience things in different ways depending on which assumptions you have or which theories you have.
- 48:14 RTH: I totally agree with that. But from my point of view, that doesn't change the fact that it's still possible to try to separate away, the theory from the direct apprehension. Lauren, you were gonna say something?
- 48:27 LG: I did, I have a quick question. Um, so are we talking about trying to separate the actual in-the-moment experience from what you later on go back and think about it and try and connect what those, um, experience or experiences were after? Cuz I can think about a moment where there's speech and I'm hearing the speech, and then later I'm thinking about the speech that was said, and then I *assume* that I possibly experienced it also coming out of my mouth *and* hearing it. And so that assumed part we want out, and we just want the actual feeling or experience in the moment. Is that what we're talking about kinda thing?

48:27

Russ comments: Following the schematic of the comment at 4:53: The aim of DES is the pristine experience (top panel), the undisturbed experience that was ongoing in Gualtiero's natural environment at the moment of the beep. Gualtiero then jots down some notes about that experience (second panel), which, because Gualtiero is less than perfect, will be a distortion of the original experience. Then, a few hours later, when we discuss his experience, his recollection will be further distorted by presupposition, intervening incidental events, and so on (bottom panel). The aim of DES is, across sampling days, iteratively to improve Gualtiero's ability to jot and recall his experience with increasing fidelity, and our ability to hear his descriptions with increasing fidelity.



- 49:03 RTH: Yes, [LG: Okay.] that's as best, and, and do that as best we can, which as Gualtiero pointed out, might be impossible *on the way in* because his theories shape his experience and might be impossible on the way out as well. And, and, and I, and, and I'm, I will be totally happy if we get to the end and say, *Well, we can't, it's not possible to tease those kinds of things apart* if we, as long as we've tried, if we haven't tried to tease them apart because we're totally captivated by our own theory, for example. (I'm not saying that's the way it is, but I have met some people who were pretty captivated by their own theory) and it wouldn't occur to them to really try to, try to, to hear any, any contradictory evidence. Let's put it that way. As long as, as long as we have tried then, then I can say when we get to the end, we'll, we'll have a data point that's worth talking about. But if we don't try, then we'll just, well, we'll just assent to some theory or other. We might as well not have done this.
- 50:13 RTH: Did that answer your question? [LG nods head yes] So about the walking. I am maybe 20% experiencing the kinesthetics of my walking.
- 50:39 GP: Yes.
- 50:41 RTH: What does that mean? [There is a glitch in the audio.]
- 50:43 GP: Did you say, what does that mean?
- 50:45 RTH: Well, what do you, what do you what- I said that, that *is* what I said, but what I really mean is: what does, what was your experience when you, which comes out in words: "I was experiencing the kinesthetics of my walking"? I wanna know what your experience was.
- 50:57 GP: Okay. So it's hard to say more, but it's just a sense of my own body in motion, y'know? In a, in a walking motion.
- 51:10 RTH: Whole body?
- 51:11 GP: Yes.

- 51:12 RTH: Leg, legs, feet, arms, hands, head? The whole, the whole deal?
- 51:16 GP: I would say so yeah, the whole body. Um, I can't guarantee, I cannot guarantee that in that 20% of my experience that I was sort of containing that there wasn't some further differentiation. And maybe the head itself might not have been, if I, y'know, to the best of my ability, I would, I would say maybe the head was not as much in the experience, but more the rest of the body. Cuz the, the head is sort of being carried, I guess, y'know, it's not moving on its own. Um, but all of this is elaboration that I'm doing now. Um, I, to the extent that I can remember the experience itself, it was just a sense of my whole body moving, y'know, walking in a walking motion.
- 52:07 RTH: So what I am trying to do (as is, which is what I almost always do on the second or whatever day of sampling) is to, is to try to understand what Gualtiero means when he says, "I've got a sense of kinesthetic sense of my body." [GP: Yes.] And does he mean *Well, to be complete, I must, I was walking and therefore I must have had some kinesthetic sense and so I'm gonna report I have a kinesthetic sense. Or is it a kines- a kinesthetic sense that I had at the moment of the beep, but minorly.* And I'm, and I'm, and, and I don't wanna discount... The, the, the hard part of my job, I guess I would say the hard part of my job is I, I don't wanna discount the possibility of having a small part of my experience engaged in the experience of the kinesthetics of my walking. [GP: Mm-hmm.] But at the same time, I don't want us to say, While I was walking, and therefore I must have had a kinesthetic sense of my walking [GP: Right.] That's the, that's my art, I guess you would say, to try to convey that I am indeed interested in your experience without, without it being driven by, by some [GP: Yes.] perceptual, pros- perceptual assumption. Let's put it that way.
- 53:44 GP: Yeah. And again, to the extent that I can try to be as faithful as possible to what I was experiencing, I'd say that was a kinesthetic experience of walking. Um, it was, it's not just an inference based on the fact that since I was walking, there must be something there.
- 54:08 RTH: Okay. And, and, and so far we haven't yet been able to say, *at the moment of the beep, that kinesthetic sense was mostly in my legs or mostly in my arms.*
- 54:21 GP: No, it was, it was more diffusing that it was more of the whole body moving.
- 54:29 RTH: And, and *the whole body moving* can be, I guess what we could call a kinesthetic sense. I feel the, I feel the joints in action...
- 54:41 GP: Mh-hmm.
- 54:42 RTH: ...or it could be a whole body through space: I feel, I feel the progression, my bodily progression of my body moving from this point to the next point.
- 55:04 GP: I am not, I'm not sure I understand that distinction. It, I would describe it as a, just a sense of the body moving from the inside, y'know, the, this, this internal sense of my body moving. And I, yeah, I don't know if it helps, but I've practiced Tai chi, um, for about 30 years daily. And so that is a practice that, um, in which you're, you develop

over time more awareness of your, well, of everything that's happening in the moment, but especially your own body and the alignment of the body and the parts of the body and how they all fit together. But you're aiming for a holistic sense of what's happening in your body at that moment. So it's something that I've cultivated through this practice for many years. So, um, maybe that sheds some light on what I might have been experiencing.

56:12 RTH: So the, so the distinction, so I'm, I'm, the distinction that I was, I was exploring, I guess you'd say, is *kinesthetic*, is a, is about flex and flexion [flexes his arm] and extension and joint movement and something like that to, in my understanding. [GP: Mm-hmm.] And the, and the alternative was something like *translation* where my body is moving, my body is moving across the universe.

56:45 GP: Yes.

56:46 RTH: And, and both of those would've been consonant with the description of *I'm somehow aware of my body moving across the deck*.

56:55 GP: Yes.

56:56 RTH: And so I would like to know whether there, whether you meant to make a distinction between there, that this was a bodily movement. I'm, I'm feeling generally my body joints flexing against each other, **or** I feel myself moving across the deck?

57:12 GP: It's a good... okay, I get it now. And I would say, again, to the extent, like I can reconstruct, I would say it's both. [RTH: Mm-hmm.] It's both, there's both a sense of internal moving and also a sense of moving relative to the surrounding environment.

57:12 Russ comments: Similar to the comment at 44:59, note that RTH is not crediting Gualtiero's understanding as being true, nor is he discrediting it as being false. This is the honest bracketing of presuppositions. We have now made more clear the experiential distinctions about things that can be called kinesthetic; those distinctions will now perhaps be more readily at hand on subsequent sampling days. RTH does *not* attempt to apply those distinctions retroactively—he will rely on the iterative nature of DES to clarify these issues.

In particular, notice that in the discussion of kinesthetics, Russ *has not in any way* suggested that Gualtiero's report about the experience of kinesthetics was incorrect. On the contrary, he asked Gualtiero to describe the experiential aspects of his kinesthetic experience.

Gualtiero comments: This is another good example of how you have to pick some words to describe experiences, and words come with their own ways of carving the world (e.g., "moving", "kinesthetic"). The choice of words is "theory-laden", as philosophers of science say. Since you have to choose some words, you can't really avoid at least something like theory/presuppositions in describing experience. So, IDK if you can really avoid all presuppositions and theorizing. Perhaps your goal should be to choose the words that best describe your experience in accordance with the most empirically adequate theories you can find.

Russ comments: I absolutely agree that all words are theory-laden. But I disagree with most or all of the rest of Gualtierio's comment. I think the goal should be to choose words that faithfully describe experience as free of extraneous theory as possible (a goal which will always fall short in both some random and systematic ways). Then (and this is the important part), *about some other randomly chosen (that is, not suggested by theory) experience*, again try to faithfully describe experience as free of extraneous theory (and the previous attempt) as possible (a goal which will again fall short in both random and systematic ways). And then (and this is still the important part) do the same thing again, and again, and again, and again. In this way, the random distortions are likely to fall away (cancel each other out), leaving some systematic distortions.

Then alter the situation in some important systematic way (for example, using different co-interviewers, or choosing participants according to some other criterion) do the same thing again, and again, and again. Then at least some of the systematic distortions will cancel each other out.

The result of that is, I think, as good shot as we have at fidelity. Much depends on the skill of the interviewer and the teamwork of the co-investigators and participants.

All of that is a way of describing the *iterative* nature of DES.

Gualtierio comments: RE "extraneous theory". What counts as extraneous theory as opposed to non-extraneous? For example, if I report that I felt an adrenaline rush, it seems that I'm relying on the theory that a certain kind of sensation is due to adrenaline being released in my body. Is that acceptable? If that is acceptable, shouldn't it be acceptable to rely on any aspect of neuroscience or physiology that illuminates our experience and its sources to provide the most accurate description of it that we can come up with?

Russ comments: RE "if I report that I felt an adrenaline rush, it seems that I'm relying on the theory that a certain kind of sensation is due to adrenaline being released in my body. Is that acceptable?"

No, that is not acceptable to me precisely because it does rely on your theory of adrenaline rushes. Were you to report having an adrenaline rush, I would likely reply something like: "Unless you directly apprehended adrenaline being squirted into your bloodstream, or something similarly physiological/hormonal, let's bracket the physiology and stick to describing what you *did directly apprehend* at the moment of this beep"

I fully accept that there is a physiology of adrenaline operation, and that adrenaline introduction does lead to experiential and behavioral changes. But...

- (a) The experiential and behavioral sequelae of adrenaline introduction may be very different for you as for me or Lauren or someone else;
- (b) What would lead Gualtierio to say "I am feeling an adrenaline rush" may be due to adrenaline increase, but may also be due to other hormones, or the situation, or the interpersonal consequences, etc. (perhaps along with adrenaline)
- (c) What would lead Gualtierio to say "I am feeling an adrenaline rush" may be very different from what would lead me or Lauren or someone else to say "I am feeling an adrenaline rush"

- (d) Because I know what it takes to explore experience with fidelity, I'm pretty sure that no one knows much about the actual experience of adrenaline introduction.
- (e) But no matter how you slice it, I want to apprehend Gualtiero's experience as it was occurring at the moment of the beep, regardless of whether or the extent to which it was caused by adrenaline or anything else. If people are really interested in the experience of 'adrenaline rush', then later they can accumulate Gualtiero's experience among others and describe what they have found.

Gualtiero comments: I see your point. Adrenaline is not observable or apprehensible within experience in the same way that color, shape, etc. seem to be. Still, there are distinctions that Russ adopts to describe experience that, at the very least, may not occur to a naïve subject and are still helpful in describing experience. For instance, the distinction between experiencing the visual appearance of a word and experiencing its meaning, or between experiencing visual images, inner speech, or unsymbolized thought. The term "unsymbolized thought" seems to me especially theory-laden and not necessarily the best at conveying what needs conveyed.

I'm going to use a version of Peirce's terminology of signs (= entity that represents something else), which can be symbols, icons, or indices. Language is symbolic (= made of arbitrary signs) but visual images are, arguably, iconic (= signs that resemble their targets). Other sensations such as pain or heat/cold may not even be iconic but more like indices (= signs that point at their target without either resembling it or being arbitrary). Or maybe both visual images and other sensations have both iconic and indexical aspects as a recent graduate of U of Adelaide has argued in his dissertation, and perhaps inner speech is like that too and its symbolic aspect is a tertiary aspect of its semantic content; how to analyze the semantic aspect of experience/mental representations/neural representations is an interesting theoretical question. Regardless, there is an important sense in which (the experience of) language is symbolic but other forms of experience are not. So, when Russ says that an experience was an unsymbolized thought, I think he means that it was a propositional thought experienced without accompanying speech, images, or indices; that is, without the experience of any signs (in roughly Pierce's sense). Perhaps it could be called "unsigned thought"?

Russ comments: (I think it likely that these discussions will lead us to some fundamentally important arenas.)

RE "Still, there are distinctions that Russ adopts to describe experience that, at the very least, may not occur to a naïve subject and are still helpful in describing experience"

That makes it seem that Russ imposes his theory (his distinctions) on naïve subjects, when I think the reverse is true: naïve subjects, in their efforts to describe their phenomena with fidelity, require Russ to describe in ways that may never have occurred *to him*. (I happily accept that I may be deluded in this view, but I will write as if I knew what I was talking about.)

For example, I sampled last week with a student who was trying to read an assignment, but was not being successful at gleaning the meaning from the passage. (So far no surprise—that is a frequent occurrence.) We (the subject and I) eventually discovered that at the moment of the beep she was drawn to the spaces between the

letters—that is, instead of seeing letters, she was seeing the screen in between the letters. I’ve been sampling for 50 years, and I don’t recall ever before encountering such a description.

It is true that this participant did *not*, in her opening salvo, say anything remotely close to “You wouldn’t believe this weird phenomenon—I was seeing the space in between letters!” Without my presence, it probably would not have occurred to her to describe such a phenomenon. Her opening salvo was more like “I was trying to read and was not being successful.” A fairly long series of probes of the ilk “I accept ‘not being successful’ as a description of the reading task, but I am interested in your experience at that moment,” and eventually we arrived at the in-between-the-letters experience.

I do not think that was a “distinction that Russ adopts.” I think it was a description that the participant and Russ developed. Certainly Russ has at his disposal a wide variety of potential descriptions—he is not naïve experience-wise. And for sure the participant *is* naïve—she *needs* Russ’s descriptive skills to help her put into words aspects of her experience that she has *never* previously spoken about or perhaps even noticed.

RE “The term ‘unsymbolized thought’ seems to me especially theory-laden and not necessarily the best at conveying what needs conveyed. ... Perhaps it could be called “unsigned thought”?”

I have no attachment to the term ‘unsymbolized thought’ other than it is a term I have used in my writing for 30ish years and so would have to have a good reason to change it.

But far more importantly, I don’t care a whit about whether it is called unsymbolized thinking, unsigned thought, or dat-dare-ding. Some terms would make my rhetorical life difficult (e.g., if it were called operatic falsetto, hybrid chickpea mash, or emotional distress signal) so I would prefer to use a term that points in the general direction of the phenomenon.

And most importantly, it is the phenomenon itself that is important. Regardless of what you call it, a lot of subjects describe what seems like the same phenomenon, so it seems appropriate to use the same term. But it is *not* the term that is important; it is the phenomenon that is important. Some subjects start by saying that they “had a feeling,” and with them I will clarify whether they intend to describe an emotion experience, and if not, what was it? Other subjects start by saying they “had a gist,” and with them I will clarify whether they intend to describe the main point, or essence, or overarching theme, and if not, what was it? Yet other subjects start by saying they were “talking to themselves,” and with them I will clarify whether by ‘talking’ they meant stringing words together, and if so, what words were they? In all those cases I will start with a naïve subject trying to describe a phenomenon, and all of us end up at the same place, which I have called unsymbolized thinking. (But the import focus is on the phenomenon, not on what I have called the phenomenon.)

Was that arrival at unsymbolized thinking because of a distinction that Russ adopts? I don’t think so, but of course I could be deluded in that regard. That’s why I invite others into the process and make the whole thing available to public scrutiny.

RE “I’m going to use a version of Peirce’s terminology of signs (= entity that represents something else), which can be symbols, icons, or indices. Language is symbolic (= made of arbitrary signs)”

I could interpret that as an invitation to some sort of analytic sparring, perhaps by claiming that language is to some degree iconic (e.g., think onomatopoeia in all its explicit and subtle variants), but I decline to do that, because I think such debate *leads away from* the fundamentally important thing—the phenomenon. It is *not* about the words. It is *not* about the analysis. It is *not* about a network of words and analyses. It is about the phenomenon.

I think (happily accepting the possibility that I am mistaken) that if you want to grasp the importance of unsymbolized thinking (or any other phenomenon), you have to care about whether words rest lightly *on one particular instance*; and then care about whether words rest lightly *on another particular instance*; and then on another single particular instance; and on another; and so on. In all those cases, it is not caring about the words but caring about the resting lightly on the phenomenon.

To the extent that you are interested in the words that might be used across all instances (e.g., whether *unsigned* is better than *unsymbolized*), then you are interested in the words, and interested in the nomological net that connects the words, and that *will blind you* to the phenomenon.

I think it is possible that if you have cared about whether words rest lightly *on one particular instance*; and then cared about whether words rest lightly *on another particular instance*; and then on another single particular instance; and on another; and so on, for long enough that your grasp of the phenomenon itself is secure (by which I mean is apprehended without regard for the words that are used to describe it), *then* it might be useful to debate the niceties of universal word choice.

RE “So, when Russ says that an experience was an unsymbolized thought, I think he means that it was a propositional thought experienced without accompanying speech, images, or indices; that is, without the experience of any signs (in roughly Pierce’s sense).”

That is not at all what I mean. I understand propositional thought to mean something like a mental state or belief directed towards a proposition; and a proposition is a statement that can be true or false. Propositional thinking involves understanding and manipulating the truth values of propositions, rather than just having concrete, direct experience.

Whether an experience is an unsymbolized thought has nothing to do with whether the experience is propositional. *I was deciding whether to have a hot dog or a hamburger* can describe an unsymbolized thought even though there is no possible truth value to the thinking. The experience that that text describes is an unsymbolized thought if: it is directly apprehended (not inferred); it is experienced in the realm of cognition or analysis—that is, it has to be thought-y and not emotion-y or sensation-y; and it is specific (not a gist or hint). None of those characteristics are in the realm of propositional; they are in the realm of experiential.

Gualtieri comments: I think I understand what you are saying and I am still tempted to call “unsymbolized thought” propositional in the sense in which it involves propositional attitudes, meaning attitudes towards a propositional content. In your example, there are two propositions, [RTH has a hotdog] and [RTH has no hotdog],

and the attitude is deciding which of those should obtain. There is a huge literature on the metaphysics of propositions that I think is not relevant. The important point is the one you make by saying that unsymbolized thought is thought-y rather than emotion-y or sensation-y. Let's stick with Russ's language. I would distinguish between thought-y thoughts and "imagistic" experiences, which normally are sensation-y. Since there are "unsymbolized thought-y thoughts", there might also be "unsymbolized"—or better, "unsigned" or "un-sensation-y"—imagistic experiences, which is what I think people like me who have aphantasia mostly have. I think the term "unsigned" might be decent at capturing what Russ's "unsymbolized thoughts" and my "un-sensation-y" images have in common. The types of contents are different, but the lack of experience of any signs for representing the contents are similar. How does Russ feel about this?

Russ comments: RE "In your example, there are two propositions, [RTH has a hotdog] and [RTH has no hotdog], and the attitude is deciding which of those should obtain"

I think we may have differing definitions of "propositional thought." At the risk of heading too far in the direction of defining words, if my unsymbolized = unsigned thinking was *I was thinking that I like the color red*, and that was experienced without words or images or other symbols/signs, would you still think that was propositional? If so, can you give me an example of an experienced thought that is not propositional?

RE "I would distinguish between thought-y thoughts and "imagistic" experiences, which normally are sensation-y"

I should make clear that when I say "thought-y," I intend "directly-apprehended-thinking-y." That is, I am *not* referring to any process that might be taking place "cognitively" or "unconsciously" or "preconsciously" or whatever.

RE "I think the term "unsigned" might be decent at capturing what Russ's "unsymbolized thoughts" and my "un-sensation-y" images have in common."

I have sampled with "A," whose descriptions I trust, who describes her experience as *I was deciding whether to have a hot dog or a hamburger* and, when pressed, says that *maybe* there was some extremely hinty speech-y quality to it. And I have sampled with "B," who whose descriptions I trust, who describes her experience as *I was deciding whether to have a hot dog or a hamburger* and, when pressed, says that *maybe* there was some extremely hinty see-y quality to it. And I have sampled with "C," who whose descriptions I trust, who describes her experience as *I was deciding whether to have a hot dog or a hamburger* and, when pressed, says that she examined her experience as thoroughly as she could immediately after the beep, as best she could say there was to speech-y or see-y quality to it, at whatever level of hinty-ness.

Do A, B, and C have the same experience but different kinds of explanatory processes? Maybe. Do A, B, and C have three different kinds of experiences, which we might call unthink-y (or maybe unsigned), un-see-y (or maybe un-sensation-y), and un-anything-y? Maybe. If so, might there be some practical advantage to making the distinction (for example, might that somehow explain aphantasia)? Maybe. I intend all those *maybes* as serious answers—serious *I don't know*s.

I have sampled with "D," whose descriptions have not yet seemed trustworthy to me, who describes her experience as "I was saying to myself that I should have

either a hotdog or a hamburger,” but across subsequent sampling days she will come to recognize, without any indications of doubt, that all her previous mentionings of “saying to myself” were misleading: she now recognizes confidently that there are no speech-y qualities (no words, no voice, no sequential production) in her experience thinking, and no images.

The distinction between D and A, B, or C is, I think, huge: there are lots of Ds, there are lots of theorists who deny the possibility of D, the evidence for D is (to me) robust. The distinction between A, B, and C, I think at this point in the history of the universe, is small. The A vs B vs C distinction is, as I would say, in the weeds. Maybe, as the science of inner experience matures, after we have been able to wipe out the D distractions, and that will put us in a position to decide whether A, B, and C are the same or different.

But I’m not sure I have answered your question.

- 57:38 RTH: Okay. And then: My eyeballs are aimed at the deck, or the floor, or whatever-
- 57:44 GP: Yeah. The, the, the horizontal part of the deck [RTH: Mm-hmm] where I’m walking.
- 57:51 RTH: And, and so I am, I am clearly accepting that your eyeballs are connected to your retina, or connected to your LGN, are connected to your visual cortex and wherever else they go. And, and that you are responding to that skillfully in the sense that you’re not tripping over the chair or whatever. But that does not necessarily mean that you are experiencing that before the footlights of your consciousness. And doesn’t mean that *you’re not*, I’m just, I just want us to not presume. [GP: Yeah.] And, and it’s the same, it’s the same deal. I could call your attention right now to your backside and your backside has been sitting on the chair now for the last half an hour, or an hour, and you probably haven’t spent much time thinking about it or experiencing it or whatever, but you’ve been skillfully dealing with it. You haven’t fallen off the chair. And, uh-
- 58:50 GP: Right.
- 58:51 RTH: So I don’t, I, what I don’t want us to do is to presume that just because my eyes are open and aim at something, that I have to have been experiencing that any more than, because I haven’t fallen off the chair, I must have been attending to the chair. Maybe I was, maybe I wasn’t.
- 59:12 GP: Right. Yeah. But I would say in this case, I *was* experiencing the, [RTH: Okay] the floor, the deck.
- 59:21 RTH: And what do you see?
- 59:24 GP: I see, y’know, brown boards, brown wooden boards, they’re painted, they’re painted the brown, the paint. In some places the paint is kind of vanishing, but, and I can’t, in this case, I don’t know that I have any, I have no recollection of exactly the state of the paint, but it, y’know, there’s like these boards.

59:49 RTH: And do I see the boards sort of moving as I move across them? I, so I see a board moving towards me, or do I-

59:56 GP: Yeah. Or y'know, I think that this, the experience is fairly described as *I'm moving* relative to the boards.

1:00:10 RTH: Okay.

1:00:10 GP: The boards themselves are not moving.

1:00:15 RTH: So I, I accept that as being the correct statement about the universe. [GP & LG laugh] The question is whether you're ex- whether your experience is connected to that?

1:00:26 GP: I think. I think so. Yes. [laughs]

1:00:29 RTH: So what I, what I, in, in the world according to Hurlburt, the ex- experience in the universe are not directly connected to each other.

1:00:39 GP: I agree with that.

1:00:40 RTH: So we can, I can be thinking about a castle in Spain and having never saw a castle in Spain, (actually, I have seen a castle in Spain), but, but I could be thinking about it. And it has nothing to do with my experience today or not, not much to do that. So my experience is not, and, and, and while I'm doing that, and my eyes might be open, I could be driving, I could be driving skillfully driving and thinking entirely about a castle in Spain. And my eyes are, my eyeballs are engaged in the task of weaving in and out of traffic. Without that being in my experience at all, my directly apprehended experience at all, at all. I'm pretty, I'm pretty confident that that happens to me and a lot of other people, maybe to Gualtierio.

1:01:21 But the, so, this, again, I, I think, I think almost everything, maybe everything that I have said today is *much more* about tomorrow than it is about, about these beeps. I'm, I am, I, what I wanted, what I wanna do is I want, I want to be distinctly in favor of hearing about minor experience such as watching the deck planks move across my visual field *if that* is part of my directly apprehended experience, but *not* if it is part of my *theoretical understanding* that if my eyes are open and I'm perambulating successfully, then, then I must be, must be seeing that.

1:02:12 GP: Right.

1:02:14 RTH: And, *and* I, I also wanna be, well, I, I wanna express myself as being fundamentally happy, is that if we were to get to the end of our sampling together and, and, and get to the point where *I just can't, I either can't make those distinctions. You're asking me to make distinctions that I don't think are possible, or that I have found are not possible*, that would be totally fine with me. [GP: Okay.] That, y'know, that's the, that is the, what, what *I think* is the interesting thing about, about what we're doing here. I'm trying to figure out what's going on in Gualtierio's experience because I think experience is interesting. I think Gualtierio's interesting. I'd like to know about what

his experience is. And I gotta sort through things—he's gotta sort through things—so that we can understand what we're talking about.

1:03:16 GP: Sounds good.

1:03:19 RTH: So we've gotten two beeps in two hours and two minutes so far. [He misspeaks: it is *one hour and two minutes*.] And, uh, shall we try for a third? Or shall we say this is enough for today? And, uh, or I guess maybe with three, I have three beeps. I lied, cuz we talked about beep number six first.

1:03:32 GP: Yes. Those are the most interesting. We got the most interesting in.

1:03:41 RTH: Yeah. So what, what, what I, so I wanna say one more thing before we, before we hang up here, I, what I, what I would like us to do is to, is to say, well, whatever it is that we talked about today, and whatever Hurlburt said about it, and whatever I said about it, whatever anybody said about it, let, let's, let's bracket that away.

1:04:06 We said, I was seeing the, seeing the boards move across my visual field and Hurlburt asked me about that. Well, I don't know what I said about that, whether that was true. I don't know whether what Gualteiro said about that, whether that was true. Let's, let's see whether we can *start fresh* next time (assuming we're gonna do this again next time). But let, let's see whether we can get at Gualtiero's experience as best we can get at Gualtiero's experience *without prejudicing it* with any specifics of what we said or didn't say today. [GP: Okay.] Which is not to say that what we said today isn't important. It, it, it's that it, it might not have been perfectly, perfectly stated. And, uh, and so we, we wish to reserve the right to revise and extend our remarks or whatever, our abilities. [GP: Okay.] So shall we do it again? [GP: Yes.] And uh, let's see.

The video fast-forwards as they compare calendars

1:06:58 And I will send that as a calendar invite and also send you an email. I sent you an email yesterday actually to remind you of today. Did you get that?

1:05:38 GP: Thank you. Yes, I did. Oh, I found, I found it. I found your cell phone. Yes. Okay.

1:05:43 RTH: And, and would, and and it's my practice to, to provide reminders because that keeps us all on the written. It's the same page, but I could do it by text if you prefer, or, or email is fine. Whatever.

1:05:56 GP: Email's perfectly fine. And hopefully I don't need a reminder. But y'know, it's very, um, considerate of you to send one.

1:06:05 RTH: I, I, I find that this time of the year is when people actually need the most reminders cuz we're, we're changing from one schedule to a different schedule, different schedule. But, but I, what I'll, I, I'm I'll, the reminder, I'm gonna program the reminder right now. So it's just gonna, it's gonna go by delayed email or whatever. [GP: Right.] And that just keeps me on track as well.

1:06:31 GP: Very good. Very good.

1:06:33 RTH: All right. Thank you very much. And, and, uh, I'll look forward to whatever comments you wanna make about, about the first, first interview. And I will hopefully get commentary made sometime along this week about this interview.

1:06:49 GP: Yes. And I find, I'm finding it's fruitful. Y'know, it helps me think about all this stuff that, things that I'm interested in. So thank you.

1:06:59 RTH: All righty. Thank you all very much.

1:07:00 GP: Bye. Bye, Lauren.

1:07:03 RTH: Same.

1:07:03 Gualtierio comments: It would be interesting to do DES in a lab setting, with EEG sensors on, to see which parts of the brain are more active during which types of experience, especially unsymbolized thoughts. Has anyone done this? I would hypothesize that the neural realizers of unsymbolized thoughts are the parts of the brain with the most amodal representations (which ones those are can be investigated independently; cf. the Fedorenko et al review paper we read in our Spring 2025 course).

Russ comments: I have performed one such fMRI study. There are substantial challenges, which I'd be happy to talk about. Here are references:

Hurlburt, R. T., Alderson-Day, B., Fernyhough, C. P., & Kühn, S. (2015). What goes on in the resting state? A qualitative glimpse into resting-state experience in the scanner. *Frontiers in Psychology*, 6(01535). doi=10.3389/fpsyg.2015.01535.

Kühn, S., Fernyhough, C., Alderson-Day, B., & Hurlburt, R. T. (2014). Inner experience in the scanner: Can high fidelity apprehensions of inner experience be integrated with fMRI? *Frontiers in Psychology: Cognitive Science*, 5, article 1393, 1-8. doi: 10.3389/fpsyg.2014.01393

Gualtierio comments: I would be especially interested in a study that attempted to figure out which parts of the brain are most involved in which types of experience to see if unsymbolized thought involves areas such that there is independent evidence that they involve amodal representations, so that we could begin to build a theory/understanding of what sort of neurocognitive processes underlie unsymbolized thought (which would contribute to a deeper theory of thought in general).