# Describing Inner Experience?
# Proponent Meets Skeptic

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## Part Two

## The Interviews

## Chapter Four

## The First Sampling Day

This chapter and the next five chapters – one for each sampling day – present annotated transcripts of our interviews with Melanie. We remind the reader of the context of the interviews. This was understood to be a private, personal exercise between Russ and Eric – the result of Russ saying to Eric, let's you and I, who have publicly opposed positions, perform some sampling together and see what happens. Russ has long sampling experience, but perhaps he's been "captured" by his own history; opening the process to a skeptical outsider might expose aspects of the procedure that he has overlooked. Eric, on the other hand, has a public role as a skeptic, but perhaps he has overstated that skepticism; confronting the concrete reality of another's inner experience might alter his perspective.

Eric can be said to be at a triple disadvantage in this situation: First, he's "playing in Russ's court" for the first time, while Russ has been performing interviews for decades. Second, the sampling interviews took place with Russ and Melanie together in Russ' office and Eric participating by speakerphone from his office hundreds of miles away. Third, it was Russ who recruited Melanie, and therefore he had a (small) prior relationship with her.

Apart from informing Melanie of the anticipated presence of a philosopher interested in exploring the method, the setup was standard DES procedure (for

details, see Hurlburt and Heavey, 2006, and Hurlburt, 1990, 1993): She had been given a beeper, set to go off at random intervals anywhere from one minute to one hour, and she had been given a notebook to jot down whatever might be helpful to her after each beep. She was to wear the beeper in her natural, everyday environments for several hours at her convenience, collecting approximately 6-8 "samples" within the 24 hours before a scheduled interview with us. She was to respond to the beep by trying to "freeze" and remember whatever experience was ongoing at the last undisturbed moment before the beep began – whatever was "before the footlights of consciousness" – whether that was one thing or many things or nothing. She was not to worry about whether the experience was typical or about its causes. Nor was she to go beyond what she could report accurately: She was told that "I don't know" was always a respected answer. If she was not able or willing to interrupt her activity to immediately note her experience, she was asked to skip the sample entirely.

In several respects, these interviews diverged from DES procedure. Most notable, of course, was the presence of Eric, who was not trained in DES interviewing principles and was explicitly invited to question Melanie in whatever manner he saw fit. Furthermore, as the reader will see, Russ and Eric engaged in theoretical conversations about the reported experience and about Melanie's trustworthiness as a subject, right in front of Melanie, and Melanie was permitted to participate in these conversations. This would never happen in standard DES.

There was, of course, a substantial risk that such conversations would have an impact on Melanie, biasing or otherwise altering her reports (see, e.g., Box 5.11 in Ch. 5 [regarding imagery] and p. *** [regarding the timing of the beep]). Despite this risk, we thought it best, rather than debating after the fact about a more standardly collected DES-style report, to try to hash out our differences with Melanie present and available to amplify her reports in response to our queries and disagreements and to contribute her own sense of her experience.

We interviewed Melanie a total of six times, discussing six separate sampling days over the course of several weeks, concluding when we decided that we had reached a point of diminishing returns. The interviews were recorded and transcribed word-for-word. For ease of reading we have removed vocalized pauses and, in some places, eased awkward locutions, repetitions, and brief digressions. Where we've cut longer portions of the dialogue, a specific note is included in the text. Except where explicitly noted, the issues raised in the boxes were not discussed in Melanie's presence. The entire transcript and original audio files are available on the Web at ****.

## Preliminary Discussion

Russ [after briefly introducing Eric and Melanie to each other]: There aren't any particular rules about this exercise except to get to the truth, the whole truth, and nothing but the truth about Melanie's inner experience.

Eric: Right.

Russ: And as long as we think that's an interesting deal, we'll do it. And as soon as we decide it's not an interesting deal, then we won't do it anymore.

Eric: That sounds good.

Russ: I don't care how we proceed in this regard. [to Eric] If you want to be the primary interviewer, that is totally all right with me. If you'd prefer me to be the primary interviewer, that's okay with me as well. And, if you want, we can just pass it back and forth as seems sort of natural… I've usually found it makes sense for somebody to be the primary ball carrier just because that's easier, but…

Eric: Right. Why don't I let you do that, because you've had so much experience with this. I may just jump in from time to time.

Russ: I've told Melanie that we may very well get into conversations along the side that we wouldn't normally do in a typical sampling situation. She would probably be interested in those conversations. She just graduated from college with a dual major in psychology and philosophy...

Eric: Oh, wow! Okay, great.

Russ: …so she may be able to contribute to the conversations we're having. She was saying just before you called that…

Melanie: I was just saying how it took me quite a while at the beginning, when I first put the beeper apparatus on, to forget that I was wearing it and to forget that I should be thinking something of great importance or interest or something like that. So…

Eric: [laughs] Right.

Russ: So, Melanie, is there anything else we should be talking about other than that sort of mechanical difficulty?

Melanie: No, aside from that everything went pretty well.

Russ: Okay. So then I'm ready to go to beep number one. And these beeps are from yesterday. Is that right?

Melanie: Yes. They're from yesterday evening from about 6:00 p.m. to 9:00 p.m.

Eric: Okay, great.

**Beep 1.1**

Melanie: Number one requires a little bit of background, so this may take a couple of minutes. I had just received this huge box in the mail, about as big as I was. It was a chair from my university, one of those heritage chairs that you get. I had unwrapped it and everything, and there were protective plastic coverings over the back of the chair and the handles and all four legs. So I'm standing in the living room and I had it tipped back on its two hind legs, and it was leaning against the couch in my home. I was removing the plastic covering from the front two legs when I looked up and there was a white manila envelope taped to the bottom of the chair. There were some papers in it, so I pulled out the papers and was looking at them. It was a family tree that you can fill out that goes back to my great-grandparents and then to my great-grandchildren, so I could document who I pass

this chair on to. And right at the moment of the beep I was kind of thinking in my head how funny it was that I had just received this chair fifteen minutes ago and all of a sudden here was this paper I was supposed to fill out about who was going to inherit it.

Russ: And by "right at the moment of the beep" do you mean like right at the very beginning of the beep? Or…

Melanie: No, right before. And then right as the beep started I was aware of the fact that I was smiling. So right before the beep I had this thought in my mind, but I didn't really know what the rest of my body was doing. But then the beep went off, and then I was aware of what I was sitting and doing.

Russ: Okay. So the moment that we're interested in is that last undisturbed moment before the beep came. So if the beep starts here and we can wind the experiential clock back a microsecond or something, that's the moment we are talking about. So at that moment are you thinking about how strange it is? Or…

Melanie: Just how amusing it is that I'd just gotten this chair, and here I needed to plan out who was going to inherit it.

Russ: Okay. And this thinking, how does it proceed? [See Box 4.1 on different uses of the word "thinking."]

**Box 4.1. What is "thinking"?**

Russ: With striking regularity, subjects early in their sampling refer to their own most-frequent kind of inner experience as "thinking," saying things like, "At the moment of the beep I was thinking that I don't want to take that exam." Carefully examining the details of those experiences reveals that people differ substantially in what they mean by "thinking." When Alice says "I was thinking…," she means that she was saying something to herself in her own naturally inflected inner voice. When Betty says "I was thinking…," she means that she was seeing a visual image of something. When Carol says "I was thinking…," she means that she was feeling some sensation in her heart or stomach and that she had no awareness of cognition whatsoever.

"Thinking" refers to cognition in its dictionary definition, but it is decidedly not necessarily used that way in DES self-descriptions, even by sophisticated subjects. My sense is that this is an unsurprising result of the way children learn language. Children observe adults say "I'm thinking…" and gradually realize that this utterance "thinking" must refer to whatever is going on in the adult out of direct sight of the child. Children then, on this understanding, use the utterance "thinking" to refer to whatever is most frequently going on inside them, out of

sight of others. Those whose principal inner experience is inner speech will come to use "thinking" to refer to inner speech; those whose principal inner experience is emotion will come to use "thinking" to refer to emotion.

This exemplifies why experience sampling or any other method that honestly seeks to understand inner experience cannot blindly rely on the words people use to describe their experiences. This was B. F. Skinner's primary criticism of attempts to describe inner experience: that words used to describe private events receive impoverished differential reinforcement (see Guideline 9 in Chapter Two; see also Hurlburt & Heavey, 2001). But I see this as a surmountable difficulty, albeit one that has not been taken seriously enough by most other methods.

Thread: Loose language. Previous: Box 2.1. Next: Box 5.16.

Thread: Human similarity and difference. Previous: Box 3.3. Next: Box 4.7.

Melanie: Well, it's not aloud, it's in my head, so I'm silent. And it's a voice going through my head that isn't my own voice. I'm not hearing my own voice. It's my inner thought voice, so it's the one I recognize and hear all of the time whenever I'm thinking. But it is different from the voice with which I speak. [See Box 4.2 for some doubts about this claim.]

**Box 4.2. Doubts about Melanie's "inner thought" voice**

Russ: Melanie's general claim here about having a distinctive inner thought voice, different from her external speaking voice, that she hears "all of the time whenever I'm thinking" is undermined by later samples. My research has shown over and over that people's general claims about their inner experiences are often not entirely true, and sometimes dramatically false, even in relatively normal, quite sophisticated people. So I recommend being heavily skeptical about all general claims about one's own inner experience, including Melanie's. Usually, as here, I simply ignore such claims. But I don't hold the fact that Melanie has made such a claim (even if false) against her: Our culture has encouraged people to be sloppy in their observation of and claims about inner experience. This does not impair her ultimate credibility when it comes to reporting specific moments once she has mastered the method. Eventually, as sampling progresses, most people (as did Melanie, as we shall see) stop making general claims, because (I think) they see that many of their own general claims about themselves are not true.

Eric: So I wonder: Is Melanie accurately reporting this sample and just overgeneralizing? Or is she committed to a false general theory about herself that distorts even her specific report of this sample – despite the confidence and "convincing detail" with which she answers our questions about this voice?

Thread: Melanie's trustworthiness: Influence of generalizations. Next: 4.10.

Thread: Inner speech and hearing. Next: Box 4.4.

Thread: Retrospective and armchair generalizations. Next: Box 4.11.

Russ. Okay.

Melanie: And at the same time as that was going on, I was aware of this kind of glow inside my head that kind of says, "That was a funny aspect of the thought or a humorous aspect of the thought." So I wasn't aware of the fact that I was smiling, but I was aware of the fact that I found that thought humorous. If that makes sense.

Russ: Okay. Well, I think it makes sense, but I'm not exactly sure that I understand it totally yet. So you're hearing something, which is a voice that's familiar to you but is not your voice. Is that what you're saying?

Melanie: Mm hm.

Russ: And does this voice have vocal characteristics, like I've got sort of a deep voice, and…?

Melanie: It's… the only way I can compare it is to my own voice. It's a little smoother; I'm a little more modulated.

Russ: You're more modulated?

Melanie: No. The voice inside my head is.

Russ: And by more modulated you mean more up and down, and more…

Melanie: Yeah.

Russ: … and more dynamic?

Melanie: Yes, exactly!

Russ: Okay.

Melanie: And I'd say it also has a lower pitch than my normal voice does.

Eric: Is it a female voice?

Melanie: Yes it is.

Eric: Does it have your regional dialect? It wouldn't have a southern accent or something?

Melanie: No, it's mine. Well, it has the same dialect that I do.

Eric: So what makes you think it's not… Why don't you say it's just your voice but smoother and more modulated?

Melanie: I suppose it could be. But at the same time, if it were my voice but smoother and more modulated, then it's not my voice anymore. I'm not sure.

Eric: Could you speak like that if you wanted to?

Melanie: No. I know I couldn't. I've tried.

Russ: The question of whether this is your voice or not in some absolute sense is probably unanswerable because it requires definitions that go beyond our ability. But whether it seems to be your voice or not, that is something that I think is answerable. So the question is, does this voice seem to you to be your voice?

Melanie: [emphatically] No.

Russ: So it seems like it's a voice that is quite similar to your voice but is not your voice. Experientially it's a different thing from saying, [affects a southern drawl] "Well, I'm going to try and talk with a southern accent, and I can talk with a southern accent if I want to"…

Melanie: Right. I almost feel as though if I could take a tape recorder and record that voice and record my own, you'd be able to hear the difference between them.

Russ: Okay. And the differences are enough that it doesn't seem like your voice trying to talk…

Melanie: …in a different manner. Mm hm.

Russ: Okay. So this voice is like a voice that is being heard rather than a voice that is being spoken? Is that correct?

Melanie: Yes.

Russ: So this is a different experience from your talking out loud?

Melanie: Yes.

Russ: This is more like you've recorded this and now you're playing it back. Experientially I mean.

Melanie: Right. Mm hm.

Russ: There's no recording part…

Melanie: No [laughs].

Russ: … but it seems like this is coming towards you like a recording would come?

Melanie: Yes.

Russ: Okay. And at the moment of the beep, what exactly was this voice saying?

Melanie: It was saying… it was towards the end of the thought about the chair, thinking about who was to inherit it. It was right at the end of that phrase.

Russ: And can you tell me exactly what that phrase is?

Melanie: Well, the phrase was that I was thinking how funny it was that I just received this chair and here I was thinking of who was to inherit. What was going on right at the moment of the beep was, "who was to inherit."

Russ: And right now you're saying that in the past tense: "how funny it was." Was the thought originally in the past tense?

Melanie: No, it was originally in the present.

Russ: So at the moment of the beep this voice was saying, quote, "How funny it is…" [See Box 4.3 for a comment on Melanie's use of tense.]

**Box 4.3. Present tense or past tense?**

Russ: Melanie reported that her voice was saying "Who was to inherit," when the situation that Melanie was describing called more appropriately for her voice to be saying "Who is to inherit." This confusion of verb tense is a sign that Melanie

is quite likely not reporting the actual phenomenon that she had experienced at the moment of the beep. This is Melanie's first beep, and we shouldn't hold her inaccuracy against her – she has probably heretofore in her life had no reason to describe with accuracy the characteristics of her inner experience. My questioning here is largely for training purposes: I'm not so much interested in what she says about this particular beep as in conveying to her that, on future sampling days, we will want to know what exactly was occurring at the precise moment of the beep. Thread: Interview techniques. Previous: Box 2.4. Next: Box 4.6.

Melanie: Mm hm.

Russ: "… that I just got the chair, I just received the chair…"

Melanie: "Just received."

Russ: "… and…"

Melanie: "… and now I have to plan who is to inherit."

Russ: And the beep comes at the end of that…

Melanie: Mm hm.

Russ: … somewhere in the "who is to inherit" portion?

Melanie: Yes.

Russ: Okay. And does that voice… where is that voice? Is that in your head, or outside your head, or in the front of your head?

Melanie: It's in my head. If I have to give a specific location, I'd say it's somewhere here, right between my temples.

Russ: You don't have to give a location if it doesn't make sense to give a location.

Melanie: Mm hm. No, it was there.

Russ: Okay. And then you said that there was something like a glow about this.

Eric: A little more on the voice before we get to the glow, actually. It takes a certain amount of time to say something like, "How funny it is that I've just received this chair and I have to plan who is to inherit it." It takes a few seconds.

Would you say that the voice was roughly the pace of the speaking voice, so that it took several seconds? Or was it going faster or slower? Or was it all kind of compressed into an instant?

Melanie: It was compressed. I wouldn't say it was compressed into an instant – it was a little bit longer. But it was significantly faster than it would normally take to say a sentence like that out loud.

Eric: [speaking rapidly] So would it be like someone who was a fast talker getting it out really fast like that? Or was it something that seemed a little different from how speech could be paced?

Melanie: I guess I'd have to say it was something a little different because when it was in my head it didn't feel compressed. It didn't feel rushed or jammed into a really small time like it sometimes does when someone speaks quickly. [See Box 4.4 on inner speech rate.]

**Box 4.4. Fast or normally paced speech?**

Russ: Most often, my subjects report that inner speech moves apparently at the same rate as external speech. However, it's also fairly common for subjects to report that inner speech actually transpires somewhat (or much) faster than

external speech, even though it is experienced as occurring at the same rate as external speech. Thus, whereas the inner and external speech rates may be experienced to be the same, the inner and outer durations required to utter the same sentence may be experienced to be much different. This may seem impossible, but inner experience does not operate under the same constraints as outward behavior. (See also Beep 6.4.)

Thread: Inner speech and hearing. Previous: Box 4.2. Next: Box 4.5.

Thread: Rules of inner reality. Next: Box 4.6.

Eric: Mm hm.

Russ: So the experience of it is that it's going at a normal rate. But you think that actually if we put a stopwatch on it, it would have been faster.

Melanie: Yes.

Russ: Okay. And what makes you think it would have been faster? If the experience is that it was going at a normal rate?

Melanie: Because there was a sense of speed to it. Not of rushedness and not of compression, but … I don't know. The best way I can think to describe it is it felt

like it was racing through my head in a way. [See Box 4.5 on whether Melanie shows promise as a subject.]

**Box 4.5. Evidence that Melanie is careful. The pace of inner speech, continued**

Russ: This exchange is the kind that leads me to believe that Melanie will learn to be a good subject. First, she's clearly trying to be careful, correcting and modifying herself. Second, she's adept at keeping track of close distinctions (here between rushedness and compression, for example). Third, she's willing to stop at "I don't know" and is comfortable with qualifications such as "the best way I can think to describe it is…," which indicates that she is not likely to go too far. In saying this, I don't mean to imply that Melanie is, or will be, an unusually good subject; in my experience, most subjects are good subjects. But Melanie is more intelligent than my average subject, and so is likely to be more nuanced.

Eric: You rightly point out that the distinction between rushedness and compression is a close one; and now I wonder whether other subjects would tend to be as careful as Melanie in making that distinction. In my own earlier sampling, in fact, I believe I reported that my inner speech was paced at roughly the same rate as my external speech, but now I find myself wondering if I was correct in that observation. Could it be that inner speech is, for most people, temporally

compressed, but only a minority of your subjects notice that fact because it does not seem rushed?

Just now, I confess, I was walking across campus deliberately producing inner speech and attempting to observe its pace as I did so. I found myself getting tangled up, feeling like I often produced the speech twice, once in forming the intention to produce a specific instance of inner speech and then again in carrying out that intention (as though I didn't realize the intention was already executed in the forming of it). I also found myself unsure of the pacing especially of the first of these two acts of inner speech – indeed, unsure even of whether the first was in fact an act of inner speech at all. I suppose, Russ, that you will say that I would do better to explore these issues with a beeper, that the deliberate self-observation and the intentional formation of inner speech hopelessly corrupts the act I'd like to observe. Maybe so, but the difficulty is still striking.

Russ: You characterize my reaction to your experiment quite precisely. I think you could in large measure become untangled if you used a proper method (such as a beeper). I applaud you for noticing the striking difficulty of informal or armchair introspection, but I hope that you don't hold that strikingness against all introspective attempts (including those that are designed to reduce or eliminate precisely that difficulty).

Thread: Melanie's trustworthiness: Attunement to distinctions. Next: Box 6.4.

Thread: Inner speech and hearing. Previous: Box 4.4. Next: Box 4.11.

Russ: More, Eric?

Eric: No, I think that's alright. Let's go to the glow.

Russ: Okay. So there was something you said that was a "glow." I didn't quite understand what you meant by that.

Melanie: I couldn't feel myself smiling. I wasn't aware of myself smiling, but after the beep I was, you know, "Oh! I'm smiling right now." But when that thought was going through my head there was this kind of rosy yellow glow in my head just as those words were going through that kind of reflected the humor I felt in that sentence.

Russ: Now when you say "rosy," "yellow," and "glow," do you mean that there was something rosy-yellow – some experience of rosy yellow? Or do you mean that as sort of a metaphor?

Melanie: I think a bit of both. There was color involved. That's the best way I can describe it. It was pale color – it wasn't vibrant and rich and bright – but there was a hint of color, almost like wrapped up with the words.

Russ: And where was this color, if that question makes sense?

Melanie: All over. It was in my head, but it felt more all over as opposed to the distinct location of where the words were.

Russ: And is this color like a wash of color, or….

Melanie: Yes.

Russ: So it's not like there's not some specific place where there's a rosy yellow color?

Melanie: No, it's all over.

Russ: And is this a uniform color, like rosy yellow all over, or is it rosy here and yellow there?

Melanie: It's uniform.

Russ. Okay. And is this rosy yellow like a light that creates rosy yellow luminance? Or is it rosy yellow like a picture has…?

Melanie: I'd say it's a luminance.

Russ: So there's some kind of illumination…

Melanie: Yes.

Russ: … that seems like it's rosy yellow colored in your experience…

Melanie: Yes, exactly.

Russ: … in a visual way. And I'm gathering that you think or know or something – and I'm trying to clarify this – that this rosy yellowness is associated with the humorous aspect of it?

Melanie: It was a feeling that was very familiar to me, or I guess, the sight, you could say, of this color that is really familiar to me and is one that I commonly associate with laughing at a joke or something that involves humor.

Russ: So the experience of this rosy yellow is not unusual – it's part of Melanie being Melanie. When something funny happens she turns rosy yellow inside.

Melanie: Yes. [laughs] Exactly.

Eric: I don't know whether you can answer this or not, whether you remember well enough, but how would it interact with your visual experience? Would it seem as though this paper… I assume the paper you're looking at is probably white.

Melanie: It was parchment colored.

Eric: Ah. So would it have discolored the paper visually in some way, or…?

Melanie: No. It wasn't as though I saw through my eyes at all. It felt very much in my head as opposed to something that was out in front of me.

Eric: So when you say it was all over, it's not kind of like all over your visual field, or something like that …

Melanie: I wasn't wrapped up in this color, no. I mean it was like it was all over my brain or thought field, if that helps.

Russ: If you'd been here when she said it was all over, she held both hands up in the vicinity of her head near her temples, rocking them back and forth as if she was trying to say "all over inside my head".

Eric. [laughs] Um hm.

Melanie: But there wasn't any outward manifestation of it.

Eric: So when you look at something, when you look out at the world, there's only a certain range of degrees of arc that you can see, right? You can see forward, say, 120 degrees of arc, maybe a bit more. You can't really see anything too high up or too low down or too much to the side or behind you. So is that where the glow is? In that kind of non-visual area, then, which would include your head, say? Or is that not the way to think about it?

Russ: Let me ask a different question if I can, here, because that's the kind of question that I wouldn't ask. I wouldn't ask that question because it has, too close to the surface for my taste, the intrusion of reality. If I were interested in that

question I would ask it sort of like this: When you say this rosiness is inside your head and sort of throughout your head, do you mean you're looking sort of forward at it, or up at it, or down at it, or backwards at it, or all of the above, or…? [See Box 4.6 on why Russ objected to Eric's question.]

**Box 4.6. Bracketing the known characteristics of the outside world**

Russ: I agree with your account of the characteristics of real perception here, Eric. But I feel that the comparison you suggest might lead Melanie to think that her inner visual experience must be in that same 120 degree field – or, alternatively, that it must be outside it. It is crucial to be as neutral as possible on such matters during the interview, since inner processes do not necessarily abide by the same rules as outer processes – as we have seen already in the case of the pace of inner speech.

As the subsequent conversation shows, Melanie doesn't seem to have been overly influenced in this way by Eric's question.

Thread: Bracketing presuppositions. Previous: Box 3.3. Next: Box 4.10.

Thread: Interview techniques. Previous: Box 4.3. Next: Box 4.15.

Thread: Rules of inner reality. Previous: Box 4.4. Next: Box 4.13.

Melanie: Neither. It's just mainly… I'm trying to think of the best way to describe it. It feels like, in my head, I guess you could say, is this other world and

I'm just looking straight at it. I can see – it's a 360-degree vision. I can see above me, below me, behind me, in front of me, through the sides. It's all over.

Russ: So the 120-degree rule doesn't apply in this…?

Melanie: No. It's not like the visual field. It's almost like looking from beneath, and looking up – and being able to see everything – kind of like in a planetarium.

Russ: So it seems more above you than below you, is that right, the rosy yellow?

Melanie: No, because it seems all around me. It's really like a 360-degree view – I can just see it everywhere.

Russ: So it's 360 in three dimensions. It's 360 in front and in back and 360 above and below?

Melanie: Yes. [See Box 4.7 for a discussion of color in emotional experience.]

**Box 4.7. Color in emotional experience**

Eric: Not many philosophers or introspective psychologists have described emotional phenomenology as literally involving color. (I do take this to be, in

some broad sense, a report of an emotion.) Melanie could, of course, be unusual in this respect, as synaesthetes are unusual, who experience color when they see numbers or hear musical tones; or philosophers and introspective psychologists could have missed a common aspect of emotional experience. However, as many people seem to find emotional experience hard to describe (as Melanie does in later samples), and we consequently reach for metaphors, I think it is possible here that Melanie is being taken in by her own metaphor.

Russ: I agree that the literature has overlooked the experience of color along with emotion. I am quite confident on the basis of my own work and that of my colleagues that some people literally experience color along with emotion. My subjects have (I think credibly) reported "seeing red" when angry, "being blue" when depressed, and "seeing rose-colored hues" when optimistic; furthermore, my careful questioning leads me to conclude that these phrases were meant to be straightforward descriptions of robust visual phenomena (they can specify the precise color of blue, for example), not mere metaphors. I don't think we should be more skeptical of this than of any other of Melanie's claims. There are two mistakes that could be made: to be taken in by a metaphor and understand it as a claim of seeing rosy when it's not there; and to presume incorrectly that Melanie has been taken in by a metaphor and therefore fail to understand and/or credit her straightforward descriptions.

Eric: One piece of evidence that might support or undermine your view about the literalness of such phrases as "seeing red" when you're angry would be evidence from very different cultures. Do speakers of non-European languages say similar things? An informal poll of my acquaintances suggests that such stock phrases are quite different across cultures. (Cross-cultural research suggests there may be some consistency in the association of chips of color with emotion terms, but hue may be less relevant than brightness and saturation: D'Andrade and Egan, 1974; Johnson, Johnson, and Baksh, 1986.)

Russ: I, too, would find such cross-cultural studies interesting, but there is no reason to be confident, I think, that the experience of anger is the same across cultures. For example, the British, known for their restraint, might have very different experience of anger than do the Italians, known for their expressivity. Thus the mere fact that their descriptions of anger might differ would not mean that their descriptions are merely metaphors. So what would be more interesting to me would be careful, moment-by-moment observations by people whose ability to bracket presuppositions I trust. The more different cultures, the better.

Eric: And if under such conditions only English speakers (or English and German speakers) claimed literally to see red when they were angry, you'd willingly embrace the view that anger experiences literally differ in coloration between cultures?

Russ: I would.

Thread: Melanie's trustworthiness: Unusual claims. Next: Box 4.11.

Thread: Emotion. Next: Box 5.13.

Thread: Human similarity and difference. Previous: Box 4.1. Next: Box 4.18.

Thread: Influence of metaphors. Next: Box 5.2.

[Here we have excised a brief discussion of the issue discussed in Box 4.6; as always, the excised text can be found on the website.]

Russ: So is there anything else going on at this particular moment? You're seeing the white parchmenty paper…

Melanie: Mm hm.

Russ: And does that seem to be in your awareness, or is it….

Melanie: No it's not. I'm not aware of how my body is positioned or of what I'm holding. It's very much just in my head.

Russ: You you're paying much more attention to your thought process here, about "isn't it strange…?" "isn't it funny?" You're obviously seeing the parchment, because that's what started this process, but it's not in your awareness.

Melanie: Yes, exactly.

Russ: Okay. Have you got further questions about that, Eric?

Eric: Right. Yeah. I don't know how fruitful it is to push on that, so…

Russ: She looks pretty confident, if you were here watching her.

Eric: Right. Well, there is a debate about whether there are things you experience that are peripheral. So some people think that when you're visually attending to something but there's, say, a jackhammer in the background, you may not be paying any attention to the jackhammer, but the jackhammer is part of your experience anyway. Or if you're sitting in a chair, in the periphery of your experience there's some kind of a feeling of the chair on your back and on your bottom. So, do you have a sense for this beep whether there were these sorts of peripheral, marginal experiences? Or was it pretty much the things that you were focusing on that you have reported so far, and that's it?

Melanie: I think it primarily was just that I was focusing on what I've already said.

Eric: Mm hm.

Melanie: It wasn't until after the beep that I became much more aware of the fact that, Oh I am sitting with the my legs tucked underneath me, and I have this smile on my face, and I am holding this piece of paper. That didn't come until after the beep kind of compelled me to examine what I'm doing.

[Here we have excised a brief discussion of the "periphery of experience." See Box 4.8.]

**Box 4.8. The periphery of experience**

Eric: John Searle (1992) and others have argued that conscious experience is rich, in the sense that although attention may be limited to one or a few topics at a time, conscious experience is not. On this view, the fact that Melanie's eyes were open is strong evidence that she was indeed having visual experience at the time, despite the fact that she denies it now (in a qualified, hedging way). Likewise, on this view, we all generally have, at the periphery of experience, sensations like that of the pressure of the chair against one's back, the noise of a distant jackhammer, background feelings of anxiety, slight feelings of hunger, et cetera, all at once.

Russ: Most of my subjects are quite clear that there is in their experience at the moment of the beep only one or a small number of things. The jackhammers and chairs are part of my skilled navigation through the world, and I pay enough attention to them as necessary not to run into the jackhammer or fall off the chair. But that doesn't mean I have them as part of my awareness or experience at all times that they are in my presence. In particular, many of my subjects quite persuasively deny visual experience despite the fact that their eyes are open, saying things like, "My eyeballs were aimed at the book I was holding, but I wasn't paying attention to it. I was entirely focused on the image I was having."

Eric: Perhaps such experiences are swiftly forgotten if they are not the object of immediate attention after the beep. What would have happened if Melanie's task had been, upon hearing the beep, simply to report whether she had visual experience at that moment or not? I have been inspired by our conversations to try beeping a few subjects with that question deliberately posed to them in advance. My tentative finding is that they report visual experience in the vast majority of cases in which their eyes are open. (I describe this experiment in more detail in Chapter Ten, section 3.)

Russ: I fear you make more of Melanie's statement than she intended. I don't think she intended to say that she had absolutely no experience of the papers (and if she did mean that, I wouldn't believe her because I don't think she can know that). She meant to say that she wasn't really paying attention to the papers, she

was involved in the thought process. She was at that moment indifferent to the papers. Maybe a visual experience of the papers existed in some way; maybe no visual experience of the papers existed. The theoretical question about the existence of visual experience at that moment was not what she was talking about.

I suspect that it is impossible to provide an exhaustively complete description of experience. The aim of DES is not to be exhaustive but to be accurate about as much of experience as possible. Thus I don't know whether Melanie had visual experience of the paper at the moment of Beep 1.1. If we become overly concerned about the fine details at the edge of experience, I think we undermine the ability to be faithful to what we can access. (For more on the consequences of pressing too hard on details, see Box 5.14 in the next chapter and my comments in Chapter Eleven, section 2.1.)

Eric: Okay, but I think what you've just said sounds much different from your first comments in this box! Here, as elsewhere, I think you waver between restraint when pushed (e.g., Ch. 11.2.1) and a stronger denial of the rich view when you're not on guard (e.g., Box 2.4, Ch. 2.3.1.6-7).

Thread: Melanie's trustworthiness: Memory. Next: Box 5.4.

Thread: Richness. Previous: Box 3.4. Next: Box 6.2.

Thread: Sensory Experience. Previous: Box 3.4. Next: Box 4.18.

Russ: So, anything else in this beep other than that?

Melanie: I think that was it.

[See Box 4.9 on whether we should believe Melanie's report.]

**Box 4.9. Should we believe Melanie's report of her first sample?**

Eric: I've raised some concerns about Melanie's report in Boxes 4.2, 4.7, and 4.8; but I am tentatively willing to accept that Melanie had a thought with something like the content she describes, accompanied by amusement, somewhere in the temporal vicinity of the beep. I'm also willing to accept Melanie's reports about the other samples today at roughly the same level of generality. (But see also Box 4.13.) The beeping task does not strike me as so hopeless and impossible that Melanie would be forced to pure invention.

That, at least, is the level of skepticism I personally feel – which is not to say that more skepticism, or less, might also be sensible and appropriate.

Russ: I would remind us that this is Melanie's first sample on her first sampling day, and much of what she said about her experience may well be untrue or misleading. That should not be held against Melanie or the method; first-day reports often reflect the presuppositions subjects hold about inner experience and the fact that they have never before been asked to describe their

experience with substantial care or instructed how to bracket their presuppositions.

Thread: Melanie's trustworthiness: General. Next: Box 5.7.

**Beep 1.2**

Melanie: Okay. I was walking kind of aimlessly between the kitchen and the dining room waiting for the shower to stop running and my boyfriend to get out so I could finish making dinner. The beep caught me just as I was going in from the hallway that comes from the living room into the kitchen. Right before the beep happened, I was thinking – and it was a kind of inner speech thought – of how you can think you're really busy and doing something and you can block time out of your day to do something but there's still little empty spaces of time that happen even while you think you're really busy.

Russ: And when you say that's "right before the beep," do you mean that that's actually before the beep or is that at the moment of the beep as I've defined it (the last undisturbed moment before the beep)? [See Box 4.10 on whether we miss the dynamics of experience by focusing on a single moment.]

**Box 4.10. Focusing on a single moment and the dynamics of experience.**

Eric: While the precise focus on a single moment seems in many ways desirable, Russ, for reasons you describe in Chapter Two, I wonder also if something is lost – some sense of the dynamics of experience as it evolves over time. Could experiences sometimes be integrally connected with each other over time in such as way as to require, for their accurate description, a relatively extended temporal story? If so, your resolutely narrow temporal focus may lead the distortion or minimizing of the dynamic, evolving flow of experience – don't you think?

Russ: I agree that it's desirable to capture flow or dynamics, but that desirability is trumped, I think, by the desirability of using randomly selected time slices to aid in the bracketing of presuppositions. The random beep says, in effect, "Let's discuss this particular instant, not because Melanie or Russ or Eric thinks this instant is important or significant or interesting, but merely because it was selected by a neutral, dispassionate, random trigger." If we allow Melanie to stray from the moment to describe the flow of experience, her description would necessarily involve a series of instants that she (not some random trigger) selected because they seem to cohere with the flow; she would exclude other nearby instants. That selection/exclusion process would be based on Melanie's presuppositional self-understanding of her own conscious flow, and I, like Nisbett and Wilson (1977), don't think people's understanding of such processes can be trusted.

Describing the single last undisturbed experience before the beep is as clean as you can get; any departure from the moment of the beep is shrouded in the murk of presuppositional self-theory.

Thread: Bracketing presuppositions. Previous: Box 4.6. Next: Box 5.7.

Thread: Limits of DES. Next: Box 5.14.

Melanie: It's at the moment of the beep.

Russ: Okay. That again is sort of a long phrase: "you can think you're really busy" and…

Melanie: "You can think you're really busy but even during those busy times there are periods of empty time."

Russ: And where does the beep come?

Melanie: Again, right toward the end, about "empty time."

Russ: And is that an exact quote, do you think?

Melanie: Yes.

Russ: Okay. And this, you said, was more like speaking, as distinct from the last one, which was more like hearing. Is that right?

Melanie: Yes.

Russ: And is this more like in your voice as opposed to….

Melanie: Yeah. It was much more myself saying it.

Russ: And when you say it's "much more myself saying it," do you mean it was myself saying it?

Melanie: Not quite. It was more of a hybrid between the voice I was hearing in the last one and my own voice. It was again in that kind of accelerated manner as the last one was, where it wasn't compressed and didn't feel rushed, but I think had anybody been timing that thought going through my mind it would have gone significantly faster than had it been actually spoken.

Russ: Okay. And the speaking portion of it: Is the sensation exactly like you are speaking? Or is it somehow different from when you're speaking out loud?

Melanie: Well it's different because my mouth's not moving. But I'd say I hear it in the same way. For instance, that thought was more located between my ears and in a way down my throat like where your vocal cords are than the earlier one was. But it was different in that I couldn't feel my throat working, and there was no vibration going around in my skull, and I couldn't feel my mouth moving.

Russ: Right. And when you're talking out loud do you generally feel those things?

Melanie: Yes.

Russ: Sort of explicitly? So when we're talking right now you're sort of aware of the vibrations…

Melanie: Um hm. Yes.

Russ: … and that is true whenever you talk out loud? That you're aware of the….

Melanie: Not always, but often. Quite often.

Russ: So let me make sure I understand this. So while you're talking about whatever it is that you're talking about, there is a part of your awareness that is paying attention to the kinesthetics and the vibromechanics or whatever it is.

Melanie: Yes. But not always. Usually if I get very wrapped up in what I'm saying or really excited about something or if I feel really, really comfortable with the person I'm talking to and almost let myself go a little bit and feel a little bit free in speaking with someone, then I'm not as aware of it. But the times when I'm a little bit tenser and a little more careful about what I say, then I tend to notice the way I talk as well. The way my vocal cords work and the way my voice sounds in my own ears.

Russ: And when you say you notice this, there are other things going on too, your lungs are pumping and whatever… are you aware of that?

Melanie: No, I'm not as aware of that. I'm not aware of that at all.

Russ: Okay. So what you're aware of is in your neck and the bottom of your chin…

Melanie: Down to the jaw, yes.

Russ. Okay. [See Box 4.11 for skepticism about this aspect of Melanie's report] So at the moment of this particular beep, you have an awareness that's sort of in that region, but it doesn't include the usual vibration stuff.

**Box 4.11. Melanie's awareness of the mechanical aspects of speech #1**

Russ: Melanie's description of herself as typically paying attention to the mechanical/muscular/sensory aspects of her external speech is worthy of some skepticism, for three reasons. First, it is a generalization about her own typical behavior and experience, and as we saw in Chapter Two, I am highly skeptical of all such general characterizations. (I asked here about her general speaking-aloud characteristics not because I would believe her general answer but to clarify what she was saying about the moment.)

Second, very few of my subjects report attending to the kinesthetic or vibromechanical characteristics of their speaking. This doesn't imply that she is mistaken, but it should alert us that she may have an unusual way of speaking, an unusual way of experiencing speaking, or an unusual way of reporting that we should bear in mind in our questioning.

Third, we need to keep in mind that this is Melanie's first sampling day, and all first-day reports should be treated with extra skepticism. Imprecision when one is learning the task is not unusual.

Eric: I wonder whether her claims here arise from her desire to draw a contrast between inner speech and external speech. She knows there is a contrast; this seems a plausible place to locate it; she leaps to the generalization and now finds herself committed to it, perhaps?

Thread: Melanie's trustworthiness: Influence of generalizations. Previous: Box 4.2. Next: Box 4.14.

Thread: Melanie's trustworthiness: Unusual claims. Previous: Box 4.7. Next: Box 4.14.

Thread: Inner speech and hearing. Previous: Box 4.5. Next: Box 5.7.

Thread: Retrospective and armchair generalizations. Previous: Box 4.2. Next: Box 5.6.

Thread: Self-awareness: Melanie's unusual. Next: Box 4.14.

Melanie: Yes, exactly.

[Here we have excised a brief exchange in which Melanie asserts again that the voice was more spoken than heard.]

Russ: And is there anything else in your awareness at that moment?

Melanie: During this beep I was significantly more aware of where I was and what I was doing. I had just stopped right before coming into the kitchen, and right in front of me I could see the microwave and the stove. And I was aware that I was looking at them.

Russ: So you were seeing in your awareness the microwave and the stove.

Melanie: Yes.

Russ: And so this is different from the previous beep?

Melanie: Yes.

Russ: In the previous beep your eyes were aimed at the paper but you weren't actually in your awareness seeing it.

Melanie: Right.

Russ: Here your eyes are aimed at the microwave and the stove and you were seeing them in your awareness as well?

Melanie: Yes.

Eric: I think it might be useful to draw a distinction between being aware of the microwave and stove visually and being aware that you're looking at the microwave and the stove. Does that distinction make sense? And if so, is it more one or the other of those? [For Eric's complaints about Russ's use of the word "awareness" here and elsewhere, see Box 8.6.]

Russ: How about this? Awareness of the stove: the attention is aimed at the stove. Awareness of looking at the stove: the attention is aimed at yourself doing the looking?

Eric: Yeah.

Melanie: Okay. Then I'd say it's the former, not the latter.

Russ: You're seeing the stove.

Melanie: Yes.

Russ: There is a philosophical position out there that says if you have consciousness of the stove you also have to have consciousness of yourself seeing the stove. [See Box 4.12 for a discussion of philosophical theories of self-awareness in perception.]

**Box 4.12. Self-awareness in perception**

Eric: Per Russ's remark, some philosophers, for example Descartes and Locke according to many interpreters, and some advocates of "sense-data" theories in the early twentieth century, think that one cannot be directly aware of (i.e., know in some unmediated way) objects in the external world. What you know directly is always just yourself and your own consciousness; we reach judgments about the outside world on the basis of a more immediate and primary knowledge of our experiences.

While I am not sympathetic with such views (see esp. the conclusion of Chapter Three, section 2), this issue is not what I meant to be asking Melanie about, and I don't think Melanie's report here really bears on it. If you are always attuned in some way to your sensory experiences, then you might, and probably should, interpret my question as a question about whether you are especially aware of them – that is, attentive to them in some additional or more robust way.

Russ: My line of questioning was also not aimed at the philosophical position, but was designed to try to further our understanding of Melanie's earlier (unusual)

self-consciousness of her facial musculature while talking. There, she had said that she was both talking and, separately, aware of the (kinesthetic) features of that talking. Here, I wanted to clarify whether she was both seeing and, separately, aware of that seeing. She said that she was not. This is groundwork for any future claims that she might make that involve a separate observer, in the sense that we are getting practice at talking about what might and might not count as a separate experience for Melanie. If, at some later beep, she maintains that she has a separate observer, we will have a few "like this" but "not like that" experiences to compare.

Thread: Self-Awareness: General. Next: Box 6.1.

Melanie: Correct.

Eric: Right.

Russ: And you're saying as far as you know that's not in your awareness.

Melanie: No.

Russ: [to Eric] Which is the way most my subjects say it is, by the way.

Eric: Okay.

Russ: And so does that exhaust your awareness, the fact of the thinking and the seeing of the stove and the microwave?

Melanie: Yes. After the beep happened I was aware of the fact that I had my hands behind my back and I was just about to step onto a linoleum floor from a carpeted floor. But I wasn't thinking of any of that at the moment of the beep.

**Beep 1.3**

Melanie: My boyfriend and I were having dinner. We were having a discussion about this country house that his family has. Right at the moment of the beep I just finished saying the sentence, "I remember the shed now," because we were talking about how someone was going to go and add on the second story to the shed that's on this property. I'd forgotten what he was talking about, and then he reminded me and I said, "Oh, I remember the shed now." And right as I finished speaking the beep came.

Russ: So you're saying, "Oh, I remember the shed now" aloud?

Melanie: Yes.

Russ: And the beep comes near the end of that phrase?

Melanie: No, right at the end of it.

Russ: Right at the end of it.

Melanie: Yes.

Russ: "Oh, I remember the shed now" beep. [See Box 4.13 for a discussion of the timing of the beep.]

**Box 4.13. The timing of the beep**

Eric: We have three samples in a row where the beep comes right at the end of a sentence. That seems too coincidental. Why doesn't the beep sometimes catch her in the middle of a sentence? Perhaps she is not accurate in locating when, in the flow of her experience, the beep occurs.

In our conversation before the first sample, Melanie had expressed a desire to find interesting thoughts during the sampling (as did I when you sampled me). I wonder whether, without being aware of it, Melanie is doing something like

fishing around for the nearest interesting thought or experience in rough temporal vicinity of the beep.

Russ: Melanie's task is to report experience at the time she hears the beep, not at the time of the actual beep, and those two times may be quite discrepant. Furthermore, that discrepancy is probably not due to the particular nature of the DES task, because similar discrepancies occur in simple tasks. For example, Fodor, Bever, and Garrett (1974) reviewed research where subjects listened to tape-recorded sentences that had clicks embedded; subjects were simply to report where the click was located in the sentence. These subjects made substantial errors, with a strong tendency to relocate clicks to natural breaks in the sentences.

Similarly, many DES subjects, including Melanie, experience the beeps as occurring at natural breaks in their inner or external speech. (This is more frequent on the first sampling day; some subjects, with practice, seem to become more able to locate the precise moment that the beep occurred during speaking.) I don't think this temporal inconsistency damns the method. If I'm involved in a conversation, I think it likely that my experience of the conversation does not track the actual conversation in perfect synchrony. Sometimes I may find a part of the conversation difficult and my auditory experience may lag behind as I parse it, then catch up in a subsequent pause. And there's no reason why I'd have to recognize that I'd lagged behind.

While the DES task is to describe, not to explain, it seems reasonable to suppose that due to the limited processing capacity of the cognitive system (whatever that is), generally one finishes one micro-task before undertaking the next. It takes several fractions of a second to recognize the beep and launch the sampling intention, and perhaps for some subjects, at least some of the time, if a beep comes during speech, the speech is completed before the beep is experienced and the sampling intention is launched.

Thread: Melanie's trustworthiness: Details. Next: Box 5.14.

Thread: Rules of inner reality. Previous: Box 4.6. Next: Box 4.16.

Melanie: Yes.

Russ: And in your awareness is….

Melanie: In my awareness is that I can feel my mouth close. And then also I have a mental image of the structure we're talking about, of the shed.

Russ: And when you say "I can feel my mouth close," that's in your awareness?

Melanie: Um hm.

Russ: And is that part of the same kind of deal we were talking about a minute ago…

Melanie: Yes.

Russ: … with the awareness of the speaking act?

Melanie: Exactly. [See Box 4.14 for comments on Melanie's awareness of her speaking and Box 4.15 for a discussion of the subject's notes during DES.]

**Box 4.14. Melanie's awareness of the mechanical aspects of speech #2**

Russ: In Box 4.11, I commented that it was unusual for my subjects to say they are noticing the mechanical aspects of their speech, as when Melanie said she felt her mouth close. As I explain in Chapter Two, my methodology requires viewing all reports skeptically; this is especially true the first day. Melanie's description of her speaking phenomena here deserves an additional dose of skepticism because what Melanie says about her sample accords with the just-a-moment-ago general account (see Box 4.11). Perhaps she has been "captured" by what she herself said about her general speaking phenomena, so that now she is describing a sample just to be consistent with what she said earlier. We should suspend judgment and communicate to Melanie that saying things inconsistent with previous statements

is okay. Note that skepticism means suspending judgment, not disbelief. In fact, I came to believe, on the basis of the entire sampling with Melanie, that it's likely that this report was accurate. (See Box 8.9.)

Eric: In a separate conversation some time after these interviews, Melanie said that she did not record on her notepad the experience of feeling her mouth close. This, I think, should amplify our concern that the purported mouth-closing feeling is a postulation she's led to by her earlier remarks. While I share your sense, Russ, that Melanie's interview reports should generally trump her written notes, the written notes might be useful for clues on matters such as this. I might pay more attention to them than you are inclined to. (Unfortunately, Melanie's original notes are not available; see Box 4.15.)

Thread: Melanie's trustworthiness: Influence of generalizations. Previous: Box 4.11. Next: Box 4.18.

Thread: Melanie's trustworthiness: Unusual claims. Previous: Box 4.11. Next: Box 8.9.

Thread: Self-Awareness: Melanie's unusual. Previous: Box 4.11. Next: Box 6.4.

**Box 4.15. On the subject's notes during DES**

Russ: In Box 4.14, Eric lamented that it was unfortunate that we did not have access to Melanie's notes. I don't share that lament, because I don't generally

consider what a DES participant jots down in the sampling notebook to be very important data.

I regard Melanie's jottings in her notebook merely as tools to the end of getting the most accurate possible view of her inner experience at the moment of the beep. These jottings are often accurate but occasionally are distorted or incorrect. Either way, they are merely steps in the process, much like a writer's outlines and drafts, which are used, reacted to, and eventually discarded.

And just as we wouldn't judge a finished scientific paper on the on the merits of its preliminary outlines and drafts, so also we shouldn't judge Melanie's reports on the basis of her notebook jottings. We should give Melanie space to amplify, reject, or otherwise correct what she has written. It is simply not possible to expect that Melanie will be able accurately to portray all the features of an experience in words that come to her shortly after the beep. Nor would we wish her to become self-conscious about her notes, to worry about our potential reactions to the particular words she might jot. The jottings are notes from Melanie to herself, and she should be free to use them in whatever way she thinks will help her most accurately convey her experience to us during the interview.

Thread: Interview techniques. Previous: Box 4.6. Next: Box 4.17.

Russ: So you had been aware of the vocal cords and whatever, but now we're right at the end and the vibrations have stopped and the mouth is closing. That's where we are?

Melanie: Um hm.

Russ: Okay. And at the same time you also have an image of the shed.

Melanie: Right, as if you've opened the front door and you're standing just inside. I've only seen this building once, and I'm just remembering it from the view I saw that day.

Russ: And in your image, whether or not it's the same as anything that actually exists on the planet, what do you see in the image?

Melanie: It's a very bright day, so it's pretty dark inside, and there are four walls. [See Box 4.16 for a comment on this.] The wall to my right has a small window in it. The wall to my left has a couple posts on it for like hanging up jackets or something like that, and then….

**Box 4.16. Imagery violating the rules of visual perspective?**

Eric: If what Melanie seems to be saying here is literally true of her experience – that her image was as if she was standing just inside the shed and also that the image contains four walls – then this bit of imagery violates the ordinary rules of visual perspective. Unfortunately, we did not press on this point during the interviews. It's hard to know how Melanie would have reacted if pressed, though later she seems to contradict that interpretation of her claim here by saying of the image that "it's as though it's in that 120 degree visual field."

I see no reason to suppose that the experience of visual imagery has to obey the laws of visual perspective, though most psychologists seem to assume it does (e.g., Shepard & Metzler, 1971; Kosslyn, 1980), and that is the most common report among people I've spoken to about such matters.

Francis Galton, in his classic (1880, 1907) survey of imagery experience, found that a small percentage of respondents claimed to be able to imagine things from multiple angles at once. Jorge Luis Borges also describes such a case in a fictional story about a person obsessed with a coin he calls the "Zahir":

> There was a time when I could visualize the obverse, and then the reverse. Now I see them simultaneously. This is not as though the Zahir were crystal, because it is not a matter of one face being superimposed upon another; rather, it is as though my eyesight were spherical, with the Zahir in the center (Borges, 1962, p. 163).

Russ: It is not uncommon for DES subjects to report images that violate the rules of external perspective: seeing an image of the living room beyond the dining room even though in actuality there is a wall separating the two; seeing an image of a person seated in a chair where the chair is seen from the side and the person from the front; and so on.

Thread: Rules of inner reality. Previous: Box 4.13. Next: Box 9.8.

Thread: Visual imagery: Structure. Next: Box 5.2.

Russ: And there are jackets on them or just …

Melanie: Yeah.

Russ: … in your image?

Melanie. Yes, there's one jacket. And then there's directly in front of me – half of it is a wall and the other half is a cutout for a bathroom but the bathroom's not installed yet, and against the wall there is a bench. And it's all in light wood, like oak.

Russ: That's quite a few details. Are you seeing all those details?

Melanie. Yes.

Russ: And at the moment of the beep are you seeing all of them sort of equally or are you paying more attention to part of them?

Melanie: It's all equal. It's a memory just like when you take a snapshot. It's a snapshot memory of the first time that I saw the shed, or the inside of it.

Russ: And so when you say it's a snapshot do you mean it has a border around it like a snapshot has or…? [See Box 4.17 for Russ's discussion of leading the witness]

**Box 4.17. Leading the witness**

Russ: We discussed in Box 4.13 the possibility that Melanie gets "captured" by what she or we have said. It's difficult if not impossible to ask questions that are perfectly non-leading, so the next best strategy is to ask questions that lead mildly in many different directions, some likely, some not. Here I ask a mildly leading question in a direction where I in fact expect the answer is likely to be "No," because it is rare that subjects report edges or borders to images. Melanie easily denies this, raising her credibility in my view.

Thread: Melanie's trustworthiness: Interview pressures. Next: Box 5.1.

Melanie: No, but it's still. There's nothing moving. It's a snapshot in that it's one moment out of time.

Russ: Okay.

Melanie: And I only stood there for a couple of seconds and then someone came up next to me and I walked inside and everything like that. But it's just that first moment when the door was opened as I was looking inside.

Russ: And so does this seeing then seem like the same kind of seeing that happened back whenever that was, some number of days or weeks ago or…?

Melanie: Yes.

Russ: So it's like you're looking the same as you had been looking then?

Melanie: Um hm. Exactly.

Russ: And as we're talking about it now, do you seem to be doing the same thing again?

Melanie: Yeah. The mental image that I have is the exact same as it was last night.

Russ: And is this image clear, like….

Melanie: Yeah, it is.

Russ: As clear, more clear, not quite as clear as it was the first time you saw it?

Melanie: Probably not quite as clear. Just because time has passed and I probably don't remember it 100% accurately….

Russ: Okay.

Melanie: …although it may be actually accurate. I don't know. But…

Russ: And here I'm not asking you actually to speculate about whether it's actually as clear as it was back then, because that would require you to have a

veridical memory of the way it was back then, which I don't think you can do. The question is, does it seem crystal clear? In the same sense…

Melanie: Yes.

Russ: ...that it seems crystal clear [interrupts himself]. Well, let me ask you this. When you see things in general, do they seem crystal clear?

Melanie: Yes.

Russ: Okay, then. When you were looking at this image at 6:00 or whenever it was last night, did it seem like you were looking at this shed in a crystal clear way?

Melanie: Yes.

Russ: And did the looking seem to be as detailed? Was this a very visually richly detailed thing with posts and windows and benches and the like?

Melanie: Yes.

Russ: And so there are three things going on. There's the speaking aloud; there's the awareness of the end of the musculature – the mouth closing at the end of the speaking aloud; and there's the image of the shed.

Melanie: [nods yes].

Russ: Is there anything else in your awareness?

Melanie: No, that's it.

Eric: So you're saying that there's not a kind of center and periphery of the image or anything like that.

Melanie: Nope. In a way you could say that it's all that I can see. The best way to describe it is going back to what you were saying about the first one with the glow. I'm seeing it as though it's in that 120 degree visual field. It's not in my head. I'm seeing it as though I'm looking at it through my own eyes.

Eric: Um hm. Right.

Russ: In reality, you're looking at one thing at a time. Right now you're looking at me, and no doubt this TV monitor is in your peripheral vision. And you could see it when you're actually looking at me….

Melanie: But not hyper-concentrating on it.

Russ: Right. And at the moment of the beep, as far as this image is concerned, are you looking at a piece of the image, like the bench, or the window, or the pole…?

Melanie: No, I'm just seeing the whole thing.

Russ: You're seeing the whole thing?

Melanie: Yeah.

Eric: So in a sense the image might be clearer, are you saying, than when you see something and you're kind of focused on one thing that maybe is clear and something to the side is not as clear? I'm not sure if that is your visual experience but it sounded like it was when you just responded to Russ a little bit ago.

Melanie: Well, it's difficult to answer because I admit in the mental image that I had there are things in my very periphery that I probably don't see. But on the whole I'm not staring at one thing, so nothing…. And even when I do, in everyday life, when I'm looking directly at someone, the things around it, in okay, let's say at least 100 degrees are pretty much clear, and I can see what they are and where they are and the color and everything like that. So it's vision like that.

Eric: Um hm. [See Box 4.18 for a discussion of the experience of vision.]

**Box 4.18. The experience of vision. The refrigerator light phenomenon**

Eric: Melanie says here that in her ordinary visual experience everything within at least 100 degrees of arc is "pretty much clear," When I casually ask people about their visual experience, I find they commonly make claims of this sort.

In my view, visual experience degrades much more rapidly away from the center. Fix your eyes on the period at the end of this sentence, and then, without moving your eyes, notice what the rest of your visual field is like. How clearly can you see the words two inches from the point of fixation? How clearly do you see the thumb that holds the page without gazing directly at it? I expect you'll discover a substantial decrement in clarity. This decrement does not depend on holding your eyes still. With a bit more effort, one can attend to one's peripheral visual experience while moving one's eyes around more naturally. Most of the

people I've persuaded to try these experiments eventually conclude that visual experience does not consist in a broad and stable region of clarity. Rather, visual experience involves a fairly small region of clarity moving rapidly around a fairly indistinct or sketchy background. (There is, of course, a wealth of scientific data on our poor visual acuity outside a narrow, central area of focus; but it's a further leap, one distinctive of consciousness studies and far from settled, to the conclusion that visual experience is also indistinct outside that area.)

Perhaps what leads Melanie and others into error here (or, at least, what I think is error) is a version of what is sometimes called the refrigerator light phenomenon: Just as my seven-year-old son might think the refrigerator light is always on because it is always on whenever he opens the door to check it, so also someone might mistakenly think her entire visual field is clear simultaneously because, unless one uncouples one's attention from one's eye movement, the act of checking part of one's visual field for clarity will create clarity in that part of the visual field. Wherever in one's visual field one thinks to attend, one will look that direction and find clarity. One may thus erroneously conclude that the whole visual field, within a certain range of natural eye movement, is clear simultaneously. (For more on this, see Dennett, 1991; Noë 2004; Schwitzgebel, in preparation.)

I don't know whether Melanie's claim here arises from a refrigerator light error of this sort – that's a lot to read into a small bit of conversation – but it does

occur to me to wonder whether Melanie's general views about visual experience might be partly driving her attribution of broad clarity and detail to her visual imagery in this sample. She earlier said that her visual imagery experience at the moment of the beep was very much like her original visual experience of the shed; if she is confident of that, she might leap unwittingly from a theory about the one to a conclusion about the other.

Russ: First, most DES subjects do not make such claims—it is much more frequent for subjects to say the center of the visual field was clear and the periphery indistinct.

Second, I don't know or care whether what Melanie says here is true or false. She is not yet a good observer of her own experience. In Chapter Two I used the metaphor of a thresher – my task is to try to grab the wheat and ignore the chaff. This is Melanie's first sampling day, and much of her talk here is "chaff". Third, she indicates in five ways that I will later call subjunctifiers (see Box 5.13) that she herself doesn't really believe what she is saying: "well", "it's difficult", "probably", "pretty much", and the unsignalled change of direction at "so nothing…". Fourth, she is also speaking in generalities of the sort that DES seeks (usually successfully) to avoid (see Boxes 4.2 and 5.17; however, we encouraged her to make this generalization, in violation of standard DES procedure).

For those four reasons, let's not draw too much from this remark. Melanie's talk here should be considered an inconsequential utterance of the sort typically

encountered on the first sampling day. It is not adequately tied to Melanie's beeped experience, and therefore, regardless of whether it is true or false, I don't count it for or against Melanie or the method. We have to do better (and, I think, will do better on later sampling days) in keeping our discussions focused on the moment of the beep before it makes sense to take anything Melanie says about her experience seriously.

By the way, while I accept that many, and probably most, people who engage in your vision experiment experience what you describe, that doesn't imply that everyone would. I'm confident that Fran (discussed in Chapter Two) would not, for example. I don't think we sampled long enough with Melanie to know about this aspect of her experience. And furthermore, visual experience in such an experiment might be unrepresentative of what it's like in the wild. Thus I think you make a large mistake here, Eric: assuming without warrant that Melanie's visual experience is like your own (see Box 7.4).

Thread: Melanie's trustworthiness: Influence of generalizations. Previous: Box 4.14. Next: Box 7.1.

Thread: Human similarity and difference. Previous: Box 4.7. Next: Box 4.20.

Thread: Sensory Experience. Previous: Box 4.8. Next: Box 9.1.

Thread: Visual imagery: Detail. Next: Box 4.19.

Russ: So when you're thinking about this image now, it looked at least a minute ago like you're recreating the image again. Is that true?

Melanie: Yes.

Russ: So there's the post and the lights and the whatever, and when we're talking about this, does it seem or not seem that your attention is going within this image now to the window and now to the bench and now to the post…

Melanie: No. I'm just seeing the whole thing.

Eric: What's the level of resolution? Can you see the nails – I don't know if it has nails – or the fineness of the grain, or that kind of stuff?

Melanie: No, I can't. First of all it's dark. I can see more than just the outline of the objects in the room but beyond that I couldn't tell you the grain of the wood, or, you know, where one board stops and the next begins.

Eric: Although is that just because the image is dark, or is it because there's some kind of unspecificity in it or …?

Russ: Let me interrupt that line of questioning and ask the kind of question that I would prefer to ask in this kind of situation. [To Melanie] You said there was a post with some hooks on it.

Melanie: There were a couple hooks on the wall.

Russ: And there was one coat hanging on the wall?

Melanie: It was a jacket.

Russ: What does that jacket look like?

Melanie: It was like a windbreaker that you just casually toss upon a hook and it's just kind of hanging there drooping a little.

Russ: And what color is it? Does it have a color?

Melanie: It doesn't have a color different than the rest of the room. It's all pretty much the same dark bluey gray.

Russ: Okay. And does this windbreaker have a hood or sleeves or what…?

Melanie: I couldn't tell you that… it has sleeves because they're a little bit longer than the coat.

Russ: So you can see the sleeves.

Melanie: Yes, one longer than the other.

Russ: Which one?

Melanie: The one closest to me, the left hand one.

[Here we have excised a brief discussion between Russ and Eric about the importance of going detail by detail rather than jumping immediately to a more general question. See Box 4.19.]

**Box 4.19. Detail by detail**

Russ: I started us on the detail-by-detail line of inquiry, rather than continuing to inquire about abstractions, because I think that keeps us focused on the experience itself rather than on the presumed characteristics of the image, and thus is likely to

generate a truer and less theoretically-driven report than more general questions would.

Eric: That makes sense to me. Furthermore, going through the image detail-by-detail like this gives us a quite precise sense of how much detail Melanie is willing to impute to the image (though see Boxes 4.20 and 5.4 for concerns about this as well).

I was hoping that by pressing for ever-finer details, we would eventually get to the point (as we did) that Melanie would say that her image left something unspecified – thus opening the door to the possibility of indeterminate imagery (see Box 5.6). Unfortunately, in this particular case, it remains unclear whether her image is indeterminate in a way a photo could not be indeterminate, or whether it is more like a dark or blurry photo.

Thread: Interview techniques. Previous: Box 4.17. Next: Box 5.10.

Thread: Visual imagery: Detail. Previous: Box 4.18. Next: Box 4.20.

Eric: So could you tell how the coat was wrinkled? Was it a little rumpled, or was it really straight…?

Melanie: It was a little rumpled, just because it's hanging over a hook, so it's falling in a particular manner.

Eric: And could you see the particular direction of the rumples in it? Could you count them?

Melanie: Probably not… no. I wouldn't say it's that sharp.

Eric: Um hm.

Melanie: I could tell the difference in the sleeves because they hang below the coat, and it's something I could just see instantly. But no, I probably couldn't count them. [See Box 4.20 for some reasons Eric is skeptical of this imagery report and Box 5.6 in the next chapter for a discussion of indeterminate imagery.]

**Box 4.20. Eric's doubts about report 1.3**

Eric: I'm nervous about this report for several reasons, some of which are expressed in Boxes 4.13 and 4.14. While I grant that it's possible that Melanie's image here is as detailed as she claims, I don't think my imagery is anywhere near that detailed (Russ will say, "don't judge others by yourself!"; see Box 7.4). Surely, Melanie could just be very different from me, but as I've mentioned before (Ch. 3.2), psychologists (not using DES) have generally failed to find differences in imagery report to correlate very well with performance on seemingly imagery-related tasks – suggesting, perhaps, that people generally

aren't as different in their imagery experiences as they say (see Schwitzgebel 2002a for a fuller version of this argument).

This is hardly decisive, of course – and even if we accept it, maybe it's I and not Melanie who's mistaken about his imagery. But also I wonder whether Melanie fully appreciates the possibility of indeterminacy in vision and in imagery (see Boxes 4.18 and 7.8), whether Russ's invitation to compare her imagery experience to visual experience near the beginning of this discussion might have led her too quickly to assimilate the two (see also Box 8.1), and whether she might commit a type of refrigerator light error as she thinks about and possibly fills in different aspects of her reconstructed image (see also Boxes 4.18 and 5.4).

I don't wish to be dogmatic – I don't think I am being dogmatic – but Melanie's confidence alone, here, and Russ's careful interviewing style, aren't enough to persuade me to relinquish these concerns, and I'm not sure further interviews of this sort could by themselves persuade me. I want something more in support of her report, some independent corroboration, if possible, something externally observable.

Thread: Human similarity and difference. Previous: Box 4.18. Next: Box 5.3.

Thread: Visual imagery: Detail. Previous: Box 4.19. Next: Box 5.1.

**Beep 1.4**

In lieu of the full transcript of the discussion of this sample, here is a description of this experience as Melanie conveyed it in the interview:

> Melanie and her boyfriend had just put in a videotaped movie, and, as always, had started at the very beginning so they could see all of the previews. The tape had begun with a several-minute-long picture of the MGM logo with the lion frozen in mid-snarl and the words 'Ars Gratia Artists'. At the moment of the beep, the boyfriend was saying to Melanie, "Didn't the lion used to [beep] roar?" Melanie was hearing and comprehending what he was saying, and at the same time was paying attention to the green color of the screen. The color had been gradually changing, and was now green. She was paying particular attention to the greenness because it happened to be the same shade of green as the MGM Grand Hotel in Las Vegas where she lives. She wasn't thinking about the greenness in any cognitive way, but she was paying attention to it.

After we finished discussing Beep 1.4, we discussed a number of issues such as the extent of Russ's and Eric's skepticism; the "refrigerator light phenomenon" as a source of skepticism about Melanie's claims about her visual experience and her imagery in Beep 1.3 (see Boxes 4.18, 4.20, and 5.4); the desirability of finding performance differences between people who report different levels of detail in

their imagery experiences (see  Ch. 10.1); and suspicions about Melanie's accurately timing the beep, given that it seems to catch her at the end of thoughts (see Box 4.13).

Melanie seemed relatively unbothered by Eric's skepticism about her reports, saying she did not take it personally. Since Melanie participated in these discussions, they may have affected her later reports.

The full transcript is available at ****.

## Chapter Five

## The Second Sampling Day

### Beep 2.1

Melanie: I was reading. It's a book set on the island of Kefalonia in Greece. And the part where I was reading right before the beep happened was, the main character pulls aside this British soldier to ask when the British are coming to liberate the island during World War II. And right at the moment of the beep, I had an image in my head of that little scene on the island, with lots of sunlight on a dirt road, with the green olive trees and shrubs, and a woman – the main character – is speaking to this soldier.

Russ: And when you say you "had an image in your head," what exactly does that mean?

Melanie: Just a picture. I mean an imagined picture of what the scene kind of looks like.

Russ: And does it seem like you're just looking at it? Or does it seem like you've got a postcard of Greece? Or…?

Melanie: It's not a postcard in that it seems confined to one little space and there's something else surrounding it. It's more like being in an IMAX film in your head where it's a little bit more surrounding you and it's all you can see.

Russ: And does it seem like a clear picture of Kefalonia?

Melanie: Reasonably, yes.

Russ: And by "reasonably" do you mean not so clear as if you were in Kefalonia? Or sort of the same way, or…?

Melanie: Not as clear, because I was making it up. But reasonably clear.

Russ: Okay. And what exactly do you see?

Melanie: There's a dirt road that's kind of going diagonally across the space.

Russ: And by diagonally, judging from what your hands are doing, sort of from close left to far right?

Melanie: Exactly.

Russ: Okay.

Melanie: And there's a hedge of greenish shrubbery lining the far side of the road with a couple of olive trees sticking up out of them, that have that kind of olive green leaf. And then on the road is this woman dressed in kind of traditional Greek clothing, with a long dark skirt and kerchief around the head and a white kind of peasant blouse.

Russ: And you say "on the road," like walking on the road? Driving on the road?

Melanie: Just standing on the road.

Russ: Looking which way?

Melanie: Looking not at me but more toward my right… [See Box 5.1 for a discussion of the reasons for inquiring about the details of images.]

**Box 5.1. Asking for details of an image**

Eric: I wonder whether asking for such details invites confabulation. Although Melanie could choose to say "I don't know" or "that wasn't specified," there may be some subtle pressure on her to give determinate answers.

Russ: The request for details is a necessary part of the attempt to understand what Melanie is trying to tell us. Melanie says she's seeing an image. It is simply a mistake (albeit a common mistake) to assume that that means she is experiencing inner visual phenomena. If she is experiencing some relatively clear inner visual phenomena, then she should be able to provide some visual details. Many of my subjects say they have an image but then, under questioning, cannot provide any visual details at all. Those subjects generally come to accept that they did not actually have inner visual phenomena at the moment of the beep; that is, that they had used the term "image" in a non-visual way. (This is not the sign of an ill-intentioned subject, but rather one who has, like most people, not adequately differentiated the terminology of inner experience.) So Melanie's being able to provide visual details about her image enhances the credibility of her claim that she had inner visual experience. It also conveys the important message that we are interested in the details of her experience and take what she is saying seriously but not blindly (see Box 7.3).

I think you are quite correct to suspect confabulation in many (perhaps most) studies of imagery. Many (non-DES) studies of imagery actually demand confabulation. They instruct people to form images and then ask about the images

generated (as you yourself do, Eric, in Chapter Three, section 2). But many people simply do not have imagery, even when (or perhaps especially when) instructed to form an image. Those studies ask about the details of their images anyway. That is an actual demand, and I think such a demand does lead to substantial confabulation. But that is much different from asking Melanie to describe whatever characteristics happened to be naturally, unmanipulatedly occurring at the moment of the beep, and only if she happened to report an image do we ask whether visual details existed and if so what they were. The demands of such a sequence are very gentle.

I agree there is a general concern about the accuracy of memory for details. Therefore, I think it reasonable to believe that of all the details of Melanie's description of her image (sunlight, dirt, olive trees, shrubs, woman, soldier, diagonally, skirt, kerchief, etc.), some were not actually present at the moment of the beep. How many were not actually present? I don't know, but I would guess most were present. If we were concerned about the long-term memory issue, we could ask Melanie to write more details immediately after the beep.

Eric: I can't avoid thinking, though, that the history of psychology shows that what seem to be subtle and gentle situational pressures often ultimately have large effects on behavior. In the current line of questioning (as in Beep 1.3), Melanie quickly commits herself to the image's being IMAX-like in its detail. Now, if she doesn't want to undermine herself, she has to produce details. A different line of

questioning – I'm not saying a better line, since it raises its own pressures – might have begun with questions about whether particular details were specified or not, letting the answers to general questions about the clarity and structure of the image fall out at the end. The research on eyewitness testimony in particular suggests that our memory of detailed, concrete events is surprisingly inaccurate and subject to a variety of distortive pressures. (For more on interview pressures and the comparison to eyewitness testimony, see Chapter Ten, sections 4-5, and Chapter Eleven, sections 2.3-2.5.)

I confess that my line of reasoning in Chapter Three, section 2, assumes that most readers can form an image on demand – or at least can realize it if they fail to do so. If I'm wrong about this and most readers only mistakenly think they have visual imagery, that of course only further supports my skeptical point there.

Thread: Melanie's trustworthiness: Interview pressures. Previous: Box 4.17. Next: Box 5.11.

Thread: Visual imagery: Detail. Previous: Box 4.20. Next: Box 5.4.

Russ: Okay.

Melanie: … and a British soldier standing next to her. They're standing reasonably close, just a couple of feet apart.

Russ: And by “standing next to her” do you mean shoulder to shoulder? Face to face?

Melanie: Not quite face to face, but turned towards one another as though in a conversation. And the soldier is wearing fatigues, olive green and tan color. And she’s kind of speaking. It’s more of a frozen picture, but she’s speaking, kind of gesturing a little bit with her hands. And he’s just standing there listening.

Russ: And when you say a “frozen picture” and yet “gesturing with her hands”….

Melanie: Well, she has her hands out as though in a gesture, like when you speak and you talk with your hands a little bit, but it’s frozen in one.

Russ: Okay. So like a snapshot has been taken…

Melanie: Yes.

Russ: … or a frame has been taken out of a video?

Melanie: Exactly.

Russ: And was it originally a moving video, which at the moment of the beep is frozen? Or are you just sort of creating a still picture?

Melanie: Just creating a still picture. [See Box 5.2 for discussion of the media references in this dialogue.]

Box 5.2. The comparison of images and media

Eric: Notice all the comparisons to pictures and movies in this dialogue (and elsewhere, e.g., Beep 4.1). I wonder to what extent such analogies might affect Melanie's impressions about her experience. Perhaps a lot. People in the 1950's (unlike now) believed their dreams were black and white. I have argued (in Schwitzgebel, 2002b; Schwitzgebel, Huang, & Zhou, 2006) that this is a consequence of our opinions about our dreams being inappropriately and excessively shaped by analogies to the media. 1950's reports about dreams were not, of course, based on DES, but I do think they suggest that media analogies can have a surprising grip on our impressions about our own experience (see also Schwitzgebel forthcoming-b).

Melanie describes the woman's hands as "frozen", rather than as moving or of indeterminate posture. Is Melanie assimilating her image too much to a photograph? The description here is so much like a photographic "snapshot" that I wonder.

Russ: I agree that there is a risk that a subject will presume that images have some of the same characteristics as photographs. But the response to that risk, I think, is to question the subject carefully about that; to make clear by word and deed that images may or may not have the same characteristics as pictures. The DES results show that still or "frozen" images are common across many subjects, but that most subjects deny photograph-like characteristics such as edges, borders, frames, and so on.

Melanie herself indicates that she is not taken in by the "snapshot" metaphor: "It's more like being in an IMAX film in your head where it's a little bit more surrounding you and it's all you can see." That indicates that she uses the snapshot metaphor to convey the frozen-ness and the IMAX metaphor to convey the surrounding-ness, which argues against her being captured by either metaphor.

And a theme that bears repetition: In my view there is a huge difference between a general opinion, which is greatly susceptible to influence, and a careful observation of an externally identified moment, which is not nearly so susceptible.

Thread: Trustworthiness: Influence of metaphors. Previous: Box 4.7. Next: Box 9.10.

Thread: Visual imagery: Structure. Previous: Box 4.16. Next: Box 5.5.

Russ: Okay. And as far as you recall at this particular moment, does this picture seem like it adequately reflects what was in the story? You're reading about this kind of scene, I gather?

Melanie: Yeah. There's probably more going on in the book than just in this picture. Like I think there were a couple of additional characters, but they weren't in the mental picture that I had.

Russ: And has the book described these hedges, and a few olive trees, and the road going left to right diagonally or…?

Melanie: No.

Russ: Those are details that you…

Melanie: Made up.

Russ: … constructed that are consonant with the book but not necessarily identical….

Melanie: Yes.

Russ: Okay. You're reading, actively reading?

Melanie: Um hm.

Russ: And is anything in your awareness other than this picture? So my question is: Does the content of the reading just seem like it's coming in and being reflected in the picture? Or are you saying the words to yourself and somehow…?

Melanie: There's nothing else aside from the picture. It almost feels like what I'm reading is being directly translated into a movie going on inside my head.

Russ: Okay. And is there an emotional reaction or sensations or anything? Or just the picture?

Melanie: Not at this beep. There is another one when I'm reading and there is emotion [see Beep 2.2], but here it's just….

Russ: At this moment you're reading and making a picture and paying attention to the picture, I gather.

Melanie: Yes, and just watching, yeah.

Russ: So you're not really even paying attention to the book. You're obviously looking at the book, and your eyes... there's a retinal image of the words…

Melanie: Right.

Russ: … but you're not really paying attention to that. You're paying attention to the picture. Is that correct?

Melanie: Yes. [See Box 5.3 for Russ's comment on the phenomenon of reading.]

**Box 5.3. Little is known about the phenomenology of reading**

Russ: Sampling has shown that there are a number of different ways to experience reading. Some people create, apparently automatically, images as they read. Melanie's example here is quite typical. Such images are usually over-detailed, as was Melanie's, in the sense that the image includes details that were not mentioned in the text. As the reading progresses, occasionally the text will contradict such a detail. The typical person simply corrects the image without noticing. So if Melanie's reading along and the next paragraph happens to say that the soldier is wearing a beret, then she is going to include a beret. A second ago,

she was seeing the soldier wearing a helmet, maybe, or perhaps it was unnoticedly unelaborated. Now she's seeing the guy wearing a beret. That would be a surprise in the real world, but not surprising in the world of imagination.

Other people (like you, Eric, as I recall from your sampling) speak the words they are reading to themselves in inner speech. Yet others apparently simply read Melanie's general view of her own reading, expressed in a different discussion and not based in sampling, is that she starts a passage in inner speech and then "takes off" into images. She reports that the sensation is like the difference between an airplane's taxiing and flying: reading with images is faster and smoother. (Because of its retrospective generality, I view this report with substantially more skepticism than her reports of individual beeps.)

Very little is known about the basic inner experience of nearly any activity, primarily because very few accurate reports of inner experience exist. If we can agree that experience sampling produces (at least) modestly accurate descriptions, then we can potentially start to fill this huge gap in our knowledge.

Eric: Although I am more skeptical about the details of this report than you seem to be (for reasons similar to those expressed in Box 4.20), I am willing tentatively to accept that Melanie had an image of some sort near the time of the beep. It would be very interesting to see if there were behavioral differences between people like Melanie who report mainly imagery while reading and people like me who report mainly inner speech. For example: Would imagers be

more likely to remember, or falsely impute, visual details? Would inner-speakers be more likely jarred when they heard someone else "mispronounce" a character's name with ambiguous pronunciation? If generalizations of roughly this sort hold up, that would in my view boost the credibility of the reports. If not, however, I think that would reflect badly on experience sampling.

Thread: Human similarity and difference. Previous: Box 4.18. Next: Box 7.4.

Russ: Okay. Eric, you want to…?

Eric: Were you pausing in your reading at this time, to just reflect on the scene and create this image? Or were you just going along reading without pausing, and the image was coming on?

Melanie: No, just going along reading. No pauses. Until the beeper went off, and then I stopped and turned off the beeper. But at the moment of the beep my eyes were just going down the page.

Eric: Right. And were you recreating that image now when you were just reporting it?

Melanie: Yes. [See Box 5.4 for a discussion of why this might be worrisome.]

Box 5.4. Dangers of recreating the image. Detail in imagery

Eric: If Melanie is recreating the image as she is reporting it, it seems likely that her knowledge of the recreated image could affect her reports in ways she may not realize. She may impute details of the reconstructed image to the original image.

For example, she may unwittingly add detail to the image as she thinks about it. When she thinks about the background of the imagined scene, she may add olive trees to her present image without realizing that she has done so (if she was not previously thinking about whether there were olive trees or not) and then mistakenly attribute that detail to her original experience. (Compare the "refrigerator light phenomenon" discussed in Box 4.18.)

Russ: I agree Melanie probably is reporting on her reconstructed image, which she trusts to be similar to the original image. And I grant that the (re)created and the original image are probably not identical, and therefore some reports said to be of the original image are confabulations. What is at issue is the magnitude of those confabulations. I doubt, for example, that Melanie would have a vague, indeterminate image at the moment of the beep and "recreate" it with a clear, detailed image merely as a result of our asking for details – or, worse, use a visual image to "recreate" a nonimage experience, such as inner speech or sensory awareness. If subjects simply caved in to such demands, we wouldn't find cases

like those in which subjects decided they did not have a visual image at all (as described in Box 5.1).

Thread: Melanie's trustworthiness: Memory. Previous: Box 4.8. Next: Box 7.5.

Thread: Reconstruction. Next: Box 7.1

Thread: Visual imagery: Detail. Previous: Box 5.1. Next: Box 5.11.

Eric: So, I'm not sure… um… it's probably not standard DES methodology….

Russ: Feel free to be as skeptical as you like.

Eric: Well, just out of curiosity, if you can recreate that image now…

Melanie: Um hm.

Eric: … when you're focusing, say, on the soldier…

Melanie: Okay.

Eric: … are the things that you're <u>not</u> focusing on simultaneously clear? Or is it that when you move your focus around from one part of the image to the other, the thing at the focus of your attention comes in some way more clearly into your

experience or something? [See Box 5.5 on whether this comment illicitly imports assumptions about imagery.]

Box 5.5. Images don't exist separately from the seeing of them

Russ: We need to carefully avoid two unwarranted, albeit common, presuppositions about inner visual experience: (1) that inner visual experience follows the same rules as external visual experience in having a focus and periphery; and (2) that there is an image separate from the perception of that image.

For example, do people frequently hold an image in mind and shift their "attention" from one part of it to another? I don't know the answer to this question, but my sense is that that is not the way imaginal visual perception usually works. If Melanie continued reading and started thinking more about the trees in the background, it may be tempting to say that "her attention shifted to the tree portion of her image." But that is not necessarily strictly true. Instead, it seems likely, or at least possible, that she would have a new inner seeing, in which the trees are more centrally interesting. Because the imagined soldier and trees don't really exist separate from the inner seeing, it may not make sense to say one's attention can shift back and forth between them, as it could between a real soldier and real trees or a photograph thereof.

When Melanie (or anyone else) has an inner visual experience, it is not, I think, that she creates an image and then looks at it. When she has an inner visual perception, she innerly sees what she intends to see, and what she does not intend to see may (unlike external perception) simply be not there, period. In like manner, what she does intend to see can (unlike external perception; see Box 4.18) all be clear simultaneously.

I think it likely that at least some inner seeings do not have pieces that are somehow out of the experience of the seeing. Contrast this with a photographic image of a soldier-on-a-road scene like the one Melanie is imagining here. All sorts of things would be in the photo, unattended until you look at that particular aspect. Perhaps they are out of focus; but they are undeniable a part of the photo. That is not necessarily true in an inner seeing.

I myself sometimes use the expression "seeing an image" because it seems natural, but that is a seductively dangerous usage because of its implication that the seeing is separate from the image. Maybe that implication is really true, although I doubt it. But for sure, it is a mistake to assume it's true without careful examination.

Eric: I think I agree with most of what you say here (assuming we give "intend" a weak reading to account for images that come unbidden). Nonetheless, I'm inclined think there is a sense in which one can attend to part of an image. If I hold an image in mind for an extended period of time, it seems to me that I can

think serially about different parts of the imagined scene. There is often some potentially shifting focus of energy in maintaining the image, some part of it that is more vividly or centrally experienced. You may prefer to say that this means I've had a sequence of related but distinct "inner seeings," but maybe our disagreement on this point is only semantic.

Even if we grant that it isn't nonsense to talk about a focal center of an image, it doesn't follow that all images have a focal center. So I agree I should not simply have assumed Melanie's image did.

Thread: Visual imagery: Structure. Previous: Box 5.2. Next: Box 5.6.

Melanie: I'm not really sure how to answer that. I think the best way to describe it is, it's almost as though I am looking at a postcard with this scene on it.

Eric: Um hm.

Melanie: And I'm just staring at it. I mean, when I think of looking at the soldier, for instance, there aren't any more details that are coming up. It's more like having that image blown up…

Eric: Um hm.

Melanie: … a little bit. But it's not like I can suddenly see whether or not he's wearing a wedding band, or how his feet are positioned, or something like that.

Eric: Um hm.

Melanie: It's not more added detail.

Eric: So you can't see how his feet are positioned?

Melanie: No.

Eric: Um… so maybe this is a totally crazy question, and you can just tell me that it's crazy if you want. [Melanie laughs] But how can you be visually imagining some legs without imagining some particular way in which they're positioned?

Melanie: [apologetically] I guess you could say that that wasn't part of the image that I was really concentrating on.

Eric: Um hm.

Melanie: I know that he's standing. I couldn't tell you what directions his feet are pointed in.

Eric: Um hm.

Melanie: It's almost like that that's below a level that I'm looking at.

Eric: So if the image were, say, like a postcard picture, you could have just looked at the feet and said, "Oh, well…."

Melanie: Right.

Eric: It's not like they were occluded by a bush or something?

Melanie: No.

Eric: So in that respect, at least, there is an aspect of it that is sketchier than a picture. That it's somehow able to leave a detail like how the feet are positioned unspecified, despite the fact that it's visual in some way.

Melanie: Yes.

Eric: Well, it's not that you kind of, when you focus on something, you add specification to it?

Melanie: No, not at all. I could, but that's not what I'm doing.

Russ: So there is, of course, the philosophical question about whether it's possible to have an image of a triangle that is at once scalene and isosceles, or whatever, however that argument has been made. [See Box 5.6 for the quote Russ is thinking of here and more on indeterminate imagery.]

**Box 5.6. Indeterminate images**

Eric: The quote you were thinking of was from Locke (1690/1975): "For abstract Ideas are not so obvious or easie to Children, or the yet unexercised Mind, as particular ones…. For example, Does it not require some pains and skill to form the general Idea of a Triangle, … for it must be neither Oblique, nor Rectangle, neither Equilateral, Equicrural, nor Scalenon; but all and none of these at once" (p. 595-596).

Berkeley famously comments on this passage (1710/1965): "If any man has the faculty of framing in his mind such an idea of a triangle as here described, it is in vain to pretend to dispute him out of it, nor would I go about it. All I desire is

that the reader would fully and certainly inform himself whether he has such an idea or no" (p. 12). Berkeley goes on quite explicitly to commit himself to the impossibility of such "abstract ideas" or indeterminacies in imagery. This is a very old issue in philosophy.

I think – as you do too, Russ, I believe – that Berkeley and others who have expressed similar views are quite mistaken in this. (A famous twentieth-century example is that of a striped tiger that is not imagined to have a determinate number of stripes: Dennett, 1969; Block, 1981; cf. Price, 1941.)

How could people be mistaken about such a basic matter of phenomenology, apparently discoverable with the least introspection? As Berkeley says, "What more easy than for anyone to look a little into his own thoughts, and there try whether he has or can attain to have [such an] idea…?" One of the principal themes of my work has been that, perhaps surprisingly, people can indeed be, and often are, radically mistaken about their ongoing stream of experience.

Russ: My DES work shows that it is not uncommon for people visually to represent indeterminateness. For example, Susan, a college student, was critical of her roommate Helen's relationships with boys. Susan had an image of Helen, seen from the waist up sitting on their couch with a boy. Helen in the image was wearing only a bra. Helen and the couch and the bra were seen clearly in this image, but the boy's face was unelaborated or indistinct. Susan had images at many of her other samples, and most of them were richly detailed and clear

throughout. Thus I think her indeterminate boy was not merely the result of weak imagery but was a highly skilled construction of indeterminacy precisely where she meant indeterminacy.

This issue highlights the difficulties of armchair observation. Perhaps Berkeley himself was not a skilled imager, and therefore mistakenly assumed others to have the same low level of skill.

Eric: Or one might think, contra Locke, that a poor imager would have difficulty conjuring up a richly detailed image and be stuck instead mostly with sketchy, indeterminate images. Maybe there's more than one way to be weak at imagery?

Thread: Visual imagery: Structure. Previous: Box 5.5. Next: Box 5.8.

Thread: Retrospective and armchair generalizations. Previous: Box 4.11. Next: 5.7.

Eric: Right.

Russ: And there are those who say it can't be done. But this is an example of how it can be done. And I find this kind of thing in my work all the time, where people will have indeterminate images. This is not a particularly good example of it…

Eric: Right.

Russ: … but she could in a similar way have had a picture of a triangle as part of this, where the particular angles in the triangle were not specified even though the triangleness of the image was specified.

Eric: Right. Yeah, I'm inclined to agree with that. One of the reasons that I tend to be nervous about people reporting a huge level of detail in their images is that I wonder whether there's some kind of implicit commitment to a picture-like theory of what images are like. And since pictures can't be underspecified in this way, then the assumption is that images can't be either. And then they create the detail and report it as having been there all along – something like that.

Russ: Right. But it seems like Melanie is not doing that.

Eric: Or at least not doing that to an extreme degree.

Russ: And this by the way is the kind of an image report that I would credit. It's hard for me to imagine that Melanie was not having an image at the moment of the beep, and that that image was being created sort of on the fly as she was reading, making her style of reading much different from yours, Eric. She watches images while she reads, and you create inner speech while you read.

[Here we have excised a discussion of the phenomenology of reading in general (see Box 5.3).]

Eric: I guess it occurred to me that one potential source of skepticism about the level of detail in Melanie's image, maybe not about whether she was having an image at all, is this: There is some research in imagery [e.g., Kosslyn, 1980] that suggests that it takes a certain amount of time to construct a complicated image. And if you're reading very fast, then if that research is correct, it's unlikely that you're getting one very detailed, complicated image after another in that one second at a time, every second. Now it could be that you have a very detailed image that you build up over the course of say 15 seconds. Or it could be that you have a series of sketchy images that replace each other faster than that.

Russ: My impression is that most people who image as they read update the image as they go along – so they have one stable, enduring image that is being modified.

[We continued this conversation, discussing issues presented in Boxes 5.3 (on the phenomenology of reading) and 5.1 (on demand). See Box 5.7 for a discussion of

Melanie's believability contrasted with Eric's believability as a subject and Box 5.8 for a discussion of whether children construct images slowly.]

**Box 5.7. Melanie's and Eric's believability as subjects. "Auditory imagery" and "inner speech"**

Russ: My skeptic detectors are pretty silent on this beep. I see little reason to doubt that Melanie was seeing an image.

Eric: I have raised some concerns about whether we should believe that Melanie's image had all the details she imputes to it (see Boxes 5.1, 5.2, and 5.4 and remarks in the transcript). But could Melanie be completely mistaken, wholly devoid of imagery at or near the moment of the beep? It seems unlikely, but still I can't quite shake the thought that even such a radical mistake is a possibility.

Russ: It seems to me that you would have to have the same level of doubt about your own reports, then, Eric. When you were sampling some time ago, you said, I thought with confidence, that you had inner speech while reading. Do you doubt that, too?

Eric: I allow that I could have been mistaken in that way; but I confess that I find it harder to doubt myself than to doubt others. Maybe this is just normal human weakness. Or maybe accepting one's own judgments (in whatever domain), even when one knows that one is no smarter or more talented than someone else who reaches contrary judgments, is necessary to avoid a paralysis of

skepticism. In my own sampling, in any case, I don't think I expressed the kind of confidence about the details of my reports that Melanie expresses here and throughout. Instead, I tended in my own reports to express considerable doubt.

Russ: I simply cannot agree with the first half of your comment here (except the part that most people find it harder to doubt themselves that to doubt others). I think it is necessary to the advancement of consciousness studies to be more rejecting of one's own judgments, not more accepting, if those judgments are arrived at under roughly the same methods. And I don't think that leads to a paralysis of skepticism, but rather to a search for better methods. If you can find a better method and apply it to the situation of interest, then you are in a legitimate position to hold your own view to be better than someone with an inferior method. If you can't find a better method, then you should surrender to a legitimate "I don't know." Because I think there is legitimate reason to believe that DES is better than armchair introspection, I think my views of inner experience are better than yours.

As for the second half, I agree that, in your own sampling, you didn't express as much confidence as does Melanie. As I recall, I was more skeptical about your reports than I am about Melanie's. It seemed that you had unusually heavy theoretical baggage that needed gradually to be let go before you could attend to the phenomena that were actually occurring for you at the moment of the beep.

For example you referred, early in your sampling, to your "auditory imagery," but the main features of your phenomenon were not primarily auditory, but much more centered on the act of creating the words, that is, more on the doing of the speaking than on the hearing. I found myself encouraging you to call this phenomenon "speaking" rather than "auditory imagery." For me to encourage a subject's choice of words is very unusual! Nearly always I prefer to use the subject's own words to my own. But your words didn't seem to be trying to reflect your phenomenon (that also is also very unusual); instead, they seemed to reflect some philosophical presupposition.

As I recall, while you weren't as confident as is Melanie, you did seem to come to accept the "speaking" nature of what you had originally called auditory-imagery. Without some external observer listening carefully, I doubt that you would have come to the realization of the important discrepancy between "auditory imagery" and "inner speaking."

Eric: Actually, I don't think I managed to abandon any presuppositions in that case. My shift toward accepting your phrasing was, as I recall, driven by the thought that imagery can be felt either as passively received or as actively created, and thus that both "inner speech" and "inner hearing" could be seen as forms of auditory (or mostly auditory) imagery. "Inner speech" thus seemed the more specific term – though I don't at all trust that I distinguished accurately between actively speaking and passively hearing.

I'm prompted to wonder whether in visual imagery there might be an analogous difference between active "inner sketching" and a more passive "inner seeing."

Thread: Bracketing presuppositions. Previous: Box 4.10. Next: Box 7.4.

Thread: Melanie's trustworthiness: General. Previous: Box 4.9. Next: Box 5.16.

Thread: Inner speech and hearing. Previous: Box 4.11. Next: Box 6.5.

Thread: Non-visual imagery. Next: Box 7.9.

Thread: Retrospective and armchair generalizations. Previous: Box 5.6. Next: Box 5.17.

**Box 5.8. Do children construct images slowly?**

Russ: I have sampled with a few children, and they sometimes take minutes to create images. For example, I had a sample from a 9-year-old boy who had an image of a hole in his backyard with toys in it. I asked him whether this was an accurate portrayal of what was really in his backyard, and he said, "Yes, but I don't have all the toys in it yet. If you had beeped me a few minutes later I would have had time to put all of the toys in the hole." This speaks to the possibility that image-making may be a skill, and you get better (faster) at it as you get older.

Eric: Or perhaps his report was driven in part by the assumption that if it takes a long time to put actual toys in a hole, then it must also take a long time to put

imagined toys in an imagined hole? You weren't clocking him actually constructing images, and I'm disinclined simply to take his word for it.

Russ: That wouldn't explain the following teenager's image. She had an image of her school orchestra, seen and heard from her usual position as a violist. The orchestra was performing their contest piece. She had been repeating this image for a few days, over and over. At each repetition, she corrected some flaw in the performance: removing a violin squeak here and a clarinet squawk there; those corrections remained in subsequent images, so that at each repetition the orchestra sounded better than before. There was no question that the music she was hearing in her image was being performed by her orchestra, but the current performance was much better than her orchestra had ever sounded. I take this as being "playing" with the image for the same reasons that children play with blocks: they develop skills.

Thread: Visual imagery: Structure. Previous: Box 5.6. Next: Box 5.9.

**Beep 2.2**

Melanie: Okay, I was reading again. In this part of the book it was the arrival of the German invasion of the island. The line I was reading had to do with the arrival of a formation of Stukas – German planes. And so I had an image in my head, a really simple image, the kind that you get if you watch those World War II

movies or footage from back then, of a line of military planes against a blue sky background with a couple of white clouds. It was a very close image of one of the planes, of only the top, the beginning portion of one of the planes, and then another one behind that, and another one behind that.

Russ: So this is two separate images?

Melanie: It's one image.

Russ: It's one image. So you're looking like you've got a camera mounted on the wing of one of these airplanes…

Melanie: Exactly.

Russ: … and you're looking down on the formation? Okay. And is this camera… this artificial camera that we're talking about, on the left wing or the right wing?

Melanie: It's more like it's on one of the planes that you can't see, because where the camera is it's looking across….

Russ: So looking across a space…

Melanie: Yes. And seeing a bunch of other planes.

Russ: … and seeing the left side of the plane or the right of the plane?

Melanie: Seeing the left side.

Russ: And what does the plane in your image look like? Do you know what a Stuka is?

Melanie: I have no idea, so yeah, I kind of put in F-18s instead [laughs], because I make them up, so….

Russ: So this is a jet plane that you're seeing!

Melanie: Yeah, they're jet planes with a tapered nose and that kind of gray, dark gray steel with a…

Russ: This guy was ahead of his time! [laughs]

Melanie: [laughs] … with the little windows. I can't see pilots or anything like that, just the outline. [See Box 5.9 for a comment on the substitution of F-18s for Stukas.]

**Box 5.9. When is an F-18 a Stuka?**

Russ: When pressed with detailed questioning, Melanie reveals that her imagined airplanes looked like F-18s, not Stukas. Should we be surprised by that?

I don't think so. All representations are imperfect in some way. Even if Melanie were very familiar with Stukas, her imaginary Stukas would have some incorrect details such as the wrong sort of wheel covers, the wings slightly too low on the body, or the like. The fact that Melanie's imaginary Stukas were rather dramatically imperfect reflects Melanie's very limited familiarity with/interest in Stukas, not any fault or limitation in her inner seeing ability. She did not think, "I'm supposed to be imagining Stukas, but because I don't know what Stukas look like, I'll use F-18s instead." She created a concrete, detailed, inner seeing that reflected her (low) level of knowledge about and concern for Stuka details.

That illustrates one way that inner seeing is markedly different from external seeing. If you're looking at a photograph of F-18s, you can pretend that they're Stukas, or mistakenly assume they are, but the fact will remain that they really are F-18s. In Melanie's experience, there is no pretense or error. She was simply illustrating a scene involving Stukas at precisely the level of her interest

in/knowledge of Stukas at this moment. She's not seeing badly represented Stukas. She's simply illustrating Stukas.

I note in passing that Melanie never said that her imaginary planes looked like or were Stukas. She said she was reading about a formation of Stukas and was seeing "a line of military planes against a blue sky background." I take this to be a sign of Melanie's skillful attempts to provide faithful descriptions during the interview. She did not say they were Stukas; she did not say they were not Stukas; she did not say they were badly represented Stukas or that she had substituted F-18s. She said they were military planes against a blue sky, which is exactly the scene she was illustrating.

Thread: Visual imagery: Structure. Previous: Box 5.8. Next: Box 8.1.

Russ: Okay. And in what way is this experience the same or different from the experience of the previous beep? In both cases you're reading and watching an image, which on the surface would seem to be sort of the same…. [See Box 5.10 for discussion of the non-leading nature of this question.]

Box 5.10 Nonleading questions

Russ: This "same or different" question is one of the most nonleading questions possible. It focuses Melanie directly on the phenomenon without preferring one

explanation to another. It does not presume that all images are the same, nor that they are different.

Thread: Interview techniques. Previous: Box 4.19. Next: Box 5.12.

Melanie: They're both the same in that they're both, again, still pictures. It's not like a movie going through my head. It's just a still picture. And then I would say that this picture was created much faster than the other one, because when the beep occurred, it was right at the beginning of a new chapter, of a new paragraph. So a huge scene change kind of just happened. Whereas in the one before, it was in the middle of a chapter and you had time, like you said earlier, to build up a scene.

Russ: Okay. And at the moment of the beep, do you have an awareness of this fastness? Or is this sort of a metadescription, given that we've stopped and….

Melanie: Metadescription. But I am aware of the sketchiness of it. Almost like… there's a feeling of… I'm ready to fill in other details. I don't know.

Eric: So what you're saying is in accord with – and you don't have to be at all in accord with what I was suggesting – so….

Melanie: Oh no, I really agreed with what you said before, because it feels very much like what I do.

Eric: Right, so it may take a certain amount of time to create a very detailed scene. So she seems to be saying that this scene is very sketchy, and that would make sense given that she had just started reading that paragraph. [See Box 5.11 for discussion of whether Melanie is complying with a demand to report sketchy imagery.]

Box 5.11. Complying with a demand for sketchy imagery?

Eric: We have just discussed the plausibility of the view that images are often sketchier than photographs and that it takes some time to build up a detailed image. Almost as though on cue, Melanie reports a sketchy image to fit the theory. As I have pressed Melanie on sketchiness, she has started to report more sketchiness in her imagery (from 1.3 to 2.1 to 2.2). While this could be coincidence, I find it suspect.

Russ: I think it's neither coincidence nor suspect. First, such synchronizations are rather common in my DES experience, and I used to marvel at it myself. Now I think it's a natural phenomenon that arises as follows. We commented earlier on the level of detail in Melanie's image because that was a quite detailed image, sufficiently detailed that it merited comment. Now either all of Melanie's images

are that detailed, or such detail is somewhat unusual – that's why we commented. If so, then the next (or soon thereafter) image is likely to be less detailed, not because we commented on the detail but because one doesn't usually get many unusual things in a row.

It's the same phenomenon as the "Sports Illustrated jinx": many athletes decline to be on the cover of Sports Illustrated because, on average, athletes' performances just after a cover appearance are worse than just before. But it's not a jinx; athletes should not expect their subsequent performances to be as extraordinary as the ones that merited a cover story.

Thread: Melanie's trustworthiness: Interview pressures. Previous: Box 5.1. Next: Box 5.12.

Thread: Visual imagery: Detail. Previous: Box 5.4. Next: Box 7.8.

Russ: Right.

Melanie: Although… I mean I don't know if this agrees with what you said or not, but at the same time I don't know how I could have filled in any other detail.

Eric: Um hm.

Melanie: It was just a very simple shot, almost, just to use….

Eric: So what about details like insignia on the sides of planes or shadows or those kinds of things?

Melanie: You couldn't. From the viewpoint you couldn't see any of that. It was just straight across. For instance, you couldn't see downwards, so you couldn't see shadows over land or sea. And then the plane that's right in front of you, it's very close in front of you, and you're just seeing a very tiny part of it, so you can't really see any insignia on it. Maybe the planes further in the distance, but I don't remember any insignia on them in that image.

Eric: Um hm. Is it that you remember them as not having insignia, or is it that you don't remember whether they had insignia, or that you positively remember that there was no fact about whether they had insignia or not?

Melanie: I positively remember that there is no fact that they had insignia one way or the other, so I hadn't filled any in.

Eric: Okay, so that's the kind of thing when you said it was sketchy…

Melanie: Yes.

[Here we have excised a brief discussion of childhood imagery and scientific ignorance of the phenomena of reading. See Boxes 5.3 and 5.9.]

Russ: So anything else about number 2?

Melanie: Yeah. I had a definite feeling of both sadness and dread. I've read the book several times before, so I knew what was going to happen; but just knowing that this invasion was going to happen, just a real feeling of sadness.

Russ: And is this sadness and dread two different feelings? Or is that the same….

Melanie: It was kind of merged into one – that's the best way I can think of to describe it.

Russ: So you're using two words to describe basically one feeling.

Melanie: Yeah, one emotion.

Russ: Okay, and this emotion is…. What does it feel like other than sadness and dread? Can you be more specific than that?

Melanie: Yeah, it's like a pressing on the lower….

Russ: And you've got your hand sort of on your chest. Is that where the pressing seems to be?

Melanie: Um hm, yeah.

Russ: And is it clearly there? Or does it seem like sort of all over with a center there? Or…?

Melanie: I would say probably all over with a definite center feeling right at that spot.

Russ: Okay. And when you indicate that spot, you have your hands sort of outstretched covering whatever… six or eight inches.

Melanie: Yeah.

Russ: So we're not talking about a small….

Melanie: It's not like a knot, but it's a more diffuse area.

Russ: Okay. And this pressure, is this pressure going from the front backwards or from the inside out or the outside in or from all over inwards?

Melanie: I'd say outside in.

Russ: So there's as much pressure on the back as well? Or does it seem like it's on the….

Melanie: No, it's coming from… it's top to bottom kind of feeling but so it's outside here…. [See Box 5.12 for a comment on demands.]

Box 5.12. Melanie does not give in to all demands

Russ: I sometimes ask questions, as here ("as much pressure on the back…?"), that are contrary to my current understanding of the subject's experience, to provide demands in contrary directions. Here Melanie demonstrates that she doesn't simply cave in to all demands.

Thread: Melanie's trustworthiness: Interview pressures. Previous: Box 5.11. Next: Box 7.3.

Thread: Interview techniques. Previous: Box 5.10. Next: Box 5.17.

**Russ: So the pressure is coming at you from the front?**

**Melanie: Yes.**

**Russ: As opposed to surrounding you in pressure.**

**Melanie: Yeah, it's not like a vise. It's more like a steady beat, I don't know, almost as if you wanted to give someone CPR, that kind of pressing on someone's chest. [See Box 5.13 for a discussion of "subjunctifiers."]**

Box 5.13. Melanie's report of emotion more qualified than previous reports

Russ: Notice the number of phrases here that express some kind of doubt about her descriptions – phrases I call "subjunctifiers". Here, for example, Melanie starts out by describing her emotion with confidence: "I had a definite feeling of both sadness and dread." But after that statement, she qualifies nearly everything she says about the experience with words such as: "kind of", "that's the best way I can think of to describe it", "it's like a", "I would say", "probably", "I don't know", "I think". Of the 136 words that Melanie utters during this description of emotion, 32 express some doubt about the accuracy of her statements. In most of Melanie's other reports, there are far fewer subjunctifiers. She is monitoring the

level of accuracy in her own statements, and displaying her sense of uncertainty in a very deep way (all the way down to the grammar). Her uncertainty with respect to emotion shouldn't cast doubt on her credibility about images or inner speech; in fact, it should raise that credibility in that Melanie is displaying a nuanced evaluation of her own statements – she's apparently not shy about expressing doubt when there is doubt to be expressed.

Melanie is quite typical of DES subjects in having more difficulty describing the details of the experience of emotion than of other forms of experience (see also Beep 3.1). This is still one of Melanie's early attempts at describing an emotion, and it's to be expected that she'll need a bit of practice before she gets it right. It may well be that if we sampled with Melanie for long enough for her (and us) to get really skilled at talking about her experiences, we may still have a level of imprecision or indecision about emotional experience. That could simply be the nature of emotional experience, or it could be a limitation of this method.

Eric: For the record, since it is relevant later, I get the sense that Melanie is reaching for words, but not that she means to be expressing much doubt about the experience itself. Actually, I'm worried that she doesn't very often explicitly express doubt where doubt might be appropriate (see Box 7.7).

We should probably also remind the reader that in cleaning up the transcripts for readability, we have excised some of Melanie's (and our) dysfluencies, false starts, and hesitations throughout the manuscript. We tried not to do this when we

thought they genuinely expressed uncertainty, but that is sometimes a difficult judgment to make. Readers interested in exploring this issue more carefully should look at the full transcript and/or listen to the interview audio on the web. Thread: Melanie's trustworthiness: Subjunctifiers and confidence. Next: Box 7.2. Thread: Emotion. Previous: Box 4.7. Next: Box 5.15.

Russ: And is that pressing going sort of perpendicular to your body, pressing right in like you were doing CPR?

Melanie: Yes. Um hm.

Russ: Okay. And hard pressure? Soft pressure? A little pressure?

Melanie: Enough so you could feel it and it's vaguely uncomfortable, but not painful or super intense.

Russ: And how do you know that this pressure is sadness/dread as opposed to something else?

Melanie: I think I just recognize it.

Russ: You just know.

Melanie: Yeah.

Russ: Your witness.

Eric: [laughs] Was there some other aspect to the emotional experience, besides the pressure?

Melanie: That was it.

Eric: That was it. So there wasn't any kind of feeling in your head, or….

Melanie: No. It felt kind of general, kind of through my body, but very specific also in that one place.

Eric: So let's say that you were a subject in CPR training – I know this is dangerous and you wouldn't really do this [Melanie laughs] – but if someone were exerting pressure on your chest…

Melanie: Okay.

Eric: … in the way that you describe, would you be able to tell the difference between that and having the emotion?

Melanie: Oh, absolutely. Well, first of all they would be in two different places, because the sadness isn't really located near my heart. It's more near my sternum.

Eric: Um hm.

Melanie: And, yeah, there is some emotional quantity to it. It's not just the feeling of the pressure but… or maybe… no, that's not true. It is just the feeling of the pressure, but it's the pressure in a certain way that I just recognize instantaneously as being that combination of sadness and dread.

Eric: Um hm. So really it is just exhausted by the pressure. But the pressure is a kind of unique thing that couldn't have been caused by the outside environment.

Melanie: Yes.

Eric: But if you were somehow to construct an arrangement in the outside environment that would give you that…

Melanie: That would most closely mirror that feeling?

Eric: …then that would be exactly the same experience as having the feeling?

Melanie: Yes. [See Box 5.14 for a criticism of this exchange.]

Box 5.14. This exchange asks too much of Melanie

Russ: I'm skeptical of Melanie's "yes" answer here, Eric, because your "So really it is exhausted by the pressure" requires Melanie to draw a conclusion that I don't think she can safely draw. She can report the big things in her awareness, and she can report some smaller things in her awareness, but it goes beyond her ability to say that there is in fact nothing else in her awareness. There may well be other small things that don't rise to the level of reportability, but that nonetheless contribute to the experience of sadness/dread. There's a big difference between "nothing exists" and "nothing else occurs to me to report".

Eric: I agree. But if Melanie can't be trusted to distinguish what she forgets from what she positively asserts as absent, that undermines other of Melanie's reports as well, such as her assertion that there were no insignia on the Stukas and, in Beep 1.1, that she is not visually experiencing the paper she is looking at (see Box 4.8).

Russ: I accept your concern, but only if we recognize that it applies only to small details. I have confidence in the big picture: that she has an image of Stukas that look like F-18s and the image is not well articulated. I think it possible that her assertion about the insignia is a confabulation in service of that larger truth. Maybe the insignia were really there but some other details (e.g. the configuration of the canopy) were missing.

I think it is a serious mistake to be too concerned about small details. This point is worth making strongly because this is the mistake that, broadly speaking, destroyed the Introspectionist programme of a century ago. The Würzburgers believed they had discovered "imageless thought." Titchener believed that all thoughts included images. Many years of introspection studies were aimed at trying to decide this issue, but neither side was convincing, and largely because they couldn't agree, introspection was discredited. But Christy Monson and I (1993) showed that Titchener's and the Würzburgers's observations were very similar to each other—subjects in both laboratories sometimes reported thoughts that have no discernible imagery. However, Titchener and the Würzburgers had different explanations for that phenomenon. Introspection can provide the phenomenon, but it cannot provide the explanation.

If we ask such impossible-to-answer questions, we can destroy the ability to observe accurately. I return to this important discussion in Chapter Eleven, sections 2.1 and 2.2.

Eric: Here, perhaps, is a key source of our disagreement and divergence in approach. I'm greatly interested in such "details" as whether the experience of emotion is (or can be) exhausted by bodily sensations (Box 5.15), whether there is constant visual experience (Box 4.8), and whether thought is possible without imagery. My hope – which is still merely a hope and not yet a belief – is that DES, or some modified version of it (perhaps asking the subject in advance to focus only on such matters), might give us insight into such major theoretical questions, which generally turn on what are from Melanie's perspective only small details of her experience.

When you're feeling relatively conservative and I'm feeling relatively liberal we may be pretty close to agreeing about what DES can deliver. But that may not be enough for what I really want.

Thread: Melanie's trustworthiness: Details. Previous: Box 4.13. Next: Box 7.3.

Thread: Limits of DES. Previous: Box 4.10. Next: Box 9.2.

Russ: I'm not buying the answer to that question. My objection is that the question is too leading, I think.

Eric: Um hm.

Russ: Let me see whether I can rephrase it. So, judging from what you just said, if we could make the same kind of pressure, then that would come out to be [the experience of] sadness/dread.

Eric: Right.

Russ: [To Melanie] Is that what you're saying?

Melanie: No. It's the closest approximation I can get to describing it.

Eric: Oh, that's interesting. I had thought I'd heard you saying the opposite.

[Here we've excised a brief discussion of whether Eric "badgered" Melanie into saying what she did.]

Russ: Yeah. I thought… I didn't think she was any longer in touch with the experience when she was answering your question. I didn't think she was trying to describe the experience any more. She was trying to answer your question.

Eric: Um hm.

Russ: And part of that comes from the experience of a lot of people talking about emotion. Her way of talking about emotion here was quite typical of many people. Not everybody, by any means, but of people who say about emotion, "Well I was having a pretty specific feeling, like somewhere between sadness and dread, and it had something to do, I guess, with my body. I'm not 100% sure, but it seemed like more or less in my chest, more in my chest than other places."

Eric: Um hm.

Russ: But I just don't think that she meant, or that others mean in that situation, that the feeling in her chest exhausts the whole deal. I think, you know, there is a literature that says that quadriplegics can have emotion even though they cannot experience bodily aspects.

Eric: Okay.

Russ: But maybe their experience is different – perhaps we ought to sample with some quadriplegics.

Eric: Right.

Russ: But what I am sure of is that for most people who are reporting the way Melanie just reported, the experience of emotion is beyond just what she is able to put into words about the bodily expression of it.

Eric: Right, yeah. You know, the James-Lange theory of emotion, I think, if I understand it correctly, is that emotion is a kind of sensation of your own bodily state. [See Box 5.15 on the James-Lange theory of emotion.]

Box 5.15. The James-Lange theory of emotion

Eric: William James (1890/1981), following C. Lange (1885), asserts that emotion, or emotional phenomenology, is the feeling of the changes in one's body that are produced by the apprehension of a fact. Thus, he writes: "Common-sense says, we lose our fortune, are sorry, and weep; we meet a bear, are frightened and run; we are insulted by a rival, are angry and strike. The hypothesis here to be defended says that this order of sequence is incorrect, that the one mental state is not immediately induced by the other, that the bodily manifestations must first be interposed between, and that the more rational statement is that we feel sorry because we cry, angry because we strike, afraid because we tremble…. Without the bodily states … we might see the bear and judge it best to run, receive the insult and judge it best to strike, but we should not actually feel afraid or angry."

Melanie's denial here that her emotional experience is exhausted by the feeling of pressure in the chest does not necessarily conflict with James' view, since the further aspects of her experience may consist of other bodily sensations (whether she recognizes this fact about them or not). But for a broader sense of just how complex and multi-faceted emotional experience may be, see Lambie and Marcel (2002).

On quadriplegics and the Jamesian theory in general see Hohmann, 1966; Chwalisz et al., 1988; Damasio, 1999; Prinz, 2004.

Russ: Our DES studies do show that there are many people whose experience of emotion is apparently entirely in their heads.

Thread: Emotion. Previous: Box 5.13. Next: Box 6.2.

Russ: Yeah, but I don't think it's true.

Eric: Yeah. I'm not inclined to buy that either. But it would have been interesting to me had Melanie avowed that [the James-Lange view]. But I guess you're saying that's not your experience, Melanie. Right?

Melanie: No. What I thought you were saying was that that was the closest approximation I could get to that feeling. That is what it is. But there's something missing in that.

Eric: Right.

Russ: People have a hard time describing how they experience emotion. Most people. Some people can tell you exactly.

Eric: So there's something else. But it's hard to say, hard to articulate in any way what that something else is.

Melanie: Right.

[The text from here to the end of this sample is transposed from a follow-up discussion we had while talking about Beep 2.3.]

Russ: I'm not getting the impression, though, that there was something separate from the experience in her chest that led her to believe that this was sadness/dread. I didn't hear her saying that she was aware of something other than the pressure in her chest. Which she now seems like she's convincingly shaking

her head to the negative about. I think she's agreeing with me that she was not aware of…

Melanie: There was no other feeling.

Russ: … anything specific other than what was going on in her chest, and yet what was going on in her chest doesn't seem to be enough to say that this is sadness/dread.

Eric: Um hm. So, okay, it's not that there is something additional, it's just that there's this one thing, and the best you can do…

Melanie: … is describe it.

Eric: … is describe it that way. Okay.

**Beep 2.3**

In lieu of the full transcript of the discussion of this sample, here is a description of this experience as Melanie conveyed it in the interview:

Melanie was standing in the bathroom and looking around, trying to make up a shopping list in her head. At the moment of the beep she had a mental image of a white pad of paper (the same writing tablet that she uses to write shopping lists) and of her hand writing the word "conditioner." Her hand in the image was in motion, and she could see the letters coming out from the tip of the pen. At the precise moment of the beep, the letter "d" (the fourth letter in "conditioner") was coming out.

At the same time, Melanie was saying in her inner voice "con-di-tion-er," slowly, in sync with the word as she was writing it in the image.

Also at the same time, she was aware that her toes were cold. This was a noticing or sensory awareness of the coldness that was present in her awareness at the last undisturbed moment before the beep. It did not seem to involve an explicit thought process.

The full transcript is available on the website.

Beep 2.4

Melanie: During this little time period I was brushing my teeth in the bathroom. I kind of was letting my mind wander, because it's such a banal thing that I do

every day. I was aware of being slightly bent over the sink and aware of the kind of rhythmic motion of my hand, you know, brushing up and down and side to side. I was also aware of the kind of cold and gooiness of the toothpaste.

Russ: And is that it, in your awareness?

Melanie: Yeah.

Russ: And when you say you're aware of being bent over, so you're sort of….

Melanie: Like hunched over a little bit. I mainly could feel it in my spine, because it's not a super comfortable position to be in.

Russ: So this is like a bodily awareness or a kinesthetic awareness, something like that?

Melanie: Yes.

Russ: And at the same time you're aware of the brushing motion?

Melanie: Yeah.

Russ: And does that seem like a sort of separate awareness? You've got the bent-over awareness and you've got the….

Melanie: Yeah, they seemed very localized. Like the feeling in my back feels in my back, and the up and down motion I can feel in my mouth and with my hand and my arm, because I'm holding the toothbrush and moving it.

Russ: And the cold and gooiness?

Melanie: Another feeling that is very located, just in my mouth and everything.

Russ: And nothing else is going on at this particular moment?

Melanie: Nope.

Russ: Okay. The first day you were sampling, you said that when you were speaking you had the sensation of your mouth coming closed at the end of a sentence.

Melanie: Um hm.

Russ: Is this the same kind of deal, or a different kind of deal?

Melanie: Different.

Russ: In what way?

Melanie: I'm not so much feeling my teeth or my tongue or my lips or anything like that. It's much less specific, I guess.

Russ: Which is much less specific?

Melanie: This, brushing my teeth.

Russ: Okay.

Melanie: Because it just kind of feels all over. It doesn't feel like a deliberate movement. I'm not sure if that makes any sense.

Russ: And if I asked the same question about the bent-overedness portion of it and the hand movement portion of it, would you say the same thing?

Melanie: Yeah.

Russ: These are different kinds of phenomena from the….

Melanie: Um hm.

Russ: Okay, then I'm turning it over to you, Eric.

Eric: You started by saying your mind was wandering.

Melanie: Yeah. Well, I mean, that was the best way to say my mind was kind of empty [laughs].

Eric: Oh, okay, so that was… you were just…

Melanie: Pretty much absorbed in what I was doing.

Eric: … pretty much absorbed in that. Because you could think, "your mind was wandering" could mean…

Melanie: Yeah, jumping to different subjects.

Eric: … thinking about, you know, what you were going to do today or something like that, but that's not….

Melanie: No.

Russ: Which, as an aside, is why I think content analysis is usually a waste of time. You know, the sort of mindless content analysis that people do when they try to count words like "mind wandering."

Eric: Um hm.

Russ: It's not what people say, it's what they mean [Eric laughs]. And I don't mean that at all in jest. I mean that as a straightforward way the world is. You've got to pay attention to what Melanie was saying here. She said her mind was wandering, and she was not actually referring to her mind and she wasn't referring to its wandering [Melanie laughs]. But other than that, she was trying to convey something, which was that she was paying attention to sensory awarenesses. [See Box 5.16 for a comment on Melanie's not saying what she meant.]

Box 5.16. People say things that are not true

Russ: My subjects often say things about their experiences that are not true (as Melanie did here), but that fact does not increase my skepticism about the accuracy of the report. Most people have little practice talking about characteristics of their inner experience, and therefore are not likely to be very skilled in their descriptions. It is the function of the interview to help subjects "clean up" their descriptions.

Melanie didn't really mean that her mind was wandering in the usual "daydreaming" sense of that term. She simply didn't have the practice skillfully to say that she was attending to sensory events. As she gets more experience in describing samples, she will likely make fewer and fewer such mistakes.

Because of subjects' infelicity in describing their experience, both questionnaire studies and studies that accept written or oral descriptions without question are problematic. Melanie would have answered yes to a questionnaire item, "Was your mind wandering?" but that would have been misleading.

Thread: Melanie's trustworthiness: General. Previous: Box 5.7. Next: Box 7.15.

Thread: Loose language. Previous: Box 4.1. Next: Box 7.9.

Eric: Right.

Russ: And you know it's sort of a high art to figure out what people mean – you've got to ride along with them pretty carefully. It's hard for me to imagine a computer that could do it. It's a complicated deal. When she said her mind was wandering, she really meant something like "my mind had wandered away" [Melanie laughs].

Eric: So let's see. Again I guess I am going to diverge from the general DES method, but….

Russ: That's fine.

Eric: Is your sense, Melanie, that if you're just kind of attending to what you're doing when you're brushing your teeth as you normally do, and you're not thinking about other stuff, you're not distracted or planning the day or something like that, that your experience is primarily sensory like this? Or was this especially, "Oh how interesting – this stuff is so gooey!"

Melanie: Of course, this is only one sample, but the best I can say is that I think this was primarily a singular case…

Eric: Ah.

Melanie: … because normally if, I don't know, if I'm not distinctly thinking about anything I'm not aware of how my legs are crossed or whether or not I'm sitting or lying down, or anything like that. So I was actually quite surprised when the beep caught me doing this because I didn't really think that I did this. [See Box 5.17 for skepticism about this claim.]

**Box 5.17. People don't necessarily know what they frequently do**

Russ: Melanie makes a general claim about her experience here ("normally…I'm not aware of how my legs are crossed or whether or not I'm sitting or lying down, or anything like that") that she does not generally have sensory awarenesses of this sort. I call this kind of claim a "faux generalization" to distinguish it from a true generalization, which is an inductive characterization of an explicit series of observations. A faux generalization looks like a generalization, but in fact may not be the result of any inductive process whatsoever, instead being the result of cognitive processes such as availability heuristics, saliency, recency, and so on.

The facts of Melanie's sampling suggest that her faux generalization is far from true: she had sensory awareness in about half of her beeps (1.1 of a rosy yellow glow; 1.3 of her mouth closing; 1.4 of the green screen; 2.3 of cold toes; 2.4 of being slightly bent over and of the cold and gooiness of the toothpaste; 4.1

of her body bobbing up and down; 6.1 of her eyes looking straight ahead; 6.3 of her lower lip and crossed arms). The careful reader may quibble about whether a beep or two should be added to (3.2, 5.1, 6.2?) or excluded from (1.1, 6.1?) this list, but in any case, Melanie apparently has frequent sensory awarenesses.

Many people, like Melanie here and including sophisticated individuals such as psychologists and philosophers, make faux generalizations about themselves that are far from true, even though they think they are true. DES therefore makes a clear distinction between characterizations of actually occurring moments and faux generalizations, crediting the first and discounting the second. As a result, I don't like to ask what Melanie "usually" or "typically" or "normally" does, because such a question invites her to make a faux generalization. Sampling can allow, over a long series of beeps, true generalizations about what a person usually or typically or normally does by simply counting the number of times the behavior occurs. Therefore, I think that if Eric's aim was to get a sense of whether there was some special "oh this is gooey"-ness about Melanie's experience or whether it was more a case of just attentively brushing her teeth, it would have been better for him to have asked this directly, rather than inviting Melanie to (faux) generalize.

Thread: Interview techniques. Previous: Box 5.12. Next: Box 7.3.

Thread: Retrospective and armchair generalizations. Previous: Box 5.7. Next: Box 8.5.

Eric: Um hm.

Russ: Let me… I'm betting against her answer to that question having been accurate, which is why your question is not a standard question of the kind I would ask…

Eric: Okay.

Russ: … and the reason that I don't ask that kind of question is that I try not to ask the kinds of questions that I don't believe the answers to. But the reason that I don't believe the answer here is that she's two for four today on sensory awarenesses, the coldness on the bottom of her feet in the previous beep and the toothpaste here. It's a small sample, of course. But I think she just doesn't remember things like the coldness on the bottom of her feet or the gooiness of the toothpaste.

Eric: It seems to me that we should also bear in mind the possibility (I'm not saying that this is the case) that when the beep goes off you think, "Okay, what was my experience? Was I having experiences of the bathroom? Oh, the bathroom floor is cold, my feet are cold. I guess I was experiencing that at the

time" – letting your knowledge of your environment feed back into your impressions of what your experience was at the time of the beep.

Melanie: I'm not defending myself by any means. But I tried specifically to really focus on the moment of the beep and not what came afterwards, because of the discussion last time about how the beep would usually catch me towards the end of a thought. And I wanted to work on trying to hone that, and so I was trying to do that as best I could.

Eric: Right. I guess the concern I have is not so much directly temporal. You could be trying to reconstruct what's going on at the moment of the beep, or immediately prior to the beep, and not confusing it in any way with what's going on now, but noticing what's going on now and then deliberately thinking, "Okay, was this going on a moment before?" And then because it's going on now and because you know certain things about your environment, you might infer that it was going on the moment before as well.

Russ: Well, I don't think Melanie can confidently say she doesn't do <u>any</u> of that. I think she just <u>did</u> confidently say she <u>tried</u> not to do that.

Eric: Right. And again, you know, I'm not saying that I have any specific reason to worry about that in this particular case. How do we partial out how much is due to a kind of reconstruction?

Russ: Right, but I think we can worry about that for every single sample: The beep came and she was reading. Well, she must have been having an image; here it is. The beep came when you were reading; well, you must have been talking to yourself in inner speech; here's what you were saying. What I think is that if you're careful, you don't get as far down that road as people are afraid that you might.

Eric: I'm not sure you can know how far down that road you're getting, though.

Russ: Well, I don't think there is an answer to that except that if all these things are made up at the end, you would think any subject's reports, from one beep to the next, would be a lot more similar to each other than they turn out to be.

Eric: Um hm. Well, I guess if the person is surprised by her own experience, that would at least suggest against the idea that she was constructing something to match her expectations.

Russ: Right. And here Melanie was slightly embarrassed to be reporting that all she was doing was paying attention to her back hunched and her gooey toothpaste or whatever. As you say, you'd wonder why somebody who was not reporting what was actually happening would report something that's mildly embarrassing. It's hard for me to believe that Melanie wasn't in some way paying attention to the gooiness of the toothpaste.

Eric: Yeah, it still feels like an open possibility to me.

Russ: And does it make a difference for you about Melanie's toothpaste or your, for example, inner speech while reading? Shouldn't you be equally skeptical that you had inner speech while reading as you were that Melanie was paying attention to the gooey toothpaste?

Eric: Well, just as a matter of what it's like to believe, you do kind of have to believe yourself in a way. But in principle I'm pretty skeptical about my own reports as well. [See also Box 5.7 on these issues.] Now, I think I'm less skeptical about the imagery – her having at least some amount of imagery while she is reading – than I am about the toothpaste.

Russ: Why is that?

Eric: Partly because I think that there really is a special problem when you're talking about your experience in light of your knowledge of your immediate environment. You know that there's toothpaste in your mouth, right? So it's awfully hard, I think, to separate that knowledge from the experience when you're trying to figure out what your experience is.

Russ and Melanie: Yeah.

Eric: It seems likely that there's a lot of reconstruction in the memory of experience. It's hard to know whether your environmental knowledge is being used legitimately in the reconstruction or illegitimately. Whereas with an image that's happening while you're reading, because it's something that's not in the environment, it may be easier to keep your environmental knowledge out of it.

Russ: Yeah, I'm not totally convinced of that. At this particular beep she was aware that her back was slightly bent over, and she was aware of the rhythmic motion of her hand, and she was aware of the gooiness in her mouth, and seemed sort of equally aware of all of those things. She wasn't saying that she was aware that her left foot was at 37 degrees from her right foot, or that her right leg was slightly bent, or that her left hip was leaning up against the sink edge, or any of

the other myriad of things which were legitimate candidates, it seems, in the way that you just described them as being facts of her environment.

Eric: Right.

Russ: For some reason she selected these particular three facts of her environment.

Eric: Right. It could be that those are the most salient facts of her environment.

## Chapter Six

## The Third Sampling Day

A technical malfunction destroyed the videotape of our interview on this day. A brief description of each sample is reconstructed from our written notes.

### Beep 3.1

Melanie's boyfriend was asking a question about insurance letters. Melanie's focus was not on what he was saying but on trying to remember the word "periodontist." She was thinking "peri-, peri-," to herself, with the sense that this was the beginning of the word she was searching for. She described her experience as involving knowing that she knew the word and "waiting for the word to come." Although she initially said that she heard "peri-" in her own voice, she later felt unsure whether the word fragment was actually experienced auditorially or whether it was instead "slightly visual."

### Beep 3.2

Melanie was walking to her car. She described herself as being dimly aware, at the moment of the beep, <u>that</u> she was walking toward the car. She said she had an

indistinct visual experience of the car, sensing, roughly, its big black shape but not such details as its brake lights. At the center of her experience was a feeling of "fogginess" and worry. She described the feeling of fogginess as involving being unable to think with her accustomed speed and as feeling "out of synch." In addition, Melanie said that, at the moment of the beep, she was in the act of observing this fogginess. Her worry was felt as being behind the eyes, involving a heaviness around the brow line, although she thought her experience of worry was not exhausted by those bodily feelings [see Boxes 5.14 and 5.15].

Melanie, Russ, and Eric extensively discussed varieties of emotional self-awareness. Eric suggested a threefold distinction between (1) what Russ calls a "feeling fact of body," which involves the bodily arousal and activity normally associated with an emotion (e.g., heart racing, furrowed brow, elevated galvanic skin response) without any corresponding emotional experience (if such a thing exists); (2) emotional states that are phenomenally conscious, part of one's stream of experience, but that are unaccompanied by special self-conscious attention to the emotion as it is going on; and (3) phenomenally conscious emotional states that are self-consciously apprehended as such; that is, emotions not only experienced but accompanied somehow by the conscious thought or recognition that one is having the emotion. Here are examples. (1) Feeling fact of body: Your heart races and you make a certain facial expression appropriate to anger, without any corresponding conscious experience of anger or of your heart's racing, or of

your facial expression. (2) Un-self-conscious anger: You feel angry in your normal way (with or without bodily arousal), without particularly attending to the fact that you're angry. (3) Self-conscious anger: You feel angry, and simultaneously you are consciously thinking to yourself (in inner speech or in some other way), something like "Boy, I'm angry!"

Partly in the course of the discussion with Melanie at the moment of the beep and partly in subsequent discussions between themselves, Russ and Eric further refined this threefold distinction; some of these refinements appear in the accompanying boxes. [See Box 6.1 for discussion of views that collapse (1) and (2) or (2) and (3) together and Box 6.2 for discussion of "feeling fact of body." See Box 6.3 for additional discussion of varieties of self awareness.]

Melanie was surely influenced by our theoretical discussion. In the course of it, she asserted that at the moment of the beep she had an acute self-conscious awareness of the fact that she was feeling foggy and a lower-level but still to some extent self-conscious awareness of the fact that she was worried. She evokes the threefold distinction in later discussions as well, for example near the end of the discussion of Beep 5.1. [See Box 6.4 for discussion of the difficulty of the issues involved.]

Box 6.1. Bodily emotion without emotional phenomenology? Emotional phenomenology without self-awareness?

Eric: There are two philosophical positions that might collapse my threefold distinction (feeling fact of body, un-self-conscious emotion, self-conscious emotion) into two. The first, a version of a "rich" view of experience (see Box 4.8, Section 10.3, and Section 11.2.1), holds that the bodily manifestations of emotion must be experienced in some way, though perhaps secondarily and peripherally, whenever they occur. William James, for example, writes that "every one of the bodily changes [associated with emotion], whatsoever it be, is FELT, acutely or obscurely, the moment it occurs…. Our whole cubic capacity is sensibly alive; and each morsel of it contributes its pulsations of feeling, dim or sharp, pleasant, painful, or dubious, to that sense of personality that every one of us unfailingly carries with him" (1890/1981, p. 1066-1067; emphasis in original); and feeling those bodily changes is just feeling the emotion. On this view, apparently, a "feeling fact of body" in your sense, Russ, without experienced emotion cannot exist.

A second view, the "self-intimation" view of consciousness, may somewhat undermine the distinction between (2) and (3) – though perhaps that distinction can still be maintained as a difference in degree. According to this view, all conscious experience must be to some extent self-conscious, accompanied by some sort of ongoing epistemic awareness or apprehension of the experience as

conscious. The relevant version of this view holds that this self-awareness must itself be consciously experienced (otherwise it would not be reportable through DES) – perhaps simply as part of the conscious experience itself. Brentano (1911/1973) appears to hold a self-intimation view; it has also sometimes been associated with Descartes. (See also Armstrong, 1980; Natsoulas, 1988; Van Gulick, 2004; Gallagher & Zahavi, 2005; Kriegel, 2006.)

Similar issues arise around other types of experience. For example, we might wish to distinguish unexperienced visual responsiveness (if that's possible), from un-self-conscious visual experience, from self-conscious visual experience.

Russ: I have repeatedly questioned DES subjects with respect to the self-intimation view, and can confidently say that most subjects do not experience some sort of conscious apprehending state separate from the emotion. Melanie seems to be a distinct exception to this rule. Most people who are experiencing emotion strongly deny, under the most careful of questioning, the conscious existence of an observer of their emotional state. Melanie, by contrast, occasionally did appear to have a separate observational part of her awareness; for example, of her lips coming together in Beep 1.3, of the fogginess in Beep 3.2, of the cognitive recognizing of her yearning to go scuba diving in Beep 4.1, of her anxiety in Beep 5.1, of her eyes looking straight ahead in Beep 6.1, of the bodily aspects of her feelings while playing video games in Beep 6.2, and of her concentration in Beep 6.3.

Thread: Self-Awareness: General. Previous: Box 4.12. Next: Box 6.2.

Box 6.2. Feeling fact of body

Russ: In what I call feeling fact of body, an emotion is understood as being ongoing in the person but not in experience at the moment of the beep. For example, a subject may be anxious, but at some particular moment she is engrossed in something else, and her anxiety is not in awareness precisely at the moment of the beep. And yet a half-second or so later, triggered by the onset of the beep, the subject may have a very clear sense that the anxiety actually was there, ongoing; she was just not aware of it at the moment of the beep.

What was ongoing, if the emotion was not experienced? Certainly part of it is physiological: If her heart had been racing with anxiety, it didn't immediately stop racing when she shifted her attention to something else. But more than that, apparently the physiological processes were organized or processed or structured in a particular, "emotional" way, and that organization/processing/structure can continue even when the anxiety itself is not experienced.

I don't know exactly what this organization/processing/structure is, but consider an analogy from vision: At one moment, you are looking at a sea of Lakers fans and you cannot spot Jack Nicholson. Then you spot him. Then the game grabs your attention and Nicholson is no longer in your awareness at all. When you look back toward Nicholson a second time, you will spot him much

more easily. Some visual organization/processing/structure persisted while Nicholson was out of your attention and experience. So feeling fact of body apparently refers to both an actually ongoing physiological process and an apparently ongoing organizational process, so that when the beep sounds, the immediately-following-the-beep recognition is that the emotion has been there all along and that the experience is now returning to an actually ongoing emotional process.

The previous paragraphs are speculations, going beyond the capabilities of DES to discover: DES is concerned only with what appears, not with what is behind the appearance. Purely from the standpoint of DES, it is perhaps possible that emotions do pop quickly in and out of existence depending on our attention.

Thread: Emotion. Previous: Box 5.15. Next: Box 6.3.

Thread: Richness. Previous: Box 4.8. Next: Box 9.1.

Thread: Self-Awareness: General. Previous: Box 6.1. Next: Box 6.3.

Box 6.3. Variations of self-awareness

Eric: The space between (2) and (3) is no simple spectrum, since people may be differentially self-aware of various of the physical and phenomenal aspects of emotion (the pounding heart, the surge of adrenalin, the angry inner speech, etc.).

Somewhat differently, I would also draw a distinction between skillful self-apprehension and acute self-consciousness. The skillful apprehension of emotion

may be likened to a driver's skillful apprehension of the fact that she's seeing the road and the cars around her – an apprehension revealed by such things as her reluctance to take her eyes off the road, her glancing in relevant directions, her readiness to use the mirror or crane her neck when appropriate, etc. Such actions and dispositions reveal that she implicitly knows – or skillfully apprehends – that she's seeing the road, rather than (primarily) hearing or reading about it. (Of course we often – even usually? – implicitly know in this way that we're seeing when we're seeing. In this sense the "skillful apprehension" is quite ordinary.) All this may be, and apparently normally is, wholly unaccompanied by any acute self-conscious reflection on the fact that she is seeing the road. Skillful apprehension of an unpleasant emotional experience might similarly be revealed by coping strategies, by exiting the situation, by refusing a phone call from someone with whom one should appear cool, controlling oneself before a young child, etc. – i.e., by dealing in some skillful way with the fact that one is in a certain kind of emotional state – even prior to explicitly recognizing the presence of the emotion in yourself.

Thread: Emotion. Previous: Box 6.2. Next: Box 7.4.

Thread: Self-Awareness: General. Previous: Box 6.2. Next: Box 6.4.

**Box 6.4. The difficulty of issues around self-awareness of emotion**

Eric: The issues discussed in this chapter we've wrestled with repeatedly in our conversations since the time of this sampling session, at greater length and with more confusion than it seems fair to inflict upon the reader. The phenomena of self-awareness are difficult to grasp and discuss. Our talents and language are not well-suited for navigating this region. That is, I think, an intrinsically interesting fact; it also underwrites some of my hesitancy to trust Melanie's reports about her degree of self-awareness (see also Boxes 8.9 and 9.3).

Russ: I think that the proper reaction to this difficulty is not simply to be hesitant to trust Melanie's reports, but to gain Melanie's differentiated cooperation, which is what we did. Our discussions clarified the distinctions and for all three of us, and all three of us recognized the difficulties involved. Thus, when Melanie subsequently reported her self-awareness it was with a differentiated understanding of the issues. We conveyed to Melanie, and she (I believe) understood and accepted, that we needed to be extra careful in this area so as not to say more than was warranted.

Thread: Melanie's trustworthiness: Attunement to distinctions. Previous: Box 4.5. Next: Box 7.8.

Thread: Self-Awareness: Melanie's unusual. Previous: Box 4.14. Next: Box 7.11.

Thread: Self-Awareness: General. Previous: Box 6.3. Next: Box 8.6.

**Beep 3.3**

Melanie was in her car, shifting from reverse to drive. Looking at the dashboard, she saw the word "brake" lit up and she realized the parking brake was still on. At the moment of the beep she was feeling exasperated at herself, hearing, in her own voice, the phrase, "Why can't I…." The beep occurred right after the "I," and Melanie had the sense that the sentence, had it not been interrupted, would have concluded with a phrase something like "remember about the parking brake." She felt that even at the moment of the beep, before the sentence had been completed in her thoughts, she had the general sense of its entire meaning. She distinctly felt that the voice was heard, rather than actively spoken (in contrast to Beep 3.1), almost as if it were a recording playing back in her mind – a fact she found surprising about this experience. She also felt that this episode of inner hearing was distinctly located in her head, moving from the region near her right ear toward the region near her left ear. Melanie said that the emotion of exasperation was also present at the moment of the beep but that she had no, or very little, self-conscious awareness of it as exasperation, although she felt uncertainty about this last point and about the issues involved in the self-awareness of emotion. [See Box 6.5 on the relationship between thought and inner speech.]

**Box 6.5. Thought and inner speech**

Eric: People often suppose that when we think in inner speech we really are thinking in inner speech – that the speech is, in some robust sense, the medium of the thought, the thing that makes the thought conscious (e.g., Carruthers, 2005). Although there's much I find attractive in this view, Melanie's experience as reported here raises a question for it. (Let me bracket here the distinction that Russ finds important, but to which most philosophers are insensitive, between "inner hearing" – which strictly speaking is what Melanie reports in Beep 3.3 – and "inner speech." See Beeps 1.1-1.2.)

Generalizing from my own experience as best as I can recall it (and in a way I'm sure Russ will deplore!), it seems to me that I often have some sense of what I'm about to say before I say it, or as I'm just beginning to say it – whether in inner or outer speech. Sometimes that sense is only very rough and inchoate; but in other cases, as perhaps like Melanie's here, it's fairly specific and developed. What's nice about this sample is that, since the beep interrupts Melanie mid-speech as it were, we can observe (if her report is accurate) that the conscious thought is already formed before the speech is complete. It runs, half-articulated, somewhat ahead of the speech (or hearing). Maybe, had the experience not been interrupted, Melanie would have completed the predicted sentence, catching up with the fully formed thought – or maybe even the thought would have departed quickly while the sentence completed itself with a kind of thoughtless inertia. In

either case, if the thought is complete before the inner speech is complete, inner speech can't be the medium of the thought, can it?

Russ: I take my primary job as a DES explorer to be the description of phenomena, not any explanation of what produces those phenomena, so I am somewhat reluctant to enter into this discussion. However, that said, I do agree that inner speech is probably not the (entire) medium of thought. My reasons: (1) As you point out, I do think there is an unequivocal phenomenological distinction between inner speech and inner hearing, the same phenomenological distinction as between speaking into a tape recorder and hearing your voice played back. In Melanie's example here, there is no inner speech, so experienced speech can't be essential to thinking; (2) unsymbolized thinking exists (Hurlburt, 1990, 1993, 1997; Hurlburt & Heavey, 2006) – I'm confident that people frequently think without any experience of words (spoken or heard), images, or other symbols; therefore experienced words can't be essential to thinking; and (3) the phenomenon that I call partially unworded speech exists (rarely), where the person is saying something in inner speech but one or several of the words are missing. "Space" is left for those words, as in "I should check the schedule for _____ ____ Airlines." At the moment of the beep, there is an experienced hesitation between "I should check the schedule for" and "Airlines"; there is no question that the missing word is "Southwest," but that word has not appeared in experience. That indicates to me that inner speaking is at least the coordination of

two processes, one that creates the rhythm and another that creates the words themselves (that's true for external speaking as well, I think). There may well be an underlying thought process that creates both the rhythm and the word processes, but I know nothing of any underlying thing. By the way, while the sense-of-the-thought phenomenon you describe as characteristic of yourself exists in DES subjects, it is relatively rare.

Eric: Just to be clear, Russ: Are you saying that it's relatively rare for people to have a sense – I mean a conscious, but obviously not a linguistically articulated sense – of what they're about to say as they're beginning to say it? I'd have thought we normally have such a sense, though often only diffuse. Maybe you think we have that sense only dispositionally (so that we could, if asked, call up what we were about to say), but not as part of our conscious experience? (This might take us back to issues about the periphery and "richness" of experience; Box 4.8.) Or do you only mean that something like pure "thoughtless inertia" is rare?

Russ: Yes – the most frequent experience of inner speech involves simply the speech itself with no conscious sense of what is about to be said. When beeped while speaking aloud, most frequently DES subjects report no inner or outer experience at all. It's as if the act of speaking exhausts all their experience-making resources (whatever that means) so that there's no conscious sense of

what they are intending to say or even of the words they are using to say it.

They're speaking – that's it.

Thread: Inner speech and hearing. Previous: Box 5.7. See also Ch. 11.1.3.

## Chapter Seven

## The Fourth Sampling Day

**Beep 4.1**

Melanie: Okay. I was having a conversation with my boyfriend over dinner regarding extreme sports, and kind of sports in general. I'm a really big scuba diver – it's one of my main hobbies and I absolutely adore doing it. And right before the beep went off, my boyfriend was saying something about how there are some sports that you can play in a rough and difficult way, but they don't wind up being life threatening, while there are other sports that you can play or do in a life-threatening manner. And so right at the moment of the beep, I was thinking about the comparison… well, just the notion of scuba diving and the possibility of its being life threatening. And what I was feeling was just this intense yearning and desire to go diving, because I miss it and I love it so much, as well as this feeling of being in the water, you know, where you're kind of bobbing at the top or surface of the lake or the ocean or something like that and you can feel the wave pick you up and drop you down, pick you up and drop you down.

Russ: So is that like two different sensations, there's the yearning to go and….

Melanie: One's very emotional, and one's more physical.

Russ: Okay. And is one of these more central to your experience or awareness or whatever it is we want to call that? Or are they sort of equal? Or….

Melanie: They're pretty much equal.

Russ: Okay, then let's start with one of them, and when we get done with that we'll move to the other one. So the emotional part. What…

Melanie: Just this desire to go, like this craving to go diving.

Russ: And what's that like?

Melanie: I feel it pretty much all over. It's really difficult to describe, because it doesn't feel like there's a location. It's just this incredible want, just to have the experience of going diving and going through the motions. I guess I can't pinpoint it to a location.

Russ: And is this a bodily thing – can you pinpoint it to your body? Or is it outside your body as well? Or in your head as well? Or…?

Melanie: It's in my head as well.

Russ: And in the room as well? Or…?

Melanie: No. It seems located just… it's in me, but it doesn't feel localized in a particular place. Like when I was worrying [Beep 3.2] I said I could feel it especially behind my eyes and around my brow. This isn't like that. This is all-encompassing.

Russ: Okay. And when you say it's in your head as well as in your body, is it in your head in the same way as it is in the rest of your body? Or are you meaning to say that there was some more cognitive or mental or whatever aspect to it that's in your head?

Melanie: Probably more cognitive, I would think, because I knew what it was that I was feeling. [See Box 7.1 for concerns about this answer.]

**Box 7.1. Is Melanie inferring rather than recalling?**

Eric: Note that Melanie's statement here is structured like an inference from the fact that she knew what she was feeling to the conclusion that there was something cognitive going on in her head. That amplifies my skepticism here.

Russ: I agree that this statement is probably inferential. I disregard such statements (statements that typically include "because," "on account of," "usually," etc.) for precisely that reason. However, I don't think this provides reason to distrust Melanie's reports in general. Notice that this sentence also contains two subjunctifiers ("probably" and "I would think"), indicating that Melanie is a careful (although not perfect) reporter: she herself is discounting what she is saying; she is not entirely taken in by her theories. Like most other subjects, Melanie doesn't use subjunctifiers indiscriminately (see Boxes 5.13 and 7.2). I have noticed over the years that even relatively uneducated people switch skillfully between declarative and subjunctive sentences when they switch between confident description and problematic reports.

One aim of DES interviews is to help subjects learn to give straightforward descriptions that they don't feel the need to subjunctify – and thus to eliminate theoretical and inferential statements.

Eric: Still, not all theory-driven distortions may be signaled in this way. For example, in Beep 1.3, Box 4.14, you, Russ, are skeptical – it seems to me rightly – of Melanie's awareness of her mouth closing at the end of a sentence. Yet her claim there appears straightforward and confident. It seems likely to me that all of

Melanie's reports are to some extent affected – for good as well as for ill – by her general background theories and her knowledge or impressions of her own patterns of experience. I'm reluctant to rely much on the hope that straightforward descriptions are generally atheoretical and noninferential.

Russ: First, I am skeptical of all reports; that skepticism is sometimes heightened for a variety of reasons, for example: because the reports are unusual (as in Box 4.14); because the reports seem to be generalizations; because the reports contain subjunctifications; and so on. But a heightened level of skepticism does not imply a heightened level of disbelief (I came to believe that Melanie's mouth-closing awareness was probably true, for example). Heightened skepticism means that we should be especially careful to ask good questions, and perhaps that we should be on heightened alert to look for confirmations or disconfirmations elsewhere in the record. I do agree with the general notion that Melanie's reports are to some extent affected by her theories and prior experience. The question is the size of the extent, and whether it can be held within satisfactory limits.

I also agree that not all theory-driven distortions are signaled. But some are (as here), and it is therefore possible to use those occasions to instruct subjects that we wish to avoid theories or inferences. We use a variety of techniques so to instruct: direct conversation, ignoring, and so forth. But I recognize that psychology and philosophy have used a variety of similar techniques without

adequate success. However, the DES focus on the description of the single moment is substantially different from those previous attempts. At issue in this book is whether that single-moment focus, combined with the interview's focus on description of phenomena and repeated explicit and implicit avoidance of presuppositional theories, can be enough to limit the magnitude of the distortions. I think so.

Eric: Such instruction probably will reduce the use of phrases of the sort that tend to signal theories and inferences in favor of balder, more confident-sounding statements. However, it may do so not only through reducing the most blatant kinds of theoretical inference but also through encouraging a kind of blasé confidence or reluctance to show hesitation – or so I worry.

Thread: Melanie's trustworthiness: Influence of generalizations. Previous: Box 4.18. Next: Box 7.14.

Thread: Reconstruction. Previous: Box 5.4. Next: Box 7.6.

Russ: Okay. Then the feeling part, the bodily part, it's all over in your body, and it's hard to describe – I'm totally in agreement with that. But can we be somewhat more descriptive? Is it like pressure, pain, heat feeling? A twisting, turning…?

Melanie: I guess twisting is actually pretty good. It kind of feels like just my entire body is being really twisted, in a way, kind of tense, with this craving. [See Box 7.2 for a note on subjunctifiers.]

**Box 7.2. More on subjunctifiers**

Russ: Note that there are six subjunctifiers in this 29 word utterance: "I guess," "actually," "pretty good," "kind of" (twice), and "in a way." This rings my skeptical alarms, so I ask the following series of questions, which eventually lead Melanie to say that the twisting is more metaphorical than descriptive. That's part of the evidence that Melanie uses subjunctifiers skillfully to signal departures from simple description. That of course does not imply that a lack of subjunctifiers means that Melanie is being straightforwardly descriptive (see Box 7.1); it does mean, I think, that Melanie can be a nuanced reporter.

Thread: Melanie's trustworthiness: Subjunctifiers and confidence. Previous: Box 5.13. Next: Box 7.7.

Russ: And when I said, and you bought into "twisting" as the alternative, and you sort of twisted with your hands, is this like one twist, like somebody has grabbed your ankles and turned you one way and grabbed your shoulders and turned the other…

Melanie: Yes.

Russ: … as opposed to a whole series of little twists?

Melanie: Yeah, it's not like the feeling, you know, when your esophagus is clumping down or anything like that, but it's just one general twist in your entire body.

Russ: And when we're talking about "one general twist of your entire body," is that like a metaphor? Or does it actually feel sort of like your body is being twisted physically?

Melanie: Probably more of a metaphor to explain the kind of tension that I feel.

Russ: So there's a tension, and to say that your body is tense, that would not be metaphorical…

Melanie: No.

Russ: … you're actually experiencing a tension in your body.

Melanie: Yes, definitely.

Russ: But that tension is not… it doesn't feel twisty in the sense that your feet are going to the right and your shoulders are going to the left, or clockwise and counterclockwise…

Melanie: No. But there's that kind of feeling all wrapped up about something and tense about something is there.

Russ: Okay. And is there any other way to describe the tension? From the inside out or from the outside in or…? [See Box 7.3 for discussion of whether Russ is creating too much pressure to be specific here.]

**Box 7.3. Is there excessive pressure for a specific description?**

Eric: Note that Melanie begins by saying the feeling is "hard to describe." You persistently ask about it, Russ, and eventually (below) Melanie settles on a description that she thinks is not (too) metaphorical. I'm torn between applauding your persistence and worrying that you've pressured her into inventing something.

I suspect that most people have a deep-rooted reluctance to admit ignorance about something it seems they should know; and, to Melanie, it probably seems

that she should know the details of her experience at the moment of the beep. Furthermore, she is now meeting with us to discuss the details of that experience. Consequently, she may feel considerable pressure to say something about the details. That pressure, plus the inherent difficulty of describing emotional experience (which you acknowledge in Box 5.13), and the likely indistinctness of the memory (see Box 7.5), may invite a kind of invention.

I'm not saying that Melanie would deliberately make things up. But she, and your other subjects, might react as locals do when asked directions by a tourist: Instead of accurately assessing how much they know and how much they don't, they simply give it their best shot – often feeling and expressing genuine confidence all the while, even if they are quite inaccurate. (For further support of this view, see Box 7.7.)

Russ: It's probably impossible to be perfectly open, but I do think my interviews create a very unusual situation that may to a large extent mitigate the pressures you describe. Without being arrogant, I hope, let me say that I think that most psychological investigators don't take these issues as seriously as I do. I think it's possible – and I think I do it at least moderately well – to say, "I'm interested in what your experience was, whatever it was, including nothing, and including 'Well I don't really know' and including 'it was so fuzzy that I can't really tell you about it'." I'm happy to get any of these responses. I say such things over and over, and (I think) act entirely consistently with those intentions.

Those intentions are (I think) pretty darn genuine, as the result of much work and practice. As a result, I think most subjects understand that I really do want to know precisely what they are really experiencing at the moment of the beep – not more and not less. When subjects accept that that is true (which generally takes a while), it is often an extremely powerful event for them: This guy really wants to know what is really going on with me! They may never have received such a communication, and even if they have, quite likely never one delivered with such skill and consistency. Most subjects, as did Melanie, I think, experience this as a rare opportunity (for self-discovery, for genuine communication) and are motivated to a very high level of carefulness, far different from a local responding to a tourist.

As for persistence: If I quit asking for details before we all are satisfied that we understand each other to the limits of our abilities, then I have conveyed by deed that I don't really care about Melanie's experience. I have to be persistent, not so much because the details themselves are important, but because the attempt to get the experience as exactly right as possible is important. The art of the method is to convey at the same time and with equal vigor that I don't want us to go too far.

It is possible (probably likely) that my persistence encourages some invention. At the end of a discussion, I generally explicitly acknowledge that pressure, and then say something like, "Well, this is only one beep, and next time perhaps we

can do better." And that is true, because it is likely that I have conveyed the genuine aim for accurate description of detail, and therefore won't have to be quite so persistent the next time.

So while perhaps I can't completely eliminate your concern here, I do think it applies only in a limited way, and at the margins.

I feel very confident, for example, not only that Melanie was yearning to go scuba diving, but also that her yearning was experienced at least in large part as her body leaning, reaching forwards (as she says below).

Thread: Melanie's trustworthiness: Details. Previous: Box 5.14. Next: Box 8.1.

Thread: Melanie's trustworthiness: Interview pressures: Previous: Box 5.12. Next: Box 8.1.

Thread: Interview techniques. Previous: 5.17. Next: 8.6.

Melanie: Yes. Inside out, in a way, almost feels like trying to… like there's something inside me trying to reach out for something.

Russ: And you're aiming forward with your hand…

Melanie: Yes. It would be out, away from my body. And it would be in a forwards direction, not backwards, not out to the side. It felt very forward.

Russ: So like your body is going forward.

Melanie: Yeah.

Russ: And you're indicating it from your chest, sort of, but…

Melanie: It was more all over, you know, even like my knees and my toes and everything like that.

Russ: Okay. So like your whole body is trying to go forward. It feels like going forward.

Melanie: Yeah, reaching out.

Russ: And is that a metaphorical thing like the twisting thing, or is that more….

Melanie: No. That's more it.

Russ: So this is more descriptive of what the sensation actually feels like…

Melanie: Yes.

Russ: … and the twisting is more…

Melanie: A metaphor.

Russ: … a way of trying to describe the degree of tension, or something like that.

Melanie: Yeah.

Russ: Eric, do you want to ask more about that, or shall I press on to the other half of it?

Eric: [laughs] Boy, it's so hard to know what to make of all this. It's such a funny description. I'm not saying that, I mean…

Russ: What's funny about it? And we're not taking it personally or critically or whatever, but what is it about it that you find hard or funny or whatever?

Eric: I guess my inclination is to read it as pretty metaphorical, even what Melanie is saying is less metaphorical. Umm. Like your toes reaching forward, and…

Russ: And if you take the whole thing as metaphorical, what do you make of Melanie's seemingly confident distinction between twisting as being metaphorical and reaching forward as being not metaphorical?

Eric: You know, I'm not sure what to make of it. I don't know. [See Box 7.4 for a discussion of whether people are mostly alike.]

**Box 7.4. Are people mostly alike?**

Russ: Eric, you apparently find some of Melanie's reports relatively easy to accept, such as her images and inner speech. But you find other reports more difficult, like her report of bodily yearning here. I worry that you find this description more problematic because you yourself don't have access to that particular kind of experience – that you fall victim to the if-I-don't-do-it-then-others-must-not-do-it-either syndrome.

Eric: That's probably right, at least in part – but too strongly put. This is a key issue. I do think that there's prima facie reason to suppose that people are mostly similar, except where there are gross differences in behavior or physiology. The burden of proof, then, should generally be on the person who says that two apparently normal people are radically different inside. Consequently, when someone says something about her experience that seems vastly different from

what my own experience is, that does give me some basis to be apprehensive about the claim. Of course, for a skeptic like me, this issue gets complicated with issues about self-trust. How much should I trust my own judgments about what seems familiar and what seems alien?

But let me now say that I feel like relenting a bit on the skepticism here. In retrospect now, it does seem to me somewhat familiar and reasonable to suppose that a strong yearning might sometimes be accompanied by something like a feeling of forward impetus, or a readiness to move forward – perhaps as a kind of (possibly vague) motor imagery of moving forward.

Russ: In my view it is a large mistake to "think that there's prima facie reason to suppose that people are mostly similar." Whether or not people's experiences are similar is exactly the issue, and should be decided on a flat playing field, not one tipped in the direction of some preconception.

I have sampled with some people whose inner experience is characterized almost exclusively by inner speech; with others whose inner experience is characterized almost exclusively by images, or by sensory awareness, or by unsymbolized thinking, or by feelings; with others whose inner experience is characterized by a combination of all those; with some whose inner experience is characterized by many simultaneous events; with others whose inner experience is characterized almost exclusively by one event at a time; and so on. So, yes, I think people are importantly different when it comes to inner experience. I accept that I

have a burden of showing that that is not hogwash, and I have been trying in a variety of ways (including inviting you to participate in this project) to shoulder that burden. But I must say I have been sampling with substantial skepticism for 30 years, and I'm 99.99% sure that I haven't been duped in all those observations.

As for your relenting because the feeling of impetus in yearning now seems familiar: I cannot say strongly enough how risky I believe is the appeal to familiarity. If-I-do-it-it-must-be-possible is just as dangerous as its opposite.

Eric: You seem to be assuming here that your species of experience sampling is the best method, the "flattest playing field," as it were. But if one is attempting to assess the validity of experience sampling itself, then one has to think about whether its deliverances are plausible. There is no way to do this other than to bring in antecedent (that doesn't mean unchangeable) opinions, thoughts, or preconceptions that arise from sources other than experience sampling. Since I think it is antecedently plausible that people with similar physiology and behavior have largely similar basic forms of experience, if your results suggest otherwise, in my view that casts suspicion on those results.

Russ: I don't simply assume that DES is the flattest playing field; I've become convinced of it after 30 years of (I think) careful investigation. I may well be mistaken; that is what is at issue in this book.

One of our central disagreements is what to do when a DES result conflicts with your antecedent plausibility. You think the conflict itself is evidence against

DES. I think that such antecedent plausibilities are a primary cause of the unproductive history of the science of inner experience. The list of antecedent plausibilities that sophisticated people have held is very long: all thinking is in words; all thinking is in images; images don't exist; images always exist; emotions always exist; and so on. Therefore I think you should bracket your plausibilities (holding them neither to be correct nor incorrect). If you (antecedently) think that everyone's inner experience is mostly the same, then you should question Melanie extra carefully but open-mindedly on those points, not simply hold your plausibility against her.

Thread: Bracketing presuppositions. Previous: Box 5.7. Next: Box 7.13.

Thread: Emotion. Previous: Box 6.3. Next: Box 7.9.

Thread: Human similarity and difference. Previous: Box 5.3. Next: Box 7.12.

[Here we have excised a discussion of people's loose language in describing experience. See Boxes 4.1, 5.16, 7.9 and Ch. 3.3.]

Russ: Okay. But Melanie is saying it's like her body is reaching forwards. And that is a description of the sensations in her body, not a metaphor. A metaphor could use exactly the same words. She could say, "It's like my whole body is reaching forward" where that really means is "I want something and I want it bad,

and I'm trying to convey to you that I want it bad and I'm using these words that don't have anything to do with the experience. It's like my whole body wants it."

Eric: Right.

Russ: But that I think is what she's not trying to say here. What she is trying to say is that there's something about her body that leads her to say in as descriptive a way as she can say, "my body is reaching forward."

Melanie: [nods].

Eric: Right.

Russ: She's assented to all of that.

Eric: [laughs] Yeah. How much of this did you note at the time that you were making notes after the beep, Melanie? And how much of this is stuff – phrases or words – that you're only generating now?

Melanie: Umm, most of it I'm probably generating now. [See Box 7.5 for a concern about this.]

**Box 7.5. A concern about introducing unrecorded details**

Eric: If right after the beep Melanie didn't think particularly about whether it was kind of twisty or forward-reaching or pay attention to what parts of her body were involved – if she didn't flag these particular facts at the time, but rather just the intensity of the feeling (which is what she emphasizes in her initial description) – then I am reluctant to trust her memory of that detail of the experience, especially since she comes to this description so late in the interview. It seems to me that such aspects of one's experience evaporate pretty quickly if you don't specifically note and label them as soon as they've happened (as I argue in Chapter Three, section 3). If there is a pressure to unwittingly invent details (see Box 7.3), this report seems like a plausible candidate for having been invented.

Russ: How to ask the subject to record is a dilemma. There's good reason to keep the recording task the property of the subject, to be used in whatever way the subject finds effective. For example, the eyewitness testimony literature holds that it's best to let witnesses tell their stories their way at least at first, and hold probing questions to later. If we were to tell Melanie how to take notes, we would (a) substantially impose our presuppositions about what to pay attention to; (b) interfere with her own natural way of remembering; and (c) weaken the subject's co-investigator responsibility. Sometimes I do give subjects explicit note-taking instructions, and inspect those notes, but that is always only after the do-it-the-

subject's-own-way has raised questions. Maybe the best way to allay your concerns would be to sample for more days during which you may give whatever instructions you like.

I agree that some of what Melanie says here is probably not accurate – she's describing a hard-to-describe phenomenon and hasn't yet had much practice at it. However, the equivocation about details should not be held against the big picture, as I said in Box 5.14. Here, I'm quite confident that she is yearning, and that this yearning is somehow bodily. I'm pretty confident that it's in some way a going forward. I'm not very confident that we understand what the "twisting" part is.

I'm quite sure that we have trained Melanie to pay attention to her emotional experience (among other kinds of experiences) in ways she hadn't done before we embarked on this endeavor, but that training is probably not complete. So I think she does now at the moment of the beep pay more careful attention to her emotional experience than she did before, and that tomorrow and the next day she'll pay more accurate attention than she did today.

Thread: Melanie's trustworthiness: Memory. Previous: Box 5.4. Next: Box 7.6.

Eric: And are you generating it, do you think, on the basis of a sharp memory of the emotional experience? Or are you kind of recreating the emotional experience

now and then kind of observing it now as you're reporting? How would you describe that process?

Melanie: Remembering the way it feels like. Because the way I took my notes was to engage my memory to think about the experience…

Eric: Uh huh.

Melanie: … and I guess the way I'm trying to do that is to put myself… to remember the exact situation and exactly how it felt.

Eric: Right, although it's interesting that you… that there's an incomplete sentence there, which is "you put yourself…." You might say that there are two ways of remembering. One is a kind of abstract remembering that doesn't involve imaginatively putting yourself back in the situation you were previously in, and the other involves kind of putting yourself in the situation in imagination, and then kind of provoking some of the old reactions. Like I remember at one point when we were talking about an image, you said something like that you were reconstructing the image as you spoke to us about it [see Beep 2.1; Box 5.4].

Melanie: Um hm.

Eric: That's a kind of way of remembering by actually doing something now that you know to be similar to what happened in the past, and then reporting on what's going on now.

Melanie: That's not what I'm doing now.

Eric: That's not what you're doing in this case.

Melanie: Unh uh [no].

[Here Eric and Russ discuss "reconstruction" and the extent to which Russ is pressuring Melanie. Some of this discussion has been condensed into Boxes 7.3 and 7.6.]

**Box 7.6. Recalling and reconstructing**

Eric: I seem to be working with a somewhat inchoate sense of "reconstruction." As I use the term at the end of Day Two, "reconstruction" means something like using present knowledge (or opinions or theories) to infer, or to guide one's opinion about, what is likely to have been the case. In this broad sense of "reconstruction," probably all memory for past events is to some extent

reconstructive (the classic articulation and defense of this view is Bartlett, 1932/1995) – though the extent to which a particular report is reconstructive may vary, as well as the extent the opinions guiding the reconstruction are well-founded.

In this passage, I'm using "reconstruction" to mean something more specific: actually attempting to recreate the experience, then reporting on the recreated experience, with the expectation that what is true of it will be true of the original experience. Melanie here denies that she is recreating the yearning in this way. I'm not sure I believe her; I think she could be doing that without realizing it. Robert Gordon (1986, 1992) and Alvin Goldman (1989, forthcoming), for example, argue that thinking about another's mental states often involves imaginatively putting oneself in the other's shoes, perhaps without even being aware that one is doing so. Could Melanie likewise be imaginatively putting herself back in the morning's situation and to some extent re-experiencing the emotion, either actually or hypothetically (if that makes sense)?

This may seem perverse, but I think, partly for reasons described in Box 7.5, that her claim here may be <u>more</u> believable as a reconstruction than as simple recall.

<u>Russ</u>: I know of no way absolutely to eliminate the possibility that she is reporting on a recreated experience. However, we can reduce the potential for errors due to reconstruction by (1) stressing the difference between a recollection

and a reconstruction and valuing the former over the latter; (2) by keeping the interval between the event and its report as short as possible; and, (3) where desirable, by encouraging the subject to write more detailed accounts immediately after the beep.

So I accept that our "discovery of Melanie's experience," the end result of the DES interview, is (roughly speaking) X percent Melanie's experience at the moment of the beep, Y percent Melanie's incorrect reconstruction during the interview, and Z percent our own presuppositionally mistaken overlay over Melanie's reports. The object is to employ a method that keeps Y and Z as small as possible.

For many purposes, and this responds to your "perverse" comment, the size of Y is not terribly important, because X + Y is still uniquely Melanie. If Melanie uses a newly (re)created image in place of an original image, we still find out something about the characteristics of Melanie's images. You, for a contrasting example, are more likely to use inner speech to recreate an original inner speaking. As long as we keep Z small, we might be able to understand something of the important differences between Melanie and you, all the while recognizing that both of you are giving recreated (X+Y) reports.

Thread: Melanie's trustworthiness: Memory. Previous: Box 7.5. See also Ch. 10.4, 11.2.4.

Thread: Reconstruction. Previous: Box 7.1.

Eric: [After agreeing that Russ is remarkably open about different alternative descriptions of experience] But there's one type of answer that you haven't particularly laid space for, and that I haven't heard Melanie say. I don't know if she said it at all, or certainly not very much. That answer is, "I can't remember it to that level of detail." If you're not reporting on a reconstruction of the experience, and especially if you took only pretty sketchy notes at the time, you'd think that there would be a level of detail you wouldn't get. You wouldn't be able to remember all the details exactly right. So then an accurate report would involve recognizing that you didn't remember one thing or another, and an inaccurate report might involve filling in some aspect of the experience that you don't actually accurately remember.

Russ: Yeah. [to Melanie] Would you feel comfortable in saying, "I don't remember?"

Melanie: Yes. In fact I think I have.

Russ: I think you have too, actually. [See Box 7.7 for a discussion of whether Melanie admits ignorance.]

**Box 7.7. How often does Melanie admit ignorance?**

Eric: In fact, reviewing the transcripts, I find that Melanie explicitly admits ignorance or uncertainty about what was going on in her experience at the moment of the beep for the most part only when it comes to finding the right words to express her experience. Prior to this discussion she never explicitly admits ignorance about even the smallest details of the experiences themselves, except maybe in Beep 3.1. The only clear exception to this tendency in the preserved transcripts is when, later in this discussion (and so possibly as a result of the present conversation), she disavows knowledge of whether she was in an up or a down phase in the cycle of imagined bobbing in the water. You have pointed out that Melanie sometimes uses "subjunctifiers" that implicitly suggest a lack of confidence (see Boxes 5.13 and 7.2), but generally her hesitations are resolved.

I find it difficult to believe that Melanie could accurately remember all the details of her experiences she confidently reports. This undermines my trust in Melanie's confidence.

Russ: I think you overstate when you say she "never explicitly admits ignorance about even the smallest details of the experiences themselves." For example, in Beep 1.3 she said about the image of the shed, "I can see more than just the outline of the objects in the room but beyond that I couldn't tell you the grain of the wood, or, you know, where one board stops and the next begins." In Beep 2.1 she said about an image of the soldier, "I know that he's standing [but] I

couldn't tell you what directions his feet are pointed in." It seems to me that she quite capably and unabashedly admits ignorance about details when she is in fact ignorant.

I have agreed that all subjects, including Melanie, confabulate details to some degree (see Box 5.14). But Melanie shows herself to be quite careful, so I don't think that degree is very high.

Eric: Both of the cases you cite are cases in which I interpret Melanie as admitting a certain amount of indeterminacy in the image, not admitting ignorance about her own experience. The two admissions are very different, as I emphasize in Box 7.8.

Russ: I think Melanie in both cases is ambiguous about whether there is indeterminacy in the image or ignorance about her ability to recall the details. In fact, I think the disentanglement of such discriminations is often exceedingly difficult if not impossible to do in practice. You are correct to point out that the two admissions might have very different philosophical ramifications, but it is a large mistake to make too much of a distinction that is by its nature unreliable. (I return to this issue in Chapter Eleven, sections 2.1-2.2.)

Thread: Trustworthiness: Subjunctifiers and confidence. Previous: Box 7.2. Next: Box 7.8.

Melanie: Especially on the second day when I had a lot of mental images [Beeps 2.1 and 2.2]. I remember there were a couple times, and I think it was mainly you, Eric, who were asking the questions, when I several times said I wasn't sure, or I didn't know. Oh! For example, when I had that scene in that book in my head, when there were people standing on a road talking, and one of the characters was dressed in an army uniform…

Eric: Right.

Melanie: … but I couldn't tell you what shoes he was wearing.

Eric: Right.

Melanie: And I remember saying I didn't remember or I didn't see that.

Eric: Right. But there's a difference between those two. And maybe you did say you don't remember for some things – I don't want to say you didn't [laughs] say it <u>ever</u>. But there certainly is a difference between saying, "I don't remember whether I saw, or had an image of, one particular shoe or another," and "I remember that the image did not specify what type of shoe he was wearing." [See Box 7.8 for discussion of this point.]

**Box 7.8. Melanie's conflation of underspecification and lack of memory**

Eric: There's a crucial difference, central to our discussions of the nature of imagery on Day Two, between failing to remember what type of shoe the soldier was wearing and remembering that the image did not specify the type of shoe. The latter involves no ignorance whatsoever about the imagery experience itself: It is a clear memory of the fact that the image was vague in a certain respect.

My sense at the time was that Melanie's grasp of this distinction was somewhat tenuous, which seems to be confirmed by her comment here. Perhaps this supports the point of Box 5.14, that we should be very cautious in trusting even apparently sophisticated subjects regarding the kinds of "details" on which most major disputes about the structure of conscious experience tend to hang.

Russ: I think you oversimplify the possibilities when you differentiate between only two: (a) the image was clear but was forgotten; and (b) the image was nonspecific and remembered clearly. I think, based on my DES work, that there is (x) a continuum of clarity of inner seeing; (y) a continuum of detailedness of inner seeings; and (z) a continuum of accuracy of remembering. Your (a) is at the clear/detailed/forgotten corner of my cubic space; your (b) is not adequately specified in my space: it could be somewhere along the unclear half of x and/or along the not-very-detailed half of y, along with the accurate end of z.

I understand Melanie to be saying (and originally to have said on Day Two) something like (according to my cubic model), "I don't know what kind of shoe, and I don't know why I don't know. It could be because it wasn't specified, or because it wasn't clear, or because I can't remember."

Eric: I admit this is a possible interpretation, though I hear it differently. In any case, the point remains that there is no detail, however trivial, that she has clearly and explicitly said she doesn't remember.

Thread: Melanie's trustworthiness: Attunement to distinctions. Previous: Box 6.4. Next: Box 8.9.

Thread: Melanie's trustworthiness: Subjunctifiers and confidence. Previous: Box 7.7.

Thread: Visual imagery: Detail. Previous: Box 5.11. Next: Box 8.2.

Russ: Yeah. I think it's part of my expectation that not remembering is okay, and I think I convey that to people that I work with. And I think, maybe not perfectly, but I think I convey that pretty well. You may have a different view of that, Eric, but I think there's the implication by the hesitancy of the way I ask questions, if nothing else, that "I don't remember" is okay.

Eric: Yeah. [But see Box 7.3 for a concern.]

Russ: The fact of the matter is, I think Melanie does not remember some things, and fills in the blanks "on the fly" as we talk. I think that's the way it is. And I don't believe Melanie can possibly have access to that, because that would require her having a veridical recollection of the scene and comparing the two recollections [Eric laughs], which I think is just not possible. So I think that Melanie is doing the best that she can, and I think that she's less than perfect, and if she is perfect then she'll be walking across the fountain on the way out of here. But I doubt that she is.

Eric: [laughs] Right.

Russ: So it's a matter, I think, of keeping the imperfections at a manageable level, and by "manageable" I mean a minimal level. So I think Melanie, for example, when she says, "My whole body is reaching forward," well, the fact of the matter is that at that particular moment it probably wasn't her whole body. Maybe there was a quarter of a square inch on her left hipbone that wasn't going forwards, or something. And so to say "My whole body was yearning forwards" is an oversimplification of the fact of her experience. But from my point of view, everything we ever say about anything is an oversimplification of the fact, and the object is to have it be a non-substantially-misleading oversimplification of the fact.

Eric: Yeah.

Russ: In fact, it would probably be more accurate for Melanie to say, "My whole body was leaning forward" than it would be for her to say, "My whole body was leaning forward except for this square centimeter on my left hip which I wasn't really noticing at the time" because that wasn't what she was doing at the moment. It wasn't like she was putting a sheet of graph paper over her body and counting off the square centimeters that were leaning forward. She was into the scuba thing. [See Box 7.9 for Russ's elaboration of these ways of speaking]

**Box 7.9. The language of accurate reports**

Russ: This is an important but little discussed point. There is an emotional way of experiencing, and to convey emotion accurately you have to use an emotional way of speaking. There is also an analytical way of experiencing, which is different from the emotional way of experiencing, and with it goes an analytical way of speaking. It is probably impossible to convey an emotion accurately in the analytical way of speaking. I think Melanie's "whole body" example is a good one. Perhaps a more accessible one is the lover who says, "I love you forever" or who says, "I think I'll probably love you forever but the base rate of forever-loving is pretty small, so it's probably more accurate to say that I feel like I'll love

you forever but it's quite possible that I'm mistaken." Which statement more accurately conveys the emotional state? I think the first, even though it's quite probably not true in an analytical sense because the base rate of forever-loving is pretty small. The second is more analytically true, but doesn't do justice to the emotion.

In this important sense, then, getting some of the details wrong may be the only way to convey something accurately; and conversely, getting the details all correct may in a fundamental sense misrepresent the experience.

Eric: "I'll love you forever" expresses an emotion (as "Ow!" expresses pain), but doesn't describe it; "I feel like I'll love you forever," in contrast, describes the emotion with (a certain degree of) cool accuracy. It seems that we should be aiming for the cool description of emotions in such interviews, rather than the expression of those emotions.

I think you could make the point about the centimeter as follows: Probably Melanie's feeling of reaching forward (if it existed at all) involved a general sense of her whole body reaching forward but not a specific sense of every cubic centimeter individually reaching forward. Perhaps Melanie's motor imagery here leaves those details unspecified in the way that her visual imagery seems sometimes to leave certain details unspecified, as we discussed earlier (in Beeps 1.3, 2.1, and 2.2). I see no need, then, to interpret her "whole body reaching forward" statement as a misrepresentation or an "emotional way of speaking."

Russ: I think it is our (Eric's and my) job to provide a somewhat cool description of Melanie's experience, including her emotional experience. Melanie's job is to provide us faithful access. If she can provide such access and at the same time provide a cool description, so much the better. But I would much rather have her simply express herself in an intelligible way (e.g., say "Ow!") and let us provide the cool characterization, than have her confound her experience with the attempt to be cool.

Thread: Emotion. Previous: Box 7.4. Next: Box 8.5.

Thread: Loose language. Previous: Box 5.16. Next: Box 8.6.

Thread: Non-visual imagery. Previous: Box 5.7. Next: Box 7.15.

[Here we've excised a brief discussion of Melanie's degree of accuracy, the openness of Russ's questions compared with those of other investigators (see Box 5.1), and Eric's supposition that people are generally similar (see Box 7.4).]

Eric: I guess I have some inclination to wonder whether the difference between people who describe their emotions one way or another might be a difference as much in reporting as in the actual experience. I'm not sure how you settle that kind of thing. It would be interesting to see if there were some other kind of measurable difference – a total fantasy, but some kind of physiological measure

of what's going on in the emotion that differs between the people, or if you could do some kind of cognitive test that might reveal a difference.

Russ: Right.

Eric: What you were talking about with imagery and reading, for example [see Box 5.3]. I guess I have a general tendency to be somewhat skeptical about verbal reports without some kind of other something to back them up.

Right: Right. And I can appreciate that. But I think that the skepticism is justified particularly because psychology has done such a poor job of asking for verbal reports.

Eric: Yeah.

Russ: If we had done a better job, then maybe you wouldn't have to be such a card-carrying skeptic.

Eric: [laughs] Yeah. You know, it's not a skepticism that I think most people find natural. It's a skepticism that's grounded in reading history of psychology and

reports about experience, and seeing vast differences that don't seem to be very plausible and that aren't backed up well by other kinds of evidence.

Russ: Right.

Eric: So it's partly that experience that makes me nervous about reports in general. But that experience has been informed by methodologies that are different than the one that you are using and that have faults that you avoid or seem to be at least partly avoiding.

Russ: So, what I think has happened is that you and I have gone down rather similar roads in our skeptical apprehension of the history of inner experience reporting. The road that I've taken is, "I think it might be possible to do it better."

Eric: [to Melanie] I hope my skepticism isn't too dispiriting or discouraging or something like that.

Melanie: Nope.

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

Russ: [humorously] She doesn't believe a word you're saying, Eric! [all laugh]

[See Box 7.10 for Russ's comment on the reaction to skepticism.]

**Box 7.10. Melanie's reaction to skepticism**

Russ: I don't think people react at all negatively to honest skepticism. On the contrary, if the conversation is honestly aimed at discovering the truth (and discussing the limitations and risks of the reports is part of that), DES subjects almost never find bluntly stated skepticism at all discouraging or dispiriting. In fact, perhaps surprisingly, they seem to relish skeptical reactions to their own reports as if they have a deep understanding of the necessity of skepticism as essential to accessing human truth.

People do react negatively to most expressions of skepticism, because most such expressions are not actually skepticism but dogmatic opinions of ideologues disguised as skepticism. In those cases, the negative reaction comes not from the skepticism but from the dishonest expression. I think Melanie senses that this is not your attitude, Eric.

Eric: Still, being frank about my skepticism feels a little awkward to me, and unless Melanie is exceptional, it's hard to believe that it's not at least a little awkward for her, too. There's something easier, smoother, more socially comfortable about accepting the confident reports of someone you're interviewing. Not doing so, maybe, feels awkward because it conveys to the

subject the sense that she's being judged, rather than trusted and treated as a collaborative equal.

Russ: I am 100% confident (from repeated personal experience) that it is possible to express the most heightened, doubtful, "that's very, very, very hard to believe" kind of skepticism without engendering the kind of awkwardness that you describe. The key, I think, is the honesty of the skepticism, the wholeheartedly honest recognition of the depth of the chasm between "that's very, very, very hard to believe" and "I don't believe that."

(See Ch. 10.5 for a bit more on this issue.)

Eric: Well, that's good! So you said something about the emotional experience being through your whole body but also in your head.

Melanie: Yes.

Eric: The aspect in your head was more cognitive.

Melanie: Right.

Eric: I'm wondering if you could say a little more about that.

Melanie: Well, there isn't very much to it. The reason that I say it was more cognitive is that I could recognize the feeling as being that of yearning and of wanting, and that was the cognitive part that was involved.

Eric: Right. And why do you say that the cognitive part was in your head?

Melanie: Because I didn't think that recognition occurred anywhere else. It wasn't as though my chest recognized it as wanting. It was my head that recognized it as that.

[Here we have excised some remarks by Eric on the location of thought in ancient China and Greece. See Box 7.12.]

Russ: Did you mean to say that it's "in your head" or "in your mind" or "a mental thing"? Or are all those things interchangeable? Or none of the above?

Melanie: Well, there wasn't any aspect of, "Oh, I heard a voice in my head," or "I saw words running through my head." There wasn't any of that at all. It wasn't inner speech, or anything like that. But it felt upwards in my body, it felt like it was in my head, or in my mind. I find it difficult to make the distinction there.

Russ: So this recognizing that this is “yearning” seems to be physically located in your head…

Melanie: Yes.

Russ: … not…. So you meant to be giving a physical, “headly” description here…

Melanie: Yes.

Russ: … as opposed to a metaphysical, “mentally” description.

Melanie: Yeah. I wasn’t reaching for the metaphysical there. That’s where I felt it was located. But there wasn’t anything more to it than that.

Russ: So there was a mental knowing that…

Melanie: Of what I was feeling.

Russ: … that was happening independent of the beep.

Melanie: Yes.

Russ: That in our alternate reality [in which there was an identical Melanie without the beeper], that Melanie would have known that she was yearning. [See Box 7.11 for a comment on self-awareness.]

**Box 7.11. Self-awareness of emotion**

Eric: Although we do not press Melanie much here on her assertion that she was aware of her emotion as it occurred, this is a major theme of some later discussions (Beeps 5.1, 6.1, 6.2).

Thread: Self-Awareness: Melanie's unusual. Previous: Box 6.4. Next: Box 8.8.

Melanie: Yes.

Russ: And that knowing seemed somehow to take place in your head.

Melanie: Um hm. [Here we have excised a discussion by Russ and Eric of the topics covered in Box 7.12 on whether people think in their heads; Box 4.1 on what "thinking" is; and Box 7.13 on bracketing presuppositions.]

**Box 7.12. Do we think in our heads?**

Russ: Some of my subjects are very explicit about where things are experienced, and some aren't. If subjects experience a process that we could call "cognitive" (inner speech, knowing, imaging, etc.), they may or may not report that that experience takes place in a particular location. But if cognitive processes do have a location, they are almost always in the head.

Perhaps surprisingly, many people who, in sampling, use locutions like "it was in the back of my mind" intend that phrase to be understood not as a metaphor but as a simple description of a phenomenon, meaning "I sense this to be taking place in the back of my skull, maybe an inch inside the posterior portion of my cranium." And when they report this, they often look at me quizzically, as though noticing for the first time the non-metaphorical nature of this expression.

Eric: The fact that the brain drives cognition does not of course imply that cognition will be experientially located in the head: Compare the case of pain, which can be referred anywhere in the body, including amputated limbs, even when its physiological basis is elsewhere. So why should we locate cognition experientially in the head instead of, say, the chest or nowhere at all? People in ancient China (also, famously, Aristotle, who described the brain as an organ for regulating temperature) generally believed that the heart was the locus of thought. It seems natural to suppose that they located cognition in the heart in part because that is where they experienced – or at least thought they experienced – it as occurring.

Is it possible that the actual phenomenology of the location of thought has changed over time, shifting with our growing knowledge about the functions of the organs? I don't think we should entirely dismiss this possibility, but I'd wager against it. More likely, I think, the phenomenology of thought has remained roughly the same over the ages, and Melanie's report is driven more by her knowledge of the function of the brain than by accurate recall of her experience.

Russ: My guess is that if there is a cultural distinction between where thinking takes place, that might well be due to a difference in what is actually meant by "thinking." What a Westerner might call the "deepest of thoughts," the deepest personal apprehensions, are in fact typically experienced by my (Western) subjects as taking place in the heart. But those are rare, and the far more frequent thoughts are usually experienced in the head. If those deepest of personal apprehensions are what the Easterners meant by "thinking," then I think my DES subjects would agree that thinking is in the heart. Of course, this conversation cries out for cross-cultural sampling studies, which have not been done.

Eric: I'm pretty sure the terms we generally translate as "thinking" (e.g., si [思] in classical Chinese) have broader application than that; although in the Chinese at least, there may not be as clear a distinction between thought and feeling as we often make in the West (see Wong, 1991; Shun, 1997).

Thread: Human similarity and difference. Previous: Box 7.4. Next: Box 8.8.

**Box 7.13. Bracketing presuppositions**

Russ: I think we have conveyed to Melanie pretty adequately that it would be okay for this kind of thinking to take place in her head, or outside her head, or in front of her head, or in her left toe, or nowhere at all, if that's how it seemed to be. I think the core of the method involves the serious bracketing of such presuppositions and carefully listening to what people are saying, not allowing your own preconceptions to get in the way.

"Bracketing presuppositions" means taking them out of play, acting as if they may or may not be true, allowing them to be examined fairly, letting the evidence support or contradict them with equal acceptance. This is difficult – partly because people's presuppositions are generally more stubborn and insidiously influential than they think – but I think it must be adequately performed if one's aim is to obtain faithful accounts of inner experience, using whatever method. Otherwise, the investigator is likely to find precisely what was expected and little or nothing else. I believe that one must attempt to suspend all presuppositions. Doubtless it is impossible to be entirely successful in this, but it is definitely possible to move closer and closer to that ideal. I do believe that with practice we can get better at it, in the same way that with practice we could become better violinists.

Your task, Eric (and the reader's as well), as I see it at least in part, is to try to evaluate, as best it can be evaluated, to what extent I was (or we were) successful in bracketing presuppositions in my (our) interactions with Melanie, and to what extent the process enabled Melanie to bracket her own presuppositions. I think we did a pretty darn good job of it. Because I think the skillful bracketing of presuppositions is of fundamental importance in investigations of inner experience, then our investigations of Melanie are fundamentally different from and fundamentally better than other investigations.

Eric: Certainly bad science can, and does, arise from excessive bias and unwillingness to examine one's presuppositions frankly. However, it's impossible to set all presuppositions aside and do anything that looks like inquiry. The art of asking questions, forming and testing hypotheses, and exploring the data requires a background sense of what is plausible and what would be startling, what would profit from further inquiry and what would not, a sense of the benefits and limitations of one's techniques, of how an inquiry might end and when we should finally accept a hypothesis under test, and so on – and all of that requires at least initial working, though possibly revisable, suppositions about how things stand in one's field of inquiry. Francis Bacon (1620/2000) advanced the ideal of a presuppositionless science in the seventeenth century, but I think the majority of philosophers of science today are right to follow Kuhn (1962/1970), Lakatos (1978), Longino (1990), and others in rejecting that ideal.

For example, at the beginning of today's interview, something guided your choice of the word "sensation" to describe Melanie's experience, something impelled you to ask whether one aspect of the experience was more "central" than another, etc. An interviewer (if it is possible to imagine one) with no knowledge whatsoever of experience could not have asked such questions. I do find you unusually open-minded, and you probably would have gone along with Melanie had she rejected the word "sensation" or insisted that the question of whether one aspect was more central than another made as little sense as the question of whether one aspect was the square root of the other. But of course there are – how could there not be? – pre-existing frames and conceptions you are initially inclined to apply. It is illusion to think one can set them aside; the most one can sensibly aim for is to hold them lightly. Furthermore, I'm not sure we should always hold them lightly, if they are well grounded (as Kuhn, Lakatos, and Longino have emphasized). But that's a tricky issue.

Thread: Bracketing presuppositions. Previous: Box 7.4. Next: Box 8.3.

Russ: Okay. So the other half… are we done with the emotional half here, fifty-six minutes into the discussion?

Eric: [laughs] Yeah.

Russ: The other half… I've forgotten what it was. It was something….

Melanie: Feeling of bobbing in water.

Russ: Oh, the feeling of bobbing in water. Right! And do you mean to say that your body was… or… What do you mean to say?

Melanie: Well, I wasn't physically, in actuality, bouncing up and down. But that's what it kind of felt like. I could imagine the waves picking me up and dropping me off, and picking me up and dropping me down, like that.

Russ: And when you say you "could imagine" that, there's another subjunctive…

Melanie: It is a subjunctive, because it's not like I felt the water. I felt the motion, not the actual water [quizzical tone]. I don't know if that makes sense.

Russ: So, are you saying that in some way your body is imagining itself going up and down and you're experiencing that up-and-downnessing?

Melanie: Yes. And it's the motion. It wasn't a thought about the water or anything like that. And it wasn't feeling the water kind of, you know, hitting the swimsuit

or lapping away or making a noise or anything like that. It was directly the motion of bobbing up and down.

Russ: And is that motion in your body?

Melanie: It felt more like my upper body, because if you're bobbing at the surface like a cork the lower half of your body is under water, so you don't really feel that. [See Box 7.14 for some worries about this statement.]

**Box 7.14. On the word "because"**

Russ: Melanie is using the language of causation here ("because if you're bobbing…"), and when people do that it opens the possibility that they are not describing the experience but instead explaining what the experience must be (cf. Box 7.1). What makes it difficult is that this language is ambiguous. Melanie's language here can be interpreted as the result of a reality demand, as if she had said "in the real water you feel it on the top of your body, therefore I must be feeling it on the top of my body now." But it is also possible to interpret Melanie's statement as simply as a way of communicating to us about the phenomenon, as if she had said, "Yes, I'm feeling it only in my upper body, and I want you to understand that, so I'm going to appeal to your sense of reality." So Melanie's statement here can be interpreted either as signaling that she's inferring

more than recalling this aspect of her experience or as a use of causative language as a way of communicating to us. I don't think we can determine which is the case here from this utterance alone. But her explanations coming shortly allay my worries somewhat.

Thread: Melanie's trustworthiness: Influence of generalizations. Previous: Box 7.1. Next: Box 9.3.

Russ: Okay.

Melanie: So it was mainly just, I don't know, maybe from about my ribcage up.

Russ: And with your hand you're gesturing up. Do you mean to say that at the moment of the beep you're going up? Or are you going up and down, or down…?

Melanie: I couldn't narrow it down that specifically.

Russ: So there's something about the upper portion of your body…

Melanie: Yes, that's feeling an up and down motion.

Russ: … that's feeling an up and down motion, and it's impossible to say which of those motions, which phase, is going on at the moment of the beep.

Melanie: Yes.

Russ: Okay. And…. [pause] So without trying to be too personal here, when we're talking about the upper body, your hands are under your breasts. Are you talking about the surface of your body being lifted?

Melanie: Yes.

Russ: So it's not like your whole body going up? It's like your breasts being…

Melanie: Oh no, no, no. It would be the whole upper body.

Russ: Inside and outside?

Melanie: Yes.

Russ: Okay. So your whole torso, your whole upper torso….

Melanie: Is being lifted and then being dropped down.

Russ: Okay.

[Here we have excised a brief discussion by Russ and Eric of the believability of this report. See Box 7.15. See Box 7.16 for a discussion of an aspect of the experience we may have left out.]

**Box 7.15. Should we believe Melanie's report of kinesthetic imagery?**

Russ: My skeptical receptors are pretty quiet here.

Eric: I don't see any particular reason to doubt this aspect of the report, apart from my general concerns about the method. It could be an invention, but nothing in the transcript especially points in that direction. However, it is interesting that she would report kinesthetic imagery of bobbing simultaneously with (what I take to be) motor imagery of yearning forward.

Melanie's trustworthiness: General. Previous: Box 5.16. Next: Box 7.16.

Thread: Non-visual imagery. Previous: Box 7.9.

**Box 7.16. Did we leave out an aspect of the experience?**

Eric: In her initial description of the experience, Melanie says that at the moment of the beep she was "thinking about the comparison [of scuba diving with other

sports] … and its possibility of being life threatening." She mentions that first and might be interpreted as juxtaposing or contrasting it with her feeling of yearning and her sensation of bobbing. Neither we nor Melanie seem to have picked up on this in the interview. Maybe her "thinking" was just this yearning and/or bobbing? Another possibility is that the "thinking" refers to an episode of inner speech (or some other type of thought) that concluded prior to what is described here and so provides a kind of background for it.

Thread: Melanie's trustworthiness: General. Previous: Box 5.15. See also Chapters Ten and Eleven, passim.

**Beep 4.2**

In lieu of the full transcript of the discussion of this sample (available on the website), here is a description of this beep as Melanie conveyed it in the interview:

> Melanie was reading a book. At the moment of the beep she was reading about one of the characters who steals the joker from decks of cards, and simultaneously was having an image of a playing card with a joker on it. The card brand in her image was Bicycle, and the image was of a joker who was dressed in a Harlequin costume with a jester hat and pointy shoes, a jumpsuit that has the colorful triangles on it, as well as the big

bicycle wheel. (The fact that the image did not correspond very well to an actual Bicycle joker was of little importance to Melanie or to us.)

Looking back after the beep, Melanie was aware of the emotions of concern and resentment ongoing in her body at that time, but they weren't experienced by her at the moment of the beep. Russ calls this phenomenon of emotions that seem to be ongoing as bodily processes (e.g. fists clenching, face flushing, heart pounding) but which are not in experience at the moment of the beep "feeling fact of body" [see Box 6.2].

## Chapter Eight

## The Fifth Sampling Day

**Beep 5.1**

Melanie: For the first beep, I was thinking about the fact that I have an appointment at 11:15 this morning, and it's all the way across town from here. So I was feeling a little bit of anxiety about getting there on time. I also had a mental image in my head of me sitting in my car and driving my car, and being stopped at a red stop light at just a generic intersection. It wasn't a specific street or anything like that. I was seeing this image as though I was in the driver's seat looking out the car window. I could see the stoplight and the road stretched out in front of me, and then could see my hands on the steering wheel.

Russ: So the image. Is this just like you were looking, like you were actually in the car?

Melanie: Like I'm in the car. You could see the, you know, the frame of the car where the window stops, and out of the corner of my eye I could see the passenger seat that was empty.

Russ: And do you take that to be just like being in the car, or is it in some way different from being in the car?

Melanie: Just like it.

Russ: So in no discernible way is it different...

Melanie: No.

Russ: …it might have been different but you didn't discern it?

Melanie: Right, exactly.

[See Box 8.1 for Eric' skepticism about this remark.]

**Box 8.1. On how one starts questioning**

Eric: Here's another instance of the sort described at the end of Box 5.1. The way you first ask the question – "Is this just like you were looking, like you were actually in the car?" – may provoke Melanie too casually to equate her imagery experience with her normal sensory experience. Once she does that, she may then have to provide vision-like details if she isn't to undermine herself. Perhaps a

different line of questioning, one that didn't begin by asking Melanie for a general judgment of this sort, would have produced a different description in the end.

I don't want to make too much of this. You are certainly not overtly pressuring Melanie to say her imagery experience was just like the experience of being in the car – if anything, you pressure her the opposite direction by evidently being unsatisfied with her answer until she modulates it a bit (to "it might have been different but [I] didn't discern it"). However, social psychological research and research on testimony has shown again and again that subtle variations in the phrasing and order of questions can have a large effect on subjects' responses.

Russ: I think the transcript makes my questioning appear somewhat more forceful than was the actual interview, which includes pauses and uncertainties not rendered in this transcript. But more importantly, Melanie had already given, in her opening description of this beep, an unambiguous account of a visual experience: "I had a mental image in my head"; "I was seeing this image"; I could see the stoplight"; and "could see my hands on the steering wheel." She had already given an unambiguous account of being as if in the car: "of me sitting in my car and driving"; "seeing… as though I was in the driver's seat"; "see the stoplight and road stretched out in front of me"; "see my hands on the steering wheel." So I think "Is this just like you were looking, like you were actually in the car?" is a pretty even-tempered question; my "just like" gives Melanie the

opportunity to withdraw from (add ambiguity to) her earlier statements or to reiterate them.

I accept the possibility of the influence of truly subtle factors, and return to this discussion in Chapter Eleven, section 2.5, where I will discuss why I think truly subtle pressure might not be as risky as you think it is. Furthermore, it strikes me as plausible that you're raising this issue here is in the service of your presupposition against clear imagery. I think that is indeed a risky strategy, and I will return to this discussion in Chapter Eleven, section 1.7.

Thread: Melanie's trustworthiness: Details. Previous: Box 7.3. Next: Box 8.2.

Thread: Melanie's trustworthiness: Interview pressures. Previous: Box 7.3. See also Ch. 2.3.1, 10.5, 11.2.5.

Thread: Visual imagery: Structure. Previous: Box 5.9. See also Ch. 3.2.

Russ: And you said you saw cars ahead of you, and stop lights and…

Melanie: No, I just saw the… it was like being stopped at an intersection. So I saw the two roads crossed. There was one heading straight out in front of me…

Russ: Like the road that you were on, continuing?

Melanie: Yeah, and then there was the other road running perpendicular to that, perpendicular and straight through the intersection. So I could see kind of buildings (they weren't specific), buildings on the corners – apartment buildings or high rises, Las Vegas high rises – and the stop light that you get at the…

Russ: So there were buildings on the corner?

Melanie: Um hm.

Russ: But they weren't specific buildings?

Melanie: No.

Russ: So you couldn't say this was the Plaza Suites or that it was…

Melanie: Or it was Jones Street or something. No, I didn't know what street it was.

Russ: Okay. And is this like a still picture? Or is it like a moving picture? Or are you driving through?

Melanie: Still picture.

Russ: “Still” like snapshot still? Or still like you’re at an intersection and just don’t happen to be moving, but it would be a movie if you happened to be moving?

Melanie: It was snapshot still.

Russ: Color? Black and white?

Melanie: In color.

Russ: And accurate color as far as you know? The stop light’s red…?

Melanie: Yeah, and the desert colors and all that kind of thing, um hm.

Russ: So accurate colors, except not accurately portraying any particular intersection.

Melanie: Right.

Russ: Okay. Any other details of the visual portion of this experience that we ought to be asking about?

Melanie: I can't think of any.

Russ: Eric, do you want to ask about that portion?

Eric: Sure. I'm not quite sure what you mean when you say they weren't specific buildings or it wasn't a specific intersection or road. Was it that the buildings were kind of generic looking?

Melanie: Yeah, they were. They were, you know, rectangular buildings with windows, but I couldn't have said, "Oh that's the building that's on the corner of Jones and Flamingo, so I must have been driving down Flamingo at the intersection with Jones." I don't know any of that.

Eric: So although the buildings had a specific appearance…

Melanie: Right.

Eric: … they weren't familiar?

Melanie: Right.

Eric: Or let's say… conceivably could there be an intersection in the world that looks exactly like that?

Melanie: Conceivably, yes.

Eric: Yeah, so it's not that the buildings were kind of hazy or something like that?

Melanie: No. The scene was detailed and clear, but it just wasn't representative of anything that I've seen here.

Eric: Um hm.

Russ: And clear all the way around? Like not just clear looking forward but clear to the sides? Like if you were really parked at an intersection I would think…

Melanie: No. It was clear straight ahead. I mean I couldn't tell you like what cars were parked on the street running perpendicular to the one I was on, you know, waiting for the intersection there.

Russ: So the apartments that you're talking about are on the street ahead of you?

Melanie: Yeah, they're the ones that are across the street, on the other corner.

Russ: Okay. Sorry, Eric.

Eric: Um hm, that's fine. So you said there were other cars that were in the image?

Melanie: Um, I couldn't tell you that.

Eric: So you don't know whether there were other cars?

Melanie: Nope.

Eric: So, just to get clear on what that means: It could be that the image may or may not have had other cars in it, and you just can't remember that fact; or it could be that the image somehow under-specified whether there were cars there; or maybe there are other possibilities, too. Which way would you describe it, or how would you describe that?

Russ: [after a pause] She's looking quizzical. I would ask the question more from a process rather than an entity perspective.

[The following six conversational turns summarize a somewhat longer conversation.]

Russ: So I might ask, if I were trying to get at the same thing: Was it that you didn't see cars? Or was it that you just didn't notice whether you were seeing cars or not?

Eric: Um hm.

Russ: She's still looking quizzical. Well, what I was reacting to in wanting to reframe the question was what seemed to be the presupposition that there's some inner screen somewhere, or some neurological equivalent of an inner screen, on which we create images. And then there's some inner equivalent of a spectator in which we look at those images. And those neurological processes could be more or less independent, so that you could have a clear image and a lousy seer or a clear seer and a lousy image or any combination thereof. I don't want us to fall into the trap of assuming that. [See Box 5.5 for further discussion of this point.]

Eric: I agree that's a trap, and I hope my question didn't assume or imply that. What I was trying to get at was the difference between her imagery experience being indeterminate regarding the presence of cars, and her definitely remembering that fact, and her simply not remembering well enough what her imagery experience was to say whether there were cars in it.

Russ: My guess from watching Melanie is that all this conversation has little to do with what her experience of the moment is. [Melanie and Eric laugh] And I think the reason for that is that for her to be able to accurately answer any of these questions, she'd have to have a veridical copy of the image and compare what she was reporting to what was actually happening, which of course she doesn't have. [See Box 8.2 for a qualification of this.]

**Box 8.2. Would Melanie need a veridical copy to answer Eric's question?**

Eric: I think you've overstated your point here, Russ. Melanie could answer this type of question without facing the epistemically impossible task of comparing her memory of the image to a veridical copy of the image. She does, in fact (as I interpret her; I know you disagree: see Box 7.8), answer analogous questions in Beeps 2.1 and 2.2 (saying that she positively remembers indeterminacy in the position of the soldier's legs and in the presence or absence of insignia) and she

goes on again to answer this type of question below. I don't know whether we should believe these answers, but I do think that at least in principle a person might be able to remember whether an image, or some aspect of it, was sketchy or indeterminate.

Russ: The phrase "I couldn't tell you [whether there were other cars in the image]" is ambiguous – purposefully, strategically ambiguous, I think – between (a) "I couldn't tell you because I don't remember" and (b) "I couldn't tell you because the image no more specified whether there were cars there than it specified whether the Tower of Pisa leans right or left". I don't think we can unequivocally determine which option to support: Too much hinges on too small details.

Thread: Melanie's trustworthiness: Details. Previous: Box 8.1. Next: Box 9.6.

Thread: Visual imagery: Detail. Previous: Box 7.8. Next: Box 8.3.

Eric: Okay.

Russ: So what I hear her to be saying is something like, "I'm confident that I was seeing, that this was a visual experience. And I'm confident that in this visual experience was my hands on the steering wheel and the frame of the car I'm looking out. And I'm confident that there was the road and the stop light. And I'm confident that there were buildings that looked like real buildings and that I had

no reason to think that these were sketchy or schematic buildings, but I don't know which buildings or which intersection. And there may or may not have been cars – that I don't know." And beyond that, it seems like we've gotten pretty much to the limit of what she can say.

Eric: Yeah, right. I assume she's nodding [laughs].

Russ: She is!

Melanie: Yes [laughs].

Russ: She looks happier now than she did five minutes ago.

Eric: [laughs] That seems fair. Maybe there is no way to determine from our vantage point now whether what she's not confident about is a result of the failure of memory over time or a result of its not being there in the experienced image immediately prior to the beep.

Russ: And I think that's true. I think we just can't make that determination, and she's nodding as if she agrees to that.

Eric: Right.

Melanie: Well, I would say that my inclination would be towards those cars weren't in the image. I was looking straight ahead; I didn't see anything out of my peripheral vision. I was mainly concentrating straight ahead. I can see room for the explanation of that, that there was an entire picture with things that could be in my peripheral vision. But all I was concentrating on, and all that was "in my awareness," quote unquote, was directly straight ahead of me.

Eric: Um hm. Although I would have thought that the buildings would be more peripheral than the cars on the street in front of you.

Melanie: Well, no, because I was pulled up, like I was the first car at the stop light.

Eric: Um hm.

Melanie: So there wasn't a car in front of me; that wasn't a question. There weren't any cars ahead of me; I could tell you that. Like there weren't any cars waiting at the stop light across the street. But it's on the perpendicular road of this

intersection that I couldn't tell you, where looking at those cars really would be more peripheral than the buildings would be.

Eric: Um hm, right. So the cars on the street you were crossing would be more peripheral. But any cars on your street, even if they were, say, parked by the curb a couple of blocks ahead of you on the street…

Melanie: Right. Those weren't there, I can tell you that. Those weren't there. There weren't any cars directly ahead of me. It was just the road.

Eric: So the road was in a way strikingly empty?

Melanie: Yes.

Russ: Or at least empty.

Eric: [laughs] Or at least empty. Maybe "strikingly"… yeah, okay. So maybe that means it wasn't strikingly empty. I think the reason I said "strikingly" here was that it would be striking, in retrospect, if there was a road big enough to have a stoplight, and straight, and you can see all the way down it, and there were no cars coming or going on it in front of you and no cars parked on the sides.

[Here we've excised a discussion of Eric's use of "strikingly." See Box 8.3.]

**Box 8.3. "Strikingly" and bracketing presuppositions. Detail in imagery**

Eric: I think my agenda in asking this question was a suspicion that Melanie may have conflated the absence of a fact with the fact of an absence. The use of "strikingly" then, was to motivate Melanie to reflect on whether there really was a positive fact of the absence of cars, which might have been a striking feature of the image if true.

Russ: I certainly agree that it's possible that Melanie has conflated the absence of a fact with the fact of an absence. And I agree that it is legitimate to attempt to discover, to the best of our abilities, whether such a conflation has taken place.

But there was no hint of strikingness in Melanie's description, so this question may reflect a presupposition that if an inner seeing (an "image") includes a feature that would be unusual in reality (such as an empty major road), then the discrepant feature must be or is likely to be striking. My work shows that that is simply not the case. Inner seeings do not follow the same rules as seeings in reality. We've had at least one pretty clear example already from Melanie: She was seeing Stukas that actually looked like F-18s (Beep 2.2; Box 5.9). In reality, that would be striking, but in Melanie's inner world, it was quite matter of fact. Similarly, it makes sense to understand that Melanie was not interested in the

"carlessness" of her intersection representation, and therefore that was not apprehended as being at all striking.

Such unbracketed presuppositions cloud our ability to hear what Melanie is saying and

diminish our effectiveness in helping Melanie to describe accurately. She responded "yes" to your question, despite the fact that there was probably nothing striking at all about the carlessness of her innerly experienced road at the moment of the beep.

Eric: I hope I was not presupposing what you suggest. I continue to worry, however, that Melanie overspecifies the detail in her imagery. This worry arises from a general inclination to think that people often overdescribe their visual imagery when they ascribe this level of detail to a momentary image. Such overdescription may come in part from analogizing images to photographs (see Box 5.2) and in part from something like the "refrigerator light phenomenon" for imagery coupled with reconstruction in the reporting (see Boxes 4.18, 4.20, and 5.4).

This worry, too, is based in "presuppositions," I suppose. But without such presuppositions, how can one have a sense of what warrants suspicion, so one knows where to press and where to accept? Although I go astray with the question here, I do think that Melanie probably would not be acknowledging as much indeterminacy in her images as she now does had my suspicion of the specificity

in her reports in Beeps 1.3 and 2.1 not led me to press her on the matter in a way that you did not. Have I simply bludgeoned Melanie into adjusting her reports toward my preconceptions? I hope not, but it's a tangled issue.

Russ: In my thinking, bracketing does not mean ignoring antecedent senses of plausibility. I think it is legitimate to ask with special care about issues that you think (antecedently or presuppositionally) warrant suspicion. The object of bracketing is (a) to avoid the bludgeoning to which you refer (and I think we did avoid that with Melanie); and (b) to be open to answers to those specially careful questions that go in a direction opposite to the presupposition. In these interviews, for example, despite your careful questions, Melanie consistently describes substantially more image detail than your presupposition would have expected. It seems to me that that you should let that weaken your confidence in (not eliminate completely, to be sure) your presupposition.

Thread: Bracketing presuppositions. Previous: Box 7.13. Next: Box 8.5.

Thread: Visual imagery: Detail. Previous: Box 8.2. See also Ch. 3.2.

Russ: We can obviously revisit this later, but it seems pretty convincing to me. And are we ready to move on to the other portion of this experience?

Eric: I guess so, yeah.

Russ: Which was the feeling of anxiety as I recall. What was that like?

Melanie: It was more at the back of my mind. It wasn't as clear, I'd say, as the image was, this feeling of anxiety. It was almost as though I was monitoring myself again, like one part of me – kind of me in the back of my mind – was monitoring what I was feeling at that time and noticed that these thoughts about what I was going to do this morning, and the fact that I had this appointment and everything this morning, went from being an idle thought to something I became quite focused on. It was after the beep that I noticed I was actually a little bit more tense, after I thought about it, than before. But it was just a general feeling of anxiety about wanting to be there on time.

Russ: Okay. So I'm a little confused about this experience. Is the feeling of anxiety a head kind of thing? Or a body kind of thing? Or both or neither one?

Melanie: Both.

Russ: And what do you mean? What's the body part? What's the head part?

Melanie: The head part is knowing that it was anxiety that I was feeling.

Russ: So there's some kind of cognitive awareness…

Melanie: Yeah.

Russ: … cognitive understanding, apprehension, not in the negative sense, but the seeing of anxiety?

Melanie: Right. And then bodily, it was just focusing more, much more intently on something. That was the main bodily aspect of it.

Russ: So your body seemed focused?

Melanie: Yeah.

Russ: On anything in particular?

Melanie: Just the thought.

Russ: And the thought being this image of the car or the thought of…

Melanie: The thought of this appointment.

Russ: So there was a thought of the appointment?

Melanie: Um hm.

Russ: Well, maybe we should start there.

Melanie: Uh, okay.

Russ: What was the thought of the appointment about?

Melanie: Stepping back a little bit, what I was doing last night was kind of running through things I have to do today…

Russ: Okay.

Melanie: … and I remembered that I had to come here at 9:30, and then the next thing that came into my head was that I had this appointment at 11:15. And then I was thinking in my head that that appointment is all the way across town. And that's when I started feeling the anxiety. And at that exact moment, after thinking that this appointment is all the way across town, this mental image slipped into

my head of seeing the intersection of the car and driving all the way across town, and having an anxious feeling of worry about getting there on time.

Russ: Okay, and so is the thought "I've got this 11:15 all the way across town," is that still there or is that here and gone by the time of the beep?

Melanie: Here and gone.

Russ: But the anxiety that that sort of aroused…

Melanie: Is there.

Russ: … or engendered is still there?

Melanie: Um hm.

Russ: And in what way is that there?

Melanie: It's lingering. I'm not fully engaged in it, but it's still there like at the back, kind of at the fringes of my thoughts and feelings.

Russ: And is it possible to say what it feels like? what it thinks like? what it…

Melanie: I couldn't tell you at that time, but probably I had my brow furrowed and was staring at something pretty intently. But I didn't know this at the moment of the beep.

Russ: Okay, so at the moment of the beep there was a sense that you were anxious?

Melanie: Um hm.

Russ: And that sense was partially bodily and partially…

Melanie: Mental.

Russ: … mental. And the mental seems to be in the back of your mind, you said?

Melanie: Yeah.

Russ: And when you say "back of your mind" your hands are going…

Melanie: Yeah, it actually felt like it was in the rear of my head. [laughs]

Russ: Okay. So there's some mental process that seems like in the rear of your head?

Melanie: Um hm. [See our discussion of this issue in Box 7.12.]

Russ: So this isn't a feeling in the back of your head…

Melanie: No.

Russ: This is a mental process that seems like it's in the back of your head, which is this awareness of…

Melanie: Of being anxious.

Russ: … being anxious.

Melanie: Um hm.

Russ: So it's not just that anxiety is in your body, but that there's a mental…

Melanie: Cognitive aspect of knowing that I'm anxious.

Russ: …cognitive aspect of knowing that you're anxious.

Melanie: Um hm.

Russ: Okay. [to Eric] Your turn.

Eric: So were you actually having the thought, "I'm anxious"?

Melanie: No. It's not like inner speech or inner hearing or anything like that. It's just this knowledge that I'm anxious, if that makes sense.

Eric: Right.

Melanie: Like a mental or bodily knowledge. I'm not saying to myself "Oh I feel anxious right now" or anything like that. And I don't hear rattling in my head or in my mind, or having a thought saying that I feel anxious.

Russ: Is this a mental knowledge of anxiety?

Melanie: Yes.

Russ: So some cognitive, or thoughtful, or whatever…

Melanie: Right.

Russ: … understanding of that…

Melanie: Yes, but it's not like having the words pass through my head or anything like that.

Eric: So would you say that you're not just having the experience of anxiety, but that there is some kind of awareness of that experience?

Melanie: Yes.

Russ: And that that "some kind of awareness" is pretty hard to articulate.

Melanie: Yeah.

Russ: It's clearly not in words...

Melanie: Right, and it's not something that I'm hearing or reading or seeing.

Russ: But it's also not not there either. It is an awareness. So there's some cognitive understanding of being anxious.

Melanie: Yes.

Russ: Okay. And the bodily portion of being anxious isn't apparently much more differentiated than the thought portion?

Melanie: It wasn't until after the beep.

Russ: Okay.

Melanie: After the beep I noticed that I was a little bit tense, but not before.

Russ: And so at the beep was there in your awareness any…?

Melanie: No.

Russ: So at the very precise moment of the beep is it true to say that really the only portion of the anxiety was the knowledge of the anxiety?

Melanie: Um hm.

Russ: So what's happening is that there is something in your body, which is experiencing anxiety, but you're not aware of that [See Box 8.4 for a comment on the use of "experiencing" here.]

**Box 8.4. On the use of the word "experiencing" here**

Russ: I shouldn't have used the word "experiencing" here, since I'm trying to ask whether the body is undergoing anxiety without that fact being part of her inner experience. However, I think Melanie knew what I meant, as the subsequent dialogue indicates.

Melanie: Right.

Russ: But there's also some kind of a thought process that knows that that process is going on, and you are aware of that.

Melanie: Um hm.

Russ: Okay, she seems confident in that now.

Eric: [laughs] I'm confused. So…

Russ: So shall I summarize the way I understand it?

Eric: Okay, yeah, why don't you?

Russ: A second or so before the beep she had been thinking, "Oh I've got this appointment across town. That's going to be tight," or something like that. And that had caused, I guess, a wave of anxiety that was probably in her awareness, but we didn't beep her then so we don't really know that for sure. So now at the moment of the beep there is apparently a bodily process that's related to this anxiety, but that bodily process seems to be outside her awareness. When beeped and called to take a look at it, she can see, "Aha, yeah, there's some anxiety going on in my body." But what is in her awareness is some kind of thoughtful apprehension of the anxiety process. So even though the anxiety process isn't in her awareness directly, the thought about, the recognition of, the knowledge about that, is in her awareness in a not-particularly-articulated way that seems somehow

to be in the back of her head, a mental process in the back of her head. And then all at the same time is what seems to be the center of her attention, which is the image of the intersection. [looking at Melanie] She seems to be pretty happy with that reconstruction. [See Box 8.5 for discussion of the possibility of experiencing the awareness of anxiety without the anxiety itself. See Box 8.6 for discussion of Russ's use of "awareness" here and elsewhere.]

**Box 8.5. Knowledge of anxiety without the experience of anxiety. Judging others by oneself, continued**

Russ: Possibly Melanie experienced herself as being anxious at some past time, and that emotion-experience started a thought process that has "outlived" the emotion-experience for a moment. Or possibly Melanie has two fairly separate and parallel processes, one cognitive and one emotional, and her cognitive process may be able to understand herself as being anxious without ever having experienced the anxiety.

Such things may seem impossible or improbable. I myself certainly don't experience anxiety that way (as far as I know). But that seeming improbability is a presupposition about the way anxiety takes place. Bracketing that presupposition means not judging others by oneself, not presuming that what Melanie says is wrong.

Eric: Maybe such things are common; I don't know. However, as I argue elsewhere (Box 9.9 and Ch. 10.6), I think it makes sense to be warier of – I don't say completely reject out of hand – Melanie's reports when they don't jibe well with the results of other approaches, including one's "armchair" sense of one's own experience. Am I thereby "presuming" that what Melanie says is wrong? I don't think so: I'm just not ready to buy uncritically every report that survives the interview process.

Thread: Bracketing presuppositions. Previous: Box 8.3. Next: Box 9.9.

Thread: Emotion. Previous: Box 7.9. Next: Box 8.8.

Thread: Retrospective and armchair generalizations. Previous: Box 5.17. Next: Box 8.7.

**Box 8.6. On Russ's use of the word "awareness"**

Eric: Here, and often throughout these interviews, Russ, you use the word "in awareness" as synonymous with "innerly experienced" or "in consciousness." I think that phrase invites confusion between a phenomenal and an epistemic sense of the word "awareness." Thus, in one sense, the phenomenal sense, to say that a thought was "in awareness" is simply to say that it was conscious or experienced. In another sense, the epistemic sense, to say that a thought was "in awareness" is to say that one is aware of the thought – that is, that one stands in some particular

epistemic relationship to it, that one knows in some way that the thought is occurring.

Some philosophers have argued that awareness in the first sense is necessarily accompanied by, or tantamount to, awareness in the second (see Box 6.1; D. Rosenthal, 1986, and Lycan, 1996, emphasize that this awareness might itself be nonconscious), but that is a substantive philosophical thesis to which I don't think you want to be committed.

Russ: I don't want to be committed to that or any other tightly-defined thesis. My methods simply don't address such issues.

There is no perfect word or phrase to describe the phenomenon I am after; each locution has its advantages, disadvantages, connotations, and theoretical implications. I therefore explicitly try to use a variety of phrases more-or-less interchangeably, thereby indicating that I do not favor any one set of advantages/connotations/implications: "Is … in your awareness?" "Do you experience…?" "Is … in your inner experience?" "Are you paying attention to…?" as well as, once the subject has the general idea, more neutral phrases like "happening" or "going on with you." My subjects are almost never confused by these terms and, like me, treat them interchangeably. It is clear enough what the questions are about that the particular label is irrelevant.

Eric: I see your motivation. I wonder, though, whether using all these terms interchangeably may invite certain responses. Using "aware of the emotion" and

"experienced the emotion" interchangeably may invite the view (e.g., in Melanie?) that we are always epistemically aware of our experiences; using "paying attention to" and "experiencing" interchangeably may invite the view that we only experience what we attend to (Box 4.8), or it may suggest that the interviewer is only interested in the objects of attention.

Is it so abundantly clear what your questions are about? I think it is abundantly clear that central features of one's experience immediately prior to the beep are the principal topic of discussion. But maybe it's too much to expect Melanie to be accurate about matters such as exactly how to characterize her self-knowledge, the existence or non-existence of a periphery of experience, indeterminacy versus forgetting – issues that may require some theoretical discussion before one sees exactly what's at stake and what one particular answer or another means, exactly. (See also Box 5.14.) Even if Melanie can eventually be brought to see what is at stake, commitment to one answer or another early on in the process may frame and bias later discussions.

Russ: The "fact" of my DES interviewing with many different people is that most people who report emotion do so in your phenomenal sense with no epistemic reference; they say things like, "At the moment of the beep I was feeling anxious" and confidently deny any experience (cognitive or otherwise) of a separate observation of that emotion. I ask about that distinction with other subjects with at least the same care and probing as we did here with Melanie.

Thus Melanie's report here (and elsewhere) is quite different from those of most other DES subjects. Therefore I don't think it's true that my questions "invite" the report of epistemic awareness. It is of course possible that Melanie interpreted my (our) questions in a different way from that of most subjects, and that the questions did in some way "resonate with her proclivity to give epistemic reports." But another possible explanation is that Melanie's experience is quite different from that of most others.

Thread: Self-Awareness: General. Previous: Box 6.4.

Thread: Interview techniques. Previous: Box 7.3. See also Ch. 2.2.

Thread: Loose language. Previous: Box 7.9. Next: Box 8.9.

Eric: Hmm… so I guess I'm wondering… let's see, um… So you had some anxiety but you say that you weren't experiencing the anxiety then? You didn't have an experience of it?

Melanie: Well, I was experiencing it. I don't know. We're coming again into this whole quandary between consciousness, awareness, experience, you know, picking the right word out. [See Beep 3.2 and Box 8.6.]

Eric: Right.

Melanie: My body was experiencing it somehow. But the way I found out how it was experiencing it wasn't until I reviewed what I was thinking about after the beep took place, when I noticed that I was a little bit tense and much more focused on this thought that I was having than the idleness of the thought that had come before. But at the moment of the beep I wasn't aware of that tension and I wasn't aware of that focus, but I was aware of the fact that I was feeling some anxiety.

[Some of Russ's and Eric's remarks from the following discussion have been excised for brevity; the principal themes are addressed in the boxes.]

Eric: I remember a discussion of emotion in a previous sample where you were feeling aware of the emotion at the same time it was going on. [See Beeps 3.2 and 4.1.]

Melanie: Um hm.

Eric: Now in that case I thought that you had said that you had both the emotion itself – the emotional experience – and (although maybe these two things aren't separable) the awareness of the emotion, maybe not integrated with the emotion

itself. Whereas here maybe you're saying you just have the awareness without the underlying thing?

Melanie: Yeah.

Russ: And my sense of it is that for Melanie that's part of what is the emotion. It's not like there's the emotion that's in her body, and then there's an analytical thing that's watching the emotion. It's that the emotion in her body and the watching of it are sort of wrapped up together as the emotional experience. This is the way Melanie experiences emotion – as both a bodily and a mental watching kind of thing. And that might be different for Melanie than for some other people, but that's her version of emotion.

Eric: Right. I don't know. I guess I'm somewhat skeptical still. I'm not saying that that's impossible, but it would seem to me – my first guess would be – that a lot of times we have emotional experiences, but normally we aren't really attending to those emotional experiences as we're having them. Now there are probably cases in which we think, "Oh, you know, I'm angry. Why am I angry?" But most of the time you're just angry, or sad, or anxious, or whatever, without thinking about that fact at the same time that it's going on. So it seems to me a little funny that Melanie seems to be reporting in general that she's thinking about

the emotion as it's happening. And it seems in this case even a little funnier that she's kind of thinking about the emotion but there isn't the underlying emotional experience at all. I'm not saying it's impossible, but I guess I'm not wholly convinced.

Russ: Well, I'm pretty sure I don't do it that way, and it sounds probably like you don't do it that way. But that doesn't necessarily mean that Melanie doesn't do it that way.

Melanie: Because I mean I was just… sorry to interrupt…

Eric: That's fine.

Melanie: … but I was just saying that in most, if not all of the cases when I have been experiencing an emotion there's a mental component tied into it. There's both going on at the same time.

Russ: Right. And that's not the way most people are. That's the way Melanie happens to be. That's part of what makes Melanie Melanie as opposed to June or Sally or something [Melanie and Eric laugh]. So we've got to make sure we're talking about the idiographic Melanie rather than people in general.

Eric: Yeah, right, and I'm not sure how much variation there is between people. But it's such a complex set of issues [see Box 7.4].

Melanie: I was remembering that we've talked about the different kinds of emotion [see Beep 3.2]. There are emotional processes in the body; and there is the experience of the emotion itself; and there is the cognitive awareness that you are having the emotion. I remember when we were having that conversation I had a lot of trouble understanding the experience of emotion without any cognitive... without knowing that you're feeling anything. That made no sense to me until I really tried to work it out, and finally I figured it out: "Oh! I guess that sometimes people must just feel the emotions!" But even then I had trouble. How do you feel anger without knowing that it's anger? It's something I still have trouble comprehending in some ways.

Russ: Right, so you're at an opposite sense of where Eric is. Eric is thinking, "Well, how can you have emotion <u>and</u> have the thought [every time]?" And you're thinking, "How can you have emotion <u>without</u> having the thought?"

Melanie: Yes, exactly.

Russ: And I think that's the deal. You grew up doing it your way, and he grew up doing it his way and you both assume that everybody does it the same as you.

Melanie: [laughs] Yeah, exactly.

Eric: [laughs] I'm not sure exactly where we ended up with this, but at least my thought at the time had been that maybe there were three different levels at least conceptually possible. One or more may not be possible in reality, or not very common in reality, but they're at least conceptually possible. Those three are first what I think Russ calls an emotion fact-of-body, which would be just the fact that, say, your heart is racing or you're tensed up; and then there is a second level which would be having the kind of subjective experiences that are associated with that kind of emotion; and then the third is an awareness, a kind of meta-cognitive awareness, of the fact that you are having that emotion. My thought would be that when you get to the third level, the meta-cognitive awareness of the emotion as it's going on, that that would be…

Russ: That's different from what Melanie's reporting here.

Eric: It is?

[Here Russ and Eric enter a long discussion about levels of self-awareness and the connection between awareness and experience (see Beep 3.2 and Box 8.6) – a discussion in which we fail to agree on the last point at issue above, and in which we sometimes misunderstand each other (but not productively enough to merit detaining the reader). Melanie does not comment. Against armchair introspection, see Box 8.7. See Box 8.8 for Russ's description of how most people experience emotion. See Box 8.9 on whether Melanie's emotional experience is different from others'. Because of the length of this discussion, we examined only this one beep from Melanie's fifth sampling day. ]

**Box 8.7. Against armchair introspection**

Russ: There are two main reasons that I am strongly opposed to armchair introspection. First, and less important, is that armchair introspectors don't agree with each other. Eric, for example, believes that there is visual experience present (nearly) all the time (see Ch. 10.3). Many others including John B. Watson (1925) and Baars (2003) believe that inner speech is present (nearly) all the time. Still others believe that people experience a continuous stream of affect (D. Watson, 2000). And so on. I see no reason to prefer one account to the other.

Second, and more important, is that many of my subjects come to disbelieve some aspects of their own armchair introspections as a result of their sampling. Melanie is a rather typical subject in this regard. For example, Melanie's armchair

version of herself was unaware that she paid direct attention to her sensations: She was surprised that she noticed the cold of her feet (Beep 2.3) and the gooiness of the toothpaste (Beep 2.4), for example. Melanie herself, very like most other subjects, didn't reject the accuracy of her DES observations; she rejected the adequacy of the armchair version of herself. I don't believe I have ever had a subject who, when confronted by such a discrepancy said, "I think my armchair view was right and the DES 'discoveries' were incorrect."

There are some subjects whose armchair versions turn out to be quite accurate – their samples fit nicely in their armchair framework. Thus, I am not claiming that armchair observations are not true. I'm claiming that they are often not true, and I have not figured out a way, other than descriptive experience sampling, to discern which are true and which are not. In my experience, the size of the discrepancy between the armchair version and the DES version does not depend on the level of sophistication of the subject or the confidence of the armchair observer.

Eric: I'd be the first to agree that armchair generalizations about conscious experience are often quite radically mistaken; this is common ground between us. It also seems likely to me that many of your subjects have a better understanding of their own experience after having sampled with you than before, though it wouldn't surprise me if they walked away with some false impressions as well –

as, for example, Melanie might if she now thinks she experiences emotion very differently from how most other people experience it (see Box 8.9).

It would be a mistake, though, I think, to treat sampling interviews as a silver bullet methodology against which all other methods must be tested for validity. All methods for studying conscious experience, including DES in my view, are seriously problematic: The stream of experience does not admit of straightforward measurement. The best we can do in reaching our final judgments about experience is to balance considerations from a variety of doubtful sources, including both sampling interviews like this one and armchair introspection.

By the way, the view that there is nearly constant visual experience (which I do tentatively accept) need not be taken as contrasting with the view that there is nearly constant inner speech and/or emotional experience, if one holds that the stream of experience is rich (see Box 4.8).

Thread: Retrospective and armchair generalizations. Previous: Box 8.5. See also Ch. 11.1.7.7.

**Box 8.8. How most people experience emotion**

Russ: I think it would be useful here to summarize how most of my subjects experience emotion, as revealed by my sampling procedure. I am convinced that the differences I describe here are not merely variations in report.

First, nearly all subjects make a clear, unshakeable distinction between thinking and feeling. They may use different words, but the distinction seems obvious to them. When pressed for the source of this obviousness, they are typically frustrated and say something like, "Well, this is thinking and that is feeling!" as if that were an irreducible fact of experience.

Second, some people experience emotion as being primarily in their bodies; others experience emotion as being primarily in their heads. Here again, these descriptions are made with confidence. Furthermore, subjects who report that emotions are in their heads are not at all confused about the distinction between thinking and feeling. "They're both in my head, but one's thinking and the other is feeling!"

Third, some people's emotion seems to be entirely cognitive. That is, they think their feelings. They don't feel angry; they are angry in some cognitive way. (This is not necessarily the same as saying they feel the emotion in their heads.)

Fourth, even if emotion is experienced in the body, it is difficult for many subjects to pin down exactly how or where in the body it is experienced, although a minority experience extremely clear bodily referents for their emotion, such as "deep in my chest, right here (points), in a region about the size of my fist, and then with less intensity throughout the rest of my chest."

Fifth, many subjects report emotion frequently or almost always; many other subjects report emotion not at all or rarely.

Sixth, most subjects who experience emotion (either in the body or the head) explicitly deny the existence of some cognitive/mental/thoughty monitoring/appraisal/observation of their emotions. Unlike Melanie, most of the time they simply feel their emotions.

Seventh, emotional processes can be ongoing in the body without being immediately noticed. I call such emotions "feeling-fact-of-body" (see Box 6.2).

Eric: I guess I'm still inclined to think that some of this might be variation in report only, rather than variation in the underlying emotional experience (see Box 8.9, the transcript of Beep 6.4, and Chapter Three, section 3). But how to sort out which is which? Well, that's the big stumper – the essential issue we need to address before consciousness studies can get traction as a science. You think you've figured it out, Russ, but I'm still flailing!

Thread: Emotion. Previous: Box 8.5. Next: Box 8.9.

Thread: Human similarity and difference. Previous: Box 7.12. Next: Box 8.9.

Thread: Self-Awareness: Melanie's unusual. Previous: Box 7.11. Next: Box 8.9.

**Box 8.9. Is Melanie's emotional experience different from others'? Emotional self-awareness**

Eric: Melanie has become convinced, on the basis of our discussions of this sample and a few others, that her emotional experience is different from most other people's in being more analytically self-aware (e.g., Beep 3.2, Beep 5.1, p.

**** [Ch. 8, p. 13 and p. 26-27], Beep 6.1, Box 9.3 and immediately before, Beep 6.2, p. **** [Ch. 9, p. 20 bottom]). While I would not be surprised to find that Melanie is in some way more self-conscious or self-observational than most people, I find it difficult to imagine that her emotional experience is as radically different from others' as seems to be implied here – i.e., that she never, or hardly ever, has an emotional experience without also reflecting on the fact that she is having that experience, while most people simply feel their emotions and only rarely reflect on those emotions as they occur (see Russ's sixth remark in Box 8.8).

Emotional experience is at least sometimes hard to describe (as Russ mentions in Boxes 5.13 and 8.8). The connection between self-awareness and consciousness is a tricky one, both to understand and to articulate (see Beep 3.2 and the accompanying boxes; also Boxes 8.6 and 9.4). Melanie might easily get tangled up here, especially if she is driven by a theory or self-conception and consistently overdescribes the extent of self-awareness in her emotional experiences – or consistently uses language that we misinterpret as signaling a higher-than-usual self-awareness. This is dangerous and confusing territory, and I wonder whether subjects might seem to have big individual differences only because they slip into different patterns of describing what really is the same thing, just because it's so murky.

So, for example, there seems to be a space between having a "feeling fact of body" with no accompanying emotional experience at all (Box 6.2) and having vivid emotional experience accompanied by an acute self-conscious thought about that experience. I cut it into three levels (Beep 3.2, transcript), but maybe it's more like a continuum – maybe even a continuum in two different dimensions: extent or intensity of experience, on the one hand, and self-awareness or self-knowledge of that experience on the other (with "feeling fact of body" being zero on both dimensions). Maybe these dimensions are separable, maybe not. My guess is that, given the difficulty of thinking through and articulating such issues (to what extent, or in what way, was I "aware of" my anxiety at the moment of the beep?) subjects might find ways of speaking that work well enough to get the approval of the interviewer – ways of speaking they then repeat in describing future experience. But these different ways of speaking may not reflect real, underlying differences in the overall structure of their experience.

I suppose it seems likelier to me that something like this is going on than that Melanie's emotional experience is constantly attended by self-reflection in a way radically different from mine or other people's.

Russ: To be fair, I am at least as convinced as is Melanie on this point. If Melanie sees herself as different from others, she probably learned much of that from me. I think we have evidence on a number of fronts that Melanie, unlike many or most others, has a distinct self-aware or self-observational characteristic.

Melanie has a separated self-awareness for many of her experiences, not just her emotional experiences. For example, she was specifically aware of her mouth closing as she talked in Beep 1.3. That is a quite unusual characteristic of the experience of speaking.

I see no positive evidence that Melanie is confused about the terminology of self-awareness and substantial evidence that she understood the distinctions and was not confused. But I accept that with any single subject, one cannot be sure.

Eric: We ourselves were confused! (See our last three conversational turns and the concluding bracketed remark.) I'm still confused.

Thread: Emotion. Previous: Box 8.8.

Thread: Human similarity and difference. Previous: Box 8.8. Next: Box 9.9.

Thread: Loose language. Previous: Box 8.6. Next: Box 9.4.

Thread: Melanie's trustworthiness: Attunement to distinctions. Previous: Box 7.8. Next: Box 9.6.

Thread: Melanie's trustworthiness: Unusual claims. Previous: Box 4.14. Next: Box 9.3.

Thread: Self-Awareness: Melanie's unusual. Previous: Box 8.8. Next: Box 9.3.

## Chapter Nine

## The Sixth Sampling Day

### Beep 6.1

Melanie: Okay. Some of these were taken from last night, and some were from today. I was in a restaurant with my boyfriend having dinner. We were talking about the All Star game that was on last night, discussing how this year is this whole new thing where whichever team, National or American, that won the All Star game would get home field advantage for the World Series. And we were trying to remember how they divide up the games in the World Series between the National and American fields. He said, although he thought it was wrong, that they did it three games in one place, two games in another place, and then two games somewhere else. And then I said, "But that doesn't make any sense because that means that one stadium gets the World Series games five times if you play all seven games." And then the beep went off. So the beep happened right when I said "that means one stadium gets the World Series five times" beep.

Russ: You were saying that out loud?

Melanie: Um hm.

Russ: You were in the midst of saying “that means….” And what, if anything, is in your experience other than your saying this.

Melanie: A feeling of conviction that what he said was wrong.

Russ: And can you tell us more about this, how you know this is a feeling of conviction, what it feels like, and…?

Melanie: Um… I think probably being a little bit more assertive in what I’m saying is part of it, and just a certainty that I’m right.

Russ: Okay. So if an unbiased observer were watching your conversation, would that observer be able to say, “Well she’s being definitive here”? Are you saying that there are characteristics of your voice that…?

Melanie: Yeah.

Russ: Okay. So these are externally observable characteristics.

Melanie: Um hm. And although it certainly wasn't in my awareness at the time, I probably leaned forward a little bit, kind of, so there was body language.

Russ: Okay. And was there anything other – I think you said that there was but I don't remember what it was now – anything other than the certainty in your voice that led you to…?

Melanie: I can't really get any more specific than this, just the feeling of knowing that what I was saying was correct.

Russ: And is that feeling of knowing, is that describable in any more detail? Mental? Physical? Bodily…?

Melanie: It's mental. It's not physical or bodily. It's definitely mental but… beyond that, no.

Russ: So it's not just that your voice is more definitive. There is some awareness beyond just the recognition of the characteristics of your voice that you are right about this.

Melanie: Yes. Um hm.

Russ: Okay. But we're not finding any way to describe it other than this is some kind of a mental event.

Melanie: No.

[For brevity we have excised, here and elsewhere in this sample, some of Russ's confirmatory repetitions of Melanie's statements.]

Russ: Okay. And is there anything else going on at this particular moment in your awareness?

Melanie: I was looking at the person I was speaking to, and I was aware that I was looking at him, but there wasn't anything else, like I couldn't tell you what particular part of his face I was looking at, and there wasn't some bit of me noticing what I was seeing. I just know that I was looking at him.

Russ: And when you say "you know that you're looking at him," does that mean in a retrospective sense?

Melanie: No, it means that I know that my eyes are pointed straight forward.

Russ: At the moment of the beep you know that your eyes are on him.

Melanie: Yeah, I'm not looking down and I'm not looking up, I'm looking straight ahead.

Russ: Okay.

Melanie: Which ties into the whole feeling of certainty…

Russ: Leaning forward looking at him.

Melanie: Yeah, and feeling of asserting something.

Russ: Okay. So there is at the moment of the beep some awareness of looking straight ahead…

Melanie: Straight ahead.

Russ: … at this guy. Okay, and anything else?

Melanie: That's it.

Russ: Eric?

Eric: So you said that you knew your eyes were pointing straight forward. Would you describe this as more knowledge about your eyes, then, or knowledge about the thing you're seeing? Or…?

Melanie: Probably knowledge about the eyes as opposed to what I'm seeing.

Eric: So in a way it sounds like, it would be analogous to, say, bodily knowledge that you're faced a certain direction or something?

Melanie: Yeah. More like that than looking directly at something. And picking up what I was looking at. Because I could have been staring at anything, or looking at anything, but I just knew that I was looking straight ahead. [See Box 9.1 on whether she was having visual experience.]

**Box 9.1. Was Melanie having visual experience in this sample?**

Eric: I wonder what Melanie would have said had I asked her whether she had visual experience at the moment of the beep. Is it possible to know self-

consciously that you're looking at something without actually experiencing the thing you are looking at? Perhaps that would be analogous to knowing you have an emotion without experiencing the emotion (Box 8.5)?

Russ: I think our questioning here left a bit to be desired, but my understanding is that Melanie was self-consciously aware of looking straight ahead, rather than simply aware of looking at the person. That interpretation may diminish the apparent contradiction that you point to in this instance.

Two comments: First, as we have noted elsewhere, Melanie's self-awareness here is somewhat unusual in DES subjects; see Boxes 6.1 and 9.3.

Second, I do think, based on my sampling studies, that some people some times (not often) do have the kind of awareness that you describe: self-conscious experience of looking at something without actually experiencing the thing being looked at. (Here, as always, when I say "without actually experiencing" I am not making the I-think-impossible distinction between "totally not experiencing" and "too-slight-to-be-noticed experiencing.") Most often, looking at and seeing are highly correlated, experientially inseparable processes, but DES shows that that is not always the case.

Eric: Let me add one thought to your parenthetical remark. On the one hand, there's the tricky methodological question of differentiating between "no X" and "an undetectable X." On the other hand, there's an issue about whether the phenomena of consciousness might be intrinsically vague – whether there might

be states of mind that are somewhere between conscious and nonconscious, so that it makes no more sense to draw a sharp line separating the conscious from the nonconscious ones than it does to draw a sharp line dividing "tall" men from those that are not tall (at exactly 5'11", say). I see no reason to suppose that "in-between" states, not definitively conscious, not definitively non-conscious, can't exist. Furthermore, given gradualism in the phylogeny and development of brains, there seems to be excellent reason to suppose consciousness would emerge gradually. So maybe "peripheral" experiences (per Box 4.8) exist somewhere in this nether zone?

Yet, for some reason, I can't quite embrace that idea. If Melanie has any wisp of visual experience here – no matter how peripherally, inarticulately, fuzzily, inattentively – then it seems to me that (reportably or not) she did indeed have visual experience, in a peripheral, inarticulate, fuzzy, inattentive way. Either her visual consciousness is a total blank, or she has some hazy beginnings of visual experience. I see no "in between" here. Thus, it seems to me that "being conscious" is more like "having money" than "being tall." Having money comes in degrees. One can have more or less. But having even one cent is having money; and this is discretely different in kind from having not a penny.

However, I'm perfectly willing to acknowledge that my inability to conceive of genuinely indeterminate, in-betweenish cases of consciousness may say more

about my (our?) concepts of consciousness than about the actual structure of the world.

Russ: Your distinctions are too fine for me or my subjects to know anything about. But if you're into metaphor, I think of consciousness as being more like a frozen lake. Sometimes it's clearly liquid, sometimes clearly solid, but sometimes, as when it's patchy or slushy or when there's a slight film of ice not strong enough to support an ounce, whether it's "frozen" comes down merely to the details of the definition.

Thread: Richness. Previous: Box 6.2. See also Ch. 10.3, 11.2.1.

Thread: Sensory Experience. Previous: Box 4.18. Next: Box 9.7.

Russ: And is that part of the feeling of leaning forward, leaning into these words in some…

Melanie: Um hm, definitely.

Russ: So it's not like you knew that your body was intensely focused forwards, and, separately from that, you knew that you were looking forwards.

Melanie: Um hm.

Russ: It was that those things were the same or those were coordinated?

Melanie: Coordinated, yeah.

Russ: Coordinated processes.

Eric: Oh, that's funny. Maybe I misheard what you said before. But I thought that you had said that it was only after the beep that you realized that you were leaning forward, that that wasn't part of your experience at the time of the beep.

Melanie: Well, no, that's right. I didn't know that I was leaning forward; I did know that I was looking straight ahead and I assume that I was leaning forward.

Eric: Uh huh. So you say, then, that you had an experience having to do with, maybe your eyes being pointed forward at the time of the beep, and then after the beep you had an experience of which that was a part, which is a kind of general kind of feeling of leaning forward. Is that what you're conveying?

Melanie: Yes, that expresses it exactly.

Eric: I don't think in previous beeps you've described an experience of feeling certainty or feeling uncertainty about anything you've said.

Russ: I'm agreeing with that.

Melanie: Yeah.

Eric: So is your sense that this is different from your reports about other things that you said in that respect?

Melanie: Well, there aren't many other times when I report that I've actually said something. [Beep 1.3 is the only case.]

Russ: Right.

Melanie: Usually it's inner speech or inner hearing.

Eric: Right.

Melanie: And when it's inner speech or inner hearing there isn't certainty or uncertainty, one way or the other. It's just kind of a thought meandering through my head, for lack of a better word. [See Box 9.2 on Melanie's statement here.]

**Box 9.2. Is Melanie's external speech generally accompanied by certainty or uncertainty?**

Russ: Melanie is making a general statement about herself based on very few samples, so it may well be a faux generalization (see Box 5.17). I think we have to suspend judgment until we have more evidence.

Eric: Below, I suggest that this issue is something that could be explored in further interviews. Now, however, I wonder whether it might be the sort of fine theoretical issue that hangs on details of the subject's report (was there a faint sense of confidence or not? do we always experience some degree of certainty or uncertainty when we express things to ourselves or others?) that may be beyond the scope of this method.

Thread: Limits of DES. Previous: Box 5.14. Next: Box 9.10.

Eric: I don't know whether we'll meet again, but it would be interesting to see whether that's a general feature of your experience of talking, that was maybe particularly salient in this case because it was so strong, or whether it's something that is generally absent.

Russ: Melanie has said sort of all along that she has something like an analytical portion of her, which is watching what she's doing while she's doing it.

Eric: Right.

Russ: And it seems like this is part of that, or similar to that kind of process to me. She's nodding to that.

Eric: Huh.

Russ: When you said, Melanie, that this is "I'm right," is there an affect that goes along with that? Like "I'm right" triumphantly? Or is it "I'm right" declaratively? As a matter of the fact of the world, this happens to be one fact that's right…

Melanie: Yeah, declaratively more than… I don't feel like I won anything and I don't feel superior or anything. It's just a fact.

Russ: So this is a stamp of correctness…

Melanie: Right.

Russ: … more than a stamp of victory.

Melanie: Yeah, it has nothing to do with anything victorious at all.

Russ: Okay. Do you have other questions about this piece, Eric?

[Here we have excised some confusion between Russ and Eric regarding Melanie's purported self-analyticity.]

Eric: When I was doing my own beeping, especially at the beginning, I think I was quite bad at determining the exact moment of the beep. So I'm wondering what your feeling is about the precision with which you're locating what's going on immediately before the beep. I'm wondering whether you're kind of gathering up a bunch of stuff that's in the general time vicinity of the beep and putting it all together as the thing that's going on at the moment of the beep. [See Box 4.13.]

Melanie: Well… I certainly tried to be as accurate as possible. That's probably the only answer I can give with any certainty. But beyond that, I think if I were just doing that kind of "sum up" process, I could add a lot more to it. There is a lot more going on in those seconds right before the beep, because I was looking

around the restaurant and I could add in little bits and pieces about that too, or things that caught my eye, or things that I was aware of hearing in the din of the other people there. But I can say with certainty that at the moment of the beep I wasn't hearing the other people in the restaurant; that wasn't in my awareness, although it had been at one time before. [See Box 4.8 for comments on the possibility of a periphery of experience.]

Eric: Um hm.

Melanie: And I wasn't aware of what was on the TV screens around us, even though I had been just a moment before that because it had something to do with what we were talking about. But right in that moment before the beep it, none of that was there, and I know that.

Russ: So is your question, Eric, something like this: "Is it your opinion, as best that you can give your opinion (and we recognize there's limitations to this), that it seems that if we could take some kind of recording of your experience and then play back this experience, there would be sort of two things going on simultaneously in this recording?…

Melanie: Yeah.

Russ: …There would be the speaking, and the analysis or the conviction?"

Melanie: Yeah. I think that at any time you might try to record my experiences that you would have that specific duality between what I'm doing or what I'm thinking or what I'm saying and this analytical part of me that's watching what I'm doing or what I'm thinking or what I'm saying. [See Box 9.3 on Melanie's possible attachment to seeing herself as self-analytical.]

**Box 9.3. Is Melanie attached to seeing herself as self-analytical?**

Eric: I worry that Melanie is by now – and perhaps earlier – attached to a self-conception that she is unusually self-analytical. This, of course, raises methodological concerns.

Russ: Suppose Melanie is attached to such a self-conception – which I'm not sure is the case. If we were asking her to generalize about her experience (as she does here), it is likely that that self-conception would lead her to select or invent instances that confirm her theory. But in experience sampling, Melanie is confronted with single, concrete instances. Just as having a theory that stop signs are red will not prevent you from recognizing that a particular stop sign is brown if you attentively view a brown stop sign, so also I think if a single, immediately

occurring, sampled experience doesn't include a self-analytical feature, Melanie's self-theory probably will not insert one.

Eric: If the stop sign goes by quickly, I might see it as red, if that is what I was expecting, even if it is actually brown. Experience flows quickly, degree of self-awareness is a particularly murky issue, and she generally reports it (when she does) as only a secondary feature of her experiences.

There's an opportunity for the refrigerator-light error here, as well (see Box 4.18). If she is wondering now whether she is generally self-analytical, that may itself create a presently occurring self-analyticity that seems to confirm her theory.

Russ: Note, though, that Melanie doesn't allow her self-theory about experiencing the mechanical aspects of speech (see Beeps 1.2, 1.3; Boxes 4.11 and 4.14) to influence her judgment below (near the end of this sample) that they are not occurring in this particular case. Instead, the influence is the other way around: the particular observation alters her general self-theory (narrowing "quite often" at Beep 1.3 to "pretty often" here).

Thread: Melanie's trustworthiness: Influence of generalizations. Previous: Box 7.14. See also Ch. 10.4.

Thread: Melanie's trustworthiness: Unusual claims. Previous: Box 8.9. See also Ch. 10.6.

Thread: Self-Awareness: Melanie's unusual. Previous: Box 8.9. Next: Box 9.4.

Eric: Um hm. I'm remembering also now something that you had said when we sampled the speech act by you before [Beep 1.3]. At that time you said that you had the experience – now I'm not going to remember exactly what it was – something like your closing your mouth or the feeling of vibrations in your throat or…

Melanie: Oh right. Yes.

Eric: At that time I think you made a generalization that you thought that was fairly typical for you.

Melanie: Um hm.

Eric: Would you say in this case there was also that kind of stuff going on?

Melanie: No, not here.

Eric: Do you still accept that generalization though?

Melanie: I would certainly say it happens pretty often.

Eric: Uh huh.

Russ: Let me ask a related question. Does the what-we're-calling the analytic process, the "I'm right" part, seem like the same kind of a process as the noting the sensations in your mouth…

Melanie: Yes.

Russ: … or does it seem like a different kind of process?

Melanie: A similar process, if not the same.

Russ: So if that's true, then that seems like the answer to your question, Eric. When she said, back awhile ago [Beep 1.2], "It seems to me like I do this kind of thing a lot," [she actually said at Beep 1.2, "…often. Quite often."] you and I thought that what she meant by that was she pays attention to the vibrations in her mouth. But what she really meant was a somewhat broader thing, which would include things like monitoring herself for correctness, or whatever.

[Here we have excised, and above we have trimmed, some further discussion of the timing of the beep.]

**Beep 6.2**

[Melanie begins by expressing some embarrassment over the fact that she was playing a video game, a rare event for her. Russ and Eric reassure her that there is nothing to be embarrassed about.]

Melanie: I was playing it with someone, and the beep came right after I said, "You're crowding me" in a joking manner. The beep came right after I finished saying that. And at the moment of the beep I was still smiling from having said that remark in a joking manner, and I felt just happy. I was just very happy.

Russ: And when you say that you were still smiling…

Melanie: Um hm.

Russ: … is that smiling in your awareness?

Melanie: Yes, I knew I was smiling.

Russ: So you were aware of the smiling.

Melanie: Um hm.

Russ: And when you say you felt happy, is that also in your awareness at the moment of the beep?

Melanie: Yes, definitely.

Russ: So this is not looking back when the beep goes off and saying, "What's going on with me?"

Melanie: No. I knew that…

Russ: It's "I'm happy and I know it." [See Box 9.4 for a comment on this exchange.]

**Box 9.4. More on Russ's use of "awareness"**

Eric: This is a good example of an exchange in which "awareness" seems to blur between its phenomenal and epistemic meanings (see Box 8.6). You, Russ, maybe

meant to be asking about "awareness" in the phenomenal sense: as in, was your smiling and your happiness part of your experience at the moment of the beep? Melanie takes this to be a question about whether she knew (in some self-analytical way?) that she was happy and smiling at the moment of the beep.

Russ: I disagree. I meant the question in the phenomenal sense, and I think Melanie understood it in the same phenomenal sense. She does use the word "knew," but goes on to clarify that what she meant was not cognitive, but rather that the lightness in her chest was in her experience at the moment of the beep. I don't think we adequately clarified here whether or to what extent this sample is an example of her self-analytical stance, but we do so below.

Eric: I take the statement "Melanie: Very kind of lightweight inside…" to be an attempted clarification of the feeling experience only (the "I'm happy" part) not a clarification of what she means by her claim that she knew that she was happy (the "and I know it" part).

Russ: The words "and I know it" are mine, not Melanie's, and they illustrate that the interview process is imperfect. I was referring, probably too obliquely, to the children's ditty "If you're happy and you know it (clap your hands)." Certainly that ditty asks children about their phenomenal, not their epistemic, awareness, and I meant the question in the same way. I agree with you, Eric, that my question raises an unfortunate (but I think pretty small) ambiguity: we don't

know how Melanie interpreted it. However, I think there is no evidence that she understood me to be asking the epistemic question.

Thread: Loose language: Previous: Box 8.9. See also Ch. 3.3.

Thread: Self-Awareness: Melanie's unusual. Previous: Box 9.3. Next: Box 9.5.

Melanie: Yes.

Russ: And how do you feel, what is this happy feeling?

Melanie: Very kind of lightweight inside, you know, just no pressures, nothing to worry about, just feeling good and feeling happy and almost feeling healthy in a way.

Russ: And when you said "lightweight inside," you went like this, sort of referring to your chest?

Melanie: Yeah, it's like in your lungs, almost like when you have a balloon in your lungs or something like that. Not when you feel choked up, because you can also use that to express that, but just really lightweight, like there's no pressure. It's easy to breathe, it's easy to think and to talk all at the…

Russ: But sort of mostly in your upper torso, does that mean…

Melanie: Yes.

Russ: … neck to midsection?

Melanie: Yeah, um hm.

Russ: So in some other places you've said that you have feelings that were in your head [maybe Beeps 1.1 and 5.1, depending on how you interpret them]. This one wasn't so much in your head?

Melanie: No. This felt all over. But at the same time if I had to just give it a place where it was, it started like around, you know, midsection or upper torso.

Russ: And now it sounds like we're maybe confusing what was happening in the physiology and what was happening in the experience. So at the moment of the beep [snaps fingers], are you more aware of your midsection as opposed to other portions of your body?

Melanie: Yeah, yes.

Russ: So you're feeling this lightness from…

Melanie: Upper torso.

Russ: … upper-torso-ness in your awareness.

Melanie: Yes.

Russ: And anything else going on in your experience?

Melanie: Just that.

Russ: You're playing the game but you're not really paying attention to the game?

Melanie: Well, we weren't playing. It was kind of... We were switching off taking turns, so there was like a pause, you know, and so I was kidding around to the person I was playing with. And at the moment we didn't have to punch a button or something like that, and so it was just like a little break.

Russ: Okay, and are your eyes aimed at the computer screen still?

Melanie: They were down, but I wasn't really paying attention to where they were located.

Russ: And by "down" do you mean at the computer screen? Or…

Melanie: No. It was like an arcade game, so I would say that the screen was kind of straight ahead and the controls were downward, so I was looking toward the controls.

Russ: But they weren't really in your awareness?

Melanie: No.

Russ: Your eyes were aimed at them but you weren't really paying much attention to what your eyes were…

Melanie: …doing.

Russ: Right, okay.

[Here we've excised a brief discussion of her physical situation.]

Eric: So I think that we had said that it was at least conceivable at one point that you could have an emotional experience but not have knowledge at the time that you're having the experience, or attentiveness to the experience at the time it's going on.

Melanie: Okay, yeah.

Eric: And you would say <u>this</u> would be a case in which you were having the experience <u>and</u> you were attending to the experience.

Melanie: Yeah. I was happy, and I knew I was happy.

Eric: And you said you knew you were smiling. Is this an awareness of your facial posture…

Melanie: Yeah.

Eric: … or is it kind of like…

Melanie: It was more like I could feel the smile.

Eric: It's an awareness of having your face in that position…

Melanie: Yes, I think the latter. I could feel that I was smiling, like feel a little tightness in my cheeks – that whole sort of thing that I go through with smiling.

Eric: Um hm.

Russ: And is that part of the awareness of the lightness in your upper torso? Or does that seem like it's different for you?

Melanie: Similar, again.

Russ: And in the beep that we were just talking about, when you were talking aloud, you were aware of facial, mouthful things, oral things. Is this the same or different from that?

Melanie: It's the same.

Russ: So there's what we were talking about as being a sort of an analytical kind of a thing.

Melanie: Um hm.

Russ: So the noticing of the smile is part of the analytical, part of the self-aware…

Melanie: Part, yeah.

Russ: …part. And is the awareness of the body also part of the self-aware part? Or…

Melanie: Um hm, it's like I'm monitoring what's going on at that moment in my body.

Russ: Okay. So it's not just that it's going on in your body and you're noticing it, but you're noticing it in an analytical sense. Is that correct? Kind of self-awareness…

Melanie: Yeah. Almost [laughs wryly] like there's this other little being that's taking notes about what's going on.

Russ: Um hm.

Melanie: That sort of awareness.

Russ: So theoretically, but apparently not for you or at least not very often, it might be possible for a lightness feeling in your body and a smile to take place, and you might know that it would be happening, and you could recognize it and feel it happen, so to speak. But this experience has something on top of that which is…

Melanie: A knowledge of what's going on.

Russ: …and it's sort of in an analytical or self-monitoring kind of way?

Melanie: Yeah. Um hm.

Russ: Okay.

[Here a further discussion of self-awareness, mostly between Russ and Eric, is excised. For Eric's concerns about this exchange see Box 9.5]

**Box 9.5. Consolidating Melanie's sense that she is self-analytical**

Eric: Here you and Melanie are refining and consolidating the idea that Melanie is exceptionally self-analytical – that, unlike most of us, she normally observes her own life or experience in some detached way as it is going on.

I remain unconvinced that Melanie has the radically different kind of inner life that this would seem to suggest. The issues around self-awareness are tricky and the opportunities for miscommunication and distortion ample (see Box 8.9). In some sense, of course, we are all constantly attuned in some way to ourselves, though it's difficult to articulate what exactly this involves. Could Melanie be misreporting, or we misinterpreting, this normal self-attunement as something unusually self-conscious?

I'd probably need to see some kind of evidence not based on self-report before accepting that Melanie differs from the rest of us in this particular way.

Russ: While I think "exceptionally" and "radically" are a bit too strong, I don't think the issues are tricky enough to overrule my sense that Melanie's self-analytical experience is different from most other subjects with whom I've sampled at least as carefully as Melanie.

Thread: Self-Awareness: Melanie's unusual. Previous: Box 9.4..

**Beep 6.3**

In lieu of the full transcript of the discussion of this sample (available on the website), here is a description of Melanie's experience at the moment of the beep as she conveyed it in the interview.

> At the moment of the beep Melanie was still playing the arcade game, standing in front of the arcade machine with her arms crossed, concentrating on what was on the screen. She was very aware of the fact that she was concentrating, and in particular she was noticing that her brow was furrowed, that she was worrying (chewing on) her lower lip, and that she had her arms crossed. She was also aware of the way her feet were placed and the way she was standing. All these bodily manifestations were part of the feeling of concentrating, but they did not exhaust that feeling [see Box 5.15]. She described it as like an inner camera watching what she was doing and taking stock of it. This self-monitoring was similar to that in other samples [e.g., Beeps 3.2, 5.1, 6.1, 6.2], only more so than usual. The content of the video screen was, she said, only about 20% of her awareness.

**Beep 6.4**

Melanie: I was at home. We had some flowers on our kitchen table, and I had taken them to the sink in the kitchen to throw them out because they had gone dry. Right before the beep I had taken the bulk of the flowers out of the vase and tossed them in the trash. Then right before the beep, I was leaning over the sink and picking up the remaining petals and collecting them in my hand to throw them in the trash. I was thinking that those flowers had lasted for a nice long time. It was just kind of an idle thought that was inner speech.

Russ: As in quote, "Those flowers lasted for a nice long time," unquote?

Melanie: Quote, "They lasted for a nice long time."

Russ: Okay.

Melanie: And at the moment of the beep my awareness was split between being focused on picking up the petals and on hearing the echoes of "nice long time" in my head. [See Box 9.6 on Melanie's care here.]

**Box 9.6. Melanie's carefulness**

Russ: Notice that Melanie is carefully distinguishing between before the beep (throwing out flowers), right before the beep (picking up petals and inner speech),

and the moment of the beep (picking up petals and hearing echoes). Melanie also corrects my quotation of exactly what she had said in inner speech. This kind of care increases my confidence in Melanie's report.

Thread: Melanie's trustworthiness: Attunement to distinctions. Previous: Box 8.9.

Thread: Melanie's trustworthiness: Details. Previous: Box 8.2. See also Ch. 10.4-5, 11.2.1, 12.2.

Russ: So you had said in inner speech, "they lasted for a nice long time," just prior to the beep?

Melanie: Um hm, not at the beep but just prior to it.

Russ: But in some way the "nice long time" portion is still there. Is that right?

Melanie: Yeah, it was. The best I can liken it to is an echo.

Russ: And is this a hearing experience? You called that a hearing experience; do you mean that to be taken literally? Or…

Melanie: It was. The "nice long time" bit was. The "it lasted for a nice long time," quote unquote, was inner speech, but this was much more like inner hearing.

Russ: Okay. And when you said it in inner speech, was that in your own voice?

Melanie: Yes.

Russ: And when you're hearing "nice long time," is that still hearing your own voice?

Melanie: Yes.

Russ: And do all of these things sound the same? Because there's your real voice, and then there's the innerly spoken voice, and then there's the heard voice, are they…?

Melanie: No, they sound the same. [Compare Beep 1.1, Box 4.2.]

Russ: Okay. And "echo." I want to understand what you mean by "echo." An echo gets softer and softer; did you mean to imply that? And echo sometimes is repeated and sometimes once but…

Melanie: No, it didn't get softer and softer, it's almost like [quizzically] it got blurrier and blurrier. Not in terms of visual blurry, but a sound blurry [again quizzically], where it just started overlapping itself until it just came to this jumble in which you can't make any noise out. It sounds really weird but…

Russ: So are you saying that you said in inner speech something that was quite clear…

Melanie: Um hm.

Russ: … "It lasted for a nice long time," and then there's "nice long time," "nice long time," overlapped with "nice long time"…

Melanie: Yeah.

Russ: … then "nice long time" overlapped with "nice long time" overlapped with "nice long time"…

Melanie: And it keeps going.

Russ: … until there's sort of several of these things going?

Melanie: Yeah.

Russ: Okay. And is it possible to say how many of these things?

Melanie: No…

Russ: And is it possible…?

Melanie: I think at the moment of the beep it had only been a couple.

Russ: So the part about overlapping a long time would be sort of speculating about what would have happened if this had gone on undisturbed…

Melanie: Um hm.

Russ: … that there would have been more of these things included?

Melanie: Yeah, because it started to overlap, and then overlap a little more. Not a couple, so there were about three or four that echoed in there.

Russ: Okay. And at the same time as these overlapping inner hearings are taking place, you're seeing petals…

Melanie: Yeah, and picking them up, and so focused in the motions of: There's a flower petal, reach my hand down, pick it up, and put it in my other hand.

Russ: Okay. Do you mean that in a cognitive sense? Or in a somehow thinking that I should pick up this petal?

Melanie: No.

Russ: So it's a…

Melanie: It's just what I'm doing.

Russ: … it's your arms are going and petals are coming up. That kind of thing.

Melanie: Yeah.

Russ: And that kind of thing could happen in awareness, and it could happen outside of awareness.

Melanie: It's in awareness.

Russ: So you're directedly, consciously, so to speak, in awareness…

Melanie: Yeah, oh there's another one. Yeah.

Russ: … but you're not saying, "Oh there's another one"?

Melanie: No.

Russ: You're examining the sink…

Melanie: Right, and then just going and picking up all of the ones there, collect them all out of the sink and throw them away. [See Box 9.7 for more we might have asked about here.]

**Box 9.7. Melanie's experience of activity**

Eric: I don't think we pushed hard enough on this aspect of Melanie's description. Did this activity involve visual experience, tactile experience, feelings of motor

control, or all or none of these? (At some point, pushing on such issues would be asking too much of Melanie, of course.)

Russ: I agree that we did not push hard. My DES experience leads me to speculate that had we pushed harder, we would not have arrived at a much different description, because such "doings" are generally difficult or impossible to describe with more detail that what Melanie has done here. However, because we didn't push, I cannot be confident about that.

Thread: Sensory experience. Previous: Box 9.1. See also Ch. 10.3.

Russ: Okay, and you said your awareness was "split." Did you mean to imply evenly split, partially split, 80-20, 99-10…?

Melanie: It felt pretty evenly.

Russ: Your turn, Eric.

Eric: So, the echoes that you're hearing of your inner speech. At first I was inclined to take the idea of an echo pretty metaphorically…

Melanie: Um hm.

Eric: … like there may be some pretty vague sense in which a thought can still be with you even after you've finished saying it in inner speech.

Melanie: Right.

Eric: But you don't mean that. You mean something much more like an echo, where there's actually a repetition…

Melanie: Yes.

Eric: … of an auditory thing that's going over and over again.

Melanie: Yes.

Russ: In sort of the same way as if we all decided in a minute here, to say, "nice long time" all at the same time. You would start at one time, and I would start a little bit later, and Eric would start a little bit later than that, and we'd all say "nice long time." That's what it sounded like?

Melanie: Yeah.

Russ: Except that it would be all your voice.

Melanie: Right.

Eric: So it probably takes about a second to say "nice long time." So if you're talking about having the echoing repeating, you're talking about something that's happening over the course of several seconds? Or I remember your saying at some point earlier on that in your inner speech things are speeded up [Beep 1.1; see Boxes 4.4 and 4.5].

Melanie: Yeah. It felt instantaneous. Or not instantaneous but incredibly, you know, microseconds apart. I mean in a very, very short span of time, so it all felt like it was happening all at once.

Russ: And does that mean that it felt like the speech was speeded up? Or did it just feel like the whole experience happened at the same time?

Melanie: No, it didn't seem like it was faster than normal speaking. It just felt like it was all happening at once.

Russ: And so is what you're saying, basically, a physical impossibility here, because Eric is right, these things take a second or so, that some overlapping has got to take a couple of seconds, if it was going to happen in reality. But it's not happening in reality…

Melanie: No.

Russ: … it's happening in your imagination, so this seems like it happens…

Melanie: Very fast.

Russ: … more or less instantaneously, even though in reality…

Melanie: It couldn't.

Russ: Okay. I don't know how she could do that either [all laugh], but that doesn't mean that she can't.

Eric: Right. It seems to me that it can't literally seem both that it's repeating multiple times, one after the other, and that it's instantaneous. It seems like the

seeming of repetition must involve at least some little time gap between the starts of the various…

Melanie: It did. I didn't mean instantaneous, but it felt like mere microseconds apart. Very fast.

Eric: Right.

Russ: And I disagree with the implication of your statement. I don't think that's an impossibility.

Eric: Uh huh.

Russ: Mozart, for example, said – I've never sampled with him unfortunately, which would have been a pretty cool thing to do [all laugh] – that he heard a whole symphony at the same time. [See Box 9.8 for an elaboration of the Mozart reference.]

**Box 9.8. Mozart's claim to hear a symphony instantaneously**

Russ: In a letter in 1789, Mozart wrote: "…my subject enlarges itself, becomes methodised and defined, and the whole, though it be long, stands almost complete

and finished in my mind, so that I can survey it, like a fine picture or a beautiful statue, at a glance. Nor do I hear in my imagination the parts successively, but I hear them, as it were, all at once (gleich alles zusammen)…. Committing to paper is done quickly enough, for everything is, as I have said before, already finished" (Holmes, 1979, pp. 317-318, italics in original).

As I have frequently said above, I am highly skeptical of retrospective generalizations, even from a genius such as Mozart. Nonetheless, there is some corroborating objective evidence (e.g., Mozart is known for his great speed in written composition and his ability to hear another pianist play an extended piece once and then Mozart himself to play it in its entirety from memory without error). But the point here is not that we should believe Mozart's account, only that we should not hold too tightly to our presuppositions about the nature of musical experience and thereby be open to credibly examined surprising views. (As an aside, Mozart himself, at the beginning of the paragraph before the cited portion, uses by my count eight subjunctifiers, a reflection of his honesty in the generalization attempt.)

Thread: Rules of inner reality. Previous: Box 4.16.

Eric: Uh huh.

Russ: And you would be saying that's impossible because these things are temporal and there are entrances and exits and whatever…

Eric: Right.

Russ: … how could you hear those things at the same time? Somehow he could do it. It would be interesting to know whether that was really true – I don't know whether it was or not. But it seems like we have to suspend the laws of physics if we're going to understand what experience is like.

Eric: Right. But it doesn't seem to me like this is just the laws of physics. I mean, you know, maybe it is conceivable. Maybe I'm being narrow-minded – the Mozart story has kind of a nice ring to it. But it does seem to me like if you're imagining a symphony auditorially, you have to imagine one note ending and another one beginning after it's ended. I don't think that's a matter of physics. If it's true, it's a matter of what a symphony is.

Russ: Not to Mozart.

Eric: If all the notes come at the same time, it's not a symphony even in imagination.

Russ: But not to Mozart, apparently. And you'd think he'd know!

Eric: Maybe I'm being too narrow about this, but the thought I was having was that it's a violation of the laws of physics to go floating off the floor, but you can certainly imagine that coherently.

Russ: Right.

Eric: But I'm not sure you can coherently imagine an instantaneous symphony in the same way.

Russ: Well, I've got the advantage probably of having sampled with a bunch of other people. Time is a pretty screwy thing in the sense that it's not at all uncommon for people to report things that seem to violate the laws of temporal sequence. The example we've got going here is a pretty good example.

Eric: Uh huh.

Russ: And I've asked as many skeptical questions as you've asked over many years of doing this kind of stuff, to try to say, "Well, you know, it can't possibly

be!" And people like Melanie stick pretty much to their guns and say, "Well, you know, maybe it can't be. But that's the way it seemed. It seemed like there was a long thing happening but it didn't seem like it took a long time to do it."

Eric: Right.

Russ: And so the laws of experience are somehow different from the laws of physics. But, you know, a skilled moviemaker can capture an event that takes a long time to actually occur, can capture that in some kind of implied way. If a moviemaker can do that in the really restricted medium of a movie, Melanie ought to be able to do it better in her own experience.

Eric: Yeah, well maybe so.

Russ: Here again, I'm not saying what it is that she did and what it is that she didn't. But it's part of what I call "bracketing," that it's not fair to discount her experience on the basis of what must happen in reality, because her experience is not reality.

Eric: Yeah. Well, for some reason I can find more sympathy with the idea that something could go quickly and not seem sped up – you know, go much more

quickly than it would in reality. So when Melanie says that her inner speech happened quickly, more quickly than normal speech, but it didn't seem that she was talking fast [Beep 1.1], that doesn't bother me as much as what seems to me saying that the echoes were instantaneous does, which Melanie actually denies in this case.

Russ: Yeah. It seems to me that if we took a regular piece of audio tape and played it back at double speed, it would of course be twice as high in pitch and take half as long. And if we did this kind of thing often enough, we could probably become quite skilled at hearing the original speaker as if the original speaker were actually speaking in his normal voice, even though in actuality it's going higher and faster. And so I think Melanie can develop a shorthand that goes even better than that about her own voice.

Eric: Right. Now…. see, I think I'm much more inclined than you are to see people as similar in their basic experiences [see Box 7.4]. So for me it seems to be that the default is what my opinions about what my own experiences are. [See Box 9.9 on the appropriateness of such a default supposition.] I am, of course, as I acknowledge and would even argue, kind of ill-informed and mistaken probably in many respects about my experiences. But the following seems to me like a possibility. I had a sense from some of my samples of having a thought that was

expressed in inner speech somehow continuing to linger with me for some short period after the inner speech was completed, and it's hard to characterize exactly what that experience is.

**Box 9.9. Should unusual reports be held to a higher standard of evidence?**

Russ: You have every right to wonder about this, and to question Melanie carefully when she is reporting something that strikes you as unusual or alien. But bracketing presuppositions means suspending your default presupposition that people are the same. It means being as happy to discover that Melanie really had echoes in her experience as to discover that she did not.

Eric: I think it's a question of reasonably having a higher standard of evidence for some claims than for others. It doesn't make sense to treat all claims as equal, regardless of their initial plausibility. If some experience is very common, then all else being equal we should be readier to believe her report of that experience than a report of some previously unheard-of experience. Compare: If someone says she saw a car doing 90 on the freeway, all else being equal we should be readier to believe that than if she says she saw a car doing 190. It's not that we should never believe the latter, just that the standards are rightly higher.

Russ: I agree that it makes sense to have some sensitivity to prior probabilities. However, the point hinges importantly on "all else being equal." If someone says "I saw a car doing 90" as the result of casual curbside observation,

and someone else says “I saw a car doing 190” as the result of sophisticated radar equipment readings, then you should not necessarily be readier to believe the first observation than the second. Casual introspective or retrospective generalization is like curbside observation, and rigorous experience sampling interviews are like sophisticated radar equipment (I think). Prior probabilities based on casual observation shouldn’t be taken to impugn careful observations conducted by a considerably more sophisticated method.

Eric: So then the question becomes: Is descriptive experience sampling, followed by careful interview, sufficiently superior a method that it should trounce evidence from all other sources? I guess I still don’t take that to be established. (See my concluding remarks in Chapter 10, sections 1 and 6.)

Thread: Bracketing presuppositions. Previous: Box 8.5. See also Ch. 10.6, 11.1.7.

Thread: Human similarity and difference. Previous: Box 8.9. See also Ch. 12.1.

Russ: Right.

Eric: So it would seem to me possible that someone attempting to characterize that would think of the metaphor of an echo, which is kind of a nice metaphor. But then she might buy into the metaphor too much and start to attribute to her experiences the literal features of an echo, imputing them backwards and erroneously into the experience, like I think people in the 1950s erroneously

attributed to their dreams black-and-whiteness because it seemed natural to compare dreams to movies. [See Schwitzgebel 2002b for an extended discussion of this issue; also Box 5.2.]

Russ: Right.

Eric: Right, so I guess I have a suspicion that that would be what was going on in this case.

Russ: Yeah, and I think it's okay to have that suspicion and that you ought to inquire about it as carefully as you can, but not just assume it.

Eric: Right.

Russ: And as part of our conversations here I have come to the notion that there's a fundamentally important deal about the difference between thinking that everybody's the same and thinking that everybody might not be the same.

Eric: Yeah, yeah, I think that's a big deal, all right. People give very different reports of experience, and I guess I have just a general bias toward the default presupposition being that people are the same. You would have something to

overcome, some burden of proof before you could say, “Wow! You know, people really are as different as they seem from these reports!”

Russ: Yeah. But let’s put it this way. When I sample with people, people say things that would never in a million years occur to me to say.

Eric: [laughs] Right. See, I guess my overall inclination is to think that experience is elusive and gone in a second. So it’s hard to remember. And in addition, it’s hard to articulate. We don’t have good words for talking about it. We don’t usually think about it or talk about it. It’s hard to describe, hard to conceive, hard to categorize the things that are going on in experience. So we reach for different ways of speaking about it, different kinds of metaphors, and because people reach in different ways and reconstruct in different ways and employ different categories to deal with their experience, it can give the impression that people’s experiences are very different, where they may actually be pretty similar.

Russ: Yeah, I can appreciate that. But I’ve tried to be as absolutely, scrupulously careful as I can to distinguish between what’s metaphorical and what’s not, and to give people the out of saying, “Well I don’t really know.” And yet, when I do that, people come out to be a lot different. [See Box 9.10 for a response to this point. See Box 9.11 for a discussion of “first-person” science.]

**Box 9.10. Do people know when they're being metaphorical?**

Eric: It's natural to suppose that people know when they are being metaphorical – and many times they do know. But I do also think that people can be taken in by their own metaphors without realizing it. Thus, I think it is possible – and something that probably cannot be resolved by further questioning of Melanie – that Melanie is being taken in by her own metaphors when she says here that she experienced an echoing, or when she says in Beep 5.1 that her recognition of herself as being anxious was experienced as literally in the back of her head, or when she says in Beep 1.1 that her feeling of humorousness was accompanied by a "rosy-yellow glow."

I'm not sure how we can settle the issue of how metaphorical such statements are; but I think we cannot simply trust Melanie on this matter, even after she has been carefully questioned.

Russ: I agree that people are often taken in by their own metaphors, but, as I have stated repeatedly throughout this book, I think the risk is greater when dealing with general opinions than when dealing with specific moments carefully examined.

I disagree that this cannot be resolved by further questioning of Melanie. It may be true that we cannot resolve the "metaphoricity" of this particular beep, because the being-taken-in might have already happened. But we can (and did)

discuss the taken-in-by-metaphor notion here, so that next time Melanie will be more alert to the notion at the time of the beep. I think we also did that more or less adequately at Beep 1.1 and Beep 5.1, as well as elsewhere, so I have more confidence in Melanie here than you apparently do, but I accept that that is a matter of judgment. My solution to your skepticism here would be to sample further, as often as it takes, to see whether or not we get enough evidence to satisfy us that Melanie has become skillful enough not to be taken in by her own metaphors.

Thread: Limits of DES. Previous: Box 9.2. See also Ch. 11.2.1, 12.2.

Thread: Influence of metaphors. Previous: Box 5.2.

Box 9.11. Is DES an example of irreducibly "first-person" science?

Eric: Alvin Goldman (1997, 2001) and David Chalmers (2004) have asserted that the study of consciousness requires distinctively "first-person" or non-"public" methods, involving introspective self-judgment – methods different in kind from and irreducible in principle to the "third-person," "public" methods of the other sciences. Dennett (2002) has notoriously disagreed, asserting that consciousness studies should and can be every bit as objective and third-personal as the other sciences, relying only on "public" data such as brain measurements and transcripts. This debate has captured the attention of consciousness studies researchers and the interested public, because it seems to concern the

fundamentally important question of how to study consciousness – what sorts of methods can and cannot, should and should not be implemented. So, looking back on these dialogues, the question seems to arise: Are we using here a "first person" or a "third person" method?

Actually, I don't know. Nor do I care, much. The seeming centrality of this debate to the methodology of consciousness studies is an illusion. One looks in vain for any genuine prescriptive differences, any study or method permitted by Goldman or Chalmers, forbidden by Dennett (as Dennett himself notes). The dispute really concerns only the description of introspective methods. Should we describe the interviews in this book (per Chalmers) as "irreducibly first-personal" because they depend on Melanie's attunement to her subjective experience? Or should we describe them (per Dennett) as "third-personal" and "objective" because what we are doing is analyzing spoken utterances, in principle available to all, and hypothesizing about what might lie behind them?

Each way of speaking highlights important aspects of the study of consciousness. But the more important question for consciousness studies – what should be the central methodological question – is when and under what conditions and to what extent people's reports about their experience are trustworthy. That, of course, is the topic of this book.

Russ: I could not agree with you more, Eric! Fascination with the Goldman-Chalmers-Dennett debate has misdirected consciousness researchers away from what you rightly call the central question.

Yet let me also say that I consider DES to be a first-person-plural method: We (Melanie, you, and I) examined Melanie's inner experience and evaluated her/our characterizations thereof. To be sure, only Melanie had access to the experience we sought to examine. However, only I had experience with a method designed to identify specific moments, focus attention on those moments, bracket presuppositions, avoid faux generalizations, and so on; and you brought your own perspective that changed and illuminated things. Thus Melanie, you, and I together did what none of us could have done alone. But my use of the term "first-person" here is not intended to imply a position in the Goldman-Chalmers-Dennett debate. I want only to emphasize the value of the skilled investigator / willing participant alliance.