Discussion between Russ, Eric, and Melanie before first beep

[The audio is available at http://mitpress.mit.edu/inner_experience]

Russ: Okay, then. I would say we ought to ask Melanie whether she has anything to say before we start talking about her samples here. Any comments on the method?

Melanie: Just that it was a little bit easier to adjust to wearing it, and answering, realizing that the beep was going off and everything this time.

Russ: So you felt like you were sort of more practiced at it?

Melanie: Yeah, and I was able to kind of forget that I was wearing it, instead of concentrating on it so much as last time.

Russ: Okay. [to Eric] And can you hear adequately?

Eric: So far, yes.

Russ: So. Anything else we should be talking about before we go to beep number 1?

Melanie: I don’t think so. I was just... These samples are just from this morning from about 7:00 to 10:00.

Eric: Okay.
Beep 2.1
[The audio is available at http://mitpress.mit.edu/inner_experience]

Russ: And I’m ready. Number 1.

Melanie: Okay. 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 on sunlight and 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…?

[1:00]

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 kind of 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 probably 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 what your hands are doing, sort of from close left to far right?

Melanie: Exactly.

Russ: Okay.

Melanie: And there’s kind of 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 everything. 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 white kind of peasant blouse.

[2:00]

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. [On the reasons for inquiring about the details of images, see box 5.1.]

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 color, 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, you know like when you speak and you talk with your hands a little bit, but it’s frozen in one.

[3:00]

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? [On the media references in this dialogue, see box 5.2.]

Melanie: Just creating a still picture.
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 a scene, I gather?

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

Russ: So this is consonant with the book, but not necessarily identical with the book.

Melanie: Exactly.

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 explicitly identical…

Melanie: Yes.

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

Melanie: Um hm.

Russ: And what... other... is anything in your awareness other than this picture? So my question is: 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 that 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. [For Russ’s comment on the phenomenon of reading, see box 5.3.]

Russ: Okay. Eric you want to…?

Eric: Were you pausing in your reading at this time, to kind you know of just reflect on the scene and create this image? Or were you just kind of going along reading without pausing, and this 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 you have that ...were you recreating that image now when you were just reporting it?

Melanie: Yes. [On why this might be worrisome, see box 5.4.]

Eric: So, I’m not sure…um…

Russ: …feel free to be as skeptical…

Eric: …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: …is the are the things that you’re not 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? [On whether this comment illicitly imports assumptions about imagery, see box 5.5.]

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 a picture 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, you know, 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] Almost because… 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 is 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 the things that you’re, 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.

Eric: Right. Okay.

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. [For the quotation Russ is thinking of here, and more on indeterminate imagery, see box 5.6.]

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 a thing in my work all of the time, where people will have indeterminate things. So it’s not…This is not a really particularly good example of it…

Eric: Right.

Russ:…but it’s…she could have 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, that somehow either. And then they create the detail and report it as having been there all along – something like that. That’s one thing that seems likely to be a source of error in imagery reporting to me.

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

Eric: Right. It does seem that Melanie is not doing that, Or at least is not doing that to an extreme degree.

Russ: Right. Whether she is doing it to some degree, I don’t know, and probably she doesn’t know, and you don’t know. But she’s certainly not doing it to a large degree, it seems.

Eric: Right.

Russ: And this by the way is the kind of an image report that I would credit as being.... 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 listen to inner... create inner speech while you read. [See box 5.3.]

Eric: Right. So it would be interesting to see... I don’t know if you have any samples of this, Melanie, but it would be interesting if you were reading something abstract that didn’t compel imagery in quite the same way that a novel does or a historical thing does, whether you would be similarly creating a stream of imagery.

Russ: I’m betting the answer to that is probably yes. But I don’t know. [inaudible]

Eric: I’m inclined to believe your empirical generalization on that.

Russ: Yeah. What my generalization actually means is that I think it’s more likely that she would create an image in abstract reasoning [meant reading] than it would be that you would create an image in a novel.

Eric: Huh!

Russ: But that’s a wild guess. But I... Your reading examples were quite consistently “inner speechified”...

Eric: Yes.

Russ: ...and so it seems to me more likely that you were going to have inner speech during image-driven or even in an imaginary situation.
Eric: Right.

Russ: But the fact that we are debating this is the whole point!

Eric: (laughs) Right.

Russ: That we could be this ignorant about how reading takes place. Two or three pretty smart people sitting around talking about reading, you know?

Eric: Yeah, I think that is amazing.[laughs]

Russ: That’s the point.

Eric: Right, so, yeah, I agree.

Russ: So anything else about number 1?

Eric: No, I’m happy to move on if you like.

Melanie: Yes..

Russ: Okay. For me, that In my detectors, that’s an image without much reason to doubt whether or not that was an image, and where that comes from....

Eric: I don’t see any positive reason to doubt it, unless one wanted to embrace a really general skepticism about the method in general.

Russ: Right. Right. And for me it’s hard to be that skeptical unless you go into the, you know, “I don’t really know if this is really a telephone I’m talking into” kind of skepticism. And if you get that skeptical, then I’m saying, “Okay, then I’m fine with that.” But if you stop short of that, it’s hard for me to say why, how, in what way it’s reasonable to suppose that Melanie was not having an image while she was reading that book.

Eric: Right. I think that there’s some... I don’t think you have to be a “the whole world could be a dream” kind of skeptic in order to be skeptical about this. I mean I think you could think that people have such a poor knowledge of what’s going on prior to the beep that they kind of make something up and then become sincerely convinced that what they made up was really what happened. I don’t think that’s what’s happening.

Melanie: It’s certainly...

Eric: It’s my inclination to think that that’s not the case but...
Russ: Yeah, but if we were going to go that way, it seems to me that I would have to have the exact same level of doubt that you were talking to yourself while you were reading.

Eric: Yeah, I agree. That level of doubt, that kind of doubt would just be a general repudiation of the method.

Russ: Right.

Eric: There wouldn’t really be a way to overcome that, I think.

Russ: Right. So then let me come back to, What difference does it make whether you create images while you read, or whether you talk to yourself while you read? Is there a difference that can be shown in some non-experiential way?

Eric: Yeah. I think that would be very interesting to do.

Melanie: Well…actually the only thing that I can add to that is that I know that when I am reading and I do happen to concentrate on the words and, for lack of a better word, physically translate the words that I’m reading into a mental voice inside my head, I read significantly slower than when I just let myself go and start seeing the images.

[R15:00]

Eric: Hm.

Russ: So I forget, Eric. When you read, are you reading at basically your same external out-loud voice rate, a couple hundred words minute?

Eric: My impression was that that’s what I was doing. And that when I was reading faster I was skipping words. But I’m not positive about that.

Russ: Okay.

Eric: I guess it has 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 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 kind of one very detailed, complicated image after another in that one second at a time, every second.

[R16:00]

Russ: Yeah.

Eric: 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 read go along – so if Melanie’s reading along and the next paragraph happens to say that this army guy was wearing a beret…

Eric: Right.

Russ: …then she was going to have to go back and add a beret.

Eric: Right, So that’s another option, you they have one stable, kind of enduring image consistent inner seeing that is being modified.

[For a discussion of Melanie’s believability contrasted with Eric’s believability as a subject, see box 5.7. On whether children construct images slowly, see box 5.8.]

Russ: Right and that I think is…
[17:00]

Eric: …as long as the details are changing and just details and you’re not kind of wiping it clean and replacing it with a whole other scene, that’s probably consistent with Kosslyn’s research on (inaudible) images…

Russ: Which I’m not sold by, anyway, because I think the method is quite…

Eric: Yeah…I’m not convinced.

Russ: …the method is quite artificial…

Eric: Yeah, I’m not convinced by Kosslyn either, actually. He puts too much… trusts his subjects’ reports too much for my taste.

Russ: Um hm. The… Most people who have images while they read, in my understanding of the way this works, is that the images are quite elastically connected to the subject matter…

Eric: Um hm.

Russ: …so that if one paragraph said a car was going by and the next paragraph said that the lady was wearing green dress or whatever, well the images are sort of going to get updated. But they don’t necessarily get immediately updated, and they’re not necessarily always immediately…entirely accurately connected. There’s an image-making process that goes on and…
[18:00]

Eric: Right.
Russ: …and it seems like sort of an elastic deal to me. Well I’m ready to go on to number 2 here, except hang on just a minute.

Eric: Yeah, Okay.

**Beep 2.2**  
[The audio is available at http://mitpress.mit.edu/inner_experience]

Russ: Okay. Number 2.

Melanie: Okay, number 2. I was reading again. And in this part of the book it was the arrival of the German invasion of the island. And the line I was reading had to do with the arrival of a formation of Stukas – German planes.

Eric: A formation of what?

Melanie: Stukas.

Russ: Airplanes.

Melanie: German planes.

Eric: Okay.

Melanie: And so I had 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 and It was a very close image of one of the planes, of only the top, you know, 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? Or is it....

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?  
[1:00]

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. [On the substitution of F-18s for Stukas, see box 5.9.]

Russ: Okay. And does this experience... 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…. [On the non-leading nature of this question, see box 5.10.]

[2:00]

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 much faster... 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 kind of in the middle of a chapter and you had 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.

[3:00]

Eric: So what you’re saying is in accord with – and you don’t have to be at all in accord with the stuff that what I was just suggesting – so….
Melanie: Oh no, I really agreed with what you said before, because it feels very much like what I do.

Eric: Uh huh.

Russ: What are we talking about here? [laughs] That it takes a while to create an image and that kind of stuff?

Melanie: Um hm.

Eric: Right. That’s what I meant to be referring to.

Eric: Right, so that 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. [On whether Melanie is complying with a demand to report sketchy imagery, see box 5.11.]

Russ: Right.

Melanie: Although…I mean I don’t know if this kind of 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 insignias 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, because you couldn’t…. 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, so you can’t... and you’re just seeing a very tiny part of it, so you can’t really see, you know, there aren’t any insignia on it. Maybe on 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.

Russ: Maybe you transformed these F-18s back into Stukas. [Melanie laughs] I don’t know whether we’ve talked about this before, but I’ve sampled with kids, a few kids not very many, and they take minutes to create images.

Eric: Hmm.

Russ: So I had an image... a sample from a kid who had an image of a hole in his backyard. And the hole was... Like a big hole he had been digging in his backyard. And the hole [in his image] had 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 of the toys in it yet. If the beep had come a few minutes later I would have had time to put all of the toys in the hole.”

Eric: [laughs] Right. I think I remember you mentioning that the very first time we met. That is a cute one.
[6:00]

Russ: It is a very cute story. And it does, in my mind anyway, talk about or speak to the notion that this image-making is a skill, and you get better at it as you get older.

Eric: Right. You know, obviously I think [this] should be taken with a grain of salt, but my recollection of my reading from my childhood was that it was more imagistic than it is now. Like I go back and read the science-fiction novels that I loved when I was a child and get a sense that I’m not vividly imagining the scenes the way that I used to. I’m not sure we should trust introspective reports about such matters, much less ones that are retrospective twenty years, but um...

Russ: We have a big grain of salt sitting right here.

Eric: Yeah.
[7:00]

Russ: But the sin of that story is that we didn’t sample with you twenty years ago so that we’d have something to compare with.

Eric: Right.

Russ: And so the moral of that story is that if we were doing the science correctly, we would be sampling with a bunch of people now to make data that would ripen in twenty years.

Eric: Yeah. It would be interesting to see. It wouldn’t surprise me, in general, it wouldn’t surprise me if you saw reading styles change or reading experiences change …
Russ: That wouldn’t surprise me and it wouldn’t surprise me if your memory is confabulated.

Eric: No, that wouldn’t surprise me either. [laughs]

Russ: And I’m not trying to draw a personality inference here, it’s just that I just don’t know.

Eric: Yeah.

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.

[8:00]

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

Melanie: It was kind of merged into one – and 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… [On demands, see box 5.12.]

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. [On “subjunctifiers,” see box 5.13.]

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?

Melanie: No.

Russ: 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 having... to the emotional experience, besides the pressure?

Melanie: That was it.

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

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

Eric: So let’s say that – this is again not kosher methodology, I know – but let’s say that you were getting CPR. you were a subject in training... CPR training – and I know this is dangerous and of course you wouldn’t really do this [Melanie laughs] – but if someone were exerting pressure on your chest…

[11:00]

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 a unique thing that couldn’t have been caused by the outside environment.

Melanie: Yes.

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

[12:00]
Melanie: …that would most closely mirror that feeling?

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

Melanie: Yes. [For a criticism of this exchange, see box 5.14.]

Russ: I’m not buying that answer to that question. The, and... in the too leading, too much 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. Because... that’s the... 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.

Russ: What she said in answer to your question was, “if we could arrange this external stimuli it would be sadness/dread.” That... She... You asked that and she said “yes.” That’s how I recall the conversation. But that’s when I said I didn’t believe that she was answering the question. I thought you sort of badgered her into it or something.

Eric: [laughs]

Melanie: Well because that’s not...I didn’t mean that.

Russ: Right.

Eric: Okay, well that’s good. You have a good nose for that. Now...bullying the witness thing...I guess I might have a slight propensity to want to lead [laughs] people towards those things that I am inclined not to find plausible. [laughs] That’s what I was doing also with the soldier’s feet, saying, “Well, you know how can it be an image,” right? Maybe it’s a way of kind of counteracting my own bias into it by trying to get the person to say something with which I am not inclined to agree.

Russ: Yeah.
Eric: But maybe I was doing too much of that.

Russ: Yeah. I thought… I don’t know exactly that it is that I thought, but… I didn’t think she was... I don’t know exactly how to say it...I didn’t think she was any longer in touch with the experience when she was answering your question. That was... When you said I have a nose for it, the nose for it was that I didn’t think she was trying answer your... to describe the experience any more. She was trying to answer your question.

Eric: Um hm.

Russ: And that’s a big difference for me.

Eric: Right.

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.”

[15:00]

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…whatever…even though they cannot experience bodily aspects.

Eric: Okay.

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

Eric: Right.

Russ: But what I am sure is, is that for most people who are reporting the way Melanie just reported, that 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 perception sensation of your own bodily state. [On the James-Lange theory of emotion, see box 5.15.]

[16:00]
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 she 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 that I could get to that feeling. That is what it is. But there is something missing in that.

Eric: Right.

Russ: People have a hard time describing how they experience emotions.

Eric: Right.

Russ: Most people. Wacky some disturbed people can tell you exactly.

Eric: So, but it’s hard to... So there’s something else. But it’s hard to say, hard to articulate in any way what that something else is. [17:00]

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.
Eric: Yeah, well, that was my own experience too when I was sampling. Not that I was caught... I wasn’t caught very much with a definite emotional experience, but when I was I had trouble with that too. So I certainly sympathize.

Russ: Moving on to number 3?

Eric: Yeah.

**Beep 2.3**  
[The audio is available at http://mitpress.mit.edu/inner_experience]

Russ: Number 3.

Melanie: Okay. I was standing in the bathroom and was looking around, trying to make up a shopping list in my head because I was going to go to the drugstore later. I was just kind of looking around to look at what we were running out of. And right when the beeper went off I had the word “conditioner” in my head and was... and had a mental image of a white pad of paper that was lined (I couldn’t see the color of the lines) and then writing the word “conditioner” as well as having it in my head, hearing the word spoken in my head.

Eric: Um hm.

Russ: So the word “conditioner” is displayed in two different ways? Is that right? One...

Melanie: It’s more like I’m writing it and hear a voice saying it while I’m writing it. 

[1:00]

Russ: Okay, so let’s start with the voice part.

Melanie: Okay.

Russ: What is the voice like?

Melanie: My own. A little slower than the way I normally speak because I’m kind of saying it along...as well as writing it. So it’s kind of like when you’re writing it (slowly) con-di-tion-er.

Russ: Okay. And is it as if you are speaking this word?

Melanie: Yes.

Russ: So this is... You had a beep the other day about something where you were more hearing than speaking. This is more speaking than hearing?

Melanie: This is more speaking.
Russ: And this is more your own voice than somebody else’s?

Melanie: Yes.

Russ: And when you’re saying it’s slower than you would have said it out loud, would it have been the same speed said out loud if you were actually writing... saying it out loud while you were writing “conditioner”?

Melanie: Yes.

Russ: [sounding it out] Con-di-tion-er.

Melanie: Um hm.

Russ: And so is it more or less accurate to say that this inner experience was just like it would have been as an outside experience?

Melanie: Yeah.  
[2:00]

Russ: Exactly like? Or just pretty close?

Melanie: Exactly like. Because I have the picture, you know, of my hand writing the word, and it was this picture of the same writing tablet that I use to write shopping lists and everything like that.

Russ: Okay. And so then the image portion. You actually see your hand…

Melanie: Yes.

Russ: …as in motion and the letters…

Melanie: …coming out from the tip of pen.

Russ: Okay. And do you know at the moment of the beep which letter is it that’s coming out?

Melanie: “d”

Russ: “d” as in the fourth letter of conditioner?

Melanie: Yes, um hm.
Russ: And does this seeing of your hand writing... this imaginary seeing of your hand writing on the imaginary pad look just like it would be if you were looking at your regular handwriting while you were writing?

Melanie: Yes and no. For instance, I write with my right hand and I always wear a ring on my pinkie. I can’t see that. But I recognize that it’s in the same formation as when I write.

Russ: And when you say you can’t see the pinkie, can you see the portion of your finger that would have the pinkie on it, or the ring on it?

Melanie: No.

Russ: So the pinkie... the ring might just be behind...

Melanie: It might just be hidden, yeah. So I guess, yeah, it does, it looks like when I’m writing.

Russ: Okay. And anything else going on at this particular moment?

Melanie: I’m aware that my feet are cold.

Russ: And is that awareness right at the moment, what we’re calling right at the moment of the beep?

Melanie: Um hm.

Russ: So this is not taking stock at the moment of the beep and saying oh my feet are cold as well.

Melanie: No.

Russ: So as part of your awareness...

Melanie: I’m aware of standing on the bathroom tile and my feet being chilly.

Russ: And this “feet being chilly”: is it possible to be more articulate about that?

Melanie: I guess I feel it more in my toes than like the rest of the bottom of my feet. And, that’s probably about... it doesn’t feel like frostbite, but they just feel chilly and kind of, “Oh, I wish I had a pair of slippers on.”

Russ: And are we talking about the bottom of your toes or...?
Melanie: Top and bottom, all over.

Russ: And do you have a thought process like the one you just described, “Oh, I wish I had slippers on”…?

Melanie: No.

Russ: …or are you just aware of the coldness that might later lead to a thought process?

Melanie: Um hm. [laughs]

Russ: Okay. I’m happy with that.

Eric: Were you thinking about conditioner, having some experience of thinking about it besides just the word and the image? Or does that kind of exhaust the thought about it?

Melanie: I’m not quite sure what you mean.

[5:00]

Eric: Um…

Melanie: Do you mean, was I like imagining the consistency of it? Or something like that?

Russ: Were you in some way thinking about conditioner other than saying the word “conditioner” and writing the word “conditioner”?

Melanie: No.

Eric: Right. Because when we were talking with the emotion in the previous beep, it seemed like there was something besides just the feeling in the chest that was difficult to articulate.

Melanie: Oh, okay. No, it was just… My awareness of conditioner was limited to the writing and the inner speech.

Eric: Um hm. Okay.

Russ: And that…. What you just said about the previous beep means that we’ve got to double back and talk about that for a minute, because I didn’t get the impression that there was something separate from the experience in her chest that led her to believe that this was sadness/anxiety or dread or whatever it was. What I understood her to be saying was that she knew that she was sad/dreadful, and the best that she could say about where this came from was a pressure in her chest, but she didn’t think that probably exhausted that. She’s nodding in assent there.

[6:00]
Eric: Right.

Russ: So what I’m saying is that I didn’t hear her to be 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.

Eric: [laughs]

Russ: 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, so maybe I was misunderstanding. It’s not that there is something additional, it’s just that there’s this one thing, and the best you can do…

[7:00]

Melanie: Is describe it.

Eric: Is describe it that way. Great, okay. So…I was just trying to see whether there some parallel in this case. So the parallel in this case would be something like…that might be harder to build a parallel for this case then because it’s not about something additional it’s just about the characterization. So the… Okay, so I guess I’m alright then.

Russ: Yeah, it would be possible for her to have some separate thought process that would seem separate from the speaking “conditioner” and the writing “conditioner.” But she’s apparently saying that that’s not what her awareness is.

Eric: Okay.

Beep 2.4
[The audio is available at http://mitpress.mit.edu/inner_experience]


Eric: Maybe we should make this one the last.

Russ: Okay.

Melanie: Okay, so during this one I was brushing my teeth in the bathroom.

Eric: Sorry, say this again?
Melanie: During this little time period I was brushing my teeth in the bathroom. And I kind of don’t know was letting my mind wander, because it’s such a banal thing that I do every day. And 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…

[1:00]

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, um hm.

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

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

[2:00]

Melanie: Nope.

Russ: Okay. The last time when 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 a 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... 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.

[3:00]

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 kind of say my mind was kind of empty [laughs].

Eric: Oh, okay, so that was…your mind… 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: Oh, right (laughs). Yeah. 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 it’s wandering [Melanie laughs]. But other than that, she was trying to convey something, which was that she was paying attention to sensory awarenesses. [On Melanie’s not saying what she meant, see box 5.16.]

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. I don’t think there’s any... It’s hard for me to imagine a computer that could do it. It’s a complicated deal to figure out what of what it is that Melanie says that’s true. And it’s not like she was trying to mislead us by saying her mind was wandering. But the...

Eric: Right.

Russ: …but sort of what she was saying was that her mind was absent. That would be the sort of charitable translation of “My mind was wandering.”

Melanie: Um hm.

Eric: Right.

Russ: When she said her mind was wandering, she really meant something like “her my mind had wandered away.”

Melanie: [laughs]

Eric: So let’s see. Again I guess I am going to do kind of [laughs] non-straight, not adhering 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, whatever you do when you’re normally brushing your teeth, and you’re not thinking about other stuff, you’re not distracted or planning what you’re going to be doing during the day or something like that, that it’s sensory... your experience is primarily sensory like this? Or was this especially cognitive, something like kind of, “Oh, you know, how interesting – you know, this stuff is so gooey!”

[6:00]

Melanie: I think this... 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.

Eric: Um hm.

Melanie: So this ...I was actually quite surprised when the beep caught me doing this because I didn’t really think that I did this. [For skepticism about this claim, see box 5.17.]

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 that I would ask…

Eric: Right Okay.

[7:00]

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. We’ve got four beeps, and she’s got sensory awarenesses in two of them, the coldness on the bottom of her feet in the previous one beep and the toothpaste here. That’s 50 percent. It’s a small sample.; I’m willing to go along with that 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. Or, I’m not saying that I know what, what she’s like. What I’m saying is that I don’t think she has a way of answering that question correctly.

Eric: Um hm.
Russ: And my guess is that she’s probably mistaken about it because she doesn’t credit that as being of that kind of important material, or whatever. I don’t… I don’t know, but…

Eric: Right. Well yeah, I’m aware that I was asking her to generalize in a way that you are skeptical about.

Russ: I understood that. But I wanted to make a point – I’m not skeptical about it for any reason other than I don’t think she can tell the truth about it.

Eric: Uh huh.

Russ: So I guess it’s not a principled skepticism, it’s an empirical skepticism.

Eric: It seems to me also that there’s a possibility, I’m not saying that this is the case, right, but this is something to that we should also bear in mind as possible the possibility (I’m not saying that this is the case) as I’m sure you’re aware, that when the beep goes off you think, “Okay, what was my experience? Was I having experiences say of the bathroom? Oh, you know, the bathroom floor is cold, I’m wondering if I was having experiences in my feet, “Oh, yeah, my feet are cold. I guess they were kind of. I was experiencing that at the time”, too!” – Kind of feeding that back to the experience because of letting your knowledge of your current experience and your environment feed back into your impressions of what your experience was at the time of the beep.

Russ: Right. And I do believe that that’s quite possible, and I asked Melanie specifically about that. She denied it, which of course doesn’t mean that it’s not true…

Eric: Right.

Russ: …but at least she understood the distinction.

Eric: Right.

Russ: And I’m pretty careful in my sampling in general to make that distinction carefully, and uh and to try to tell people, to define carefully what “at the moment of the beep” means. So I say a lot of things, like I did with Melanie a few minutes ago about, “Well was this something that was in your awareness, or was it something that came when you took stock of things afterwards?”

Eric: Right.

Melanie: I’m not defending myself by any means. But I tried specifically in this time of sampling to really focus on the moment of the beep and not what came afterwards, because of the discussion last Friday 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 as I could.

[10:00]

Eric: Right. I guess the concern I have is not so much directly temporal as it is... 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 some 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 kind of because it’s going on now and because you know certain things about your environment, you might be inferring, “Oh, well infer that it must have been was going on a moment before as well.”

Russ: Well, I don’t think Melanie can confidently say she doesn’t do any of that. I think she just did confidentially say she tried 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. It’s just one general source of concern. One thing that seems to me…

[11:00]

Russ: Well, I think it’s a legitimate…

Eric: …to kind of How do we partial out how much when you’re reporting is due to a kind of a reconstruction?

Russ: Right, but I think we can say that worry about that for every single sample, that, you know: 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 myself you were saying.

Eric: Right.

Russ: I don’t think there’s an end to that logic other than to try to be careful about it and get reports that are as close to the time as you can get it.

Eric: Yeah. I’m not sure that there’s a kind of good methodological way to you know really say, “Okay, here’s when you’ve got this error and when you don’t.”

[12:00]

Russ: Right. What I think about it is that if you’re careful, you don’t get as far down that road as people are afraid that you might.

Eric: Um hm.

Russ: But that doesn’t mean that you don’t get somewhat down the road. You just don’t get too far.
Eric: I’m not sure that 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 the same as that we had at the end of last time: that if all of these things are made up at the end, you would think that they 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. Yeah Well, I guess that if the person is surprised by her own experience, that would be one kind of 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 the back 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. [13:00]

Eric: Right.

Russ: Unless Melanie is very highly skillful in deluding us.

Eric and Melanie: [laugh]

Eric: Well…It’s not that I think that there would be any deliberate attempt to mislead.

Russ: Right, but you have a pretty thorough going... I think one has to have a pretty thorough going skepticism to rule out all that stuff, you know.

Eric: Yeah.

Russ: I suppose there are legitimately several different levels of skepticism. But it’s hard for me to believe that Melanie wasn’t in some way paying attention to the gooiness of the toothpaste. [14:00]

Eric: Yeah, it still seems like an open possibility to me. I’m not saying that I think she wasn’t, but I guess I don’t feel wholly settled on that.

Russ: And does it make a difference for you about Melanie’s toothpaste or your, for example, inner speech while reading?

Eric: Um, I don’t think so. Why would it make a difference?

Russ: I mean, then you’re 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: Um…well it’s harder to be skeptical about myself, of course. Um…
[15:00]

Russ: You can’t have it both ways [laughs].

Eric: [laughs] 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 box 5.7.] 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 this a special problem of separating when you’re talking about your experience in light of your knowledge of your immediate environment. Right. You know that there’s toothpaste in your mouth, right? So it’s awfully hard to kind of, I think, to separate that knowledge from the experience when you’re kind of trying to figure out what your experience is.
[16:00]

Russ: Yeah.

Eric: It seems likely that there’s a lot of reconstruction in the memory of the experience. It’s hard to know whether that’s your environmental knowledge is being used kind of 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, so that it may be a little easier to keep your environmental knowledge out of it.

Russ: Yeah, I’m not totally convinced about of that. This comes back to a conversation that you and I had a couple of days ago I think. But you know 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 that you just described them as being facts of her environment.
[17:00]

Eric: Right.

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

Eric: Right. It could be that those are the most salient facts of her environment.
Russ: That would be easy to say about the toothpaste, harder about the back, but you know maybe. They probably were in fact, in some way, the most salient parts – that’s why she was paying attention to them.

Eric: Right.

Russ: But I’m in total agreement that you cannot in principle rule out the skepticism of this. I don’t think there’s any way for us to definitively answer this question. [18:00]

Eric: Right.

Russ: I think that one can do a careful job at questioning, which I think we did about as good as you could do. And one can do a less careful job, which is what is often, in fact almost always, done. And the risk is to criticize the results based on the less careful questioning and apply that criticism to the more careful questioning.

Eric: Yeah.