MORNING GENERAL DISCUSSION
DAY TWO

ROLL: I have a couple of factual questions and a general observation. The general observation has already been alluded to, and that is what we call NDEs, perhaps are not caused or are not due to physical stress but may be due to mental stress and may occur in any situation in which there is extreme mental stress. The mental stress can be produced artificially, as in very ardent Zen meditation, or it can be the result of life circumstances where a person is plunged into a desperate depression. Suddenly, an opening is produced and a full near-death type experience may unfold. We don't usually talk to people like that. They are the people who come up after meetings and say, "Well, I had a near-death experience, but I wasn't dying." Perhaps the two speakers could respond to that. The second thing we already discussed yesterday, and that is where somebody else who is close to the near-dier, the person who is experiencing a trauma, may have transcending near-death type experiences. Part of that may be the reunion phenomenon that Raymond Moody is now studying experimentally where people appear to their loved ones after death through scrying.

Electronic equipment was mentioned. I don't know whether it was sensitivity to electronic equipment or whether electronic equipment somehow or other was sensitive to the person who had had a near-death experience. That's the sort of information I would like. With regard to telepathic communions or community with a deceased, during the near-death experience, what is the experience like apart from the veridical aspects of it? Is the experience telepathic union, the sense of union, primarily with the dead, with the living, or with both?

LAWRENCE: Let me see if I can respond. When patients have near-death experiences (and I'm now using the term NDE as the typical: feeling euphoric, wonderful, peace, going out of the body, through the tunnel, etc.) we know and can predict that a certain percentage of patients who come close to death will have that experience. That is fairly consistent. Now, that may not be the only situation that that does happen but for sure it does happen to a certain degree with people who come close to death.

Now, it is my own belief, though I haven't seen this any place, that if you have a situation where there is a physiological compromise it could possibly lead to a near-death experience, for example, OB patients who drop their blood pressure because of blood loss. They don't call it cardiac arrest. In other words, their heart doesn't stop. They don't have to be put on a ventilator. But the patient may become unconscious. So, if you have a situation where you have a highly emotionally charged event like having a baby and a compromised physiological state, possibly that could also lead to a near-death experience. For example, the healing session that I talked about might be another set of circumstances that could induce this classic description of the near-death experience, although I'm sure that that's not limited. But the thing about it is we can predict with a certain number of patients who have come close to death, that a certain number of them will have near-death experiences.

ROLL: I had a man come to me and describe a full near-death experience. The situation that seemed to trigger it was that he lost his job as a result of some wrong-doing. He was divorced; he lost his family; he lost everything. He was reduced to nothing in his own eyes and was close to suicide. Nothing was physically wrong with him but out of that despair followed a near-death experience. I've spoken to some other people who felt they weren't being taken seriously because they weren't near death. They would communicate with people like Bruce Greyson, but their experiences didn't belong anywhere. So, what about that?

OWENS: To fully answer your question would take some time, but I will do the best that I can. I'm aware of the classification problem. I tend to take people in that are not taken in by the International Association of Near-Death Studies (IANDS). I've had several orphans that came to me. I didn't know what else to do, really. I've studied somewhere between 500 and 600 self-reported cases of near-death experience. It became clear that some cases didn't fit the NDE prototype. Finally I started putting them into piles and as the piles got bigger, I gave it a label. A rather large pile is what I call stress, Emotional Distress Exhaustion cases. That's one of the larger groups of these anomalous kinds of cases. The basic answer to your question is, there's a tremendous amount of diversity in the situations where

these kinds of experiences occur. I have a rather lengthy classification scheme that takes this diversity into account.

ROLL: My feeling and my guess is that the umbrella concept is stress—psychological stress rather than physical stress.

LAWRENCE: Not always.

ROLL: In other words, when you are near death most people would feel stressed.

OWENS: That is true. I think it's an important factor. I take a multifactorial approach to the study of these phenomenon. One of the factors that I believe is very important in accounting for the depth of the experience is the perceived threat of death. Another factor is the actual severity of the medical condition. I think those are independent factors. Neither one of them needs to be present in order to have these experiences. Another factor that I think is important is prior experience with altered states of consciousness.

ROLL: In the old near-death literature, the old parapsychology literature, and the old psychiatric literature a lot of these experiences happened during falls from bridges and mountains where there was nothing physically wrong with the person.

OWENS: Yes, the near-miss accidents. That's another very problematic case that often gets ignored. I've worked pretty intensively with a labor and delivery nurse who's had a lot of experience. She thinks the term "normal delivery" is an oxymoron, which I think is probably true. Another problem that hasn't been brought up here is the class of people that have been excluded from the classification with IANDS. These people remember the experiences a long time after the crisis, or even don't have memory of these experiences at all. So, they feel like something happened during the crisis, but they have an amnesia for it and then later recover this memory. That's a very problematic situation. Another case that was very difficult to classify was a heart transplant patient who had a near-death experience in which God told her that she should have the transplant. She was resistant to having this. She absolutely refused to have it. She came back to consciousness long enough to tell her daughter of the experience. The transplant went through but possibly because of the drugs that they use for these patients as sedatives, she has total amnesia for this experience. Did she have one?

ROLL: I see.

PALMER: Something just occurred to me in relation to this notion that sometimes people have near-death experiences when they're not near death, particularly regarding the out-of-body component. A number of years ago I developed a theory of out-of-body experiences which contains an idea that is implicit in some other theories like Susan Blackmore's, namely, that the experience is precipitated by a kind of subconscious threat to the body concept. In other words, we feel that we are losing our sense of body and also our sense of self. The out-of-body experience is an attempt to bring these back symbolically, in a different way. When you're losing your sense of body and your sense of self, it's something like death. Of course, all this is at an unconscious level, so, it wouldn't necessarily show up in a report of stress. But, it could explain why you get some death-related themes in conjunction with some of these experiences.

LAWRENCE: I think the problem is the methodological question: Why doesn't everybody, then, who is faced with those same types of situations have those kinds of experiences? What is it, then, about this particular individual? You've got hundreds of people who have this, yet not everybody reports the phenomenon. I think that's a key problem. I would like to pick up on something Justine said. I also had a couple of cases with patients who immediately after the experience reported to a family member that they had had either an out-of-body experience or a near-death experience and then a couple of weeks later didn't remember the experience, nor did they remember even telling the significant other about the experience. So, memory is a factor. Some of it has to do with the drugs that they are taking, which promote amnesia for a lot of the events. That's another complicating factor.

EDGE: There are two other questions that Bill had, one was on the electronic equipment, and the other was on telepathy.

ROLL: Particularly reports of telepathy primarily with living persons or with dead persons.

OWENS: There's a broad range and a real mixture. It's the same response I have to the simple classification. I've heard it all.

ROLL: So, both are there.

OWENS: Yes.

LAWRENCE: I think the thing that is interesting for me is when they report these experiences, the visualization is similar to when they're in their body. Whatever is going on, the visual system seems to be the same with the exception that it's more intense, particularly as they go deeper in the experience. If they see flowers or scenes they describe them as very, very vivid. So, the senses are enhanced except for hearing. Hearing, given our typical, normal senses, changes and people don't report hearing as they usually do. They report telepathic information. I gave one presentation to a lay audience. I was talking about what people see and hear. A woman raised her hand and said, "I'm deaf. And when I had this near-death experience, the information came into my head." This was obviously a very new experience for her to get information this way.

ROLL: What about music?

LAWRENCE: Yes, they will hear music. But, again, the hearing has changed in terms of what they describe as their sense experience.

ROLL: They won't talk. They'll telepathize. But they may experience something like music. Is that true incidentally? There seem to be some reports but I don't know how common they are.

OWENS: It really varies quite a lot. There is definitely a very strong claim of this telepathic communication where they will verbalize what was told to them. Then they'll quickly say, "But I didn't really hear it. I just knew it." They'll go on and on about it. But then there are cases where they report hearing sounds, definite sounds: music, clanging sounds, whooshing sounds, definite auditory-like sensations.

ROLL: Electronic? Did we get to that? That's interesting because it might be PK.

OWENS: I think these people should be tested (I'll just talk briefly about that) because the reports that I get are such a mixed bag. Some of it, I have to say, is kind of silly or hard to believe, but I'm not trying to at all discount all the claims. I think some electronic interaction might really be going on. However, they sometimes seem overly interpretive of what's happening to them and illogical about these purported interactions with electronic and physical equipment. You get a whole morass of reporting. It's really difficult to sort it out. But I think that there is enough consistency that these people should be tested.

ROLL: Madelaine, did you mention that, also?

LAWRENCE: Yes. I just want to mention one other aspect of this which I haven't checked out, but I think it might be worth pursuing. I would be interested to know what is already known about people who have other kinds of paranormal experiences. I agree with what Justine says, that the people will often report that clocks don't work when they're around them and report that they affect the electronic equipment so that the electronic equipment doesn't work as well. One of the nurses in the coronary care unit says that when she has a patient, who is on a lot of pieces of equipment—ventilators, tubes, and electronic equipment—the EKG readings have blips and a straight line as part of that whole configuration. There is what she calls a "fuzzy baseline". It usually means that there is so much electronic equipment that the monitor is picking it up. She swears that patients who have had a near-death experience, even if they don't have all this electronic equipment on them, will have that same kind of fuzzy baseline. It was the same kind of reading that they would get with a lot of electronic equipment. She showed me a couple of strips. Nobody has systematically checked this out. But I, like Justine, believe that it's worth pursuing, because there are lots of reports of this. There seems to be something that happens that can be picked up based on electronic equipment.

OWENS: That needs to be done carefully. I've done a lot of physiological recordings and fuzzy baselines are a part of life. With 60 cycle interference you need to be very careful when making any claim about electronic effects. The anecdotal reports are numerous.

BRAUDE: I was first struck by Bill Roll's comment about the possibility of near-death experiences occurring when there is no real threat of physical death. It reminded me that in general (and this is well known in the case of dissociative disorders) that what counts as trauma of the sort that would initiate a dissociative disorder varies quite wildly and idiosyncratically between individuals. So, it could be something that practically everyone would find traumatic, or it could be rather more specific. I suppose a philosophy student could be traumatized by reading Rudolf Carnap. Here I just want to ask for a point of information. I guess I'm just flaunting my ignorance. It makes me wonder whether there are some suggestive parallels between the studies of near-death experiences and what we know about dissociative

disorders. For example, children tend to dissociate differently than adults. That's why adults seldom develop multiple personality. We also know that people suffering from dissociative disorders are highly hypnotizable. I would wonder whether any studies have shown whether those who experience NDEs are likewise highly hypnotizable?

OWENS: Studies have shown that people who experience NDEs score higher on measures of mental absorption, which is correlated with hypnotizability. There are a number of interrelated scales. That's a consistent finding. Four studies have shown that. Back to the physical sensitivity, Phyllis Atwater, who has written books about the after-effects of a near-death experience and talks a lot about the brain changes, has done a lot of media work, gone into television studios, and claims to have destroyed thousands of dollars worth of equipment because of these problems. She has very strong claims and would be a good subject to be tested. There are a number of people who make these really rather strong claims.

BRAUDE: With your equipment?

OWENS: No, not my equipment.

ROLL: Ken Ring apparently has found that people who report near-death experiences and also people who report alien encounters, have had stressful childhoods. Do you have any comment about that?

OWENS: I take it seriously enough to have attempted a replication of his work with several hundred persons, using both his scales. His studies have been criticized because of the use of nonstandard psychological measures. So, I'm replicating his work, both with his measures and with standard psychological measures. I'm in the process of entering this data into a computer.

ROLL: Oh, good.

LAWRENCE: I think one of the methodological issues that comes up with this kind of research is that you can give patients DES scales or mental absorption scales, but you give them after the fact. So, you don't know whether this was the pre-condition that resulted in the NDE or the NDE then changed their scores. Obviously, the interest in near-death experiences has come about as far as the health care field is concerned, because of the new resuscitation procedures. We can now resuscitate patients, bring patients back, that historically would have died. But now we also have another group of patients that are going to

lend themselves very nicely to this kind of research in that we have patients that come in for treatment. We put in implantable defibrillators, for example. One of the things, given that particular patient population, is they come in to see if their defibrillators work. One of the ways to test it is to actually put the patient out. The patient's heart stops. They bring him back if the defibrillator doesn't work. (Talk about being on the edge!) There are a couple of other cardiac patients that we have and can predict that a certain percentage of these patients will have near-death experiences during this event. So, this gives us another whole group of patients that we can pretest and look at some of these scales ahead of time and see what their personality characteristics are, or at least what they report, before the event happens. And then test them immediately after. I think that's going to be a big step forward in terms of some of these questions because these are big questions. Do they have certain personality characteristics that then lend themselves to having this experience happen? But the question I have for you, and it's a question I think I mentioned yesterday and even this morning, is: What constitutes evidence? Bill and I were talking about this before. Now that we have these opportunities given these patients are having these experiences, what really would be evidence or what direction of evidence would be useful in terms of getting some handle on these kinds of questions that have been raised in the last day-and-a-half?

PALMER: I think it would be good not just to use this to define who has the experience and who doesn't, but also who has what particular types of experiences. One question that would be very important is, "What kinds of people are likely to have a negative experience as opposed to a positive experience?" There are all kinds of common sense predictions you could make about that. Depressed people might be more likely to have negative experiences, or people who use certain psychological defenses like reaction formation might have positive ones.

EDGE: What sort of research or direction in research might be helpful in this area? Might another way of asking that question be, "What evidence, if we had that evidence, would be convincing of survival?"

ROLL: I don't think that is the right way of asking the question. I think the question that she asked was, "What is the evidence for having a psi-type experience?"

EDGE: Oh, okay.

ROLL: The survival issue is a different issue.

EDGE: Well, let me ask both questions then. Robert, do you want to respond to which question, or both?

ALMEDER: The question that's been going on in my mind is, "Are any of these experiences evidence for the fact, if it is, for the claim that people are different from their bodies and sometimes leave them?" Madelaine asked the right question, which is, "What would you take as evidence here that this is evidence for dualism and that people leave their bodies?" Now, if you say, "There's nothing we'll take as evidence," that's dogmatic. There are people who have made that sort of claim in interesting ways, for example, Susan Blackmore's claim that these are all hallucinatory experiences. If you say, "Well, look at those cases where people have out-of-body experiences and the content is veridical. They had no access to the material or had no possible access by way of their sensory apparatus to the states that they're testifying to." Her response is, "Well, you can't count those cases because they're not typical." Most of us believe the story to be told here is not that some of them are hallucinatory and some of them are not. The story to be told is in terms of the best cases that can't be explained as hallucinations. Those cases are going to have a lot of veridical content that's very rich and couldn't be acquired in any obvious way by being immediately present to these objects while brain functions and heart rates are down. It's also the case that people will come in and say, "Look, it's not all hallucinatory. But we can explain it by psi." These would be cases where the experiences do have veridical content, but they have these paranormal abilities. They also mistakenly believe that they left their body. In other words, you cut the experience in half: reserve the interesting part for hallucinations, namely, that they couldn't have left their bodies, but they do have true sentences to utter about things that they didn't have access to. That seems to me to be very arbitrary, too. That seems to me very ad hoc. I tend to think the voluntary OBE is the place where you are going to get the most interesting information—the people who claim they can leave at will

like Russell Targ's experiments with Miss Z and the Osis-McCormick experiment.

ROLL: Robert Monroe?

ALMEDER: No, Alex Tanous, the repeated ones.

ROLL: How about Charles Tart's experiments with Monroe, the out-of-body person?

ALMEDER: I'm not particularly interested in that one just now. Let me finish the story that I want to tell. You can't tell this story. We don't have enough time. I get the sense that we haven't been on the issue. Which cases, if any, provide striking evidence that people will leave their bodies? Now, if you start working with the cases that have a lot of veridical content, then you are going to get the usual objection that it is just psi at work. I'm not sure at all it's just psi that accounts for that. I think it's very arbitrary to say part of their story is psi, but the other part isn't. Why divide it up that way, except that it serves your purpose? I get the sense that there is a bigger discussion to be had here on the question of survival than we're doing.

TAYLOR: I just have a few general comments. The first thing is that the discussion seems to be drifting again towards the problem of evidence and how to convince reductionist scientists that alternative realities exist. At the same time I think that there is something going on here with these experiences that is not necessarily applicable to the domain of science itself but really has another function, which has to do with the way people mythically and metaphorically understand their own selves. The big problem that I see is when you get into the objective manipulation of conditions. You can gather extensive information about out-of-body experiences and collect reams of clinical data if you can find grants and locate people who are willing to talk to you. But, what does all this have to do with the individual? You are just going to transmit your conclusions to the person and somehow suppose that this is going to allow them to get to the point of transformation that you seek. I think that there is a much greater epistemological leap than we realize between the collection of objective scientific information under controlled conditions and the ability of an individual to have these experiences and perhaps to get some control over them him or herself. I think that there are domains not exactly the

same and that you cannot necessarily achieve self-realization through the scientific paradigm.

In this regard, there was a comment that John made a little earlier about time estimation under sensory deprivation. Believe it or not, I have done some scientific experiments on that subject. In one of them I took a group of 250 people through a sensory deprivation environment for varying lengths of time. I measured time estimation, heart rate, blood pressure, and introspective reports on various subgroups. The time estimation study was interesting only because most people in sensory deprivation show a consistent time underestimation. If you keep subjects in the deprivation environment for a half hour, then bring them out, they say, "Well, I was in there for 20 minutes." What we found was that, if you manipulate the conditions of the environment (we optimally biased them so that people wanted to be in there), subjects reported a wide range of time estimations. But if you took an objective measure to find out how pleasant their experience actually was and divided them into people who didn't have a very pleasant experience and those who really did have a pleasant experience, the people who didn't have a very pleasant experience had the usual consistent time underestimation. People who had a tremendously pleasant experience had the most wild variation. Either they felt that they were in there for an eternity or it seemed like the half hour passed "in just a second". That to me has interesting phenomenological implications because there is something going on there with the people who are somehow oriented positively toward that experience.

EDGE: Did the reports change in any way? For instance, were the reports of the people who thought that time was longer more detailed and richer than the ones who reported a shorter time?

TAYLOR: The problem is that once you get into that type of environment, it does depend on the person. Some people report being tremendously bored; others report tremendously rich experiences. They report a streaming flow of consciousness and a rush of images which sometimes can make it seem like the time passed in an instant or in a year. There was no consistency. It seemed that the difference was between boredom and the richness of the experience: the richer it was, the more variable the time estimation would be.

OWENS: I am sort of startled by this report because it is very similar to a finding that I reported in *Memory and Cognition* in my former life as a cognitive psychologist. I found differences in time estimation and memory for stories. Without going into the details of the experiment, there were boring stories and there were interesting stories differing only by a relatively minor manipulation. I found very strong differences in memory in terms of the amount of imaginative inferential processes of the material—very emotional inferences about what the characters were feeling and thinking, identification with the character, and very standard memory measures—between the two groups. We also found a difference in time estimation. The people who read the interesting stories and had more elaborated memories underestimated the time. Time flies when you're having a good time. People who read the boring stories had sparse but factual recalls, which faded more over time. There was a difference when we measured these people over time. They didn't have as good memory retrieval later on and their time estimation was greater than the actual time that they were given to read the story.

TAYLOR: This was a slightly different study in a sense; it was a meditation experiment.

OWENS: Yes. It's different, but it's quite similar in terms of the connection between imaginative involvement and time distortion.

TAYLOR: We identified a state of psychological suspended animation in those people who were able to have rich cognitive experience with emotional surges and deep imagery. Those who were in there long enough saw the flow of images become interspersed with periods of complete psychic rest. When they learned how to disidentify with the imagery, they would spend longer and longer periods of time floating in this experience of pure nothingness, which they described as a tremendously peaceful, wonderful experience. Then we followed them up a year later. If they had experienced the bliss of nothingness, they always said, "Gee, you know, I've kept that with me all along. It's really changed the way I think and feel about things."

OWENS: My people were just reading stories. But there's a lot that goes on when you read a story. I'd like to respond to something that Robert Almeder said about hatcheting these experiences in two. It is a problem. There is a lengthy literature on the validity of self-report in

psychology. I certainly champion the validity of self-report. However, you have to face the fact that some things that people report to you just can't be accepted as the truth. A very good example in the near-death literature is their beliefs about their medical condition. This has to do with the perceived threat of death. We've evaluated 150 cases with independent raters of the medical condition. Many people were rated not to be near death; in about half these cases there was no loss of vital signs. But many of these people firmly believe that they did have a loss of vital signs, and they say things like, "I made medical history." I've heard this reported a number of times. They really do believe that they made medical history, even though they didn't.

EDGE: It seems to me it's not just a matter of things you can believe or not, but there are also things that you can check and things that you cannot; that is, if there's veridical information, you can say, "Well, that part we know. This other part we're not sure about yet." And so, there is a kind of natural cleavage but that doesn't necessarily deny half of it; it simply says, "We can't check it."

ROLL: Veridical information in OBEs, just like in ESP, comes in terms of the mental constructs of the percipients. ESP is a kind of perception in that memories, imagination, and so forth are interwoven with it. That's why you can't combine that with the many cases of non-veridical OBEs by people who otherwise produce veridical OBEs, like Keith Harary, Robert Monroe, and many others. You can't accept that they are just stepping out of their body and are in consensus reality because they are essentially memory constructs. In other words, memory and imagination are interwoven in the experience, whether or not there are veridical elements in it. But we are completely ignoring the question about the criteria for evidence for this. No one has addressed the evidence for psi.

LAWRENCE: I would be interested in evidence for either one, for psi or for survival. I think what I'm saying is, right now we know that there are patients who are going to come into an acute care hospital who are going to have this experience. We know it ahead of time. We can predict a certain percentage of these patients are going to have it. I certainly am not as knowledgeable as the people here, but as I've read some research studies of out-of-body experiences that try to demonstrate veridical perception through electronic measurement or

impact on animals and other people. I think that the question is, "If you now have a situation where these patients are going to have some kind of experience, what would constitute evidence either that they have some kind of psi ability or that they really are out of their bodies?" I think that is the heart of the question that we have been talking about.

ALMEDER: My concern is when people have these veridical contents, what was the best explanation for them having this knowledge if they're not out of their bodies? The answer, obviously, that everybody is giving is that it is psi.

GROSSO: Not me.

ALMEDER: Well, I don't know if everybody is doing it. But there are two possible explanations for people with these rich contents to their experiences that they could not have acquired in normal ways. One is psi, and the other is that, in fact, they were right; they did leave their bodies. Now, to say that their knowledge is some sort of a construct is obvious. All knowledge is construct. The question is, "How do I have knowledge of what's going on out in Boylston Street when I'm here on my back with my eyes closed, my brain waves down, and my heart rate down?" That's not the usual access to that information. You say, "Well, it's just psi." The question now is, "What's your evidence that that is a better explanation than people would be leaving their bodies?" You might say, "Well, I have no other experience of people leaving their bodies." Maybe you don't have all that other experience of people having that much psi about events that take place far away. I wasn't saying if they say it's so, it's so. I'm saying that when you rule against a particular position, you can't do it in a way that makes it impossible for the other hypothesis to be true. I don't accept the claim that people leave their bodies because they tell me. But when they tell me a story about what went on when they were away from them and you have no access to explaining that normally, it gets interesting. We have to be careful about the logic. You just can't exclude the other side of the argument.

BRAUDE: But I would say that that is not what the proponents of the psi hypothesis do here. And, it may come as a shock to Bill Roll to discover that I'm in total agreement with him on this!

EDGE: That means it's time for a break! Continue.

BRAUDE: Whatever we know about ESP, I think it's safe to say that assuming it occurs, it would be at least a two-stage process. There would be first of all what we could call a stimulus stage. And then there would be a response or a manifestation stage. Now, a lot can happen between the stimulus and the manifestation of some ESP interaction. It's usually in the manifestation stage that subjects add their own analytic overlay or their various other cognitive idiosyncracies to what's going on. This is also the place where so-called telepathic deferment might occur. That's why some people seem to have their ESP responses some time after the presumed interaction would have occurred. I'd say it's fair to conclude that when we look at the totality of evidence for ESP and the way in which it usually gets bundled in quite cognitively idiosyncratic ways that it is reasonable to think that subjects having veridical OBEs are experiencing a kind of imagery-rich form of ESP, which not all people who manifest ESP do, and that they are simply, let's say, packaging veridical information in ways that are visual; whereas other people might do it in ways that are auditory or without any kind of imagery whatsoever.