

Problems Related to Experimentation While Dreaming Lucidly

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Lucid dreaming offers a unique opportunity for the study of dreams. The lucid dreamer knows that what is being experienced is a dream, and thus, while dreaming, can investigate dream content and how consciousness works during dreams as well as do exploratory experiments.

For some years I have experimented while dreaming lucidly. While awake, I plan an experiment plus a cue word or phrase that expresses the experiment. For example, in a series of experiments, I had planned to handle an object and note its solidity, then put my hand through that object, and finally to feel it again as solid. I found that once I knew I was dreaming, if I could bring to mind the cue "solidity" or "test solidity," I generally had no problem remembering what to do.

While experimenting in dreams, however, I met with certain problems that arise out of the nature of dreaming. I'll begin with the more obvious ones.

1. **No notetaking.** There is the problem of not being able to take notes. Actually I can, but they disappear when I wake up.
2. **Interruption.** There is both the problem of waking up before finishing an experiment and the fear of waking up that occasionally makes me rush through an experiment. False awakenings (dreaming that I have awakened) and what I think of as the "spliced-film effect," in which suddenly I am dreaming something else, have the same effect as waking up, since I no longer know I am dreaming.
3. **Undesirable circumstances.** The dreamer cannot select the circumstances in which he or she will experiment. Experiments must be carried out in whatever dream environment is found when the dreamer becomes lucid. For instance, I had planned to do ten jumps in a dream, but when I became lucid, I found myself poised inside a tower with little to stand on. I was afraid of falling and could not proceed with my jumps.
4. **Intrusions.** The dreamer cannot prevent intrusions into the experiment. Things appear or disappear. Events happen without warning. If a beast takes my hand, I have to deal with him. In one case, I was testing the continuity of consciousness by counting in the dream, intending to count through the act of waking up and slightly

beyond. I was counting out loud at a regular speed, deliberating on each number. Someone began pinching me in my seat. This distracted me. I tried to shake him off and couldn't, so I ignored him. Next, I had bothersome grape seeds in my mouth. I needed to spit them out, yet had to be careful not to lose count nor lose my rhythm.

5. ***The "reality" of the dream.*** In spite of knowing I am dreaming, the dream may be so convincing that it disturbs my progress. Once when someone wanted to take a picture of me with my Uncle Tom, I thought it was not right to interrupt the picture-taking to proceed with the experiment.

6. ***The attraction of the dream.*** Even when the dream has been unpleasant, or upon waking reflection I see nothing that could have interested me, the dream attracts me so greatly that it takes a certain amount of will power to proceed with my experiment. Often I ignore experimenting in order to try to go on with the dream.

7. ***The presence of only what is being experienced.*** There is to the dream only what is being experienced. What has just been seen is gone and cannot be seen again. There is nothing out of view, behind me or to the sides. Nevertheless, it seems that there is physical continuity from what was experienced earlier, and it seems the environment extends out of sight. Therefore, I may make wrong assumptions about my experience. When I saw only light, I assumed without warrant that I was surrounded by light. When I was trying to carry out a pre-planned dream, for which I needed a plant, I turned and saw a potted plant. I wrongly assumed that it had already been there. But it did not exist until I saw it.

8. ***The occurrence of what is anticipated.*** What is anticipated tends to occur, directly or indirectly. Anticipations include desire, intention, fear, the observation of a possibility and expectation of certain responses. If I plan to go upstairs, stairs appear. If I expect to land when I fall, I do (or wake up); if I don't expect to, I keep falling. If I want to look out of the window, I next find myself outside the window. This effect has serious implications for experiments, for we are likely to see happen what we expect to happen. When I test for solidity, things feel normal when I first feel them, but when I intend my hand to go through them, it does, feeling their texture. However, what is anticipated may be slightly altered, or may not occur. For instance, a salesman that I hoped to take part in a dream turned out to be a saleswoman.

9. ***Deactivation of the dream environment.*** To maintain the dream environment I must interact with it. If I stop to compose poetry or to try to remember where I am sleeping, the activity in the dream environment diminishes or stops. If my mind is taken off the environment altogether, the environment is in danger of being lost, causing me to wake up. For example, when I was trying to mentally picture my

grandmother's house while I kept my eyes open, as I can do while awake, I needed to keep running down the dream road to keep my interaction with the dream and not wake up.

10. ***Limitations of memory.*** While dreaming, I remember few circumstances of my waking life. What I remember is largely the previous events of the dream, plus a few stray memories. I can bring little to mind, though there is no problem with rote memory. There is no awareness of a continuity of events leading to the present place and moment. Indeed, memories are often false. In the first 277 lucid dreams for which I had planned experiments, in only 122 of them (44%) was I able to bring to mind in whole or in part the experiment that I had planned to do. Sometimes I mistakenly proceeded upon a former experiment. During an experiment I also might forget what I am to be doing or what I am looking for. If I do not wake up soon, I may forget some of what happened. When I was composing poetry, I kept the compositions to only two lines, and even then I often could not retain parts of the lines.

11. ***Knowledge not based on sense experience.*** Much of my understanding of the dream is not determined by sense experience. My recognition of places, people and objects does not depend on what I see. I spontaneously assume I am in Hong Kong without any clues in the environment and without any memory of having arrived there. I "recognize" Charlotte, my wife, without looking at her. I can "know" what she said without hearing it said. I can "know" what is happening out of sight. False memories come in the same manner. Such spontaneous, unconsciously-supplied knowledge frequently accompanies dream experiments. For one experiment, I wanted to change whatever dream environment I found myself in to New Market in Calcutta. I eventually realized that the identity of where I was did not depend on what I saw, but on what I "knew" it to be. The necessary change in the dream could not be in an indeterminate visual environment, but in what place I believed it to be. In one lucid dream, I "knew" that I was flying about in my real bedroom, in spite of the fact that there was nothing truly recognizable in the room.

12. ***Limitations in rationality and judgment.*** While dreaming, I have no such thing as a scientific attitude, nor even much rationality. I can make no critical judgment about the progress or outcome of my experiments. I am not aware of inconsistencies, changes or implications. The judgments that I do make are more frequently spontaneous knowledge, not based on my perception of the experiment. When I try an experiment not already planned ahead while awake, I often do such irrational "experiments" as trying to make Psalm 140 appear or examining the car my mother just left in, so that I can compare it when I wake up with the one she "really" left in. In another dream in which I wanted to examine objects for authentic duplications of waking reality, I was absurdly trying to decide whether a painting was authentically

by Goya.

13. ***Unpremeditated action and speech.*** While dreaming I often speak and act spontaneously. These unpremeditated actions, rather than arising out of what I am doing, intrude into the dream. For example, I had planned to repeat the Lord's Prayer in a dream. When I remembered to do so, I spontaneously proceeded to sing it to a familiar tune. I eventually realized that that was taking too long, and that I should continue by only repeating it. In other experiments, I attempted to put objects I saw in the dream into alphabetical order. I consistently had the problem that while I repeated the words for what I had seen, trying to remember them, I spontaneously changed some words and added others, usually alliterative by-products of the original words. For instance, in one dream, I saw stairs, a pipe, some paper, and a wheel. But when I made the list and repeated it, I ended up with "air, pipe, paper, steel, wheel." Stairs had been dropped. Air and steel had been added.

14. ***Relatedness of words to the dream.*** Words brought to mind tend to be related to the ongoing dream. I found that each time I composed a couple of lines of poetry in a dream, by letting them come to mind, the lines had a relationship to what I had been dreaming. When I tried to remember a forgotten address by simply speaking it, part of the incorrect address that I said was related to my dream location. In a series of dreams I tried to recall where I was sleeping, but when I looked back on the series of tests, I saw that each time, my guess was related to my dream situation. Each time but once my guess was incorrect. The time I was correct I guessed that I was in Landour, but I had been walking along the type of street I would find only while staying in Landour. It only seemed that I had guessed correctly.

15. ***The experimenter as part of the experiment.*** If I test my memory or thinking, obviously I test myself. But also if I test the dream environment, whatever I experience of myself physically is a part of the environment I am testing. All aspects of what I experience remain dependent on my creation of them. I can never separate myself from anything I investigate. When I intend to be still and watch a dream impartially, I can never feel separated from it. For example, in a solidity experiment, I placed my hand inside my uncle to see the effect it would have if I kept it in him. My arm looked normal up to the point where it entered him. It seemed I was successfully keeping my hand inside him. However, upon waking reflection, I realized that I had not observed my hand staying inside him. I did not recall feeling my hand inside him or feeling his texture or moving my hand inside. I had only seen my arm stop at my uncle's body.

In spite of the problems, dream experimentation and observation is possible. I remember planned experiments occasionally. When I remember them, I can carry them out. More often than not I remember the dream well upon awaking. And (what

can be seen over and over again in the examples I gave) once awake, I can reflect critically on the dream, the experiment, the results and myself as the dreamer. I can compare with earlier experiences and see inconsistencies, changes, implications, false memories, false assumptions, and bad judgments. So it is possible for me to carry out experiments in lucid dream and learn from them.