## Comments on an Investigation of the Relative Degree of Activation in Lucid Dreams

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Observations and experiments in connection the light switch phenomenon (LSP) both in my case and those of others (See LL's 3 & 4) prompt me to suggest that in dreaming, including lucid dreaming, a significant amount of the anomalous content arises as a result of the reliance by the dreamer upon patterns of expectation which though appropriate in waking life are not appropriate to the changed circumstances under which dream imagery is constructed. In particular in the LSP the time taken for dream imagery to be constructed, even though it is only a matter of seconds, is rather longer than the time taken for a scene to be illu-minated and perceived while awake after switching on a real electric light. The failure of the mechanism which creates dream imagery to perform at a rate which conforms to the dreamer's waking expectations leads to further anomalies as other expectations are brought in to explain why the light does not come on. These expectations are also inappropriate because in dreams there are e.g., no fuses to blow or other material causes of that nature; the material causes lie in the brain and the brain does not work upon the same principles as those of domestic electricity distribution. There are certainly no fuses in the brain.

In this way the original error resulting from inappropriate expectation is compounded and the dreamer's report of the result is difficult to understand even with the insight afforded by the interpreter's knowledge of the role of inappropriate expectations be-cause this factor is only one of many. It is therefore not surprising that the interpretation of dreams has varied so wildly over the centuries and continues to do so.

Perhaps the key fact that a lucid dreamer has to grasp in order to extend the moment of lucidity — for that is often all that it amounts to when the dreamer is faced with the confusion arising from the use of inappropri-ate expectations — and to exploit the result-ing situation is that he need not adhere nearly so much as in waking life to the learned limitations of cause and effect but is free to construct whatever images he wishes though he will probably find it neces-sary at first to use the existing framework of actions and probable results. This freedom applies not only to sensory imagery but also to other experiences even as far as meanings though this is where communication with the waking world breaks down and dreams become vary mysterious.

A practical approach to the investigation of the relative degree of activation of these different levels and under what circumstances the emphasis is at one level rather than an-other might be easiest in the area of lan-guage and auditory imagery. In my own experi-ence the sensory aspect of speech in dreams often seems deficient — I am frequently in doubt as to whether I have had the experience of hearing speech in addition

to understanding what was said unless I make a point of turn-ing my attention towards the sensation. This is perhaps not unexpected since as opposed to the situation in waking life where it is more a matter of filtering out information that is not required from the sensory input the situ-ation in dreams is that the imagery has to be created and it would be reasonable to surmise as a first approximation that the dream im-agery would be created as required by the rapidly changing circumstances of the dream rather than as a grand total from which items are selected. There must be a limit on the size of the model held in the brain. On the other hand the limits on what can be quickly created are much wider. In the simple case of a lucid dreamer choosing to look to the left or the right it is quite unnecessary that the scene on the left or the right actually ex-ists (except in the possibility of its rapid construction) before the dreamer looks at it otherwise there would be no limit to what would have to be stored in a form available for immediate access because there is no knowing in advance where the dreamer will direct his attention if he is indeed free to look where he will. It might be argued that in fact some of the difficulties in con-trolling dreams arise out of a lack of latent but readily available potential imagery but the same difficulties could be explained by inadequate capacity to construct the required imagery.

By way of beginning the line of investigation suggested in the previous paragraph I have recently been experimenting with turning on a radio in dreams with interesting results. Since there is no social situation involved and random tuning in covers a wide range of possible results the situation is open as far as possible for expectations to operate according to waking experience. In fact on the occasion when I obtained the clearest results first I obtained the weather forecast (after the time signal) and then the news. However, although it sounded very much like it should, it made very little sense. I imagine it was much as someone who did not understand the language might hear it. The point of the experiment — whether I could hear sound if I directed my attention specif-ically to it and if it could be brought into being at the touch of a switch — was satis-fied. I could hear it. On the other hand the meaning had gone to pieces though it amused me to hear such nonsense in the solemn tones of the news. This experience seems to paral-lel the difficulty of reading in dreams. In both cases approximations to the forms are generated but rarely is it possible to make sense out of it. In both cases the medium is abstract symbolic. It looks as if the dream imagery generating mechanism does not handle abstract symbols too well when they occur in long strings whether they be expressed in visual or auditory imagery. This seems to support the contention that dreaming is pre-dominantly a right brain activity. Visual representations or sounds which are not abstract symbolic but whose meaning lies more directly in the form itself seems to be handled rather better. At least there is not the same disparity between ostensive purpose, communication, and the almost complete failure to satisfy it. This superiority might however be illusory because it is possible to read meaning into pictures or music since the medium is fluid and mistakes or other defi-ciencies are not so glaring as in a digitalized system of abstract symbols.

The difficulty of handling language in dreams thus appears to be another area in which the consideration of inappropriate expectations as an aid to the interpretation of dreams would be useful and as usual lucid dreamers appear to be in a good position to investi-gate along these lines. I hope to report on my progress with this approach in future issues of LUCIDITY LETTER.

Note: A personal observation from Fay Wilmes of Omaha, Nebraska dovetails with Mr. Worsely's comments. She writes:

In my experience the most common type of lucid dream I have concerns written material. When I dream I am reading things I then be-come aware that I am dreaming. Several times I have the overall feeling—sense that it is things that I shouldn't be reading. Many times though it is just common things, like drivers licenses, business cards and news-papers. The uncommon thing about these is that they weren't Nebraska licenses or the local newspaper.

I try to keep reading whatever it is, and many times I can. Some of the things I "end up reading" are very technical end contain sketches and graphs. These are the things I get the "feeling" that I am not supposed to be reading. I also read things while someone (and I don't know who) is actually writing them. Much of the "information" I read, al-though clearly readable, I don't understand.

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