

Dream Lucidity and Dream Witnessing: A Developmental Model Based on the Practice of Transcendental Meditation

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I will briefly review what we said yes-terday at the symposium on lucid dreaming during the ASD meeting. Harry Hunt has been doing research on meditation and its relationship to lucid-ity. Jayne Gackenbach and I began a collaboration, at MIU and UNI in Iowa, to look at the same question. We have thousands of advanced meditators practicing the TM program at MIU in the Advanced TM Sidhi Program. Lucid dreaming, as it's typically de-scribed, is, in my opinion, in a direction which has been classically described for thousands of years in various East-ern traditions, especially the Vedic tra-dition of India, as something called 'Witnessing'.

Ordinary waking and sleeping is a cycle: you're awake, you're asleep, you're dreaming, you're in deep sleep, you're dreaming again, and eventually waking again. One experiences active changing states. The Vedic tradition proposes that underlying these chang-ing states of consciousness, and from which they arise, is an unchanging continuum of pure consciousness. It's sort of like a unified field of conscious-ness from which the diverse changing states of consciousness arise. This unified field of consciousness is de-scribed as transcendental conscious-ness or a fourth state of consciousness, distinct from waking, dreaming and sleeping.

It's said to have the character of restful alertness. That the individual is, at the same time, very settled, as he or she would be in sleep or dreaming, includ-ing deep sleep. On the other hand they're increasingly wakeful and alert within. So that it also shares the attrib-ute of enhanced alertness, as in the waking state. This fourth state of con-scioussness combines these dual charac-teristics in one state by being increas-ingly awake and aware and yet in a very settled, silent state, both metabolically and phenomenologically/ psychologi-cally.

This state is said to be purely content free. That is there is no mental content to it. All that it is is a simple experience of 'Self' or 'am'ness; an experience of ones inner being. It's a state of being. It's a state of knowingness, rather than a state knowing particulars, like I am a boy or I am a girl, or I've done this or I will do that. All that is transcended and all that's left is consciousness as a field, aware of itself, alone without anything else in that awareness: no thoughts, no feelings, no perceptions.

This is the theory that meditation, for instance transcendental meditation, facilitates a process of transcending the active state to experience this transcen-dental foundation state. What happens as a long term consequence of repeated diving to this transcendental state and coming out into activity is that this settled, silent, fourth state of conscious-ness begins

to be maintained at all times along with the active states of waking, dreaming, and sleeping. When this silent settled state of pure awareness devoid of mental content, unbounded in space and time, is maintained it becomes a silent witness or observer to the active changing states of waking, dreaming and sleeping.

That's the theory and that defines what's called a fifth major state of consciousness, or what's often called cosmic consciousness. It's inclusive of the ordinary changing states plus this fourth state, which is without boundary in time and space. This is what's considered the first classical state of enlightenment in a variety of Eastern systems.

Where Does Lucidity Fit?

So, where does lucidity fit in with this Eastern conception of cosmic consciousness or of transcendental consciousness? What we were looking at yesterday was some empirical research on an advanced meditator from the MIU community who claimed to be experiencing this witnessing state twenty four hours a day, non-stop, along with the changing states of waking, sleeping, dreaming. (Editors Note: See article in the June 1987 issue and in this issue of Lucidity Letter for specifics of this research.) We examined if this person's experience psychologically, phenomenologically, and psychophysically, was different from subjects who had experienced lucid dreaming. Is this a different animal? Is it along a continuum with lucid dreaming? Our own predilection is that there is a continuum of degrees of lucidity. We feel that typical dream lucidity represents a step beyond ordinary dreaming and that this experience of witnessing represents a step beyond ordinary dream lucidity, and if you took dream lucidity to its ultimate state, then it would be synonymous with the experiences I just described. Basically what we found was that this subject claimed that he was inwardly awake in a silent state of awareness during dreaming and sleeping. We found that he could signal through lateral eye movements of the type described in LaBerge's work (LaBerge, 1985). He could voluntarily act from within REM sleep and also from within stage one and stage two sleep. This was a very interesting finding, that he could signal from Stage two sleep, which although there is some mentation in stage two sleep it is, relative to REM sleep, a deeper state of sleep. Yet he was able to voluntarily signal from that state and not just from a dreaming state.

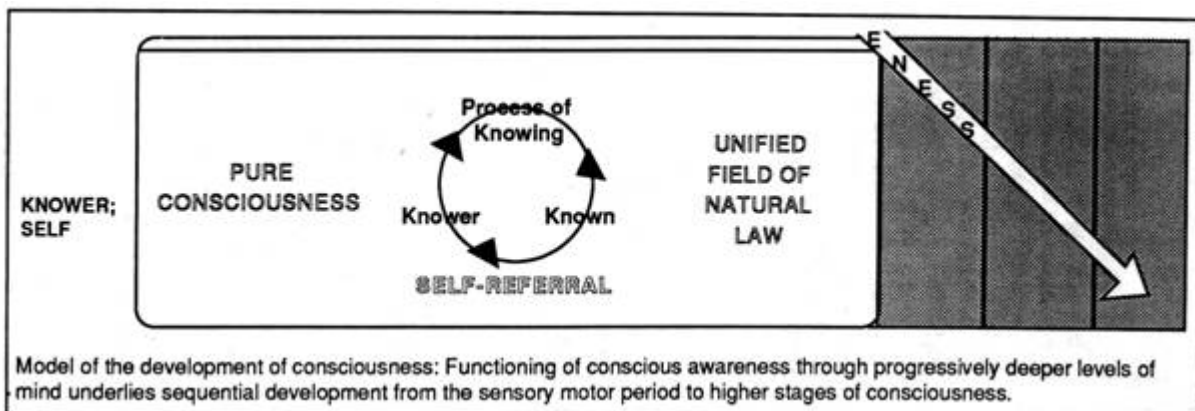
This is interesting to me because typically lucid dreaming involves, in some ways, an activated mental condition. It's as if you're waking up in the dream. Suddenly you have your waking mentation and you can think and act. You can act upon and observe the dream world from which you're now partially de-embedded. But it's an active state of mentation. "Oh! I'm lucid!" Sometimes you wake up because it's kind of a state of arousal. You can think about it and process the dream and do things like, "I'm going to change the dream." You get the goodies of being awake and being asleep. Hopefully you're doing good things, but you can do anything you want.

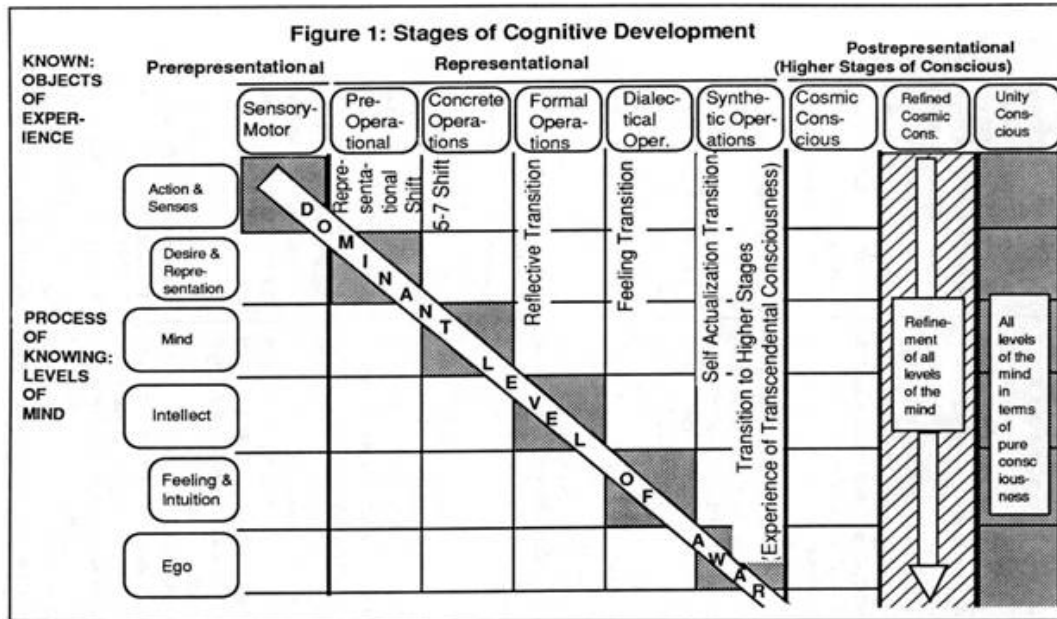
This state of somatic arousal, which would presumably be somatic (LaBerge, 1985) as well as cognitive, should look different than the state of witnessing. The latter is defined as a state of silent awareness separate from any active changing state of waking, dreaming and sleeping and therefore would include lucidity as well. You would be stepping back, not just from dreams, but from lucidity, and you would be back, as it were, at the source of awareness, observing all the changing states as they go on. In other words, when the subject was in a deeper state of sleep and there was no mentation at all, that silent inner awareness was still turned on so it was observing dreaming and it was observing absence of any mentation in sleep, and that's why the subject could voluntarily signal. Now beyond that, we found that, in terms of his heart rate and his respiration rate, that the subject had a lower level of both than the lucid subjects to whom we compared his data and to the non-lucid subjects. Again there was this notion of low somatic arousal.

Relevant TM Research

This is consistent with a lot of research we've done on transcendental meditation about experiences subjects have during TM of this state of pure consciousness (without thought in just pure awareness). After they come out of this state we ask them to press a button. We look at the button press in terms of those periods when they were supposedly transcending. We found that there was a very high probability that they would be having apparent respiratory suspension, where they wouldn't breathe at all for anywhere from fifteen seconds to about a minute, which was associated with what the subjects called transcending (Farrow & Herbert, 1982; Kesterson, 1985). There would be, essentially, a period of silent physiology.

Also, during those times, there was a maximization of what we call EEG coherence, or synchrony, especially in the alpha and theta bands (Dillbeck & Bronson, 1981; Orme-Johnson & Haynes, 1981; Orme-Johnson & Gelderloos, in press). So it seems that this phenomenological experience of transcending





during TM is associated with metabolic silence and with some sort of enhanced alertness according to the EEG record. What we think is happening is that through repeated repetition over time this silent state of restful alertness begins to be maintained even outside of meditation throughout the cycle of waking, dreaming and sleeping. When it does, it takes the form of witnessing which enables a person to witness his dreaming and sleep which is a step removed from the changing states of waking, dreaming and sleeping. Our pilot data on one subject for sleep seems to support this model. That's a brief overview of what we covered yesterday.

Developmental Context of Witnessing/Lucidity

Now I would like to place these concepts in a developmental context. I'm a developmental psychologist by training. I think by relating lucidity, and especially witnessing, to a developmental context in western psychology it helps to demystify our understanding. I feel like I could say, especially in Iowa, but in general, that very few people have an understanding of their potential higher states of consciousness. Most contemporary psychologists simply reject it out-of-hand as silly-willy.

Similarly lucid dreaming has had its own row to hoe, it has its own similar dilemma of trying to describe to psychologists and indeed to everybody, a state which they typically don't have access to. That's a dilemma. How do you convince someone of something they haven't experienced? What I want to do is turn the tables on the people who just reject out-of-hand the possibility of higher states of consciousness and/or lucidity. I'm going to be especially talking about higher states of consciousness like the slate of cosmic

consciousness. I would like to entertain, and will entertain until proven otherwise, that in fact higher states of consciousness, possibly lucid dreaming as a step to them, actually represent the natural and normal continuation of development into adulthood. That they are not odd, they're only mystical in that they allow us to go outside of our ordinary range of experience. Essentially people who experience higher states of consciousness are grown-ups and everybody who doesn't, isn't. That's what I'd like to momentarily maintain just for the sake of being feisty!

I've been doing a lot of research to determine whether or not people who have these experiences seem to be using more of their potential, whether measured in cognitive terms, personality terms, perceptual terms, or relationships, and whether or not they score higher on developmental scales than other people. I want to present to you an example that has always fascinated me once I realized what was going on.

Piagetian Analogy

Most people have heard of Jean Piaget, the modern founder of Developmental Psychology. In a funny way, he had a similar task to my own, or our own, in that he was trying to show that young children viewed the world in a qualitatively different way than adults. That may be common knowledge now but when he began it wasn't. People thought that young children didn't really view the world in a qualitatively distinct way. They just weren't as good at it as adults. His essential challenge was to show that young children have a different state of consciousness.

Think back to when you were four years old or to when your children were that age. They do, in fact, view the world in very different ways. They have a different perception of time, space, causality, self and world. Piaget had to demonstrate empirically that these young children were different than adults. Our task, on the other hand, is to demonstrate that there are higher states of consciousness beyond formal operations. So we are at a similar point where he was but on opposite sides of the life span. He had a hard time showing that children were younger developmentally. Being a reasonable person in a reasonable world, which is being able to perform science, it's also a challenge to show that there may be people who are developmentally higher than formal operations.

4-Year-Old vs. 7 Year-Old Science

Piaget's critical experiment, which for the last thirty years has been done numerous times, has always fascinated people. This is his conservation experiment. If you had two beakers that had the same amount of water in them and poured water from one beaker into a tall skinny beaker and asked a four-year-old, "Is there more water in this one or that one?". The four-year-old would say there was more water in the tall skinny beaker. Then if you poured it back and said, "Wait a second. Is there the same amount of water in these two?", the four-year-old would say, "Yes." Then pour it into the tall thin beaker and say, "Now what?". The four-year-old would say, "I already told you there is more water in this one!"

Four-year-olds have a particular way of viewing the world. We could say it is one dimensional because their perspective is that the beaker is taller therefore there is more in it. The four-year-old didn't take account of the fact that it was also skinnier. When you bring a seven-year-old into the room, he sees that there is actually just an apparent transformation but nothing's really changed. There is the same amount of water in the two beakers.

My claim is that to the four-year-olds of our world, seven-year-olds are, essentially, mystics. They don't make any sense. If you had a bunch of four-year-olds in a room they would come out and measure this and they would say, "Of course there is more in the skinny beaker." They would be able to do four-year-old science. They'd hold up a measuring rod and say it's taller. They'd have perfect reliability that there was more water in the skinny beaker. Then if you brought in a seven-year-old who looked like a four-year-old so the four-year-olds didn't think, "Oh, he's big and tall and must be right or he'll beat me up," the seven-year-old's conclusion just wouldn't make any sense in terms of the four-year-old's perception of reality. There are only a few choices for the four-year-olds of our world. Either the seven-year-old is hallucinating, he can't see right because there is something wrong with his perceptual mechanisms, or maybe he's just immature, kind of childlike. The four-year-old might conclude "when he gets older like me, he'll see that there is more in this one. Because he certainly isn't scientific or he could do science and see that there is more in this one."

But four-year-olds who are in transition to becoming seven-year-olds, and this is an empirical fact, begin to see that the seven-year-olds logic has some compelling things to it. I mean, after all, when you pour it back into here there is the same amount so it's kind of a paradox, "How could there be the same amount and now there be different?" So the four-year-olds who are beginning the transition to seven-year-olds or to concrete operational thought are beginning to realize that maybe there is something to his view. Those four-year-olds may generously label the seven-year-old a mystic. Because after all the seven-year-old understands, and this is the criterion of higher development at every level. From the way the four-year-old sees the world but he can't understand the way the seven-year-old views the world.

Asymmetry is always typical of development. The more developed stage incorporates the prior stage as a sub-part and can access it freely but the prior stage has no access to the higher stage and therefore it's mystical to that person. It's not mystical. Piaget was showing that seven-year-old logic is a higher form of logic than four-year-old logic. Similarly that's the situation that we find ourselves in.

Vedic Developmental Psychology

I'd like to, briefly run through a developmental sequence that I've worked out by comparing Vedic descriptions based on the Maharishi Mahesh Yogi's theory of

development of higher states of consciousness to contemporary developmental psychology models. (A fuller discussion of this model can be found in Alexander et al., 1988). These are graphically represented in Figure 1. It turns out that Piaget described four stages: a sensory motor stage dominated by action; a preoperational stage, between two and five years of age, dominated by immediate desire or simple representation, kind of a pre-logical period; concrete operations, where you begin to think logically but about things you can observe outside you; and formal operations, where you get to do adult science and understand about false arguments and philosophical discussions. These were his stages, as far as they went.

It turns out that in Eastern philosophical systems, especially in the Vedic system, there is a description of a hierarchy of levels of mind. Its range is action and sensation at the surface. Deeper than that is representation, where sensations are represented. Deeper than that is the mind which thinks about the representation. Deeper than that is the intellect which discriminates about the contents of mind. Deeper than that are delicate feelings and intuitions which guide our intellect. Deeper than that is the structure of the individual ego which orders all of the other levels of the mind and deeper than that is this state of pure consciousness that I described initially which is said to be the source of all these excited states of the mind.

It turns out, and I think that this is quite striking, that Piaget's four stages actually correspond to the first four levels of the mind described in Vedic psychology. I think that's because the unfoldment of these deeper levels of the mind actually underlies the cognitive behaviors which Piaget observed. It's just that this system of development doesn't end with the intellect as Piaget's does and Western science does.

The great scientists often admit that their own theories are guided by deep feelings and intuitions. Actually if you look at the two deeper stages (see Figure 1) they correspond to higher stages of development. I call these dialectic and synthetic operations, which are essentially guided by feelings. Then the final representational (synthetic) stage essentially corresponds to Maslow's self-actualization, where the individual is aware of his own individuality and ego boundedness and his relationship to the world to a very developed degree. Although this occurs empirically, it is less than one percent of the population. Beyond that is this experience of pure consciousness, which when stabilized along with the changing states of waking, sleeping and dreaming provides the foundation for the development of cosmic consciousness.

The way these stand in relationship to each other is quite simple and are represented along the left side of Figure 1. This is action, the sensory level. This is thought, varying degrees of thought, pre-logical, concrete, abstract logical and then what you could call post-logical but still representational levels of thinking, like feelings and intuitions. So we're going from action to thought to what I would call being or purely post-representational ways of knowing. This pure consciousness state is purely post-representational. There are no

mental contents to it. It's called a state of self-referral. It is just aware that it is. It's a state of pure knowingness without content. It's not mediated by thoughts and feelings in the typical sense. It's just a state of am-ness. When you transcend even the subtlest state of the ego you arrive at this state of pure consciousness which then provides the foundation for cosmic consciousness which is this state where one is a continually witness to the changing states of waking, dreaming and sleeping.

De-embedding of Ego While Sleeping

What I think may be happening in lucid dreaming is similar to the waking state. In waking many people end up at about the level of concrete operations, maybe fifty percent of the population! I'm being very crude, but it turns out, and it may be a measurement error, that about half of the population tends to be concrete. It gives people a headache to be abstract! So most people may even prefer to stay concrete but none-the-less formal operations is the generally the dominant level. This is during the waking state.

Dreaming, on the other hand, tends to have a different character. In a certain sense it shares qualities with the earlier stages of development: mind, desire and representation. Now, obviously, when an adult dreams it's not the way a child dreams, but it shares certain features, for example, dreams tend to be dominated by desires and representations, It's an imaginistic world. There doesn't tend to be strong reality testing or sense of the ego. Essentially what happens is that your ordinary intellect, waking state feelings, intuition and ego go to sleep when you're dreaming, and you're immersed in, what I would call, mind or representation. That's your dream reality. There is no ego at a deeper level that's further away that's commenting upon the dream reality. That occurs in the process of lucidity. You wake up, as it were. Your ego wakes up during the dream and has access to ordinary discriminative waking state processes and can reflect upon the dream content. It's more a process of going to deeper levels of the mind. The de-embedding of awareness starts generalizing beyond the ordinary waking state to dreaming. In the ordinary process of development, you begin to de-embed and go further down. No longer are you embedded in your dream world but your ego is outside the dream and your intellect may be outside the dream and you can process the dream as the content of the mind rather than being unable to differentiate these things from the mind. In that sense, witnessing would simply be the next step down, where you would transcend the individual ego entirely and from a silent state of unbounded awareness observe changing waking, sleeping, and dreaming, including lucidity.

I'll end on what this advanced subject told me. I was asking him, and have asked several people in order to go beyond my own experience, "In your experience, is lucidity as typically described," and I read a description (I call this anecdotal, not science), "is this your experience of witnessing? Are they really the same thing?" He said was that no, they were very different, and several other people have told me this as well. He said that ordinary dreams are on the surface of the mind and that the lucid activity of reflective thinking and

discrimination and acting upon that content is in a more settled state of mind, but that witnessing is at the source of the mind. Awareness is identified with the state of being and these other things are relative degrees of excitation above this silent state of awareness. He did say that he thought the duality of lucidity, the reflection on the content of dreams, was more abstract, more de-embedded than ordinary dreams, which of course it is. Lucidity is relatively liberating. You realize it's only a dream and step out-side of a constrained reality. Then witnessing would simply represent, I think, the next step outside of that, to the source of thought entirely. This is, of course, a highly tentative and theo-retical framework. Jayne and I and others are going to continue to do re-search to test some of these Vedic hypotheses and fit them with related Western hypotheses.

Hunt: I'm very intrigued by this approach, and challenged by it. It bears some resemblance to Ken Wilber's discussion of a spectrum of consciousness. I would make a slightly alternative suggestion because although I'm very interested in the meditative traditions and I practice meditation myself within a tradition it occurs to me that the danger for some of us doing "transpersonal psychology" is that we end up proposing a sort of absolute goal for all human development. We are thereby risking the fact that there may be very distinct, what Howard Gardner would call, frames of mind for psychological types each of which has their own sort of line of unfolding. Certainly, I think that when you look at any of the meditative groups you see that some people take the training very fast and enter fairly deep states of attainment within whatever tradition they're practicing and others of us just struggle along at times.

Now what I was going to suggest was a slightly different alternative. Rather than conceptualize in a linear way stages beyond formal operation, what I was going to propose or suggest as a developmental conceptualization of these higher states of consciousness would be that they represent formal operations attained within what Piaget started to call but never investigated, the affective schemata. In other words, formal operations as Piaget studied it, pertains to logical relationships, logical abilities, precisely the kind of things done in the physical sciences and mathematics but affective schemata pertained to intuition, feeling, self knowledge, knowledge of others.

There is a fair bit of evidence, both in Eastern traditional societies and many primitive, especially Shamanistic cultures, that we in our society (our educational system and our culture) are led through with painstaking care formal operations. However, we are more or less left to wallow with respect to affective schemata. Even Piaget, who wasn't very interested in any of these kinds of things, felt that the affective schematization lagged way behind the logical relations.

If you conceptualized these higher states as the very rare and difficult attainment of formal operations within the affective schemata it seems to me that it would be consistent with people like Dikeman who talk about the crystallizing of an observing self. One of the things that the observing self can do is watch predominant forms of emotive reaction, typical

moods or emotive reactivity of oneself and others in a situation. See various myriad alternative reactions that could have occurred and see none of those as superior necessarily or inherently to any of the others. In other words, you're talking about a kind of capacity for increased receptivity and observation of the affective emotive life. I propose it as a possible different chart.

Alexander: That's very interesting and Heinz Werner, who is one of the founders of developmental psychology, along with Piaget, had a similar notion of a branching tree and that different cultures may branch along a certain line and may therefore be more developed along one branch but not along another. It seems, you might be, in a certain sense, missing the point to hierarchalize them. My feeling is that I'm not overly attached to this conceptualization as it currently appears but I do think that it's not formal operations in the affective domain, whatever that would mean. It's inconceivable, to me, what that would mean. Whatever it is, it probably isn't that I do agree that there are vast individual differences which I would rather cast developmentally.

I may doubt all this stuff in the middle of Figure 1 but that the higher states of higher than formal operations I have no doubt. They are not a parallel universe. They're developmentally higher. They are developmentally higher than the affective equivalent formal operations, they transcend that domain entirely. They are post representational and they coexist hierarchally with any kind of representationally system, be it affective or logical. When you experience this transcendental self you experience this liberation and unboundedness and you experience a differentiation of this universal self along with the changing smaller active self; be that self engaged in action, thought, affective, intuitive, any kind of processing in the typical sense.

I think that is how TM works and is the reason it enables you to go beyond formal operations. It can be conceived of as a post-language system. All of our formal education, reading, writing and arithmetic, are essentially ways of engaging us in these domains of thinking. They get us out of the sensory motor domain by getting us involved in thinking, reading, writing and arithmetic, and that to go beyond that you also need post-conceptual technologies that enable you to transcend thinking in the same way thinking enabled you to transcend action. Meditative practices, especially some of those like TM, are focused entirely on transcending the thought process in order to come to the source.

Consequently, I'm very friendly to your suggestion on the one hand because I do think that there are individual differences and cultural specificity but ultimately I think that the stages on the higher end are just plain higher. If you say that affect filling out means the experience of the self, with a capital S, then the answer is yes except it's not at all parallel to formal operations. It's not just a different line. It transcends affect and thought so it's different from both of those lines, I think, and lies at the source.

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