

Fading light and sluggish flight: A two-dimensional model of consciousness in lucid dreams

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Summary. In the interest of correlating subjective lucid dream experience with discrete modes of awareness or cognitive styles, the following hypothesis is considered: A variety of anomalies occurring in lucid dreaming suggest that there are two distinct modes of awareness available in the lucid state--Focused and Objectifying awareness (FOA), and Relational Immersive Awareness (RIA)—and that these distinct modes impact the phenomenology of the lucid experience in clearly observable ways. While this hypothesis may raise questions about neural substrates and large-scale networks, this paper focuses principally on how these two modes of awareness either restrict or facilitate the dreamer's perception and range of possible outcomes.

Keywords: Lucid dreaming, conciousness, co-creative dream theory, default network

Introduction

The scientific study of dreaming represents a marriage of empiricism with subjectivity, in which personal dream reporting can generate hypotheses about complex underlying processes, as well as providing the basis for theory building. The current state of dream research indicates a growing interest in understanding dreaming from the standpoint of large scale networks, such as the hypothesized "default network" (DN) (Domhoff and Fox, 2015; Fox, Nijeboer, Solomonova, Domhoff, & Christoff, 2013), which has been associated with dreams and mind wandering alike. Further, Spoormaker, Czisch and Dresler (2010) suggest that lucid dreaming may involve a network that is distinct from the DN. Hobson's earlier reference to the sleeping brain as "a unified system whose complex components interact dynamically so as to produce a continuously changing state" (Hobson, et. al, 2000) acknowledges the importance of a dynamic, large-scale orientation to the dreaming mind. However, invasive laboratory monitoring makes it difficult to capture the complex, systemic nature of neural networks (Domhoff and Fox, 2015).

The Importance of the Co-Creative Paradigm

The study of anecdotal dream reports, while seeming to fall short of the empirical data generated in the laboratory, may nonetheless provide valuable evidence for the mapping of underlying neurological and cognitive processes (Windt, 2013; Domhoff; 2017). I believe this is especially true when viewed through the lens of the systemic, co-creative paradigm (Rossi, 1972; Sparrow, 2013; Sparrow and Thurston, 2010), which treats the dream as a dynamic interactive pro-

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Submitted for publication: October 2018 Accepted for publication: March 2019 through the reciprocal interplay of the dream ego and emergent content. This view of dreaming stands in stark contrast to the belief first espoused by Freud (1965), that dreams are "strictly determined" products of the unconscious mind, which effectively disregards the unfolding impact on the dream of the dream ego's subjective stance. This paradigm shift (Kuhn, 1962) from static predetermined content to dynamic process allows the dream on one hand to be viewed as a relational event unfolding in real time, and the dream ego, in turn, as exhibiting discernible "adaptive styles" (Sparrow, 2014) that can conceivably, in turn, be related to prior trauma, personality characteristics, and cognitive styles that become apparent only through the dream's movement; that is, through an interactive, relational lens. Because the co-creative paradigm raises questions that have never been considered, nor could have been considered from the standpoint of the static content paradigm (Kuhn, 1962), it can arguably "view" data as a continuous process rather than a series of discrete data points, and thus can permit researchers to see relationships and enduring response styles that were previously shrouded by theoretically driven neglect. Indeed, by adopting a co-creative, relational orientation to dream narratives, one may be able to observe and thereby hypothesize more accurately concerning the realtime expression of underlying neural processes, as well as stable or shifting cognitive and personality styles.

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Research into Personality and Cognitive Styles

Thus far, there has been little attention given to the possibility that dreamers in general, and lucid dreamers in particular, exhibit discrete cognitive styles. Part of the reason can be attributed to the static content paradigm that has traditionally ignores the dreamer's subjective processes, and part of it can be traced to the way that lucidity has historically been defined as an all-or-nothing variable. Beyond discriminating between "pre-lucid" and "lucid" (Green, 1968), early lucid dream researchers tended to conclude that lucidity was present simply on the basis of the dream ego's insight that the experience was a dream. In the spirit of those times, Gackenbach conducted a variety of correlational studies to ascertain the waking personality characteristics of frequent



vs. infrequent lucid dreamers. Reporting on the general research methodology used in her research (Gackenbach, 1986) she reported that the lucidity measure was the Ss' subjectively assessed frequency of lucid dreams based on the popular definition (i.e. the realization of that one is dreaming during the dream). While the criterion seemed straightforward, she and her colleagues found that almost half of the Ss were unable to provide a reliable transcript of a dream that confirmed their understanding of the definition. More recently, philosophical and practical difficulties in defining lucidity has given rise to a more sophisticated, if not also more confusing, picture of this previously singular construct, breaking lucidity into six factors (Voss, Schermelleh-Engel, Windt, Frenzel, & Hobson, 2012).

This increasingly complex way of defining lucidity raises the question of whether lucid dream research is moving in the direction of assessing the dream ego's cognitive style and skillset, rather than on an arbitrary conclusion made by the dreamer. Along these lines, Kahan and LaBerge (1996, 2010) have focused on the metacognitive attributes in lucid and nonlucid dreams, which expands the scope of research beyond the traditional focus on lucidity *per se*. Kahan has even suggested that direction of dream consciousness may be to elucidate what constitutes *mastery* in the dream (2012).

The subject of cognitive style is a vital area of modern psychology. A variety of bipolar, one-dimensional measures have been used to discriminate between ways of processing and knowing. One widely used model derives from research in hemispheric specialization (Galin and Ornstein, 1972), which continues to have utility today in McGilchrist's (2009) concepts of "right-shift" and "left-shift" thinking. An earlier, similarly bipolar model assesses the extent to which a person is field dependent or field independent by determining how quickly the respondent can perceive a pattern in the context of background noise (Witkin, Moore, Goodenough, & Cox, 1977). A third bipolar model differentiates between holistic vs. serialist thinking (Pask, 1972), in which holistic processers gather information randomly within a framework, in contrast to serialists who solve problems by collecting information in a stepwise fashion.

I have come to view a lucid dreamer's cognitive stance from a similarly bipolar perspective. That is, I have observed a variety of recurrent anomalies in my own lucid dreams suggest that there are two distinct modes of awareness available in the lucid state: 1) Focused and Objectifying Awareness (FOA), defined as a mode of awareness that concentrates upon, manipulates, and/or extracts elements from the dream's phenomenal field; and 2) Relational Immersive Awareness (RIA), defined as a mode of awareness that relates to, or immerses itself in, the dream's phenomenal field. Further, I hypothesize that these distinct modes impact the phenomenology of the lucid experience in clearly observable ways.

A well known example of FOA was reported by Frederick Van Eeden in his seminal study of his own dreams:

On Sept. 9, 1904, I dreamt that I stood at a table before a window. On the table were different objects. I was perfectly well aware that I was dreaming and I considered what sorts of experiments I could make. I began by trying to break glass, by beating it with a stone. I put a small tablet of glass on two stones and struck it with another stone. Yet it would not break. Then I took a fine claretglass from the table and struck it with my fist, with all

my might, at the same time reflecting how dangerous it would be to do this in waking life; yet the glass remained whole. But lo! when I looked at it again after some time, it was broken (Van Eeden, 1913).

Van Eden's bewilderment is by no means unusual for those who have experienced frequent lucid dreams, during which the perceived objects and characters can be considerably resistant to manipulation. Or conversely, the dream objects may transform spontaneously, and fade or disappear when focused upon. In Van Eden's particular dream, he stands apart from the dream as an observer, focuses on an object in the dream, and attempts to modify it. By definition, this type of awareness fits the above-stated criteria of FOA, since Van Eeden "concentrates upon, manipulates, and/or extracts elements from the dream's phenomenal field."

In the early classic, *The Projection of the Astral Body* (2010, orig. 1929), Sylvan Muldoon distinguishes between "passive or imaginative will" and "active will." Muldoon might say that Van Eden expressed active will in his "experiment" with the claret glass. Muldoon believed that this form of focused intention was self-defeating in the lucid state, whereas passive or imaginative will was the secret to moving about freely, and modifying the dream forms if so desired. He says,

...imaginative Will...is one of the big secrets of projecting. You can call it a process of mere imagination if you wish, but it is not mere imagination, but imagination plus Will to do that which is imagined. You can never force the passive Will successfully, for the instant you try to force passive Will, it becomes active Will...Now he (the projector) wishes to move to his neighbour's house, but he makes no effort to do so. Instantly he begins to move forward-apparently everything coming toward him, through him, passing him. He is conscious, he realizes what he is doing, but he is not using his own motive power (Muldoon and Carrington, 2010, orig. 1929).

It is important to note that Muldoon does not mean to equate passive or imaginative will to the state of ordinary non-lucid awareness, but rather views it as an orientation or attitude that the lucid dreamer can adopt as an alternative to focused intention. This raises the question of whether there are two distinct modes of awareness within lucidity itself.

From the phenomenological evidence of these early researchers, we can see that the difficulty of directly exerting oneself in the lucid state. Similar to Muldoon's experience, my own LDs point to two distinct modes of consciousness-FOA and another mode that I have termed, "relational immersive awareness," or RIA, which coincides with Muldoon's passive will. I will briefly describe the ways that FOA 1) overrides or diminishes the perceptual intensity and richness of the experience, while 2) increasing the physicality or "hardening" of the phenomenal realm with a commensurate loss of freedom. I will then suggest that RIA, in contrast to FOA, increases the perceptual intensity of the experience and renders the three-dimensional qualities of the experience less rigid, enabling the dreamer to fly effortlessly, modify forms, and move through walls and other barriers more freely during the experience.

Personal Dream Data

My principal objective in my early work in lucid dreaming (Sparrow, 1974; 1976), was to meditate in the dream, and



to see the light whenever it would appear to me. My first lucid dream was an unforgettable, ecstatic experience of illumination that prompted me to seek to experience the light whenever possible. Back in the 70s, I was fortunate to locate a translation of ancient Tibetan Buddhist texts referring to lucid dreaming as a form of yoga (Evans-Wentz, 1958). Consequently, I came to regard the orbs of light appearing in my lucid dreams as manifestations of the highest reality, or the *dharmakaya* (i.e. "body of truth"). As I nurtured a relationship with this ineffable presence, I soon discovered that meditating before going sleep—or better yet, in the middle of the night, and even during lucid dream—seemed to facilitate the light's appearance as well as my openness to it.

In some lucid dreams, the light appeared as a nebulous orb of white light that would hover above me, and approach me. Whenever I expressed eagerness, however, the orb would retreat, as if awaiting another mode of awareness or intention. Then, when I would finally turn away and not look at it, the light would often approach and suffuse my consciousness with radiance and ecstasy.

On other occasions, I would observe objects in the dream-scape that seemed to be lit from within. As I would focus on the shimmering objects in an attempt to experience the light within them, the light would usually fade out, and the object would assume a dull, ordinary appearance. Thus, my focused intention seemed to have a withering effect on the otherwise luminous dream forms. On one occasion, a woman approached me and offered an explanation for my fruitless efforts. She said, simply, "You must first learn to love the form before you can see the light within it." In a few words, the woman seemed to be saying that the light could not be "extracted" from the dream objects, only experienced as a consequence of relating to them.

My lucid dreams decreased in frequency in my 30s to the point where I only had one about once a month or less. But an altogether new phase commenced about seven years ago after I began combining my middle-of-the-night practice of meditation with the ingestion of the naturally occurring supplement galantamine, an extract of the snow drop lily. Two recent studies have established the effectiveness of using galantamine to induce lucid dreams. (LaBerge, LaMarca & Balliard, 2018; Sparrow, Hurd, Carlson & Molina, 2018). Since beginning to supplement my middle-of-the-night meditations with galantamine, I have been able to have lengthy LD/OOBEs—often lasting over an hour—as long as I get enough sleep beforehand, and have a good meditation in the middle of the night before endeavoring to have a lucid dream.

My current LDs often begin without a break in consciousness soon after returning to bed; that is, they are "wake-induced lucid dreams," or WILD. After I become aware of a distinctive vibration and sound, I find it's easy to move directly into the dream. At that point, I fly upward through wind and complete darkness. I sometimes feel someone beside me, supporting my flight by taking my hands as I move into the total darkness. I usually spend some time praying and meditating, until I emerge into a brightly lit, exceedingly detailed, and internally consistent world. Then on some occasions, the accompanying guide appears beside me as a unknown person, and usually a woman.

As I stabilize my presence in the LD experience, it often seems that I am with beings on a different planet in a distant star system, and sometimes it seems that I am in a stable, vivid world that is parallel to our own. Regardless, my main intentions have remained consistent during this recent chapter of exploration: to commune with the light, to understand the true nature of the beings I encounter, and to explore the purpose of our relationship.

In my search for the light during this most recent chapter in my exploration, I have discovered that my relationship with it is still governed by the quality of my awareness and intention. Almost without exception, any exercise of FOA has a withering effect on any light source that I gaze upon directly. On one occasion, for instance, I became lucid while inside an ancient stone building with windows overlooking brilliant landscapes and horizons. I became aware of three separate sources of white light. At first, I looked off the side so that the sources of radiance would continue. Then, I looked directly at the largest light source. As I did, it remained bright for a few seconds, then slowly faded from brilliant white to dull yellow-brown, until there was only a slight afterglow.

Similarly, whenever I ask direct questions concerning the identity or nature of the people that I encounter, I find the more effort I make to understand what they are saying, the more their responses seem distorted by the sound of wind, which blocks out most of their words. Again, my intention to extract something from the dream seems to result in a distortion of the dream character's words. In other cases, when I am able to hear their answers clearly, the answers they provide are frustratingly indirect and inconclusive. For instance, in one experience, I encountered a woman standing behind a podium in a brightly lit room. I asked her, "Are you real?" She laughed and began morphing into a young girl in a white dress, who ran from the room giggling.

In another, I was sitting with a female guide in a park-like setting, observing the people around me. I asked her, "Are you a part of me?" She said, "Kind of." Then I asked, "Are you my anima?" Again, she responded, "Kind of."

More recently, it is as if the beings I encounter are less patient with these attempts to extract a clear definition of their true nature. In one experience, in which an unknown man is guiding me through the experience, I turn to him, and ask, "What is your name?" He smiles, leans over, and blows air into my ear as he mouths the word, "Puff." And in another experience, in which I am guided by a woman for whom I feel a timeless connection, she remains veiled to me in spite of our deep mutual love.

FOA as a Disruptive Influence in LDs

There are two other ways that FOA appears to defeat dreamers in the LD state-when one tries to fly, and when one tries to pass through walls and other barriers. In both cases, the more I am in FOA mode, or expressing "active will" as Muldoon refers to it, the more difficult it is for me to fly or to pass effortlessly through walls and objects. It is as if the empirically oriented FOA inadvertently restricts the range of possibilities by implicitly ratifying the laws that govern threedimensional reality. Paradoxically, the harder I try to fly, the more I believe in gravity, and thus the more I am likely to fail because flight is impossible. While Van Eden should have been able to break the claret glass under normal conditions, his inability to break the delicate glass dramatizes the almost perverse manner in which the phenomenal realm of the dream seems simultaneously to exaggerate its physicality and resist the dreamer's focused intent, making it far less possible for the dreamer to move about freely and to modify existing forms. That is, FOA "firms up" the physicality of the



observed phenomenal realm, making it difficult to manipulate ordinary physical laws.

I think these examples demonstrate that FOA sets about to isolate and extract something from the dream, and by doing so, it overrides or provokes resistance from the autonomous dream creation that seems incompatible with, or unwelcoming of its hard edge. In the waking state, the opposite seems to be true. That is, when we concentrate on a stimulus, the brain facilitates a heightening of perception through lateral inhibition, that is, by suppressing neighboring sensory neurons thus creating a greater contrast between the excited receptors and nearby and related receptors. In regard to FOA in the dream state, the process appears to operate in reverse by suppressing the intensity of the central visual field. We might refer to this perverse effect as reverse lateral inhibition, which seems uniquely associated with FOA in the dream state, and dramatically demonstrates its disruption of dream phenomenology.

Note that in the effort to commune with the light, or to identify the nature of my companions, FOA is not so much bad as it is an expression or ordinary, empirical inquiry that simply does not seem to align with the dreaming process. That is, by attempting to view a light source or by interrogating a dream character effectively isolates and objectifies the dream feature for the dream ego's own purposes only to suppress the central focus, and defeat the dream ego is goal-driven efforts. Consequently, the dream ego inadvertently defeats itself and remains on the outside looking in.

In normal waking perception, FOA facilitates the processing and construction of experience on the basis of afferent stimuli entering awareness through sensory receptors. As such, the process of waking perception moves from outside to inside—from specific external stimuli to internal representations. Lateral inhibition supports this inquiry, bringing an object into the foreground of the perceptual field, and suppressing awareness of the background. But in the dream state, the observer perceives internally generated content, not entering the senses as afferent stimuli, but from some dream activation that relies on internal sources or network to generate a virtual reality, perhaps through the default network (Domhoff and Fox, 2015). As I have articulated elsewhere, the emergent dream content seems to depend on the observer's consciousness for its specific form or appearance, and thus may reside as general potentials within broad domains of experience prior to the dream ego's actual observation of the emergent content. Indeed, the sustained act of observation in our ordinary dreams seems to influence and co-create the resulting experience in a momentto-moment real-time reciprocal dynamic (Sparrow, 2013a; Sparrow and Thurston, 2010). However, FOA can apparently take this reciprocal process too far, thus unbalancing the relationship between dream ego and emergent content. The heavy-handedness of FOA apparently 1) suppresses the dream's visual and auditory channel, in particular, and 2) precipitates a further "hardening" or materializing of form, thus limiting the dreamer's capacity to transcend or modify normal physical laws in the dreamscape. In regard to the distortion of visual and auditory signals, it is intriguing to note that these sensory domains are especially active in the default network (Domhoff and Fox, 2015), so any disruption of the default network by the dream ego would presumably distort the autonomous fluidity of internally generated visual and auditory content, which we have seen in the examples I have provided.

RIA as a Facilitative State in LD/OOBEs

In spite of the disruptive impact of FOA, there are also examples of intention facilitating an intensification of the perception of light and an ability to move about in the dreamscape with greater freedom. What explains the differences in these seemingly dichotomous outcomes? In addition to Muldoon's description of two distinct forms of intention, Leslie Farber (1968) divides volition into the "first" and the "second" will. Farber's "first will" corresponds to Muldoon's "active will," and his "second will" approximates Muldoon's "passive will." Farber argues from a psychological standpoint, that while the first will is active in virtually all of our practical, goal-oriented pursuits, it cannot do the work of the second will, which relates to the deeper directions of one's life—to love, and to purpose.

Based on Muldoon's and Farber's models pertaining to two forms of volition, and my own observations as a lucid dreamer, one can see that a two-dimensional model of consciousness based on FOA and RIA to denote restrictive and facilitative modes of lucid dream awareness, respectively, makes sense. How this two-dimensional model might map onto contemporary models of brain function, including hemispheric specialization (McGilchrist, 2009) is, of course, a fertile avenue of inquiry. What McGilchrist refers to as "left-shift" and "right-shift" thinking may coincide, at least generally speaking, with FOA and RIA. Drawing the distinction between these two modes, Ellis right-shift thinking: "This way of approaching the world is relational and phenomenological, and differs from the goal directed leftshifted tendency to value only those things that can put to our personal use" (2020). From this standpoint, RIA would represent a superior mode of awareness in the lucid state from the standpoint of achieving positive relational experiences.

FOA is, of course, essential to life itself. During the "orienting response" (Sokolov, Spinks, Naatanen, & Lyytinen, 2002), we apprehend, compare, and contrast novel phenomena with prior experience, incorporate it into an expanding array of prior experience, and thus habituate to its novelty. This state of mind effectively sets us apart from what we are contemplating, in order to comprehend and categorize novel sensory experience.

FOA is to the lucid dream state is what the orienting response is to the waking state: It results in a temporary heightening of focus, and suppression of surrounding stimuli, in order to grasp and incorporate a novel event. In contrast, RIA corresponds to a less focused, more immersive experience of the environment, much in the way that a meditator might experience the flow of thoughts and feelings without isolating them, nor identifying them with language. Just as the orienting response is not necessary for a person to remain conscious in the waking state-nor desirable during moments of immersive, relational experience—lucidity does not depend on focused awareness for its continuation in the dream state either. While FOA may appears to be a "higher" expression of lucidity, it may actually suppress other important features of the dream experience. Take for instance, a lucid dream that I experienced not long ago, in which I receive corrective feedback from the dream itself regarding the need to reorient my awareness from FOA to RIA in order to experience an internally generated experience of luminosity:

I was lucid and looking for the white light. There were strands of holiday lights draping trees and shrubs in all



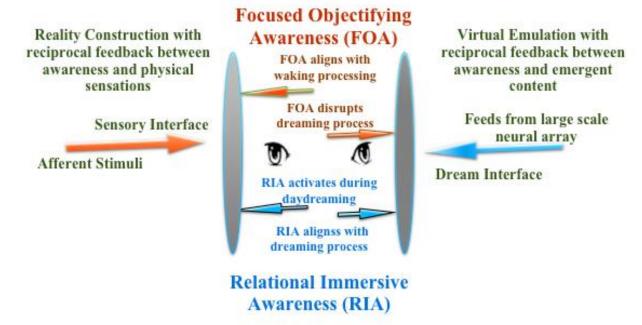


Illustration 1. The impact of FOA and RIA on waking and dream interfaces

directions, and I eagerly focused on them, one by one, hoping to experience the ecstasy that can ensue when the light is experienced internally. But every time I focused on the lights, they immediate grew dim. Frustrated, I flew to the top of a building and sat crosslegged, pondering my dilemma. As I began to meditate, a voice said, "The light is in the eye."

This succinct message has the effect of reorienting the dreamer's attention to internally generated dream phenomena, which by implication requires a different mode of awareness and intent in order to experience it. Thus, the autonomous nature of the dream effectively corrects for the dream ego's reflexive application of FOA.

As we know, the normal state of waking awareness involves a hodgepodge of focused moments, habitual low-reflective functioning, as well as a significant amount of mind wandering, thus partaking of at least two modes or networks of consciousness—one corresponding to FOA and its commensurate network of brain activation, and the other with RIA and what some have referred to as the default activation network (Domhoff and Fox, 2015). We have all experienced the jarring impact of FOA intruding upon the immersive experience of the present moment, whether in the form of unwanted conversation, questions, or labeling.

Situated and Non-Situated Awareness

Similar to his distinction of active and passive wills, Muldoon referred to a largely automated form of awareness in the lucid state as "crypto-consciousness," or the "subconscious mind" in contrast to normal waking awareness. He observed that the crypto-consciousness of the dream ego would seem to believe things and do things without really questioning them, and thus remain embedded in the immediate dream context, unaware of the true facts of the waking life. Spoormaker, Czisch and Dresler (2010) point out that non-lucid dreamers in this situated awareness have difficulty "back re-constructing" what occurred in the previ-

ous few minutes. One might consider situated awareness as the product of the autonomous default network, which has been considered incompatible with heightened self-reflectiveness (Domhoff and Fox, 2015; Foulkes and Domhoff, 2014). Conversely, we assume that lucidity confers non-situated awareness, or the awareness of past events and future plans, as well as waking facts that provide a contextual framework for understanding the immediate dream events (Sparrow, 2013b). For instance, non-situated awareness would inform the dream ego that having sex with an unknown dream figure would violate one's marital vows, whereas situated awareness, or crypto-consciousness (Muldoon and Carrington, 2010, orig. 1929) would remain oblivious to that fact, as if one's marital commitment had been conveniently left out of the dream ego's consideration.

One might ask, Can the lucid dreamer remain lucid and in a state of semi-situated awareness without disrupting the sensory intensity and flexible emulation of the autonomous dream creation network? Anecdotal evidence suggests so. And, if we view the lucid dream ego as capable of shifting back and forth on a continuum between two modes of awareness, then the answer is definitely "Yes."

The Best of Both Modes: Combining Intention with RIA

In contrast to the experiences in which FOA appears to 1) override and diminish the perceptual clarity and intensity of luminous forms and verbal communication, and 2) impose physical laws contrary to the dream-like quality that we expect to encounter in dreams, I have had numerous experiences in which I have been able to suspend FOA and enter into a perceptually rich and intensified experience of the dream, by intentionally preparing for, and practicing RIA in the lucid state.

For instance, after recently experiencing the dimming of light sources in several successive LDs, I decided to meditate at length in the middle of the night in hopes that I could view the light source during subsequent LDs without having



it fade away. After meditating for almost an hour, and then lying down, I soon felt/heard the familiar pre-LD vibration. Knowing I was then free to move into the dreamscape, I sat up and flew upward through the darkness without the accompaniment of a guide, and emerged into a bright outdoor setting. As I walked along a path, I became aware that the sun was shining brightly overhead. I turned my gaze upward, and entered a meditative state, letting go of any particular intention. The orb of light continued to shine brightly, and even intensified, as I stared at it directly. Experiences such as these suggest that that dream process can proceed unimpeded if the dream ego maintains the receptive mode of RIA.

Similarly, in several recent experiences, I have practiced maintaining RIA while flying and passing through walls by shifting away from focused intention to imagination and desire. In order to remain in this facilitative state, I have to believe that I can do what I want to do, but I have refrain from actively trying. That is, instead of willfully trying to fly, I have imagined the pleasures of flight, and the ease with which I expect to do it. When I achieve this level of unfocused intent, I am able to fly with complete ease. Interestingly, lowering my arms to my sides, rather than extended them upward, actually facilitates my intention to fly.

Going through walls is also a matter of letting go, and believing, rather than exerting myself. As Van Eden discovered in his ordeal with the claret glass, the harder I try to dominate the physical aspects of the LD, the more impervious the barriers become.

Muldoon referred to the facilitative state of awareness as passive will. But I think immersive, relational awareness, or RIA, is a better term; because the state of awareness is not so much necessarily passive as it is fully immersed in the experience without imposing a specific ego-driven agenda. That is, the perceiver enters into a contemplation of the object without imposing objectifying language or thoughts to describe it, nor pursuing any agenda other than relating deeply to what he contemplates. Contemplation reigns over acquisition in RIA.

In terms of contemporary research, this is where my observations seem to coincide with and support the idea that there is an optimum state of awareness that aligns itself with the functioning of the dream state, or the DN. As for the neurological mechanisms that account for lucidity in general, and RIA in particular, Spoormaker, Czisch, Dresler (2010) suggest that there is a separate network that accounts for lucidity, and that "when the attention system is more 'active' the organism's attention is shifted to external stimuli, and conversely, when the default mode is more active the attention shifts inwards, e.g. to mental imagery (memory reprocessing or future imagination)." According to this model of shifting attention, it's possible that FOA represents a failure of the lucid dreamer to shift away from empirical, sensory channels toward a state of mind more congruent with the functioning of the DN. If so, we can imagine that the lucid network interfaces with the DN, and either aligns with it, or disrupts it depending on the level of focus or intention. Regardless of the network(s) that may account for lucidity, the range of phenomenal experiences I have cited suggest that the optimum lucid state is not a focused, objectifying mode or awareness, but rather an immersive, relational mode that works with the virtual emulation of the default network without disrupting it. Indeed, the ideal lucid dream awareness may consist of a state of mind that avoids isolating and objectifying what one perceives, toward what could be misconstrued as a "lower expression" of lucidity, which retain the autonomy of the emergent content and situated dream ego awareness.

This "higher and lower" designation is based on seeing lucidity as one variable on a continuum, rather than a faculty with two distinct modes. By equating lucidity at its height with non-situated awareness, and the ability to focus and objectify one's experience, we may have contributed to the perception that lucidity was somehow set apart from, even antithetical to ordinary dreaming. As recently as 2014, one can still see the way this thinking still prevails. For instance, Foulkes and Domhoff (2014) state:

...participants only reported dreams if they also reported a loss of volitional control, whatever the sleep-onset stage, which is noteworthy because **loss of volitional control appears to be another condition necessary for dreaming to occur** (p. 170) (bold italics added)

If we substitute Muldoon's concept of "active will" for "volition" in the above statement, then Foulkes and Domhoff align fully with the idea that intention—as we usually think of it-disrupts the dreaming process, or DN. However, in time we may come to see that what some people refer to as "high lucidity" could be an expression of FOA, and that "low lucidity" could be an expression of RIA, which instead of overriding the autonomous aspects of the DA, adjusts to its requirements and enters more fully into a relationship with it. Given that Schredl and Erlacher (2004) have found that frequent lucidity correlates with an openness to, and absorbtion in one's experience, it is possible that RIA may represent the more natural expression of lucidity. Or lucidity may interact with personality styles, as suggested by Filevich, Dresler, Brick, & Kuhn (2015) thus producing a more complex picture of lucidity. Or further, it may be that the ideal form of lucidity could be a hybrid state that combines the somewhat immersive qualities of RIA with certain waking or nonsituated facts that seem more aligned with the distancing, or dissociated stance of FOA. For instance, instead of awakening, and wondering why I didn't realize that my father was actually deceased as I spoke with him, I might consider that my belief in his actual presence could have served a different priority—to be fully present for, and immersed in the encounter while simultaneously lucid and able to reflect on what I want to say in that unique and fleeting moment.

Directions in Research

The dual mode hypothesis presented here is based largely on my own lucid dreams, and thus needs to be tested through manipulation of independent variables or intentional tasks in order to determine if different modes of intention produce different lucid dream outcomes. One approach would to use a single-subject repeated measures design, wherein a sample of frequent lucid dreamers would be assigned a sequential array of dream tasks, randomly ordered over the course of an equal number of dream nights after gathering pre-treatment baseline dream reports. The array of tasks would be divided into two general categories based on the definitions of FOA and RIA, respectively, such that a number of FOA-related tasks would be randomly interspersed with an equal number of RIA-related tasks. Examples of FOA-related tasks might include 1) to physically touch a dream



character or animal, 2) to travel to a particular place, and 3) to change the shape or appearance of an object. Examples of RIA-related tasks might be 1) to meditate while focusing on some aspect of the dreamscape, 2) to allow the events around you to unfold without making any effort to change them, or 3) to ask a dream character an information gathering, open-ended question.

Various outcome measures could be analyzed on the basis of these disparate activities. The outcome measures could be evaluated on separate Likert scales assessing "dream character resistance," "flexibility of form," "luminosity," "ease of movement," "relational intimacy," and "emotional intensity" (positive and negative). Since this Dual Mode Instrument would involve untested items, the psychometrics of the instrument would ideally need to be assessed in a pilot study prior to an experimental application.

Summary

In summary, a variety of phenomenological features of LDs indicates that the dream ego may express two modes of awareness, each of which has its strengths and weaknesses in both waking and dreams, even though RIA may represent the superior mode for achieving positive relational outcomes in the lucid state. By observing the consequences of these modes of awareness interacting with dream phenomenology within the lucid state, we may arrive at a more sophisticated view of what constitutes an ideal or balanced cognitive style that aligns itself more fully with the integrity of the spontaneous dream.

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