The Aphantasic Psyche and Its Proclivity to Creativity

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Autoethnographically, the first study investigates the potential of achieving arousal despite the lack of conscious imagery. The second study delves into the role of dreams in Aphantasic individuals, finding a positive correlation between unconscious imagery and vivid, surreal dream experiences. The third study examines the temperamental implications of Aphantasia, using the Big Five personality model. Findings indicate that higher levels of trait introversion, neuroticism, and openness are associated with more vivid unconscious imagery during dreams.

Keywords: aphantasia, consciousness, dreams, autoethnography, personality-traits

Aphantasia

Aphantasia—a condition characterized by the absence of mental imagery—was first described and named by Sir Francis Galton in 1880. However, it remained relatively obscure until the late 20th century when further investigations began shedding light on its prevalence and characteristics. In the realm of imaginary visualization, two distinct principles emerge: conscious imagery, where individuals actively and consciously visualize mental images based on constructed patterns; and its counterpart, unconscious imagery. Unconscious imagery operates at a more metaphysical level, with the individual unconsciously visualizing patterns influenced by the workings of the unconscious mind—often manifesting within dreams.

Autoethnography

According to Poulo (2021, p. 4), autoethnography is an autobiographical genre of academic writing that involves analyzing or interpreting the author's lived experience. It connects the researcher's insights to various aspects, including self-identity, cultural rules and resources, communication practices, traditions, premises, symbols, shared meanings, emotions, values, and larger social, cultural, and political issues.

In a rather similar fashion, Chang (2008, p. 43) asserts that autoethnography shares the storytelling feature with other genres of self-narrative but goes beyond mere self-narration by involving cultural analysis and interpretation. This analytical and interpretive nature distinguishes autoethnography from other forms of self-narratives.

Consciousness

Consciousness pertains to the epistemological understanding of being aware and cognizant of our thoughts, emotions, sensations, and the external world. It encompasses our subjective experiences, self-awareness, and capacity to perceive, reason, and make decisions. Consciousness enables us to form an identity as individuals and consciously engage with the world around us. It is the state of being awake and aware of ourselves and our surroundings.

To shine greater light upon conscious imagery, there is a wide range of epistemological patterns that can be visualized. Galton (1994, p. 462) describes the diverse and often unconventional forms of mental imagery that can be analyzed through a structured approach. These include number forms, synaesthesia, phantasmagoria, and habitual associations of words with images.

Subconsciousness

Subconsciousness, also recognized as the preconscious mind, refers to the epistemological comprehension of mental processes situated beneath the level of conscious awareness but easily accessible through focused attention or retrieval. It involves thoughts, memories, and information that are not currently within our conscious awareness, yet they can be readily surfaced with minimal effort. Subconscious processes play a role in automatic behaviours, habits, and the swift retrieval of information. The subconscious mind acts as a bridge between conscious and unconscious states, influencing our perceptions and actions without our immediate awareness.

Modern development and comprehension of the subconscious can be found in Freudian and Jungian works, although Jungian works are more elaborate when it comes to this subject in particular.

Unconsciousness

Unconsciousness, also known as the unconscious mind, goes beyond conscious thought and refers to the epistemological comprehension of the deepest and most elusive aspects of the mind. It houses thoughts, emotions, desires, memories, and experiences that elude direct availability to conscious awareness. The unconscious mind wields significant influence over human behaviour, often intertwined with repressed memories, unresolved conflicts, and concealed motivations. Standing beyond conscious thought, the unconscious has the power to subtly and profoundly shape our conduct and encounters. It plays a critical role in psychoanalytic theories and understanding the underlying drivers of human behaviour.

According to Jung's (1921/2017, p. 369) framework on the inner world of the individual, the perception of images from the unconscious holds intrinsic value despite its lack of immediate practical utility. Jung states that these images represent potential worldviews that can bring about new possibilities in life, making this function crucial to the overall psychological well-being, much like how a corresponding human type is essential to the psychic life of a community.

The epistemological observation of what constitutes unconscious visualization appears to hold a direct metaphysical embodiment, thus creating a paradox of a conclusion in which Freud's (1980, p. 32) assertion of the event that conceptualizes mixed dreams—those which originate spontaneously from the juxtaposition of images—when we see that which we desire.

The common function which all of Freud's (2003/2012, p. 56) cases had, regardless of content, is that whatever has been forgotten or distorted is linked by association, in some way or other, with unconscious ideas which manifest themselves as forgetfulness.

As though mere resentment weren't enough, Freud's (2003/2012, p. 59) approach, although unconscious, was expressed in him forgetting the name of the individual, which he had in fact known perfectly well.

Freud (2003/2012, p. 62) had also noted that his unconsciousness, or least his epistemological comprehension of this phenomenon, was to cling more tenaciously to old impressions, and is unforgiving in retrospect.

Jung (1967, p. 399) had noted, in one of his older works that depression is often but an unconscious compensation. Yet what had he also noted a psychotherapist to be, if not an expert that is not merely licensed, but one whose practice of psychotherapy is the integration of unconscious tendencies with the conscious mind.

Discussion

When it comes to an individual that suffers from Aphantasia, my hypothesis would be that the certain individual may also possess an exceptional unconscious mind's eye—enabling them to experience vivid dreams that can create the impression that the conscious, epistemological world is merely a framework constructed within their own unconscious realm. To further emphasize the concept of the "unconscious mind's eye", it stands as an arch-nemesis to what we like to dictate as a metaphysical eye of perception. Unlike the mind's eye, its sibling is, in fact, far closer to reaching a metaphysical state of interpretation. A mere mind's eye is merely a perceptive element of the principles hidden behind the epistemological comprehension, which stands as merely a few inches more objective than the proclivity of the unconscious' singularity. Thus, my interpretation also suggests that individuals with a higher propensity for trait intuition—paired with trait introversion (refer to Table 1) may exert a greater influence over this phenomenon.

I cannot help but ponder the inclination between a lack of conscious visualization towards a more analytical approach to comprehending knowledge, as the great majority of the men of science to whom Galton (1994, p. 457) first applied, protested that mental imagery was unknown to them.

Researcher's Traits

Table 1

OCEAN model consisting of BIG Five personality analysis

O	C	E	A	N
96	78	4	41	99
97	86	0	48	100
98	88	2	33	100
98	71	1	18	99
98	78	1	60	100
99	65	29	0	93
99	31	38	0	98
99	36	34	2	96
99	42	34	4	96
100	34	30	0	94
98	**61**	**17**	**21**	**98**

O = Openness/Intellect; C = Conscientiousness; E = Extraversion; A = Agreeableness; N = Neuroticism.

Highest influences: O: Intellect/Openness; C: Orderliness (50-60% of C); E: Assertiveness (98% of E); A: Compassion (99% of A); N: Depression/Withdrawal

Note 1. A score of 98 represents the 98th percentile, indicating that it is higher than or equal to 98% of the scores in the dataset. The data in the table covers approximately 24 months, and the rounded averages for each domain are indicated in bold.

Study 1: Arousal

Hypothesis

$$c(a) \wedge \neg i^{c} \Rightarrow (o^{s}) \Rightarrow r$$

c = consciousness, a = aphantasia, i = imagery, o = intuition, s = subconsciousness, r = result

This statement establishes a logical chain of events. It suggests that if consciousness is affected by aphantasia ($c(a)$), then it implies the lack of conscious imagery (i^{c}), which subsequently leads to more focus on subconscious intuition (o^{n}), ultimately resulting in arousal (r). The objective of this study is to determine if successful arousal can be achieved despite the lack of mental imagery caused by Aphantasia.

Methodology

Procedure. The autoethnographic data collection took place over a period of two months. I engaged in a series of structured stages to explore the possibility of achieving arousal despite the lack of conscious imagery associated with Aphantasia.

Stage I. The first stage requires the individual to lie down in a dark room and gradually close their eyes. This step is crucial in setting the foundation for the subsequent stages.

Stage II. In the second stage, the focus should be exclusively directed towards thoughts, concepts, or ideas. Any other distractions or unrelated principles must be avoided. This step aims to ensure a concentrated and focused state of mind, ultimately ending the conscious procedures.

Stage III. In the third stage, the attempt at entering the subconscious process of visualization starts. Importance of the chosen subject is highly important; one that is able to evoke a strong sense of stimuli, particularly arousal for this study (although others may work as well).

Stage IV. The fourth stage involves achieving arousal by utilizing certain elements that establish a connection between concepts, memories, emotions, and other cognitive processes. This step aims to create a pathway for arousal to occur despite the absence of mental imagery associated with aphantasia. Reflecting on personal experiences, drawing on intuition, or using abstract thinking to explore the chosen subject is key.

Data Collection. Throughout the process, I maintained a reflective journal, recording my experiences, emotions, and insights during each stage. This autoethnographic data formed the single source for analysis.

Results

Table 2

Positive percentage on arousal, lowered cortisol and implications of Others (refer to List 1).

Weeks	Arousal	Cortisol	Others
1st	P%	Lowered	Positive
2nd	P%	Unsure	Positive
3rd	P%	Lowered	Positive
4th	P%	Lowered	Positive
5th	P%	Lowered	Positive
6th	P%	Unsure	Positive

Based on logical assumptions, I infer the existence of additional implications, notably those concerning overall psychological well-being, the impact of extreme neuroticism, and the influence of paranoia.

Table 3

Positive percentage on piloerection when the subject focus is on leadership, lowered cortisol and implications of Others (refer to List 1).

Weeks	Piloerection	Cortisol	Others
1st	P%	Highered	Unsure
2nd	N%	Highered	Unsure
3rd	P%	Lowered	Positive
4th	P%	Lowered	Positive
5th	N%	Highered	Unsure
6th	P%	Highered	Unsure

When the chosen focus has been set to achieving arousal, it has been achieved 100% of the time.

When the chosen focus has been set to achieving piloerection (pilomotor reflex, horripilation), specifically by focusing on attempting to visualize a position of leadership, (ex. rallying speech), it has been achieved roughly 66% of the time.

When applying these stages, it has been hypothetically found that stress-related hormones, specifically cortisol may be lowered when engaging in subconscious visualization. Dopamine, serotonin, endorphins and potentially gamma-aminobutyric acid can be released upon deeper sessions of interconnection with supposed subconscious elements.

It was hypothetically found that aphantasic people are still capable of reaching a state of arousal by following a subconscious framework, lacking in major conscious elements, by reaching to the subconscious mind, creating a set of patterns constructed based on the interpretation of the individual.

Discussion

The interpretation of the results leads to another inquiry, specifically the levels of intuition with regards to the individual in question. In our study, as an autoethnography, the data pool (refer to Table 1) leads us to assume that a positive level of intuition leads to a stronger arousal (o = 97), when based on subconscious elements intertwined with the intuitive side.

The brain uses a complex interplay of neurotransmitters and hormones to regulate our emotional responses, yet the mere neuroscientific implications lead us to suspect yet another subject, potentially memory. Would memory (of not necessarily shards of images, but stimuli) be part of what makes an aphantasic individual able to experience arousal despite not being able to consciously visualize these vivid patterns, or as an artist might call them images? Potentially so. Yet what I have seem to found is that such an individual may be able to delve deeper into their own subconscious, elaborate and articulate such visions in a way that is not necessarily purely metaphysical, but one that follows a logical framework—it still appears to be rather abstract, regardless.

Despite my conscious failure to visualize the event in the traditional sense, I found myself engaging in a different form of cognitive processing. Rather than experiencing vivid visual imagery, I noticed a unique phenomenon characterized by abstract patterns and a metaphysical sense of imagery. It was as though my mind was exploring non-visual dimensions of thought, detached from traditional sensory representations. These abstract patterns seemed to arise from a place beyond my conscious control, with an indirect correlation to the stimulating content I was attempting to visualize. This metaphysical sense of imagery, while distinct from traditional mental imagery, evoked a certain level of intrigue and cognitive engagement. Although it lacked the visual richness that others might experience, it seemed to tap into a different mode of cognitive processing, involving conceptual associations, emotional responses, and perhaps even subconscious elements. In the end, it did end up causing arousal, despite not being able to consciously process visualization.

Study 2: Dreams

Hypothesis

$$c(a) \Rightarrow u;\ u \neq c(a) \Rightarrow i^{s}, i^{u}$$

c = consciousness, a = aphantasia, i = imagery, o = intuition, s = subconsciousness, r = result

Methodology

Procedure. Over the course of two months, I engaged in dream journaling to explore the role of the subconscious and unconscious mind in my dream experiences.

Analysis. If an individual's consciousness is affected by aphantasia $(c(a))$, it suggests a lack of conscious awareness or experience of mental imagery. When consciousness is absent or diminished $(u \neq c(a))$, there is potential for imagery to arise from the subconscious mind (i^{s}), with potential implications of unconscious imagery being produced, and potentially stored for later usage, usually coming out within dreams.

Data Collection. The dream journal entries formed the primary data source for this study, providing insights into my dream experiences over the research period.

Results

For most nights, intensified subconscious processes and unconscious desires, mainly characterized as intense dreaming has been present for roughly 30% of dreams. This percentage is far greater than when conscious imagery (genuine, vivid) imagery had taken place (0%).

Certain dreams had become so deep, vivid, and surreal that they were accompanied by the release of specific neurotransmitters and hormones, including epinephrine (adrenaline) and norepinephrine (noradrenaline).

Within my assumption, the release of epinephrine and norepinephrine during these profound dreams suggests a potential link between the dream content, emotional intensity, and the activation of the body's stress response. These neurochemicals may play a role in enhancing the emotional impact and physiological arousal experienced during such sessions of absurdly rich dreams.

Discussion

Dreams primarily occur at an unconscious level and often involve subconscious interactions with conscious elements. Aphantasia, the absence of vivid conscious imagery, enables individuals to focus on their unconscious psyche. Supporters of the initial concepts of meaningful visualization suggest that these cognitive processes operate predominantly at an unconscious level, despite their abstract nature. These processes shed light on the apparent duality and paradoxical nature of conscious and unconscious functions within the brain.

During dreaming, the unconscious eye, along with its imagery, experiences a heightened sense of liveliness. In contrast to the conscious state, it has been hypothetically observed that unconsciousness is positively correlated with a deeper and more vivid imagery experience for individuals with aphantasia.

The duration of each vivid dream, when experienced in greater unconscious imagery, outputs a rather strong, surreal experience, for a decent amount of time (roughly 20-60% the duration of a sleep; although evidence is lacking—impossible to assert a precise percentage).

Study 3: Temperamental Implications

Hypothesis

$$i^{u}(O > N > C > A \geq E)$$

Methodology

Procedure. This study is focused on exploring the potential correlations between personality traits, as assessed by the OCEAN model, and the vividness of unconscious imagery in my dreams.

Objective. The primary objective of this study is to explore positive correlations between OCEAN traits (see Table 1) and their impact on increasingly vivid dreams in individuals with Aphantasia. This approach involves analyzing the logical progression of each trait variable, juxtaposing these manifestations with past dreams, and discerning potential patterns that can be considered as significant, autoethnographic findings.

Dream Journaling. As in Study 2, I continued to maintain the dream journal, recording my dreams in detail over a period of two months.

Data Collection. The quantitative scores from the Big Five personality test, along with the dream journal entries, constituted the primary data sources for this study.

Results

Reminder: Autoethnographic results are singular in nature, a larger sample pool is required to be certain of these findings.

Findings indicate a positive correlation between exceptionally high levels of intuition (o = 98) and the vividness of unconscious imagery. Results suggest that relatively high levels of conscientiousness (c = 83) are associated with more organized and repetitive dreaming, where the same events or scenarios occur over multiple nights. It was observed that low levels of extraversion (e = 13) are linked to dreams featuring no more than 2 to 3 characters or individuals in vivid detail. The study reveals that low to moderate levels of agreeableness (a = 42) are positively associated with the occurrence of verbal conflict and, in some cases, physical conflict within dreams. Notably, very high levels of neuroticism (n = 97) are positively associated with negative endings for dreams.

Discussion

Individuals with higher levels of trait introversion, neuroticism, and openness are more prone to experiencing more vivid unconscious imagery, even in the presence of Aphantasia. Additionally, lower levels of agreeableness are associated with a tendency for conflict to manifest within these dreams. Conscientiousness significantly influences the recurrence of these dreams, including nightmares, and may contribute to the amplification of conflict and chaos within the unconscious realm.

General Discussion

The first study explored the potential of achieving arousal despite the lack of conscious imagery associated with Aphantasia. The autoethnographic approach revealed that individuals with Aphantasia can indeed experience arousal by delving into their subconscious minds and utilizing abstract cognitive processing. The study demonstrated that subconscious visualization, lacking in major conscious elements, can lead to arousal, indicating that a unique metaphysical sense of imagery may be at play in Aphantasic individuals.

The second study delved into the role of dreams in individuals with Aphantasia. It found that dreams primarily occur at an unconscious level and involve interactions between the subconscious and conscious elements. Interestingly, the absence of vivid conscious imagery seemed to enable Aphantasic individuals to focus more on their unconscious psyche during dreams. The study uncovered a positive correlation between unconscious imagery and Aphantasic individuals, leading to profound, surreal experiences during dreaming.

The third study explored the temperamental implications of Aphantasia, using the Big Five personality model (OCEAN). The findings indicated that individuals with higher levels of trait introversion, neuroticism, and openness were more likely to experience vivid unconscious imagery in their dreams. Moreover, different personality traits were associated with distinct dream characteristics, such as organization, character involvement, and the presence of conflict.

Conclusion

Aphantasia, a condition characterized by the absence of mental imagery, does not impede individuals from experiencing arousal or profound dreams. Instead, it appears to open up a unique avenue for engaging with the unconscious mind, leading to abstract and metaphysical patterns of cognitive processing.

The results suggest that Aphantasic individuals can access a deeper realm of thought, falling into a different mode of cognitive processing that involves conceptual associations, emotional responses, and potentially subconscious elements. Such unconventional form of cognitive processing appears to contribute to the experience of vivid dreams despite the lack of traditional mental imagery. Moreover, the research indicates that personality traits play a role in shaping the nature and intensity of dream experiences in individuals with Aphantasia. Higher levels of trait introversion, neuroticism, and openness seem to be associated with more vivid unconscious imagery during dreams.

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