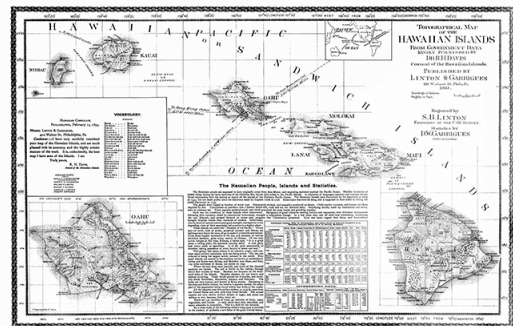


What is Aphantasia?

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A true story



"When we hear something, we form images in our head automatically in order to visualize what we hear" (Antonioni, 1982, p. 6)

"The soul never thinks without an image" (Aristotle, DA III, 7)

Lack of mental imagery?

Despite the apparent role of mental imagery in supporting and facilitating a substantial part of our mental lives, some otherwise healthy individuals have recently reported a complete inability to produce it.



A brief history of aphantasia

MIND
A QUARTERLY REVIEW
OF
PSYCHOLOGY AND PHILOSOPHY.



I.—STATISTICS OF MENTAL IMAGERY.
There were many other questions besides these, of which I defer mention for the moment.
The first results of my inquiry amazed me. I had begun by questioning friends in the scientific world, as they were the most likely class of men to give accurate answers concerning this faculty of visualizing, to which novelists and poets continually allude, which has left an abiding mark on the vocabularies of every language, and which supplies the material out of which dreams and the well-known hallucinations of sick people are built up.
To my astonishment, I found that the great majority of the men of science to whom I first applied, protested that mental imagery was unknown to them, and they looked on me as fanciful and fantastic in supposing that the words "mental imagery" really expressed what I believed everybody supposed them to mean. They had no more notion of its true nature than a colour-blind man who has not discerned his defect has of the nature of colour. They had a mental deficiency of which they were unaware, and naturally enough supposed that those who were normally endowed, were romancing. To illustrate their mental attitude it will be sufficient to quote a few lines from the letter of one of my correspondents, who writes:—
"These questions presuppose assent to some sort of a proposition regarding the 'mind's eye' and the 'images' which it sees. This points to some initial fallacy. It is only by a figure of speech that I can describe my 'reproduction' of a scene as a 'mental image' which I can 'see' with my 'mind's eye'. I do not see it; I am sure that a man can see the thousand lines of Spherule which under the pressure he is ready to repeat. The necessary possession is, &c."



A name

α φαντασία
a phantasia

Articles: *The New York Times*, *Scientific American*
News stories: BBC, CBC
Testimonials: TEDx, YouTube
References: Netflix's *Space Force*

Zeman's paper reached the top 1% of scientific outputs.

However, this alleged condition has hardly been discussed in the philosophy of mind.

SEP 1997-2021
SEP 2021-Present

Nigel J. T. Thomas
Bence Nanay

The puzzle

There is a "puzzle raised by the apparent lack of correlation between objective task performance in imagery tasks and reported imagery" (Phillips, 2014, p. 279)

Discrepancy

"Subjective" tests

E.g., VVIQ

Imagine:

"A country scene which involves trees, mountains and a lake."

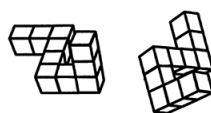
Rate the vividness of the picture (1-5).

E.g., SUIIS & OSIQ

"If I am looking for new furniture in a store, I always visualize what the furniture would look like in particular places in my home."

"Objective" tests

E.g., mental rotation



E.g., Parts of animals

Elephant: "Does it have a long tail proportional to its body size?"



INTROSPECTION

Individuals who report no visual imagery fail to become aware of personal-level mental states that they nonetheless have, due to intrinsic unreliability or abnormal performance of introspection.

DESCRIPTION

Individuals who report no visual imagery are simply describing their mental experiences in a different way, with no significant cognitive differences between self-described aphantasics and other individuals.

Arguments

Neurophysiological (fMRI)

Psychological (aversions, frightening scenarios, and post-traumatic stress)

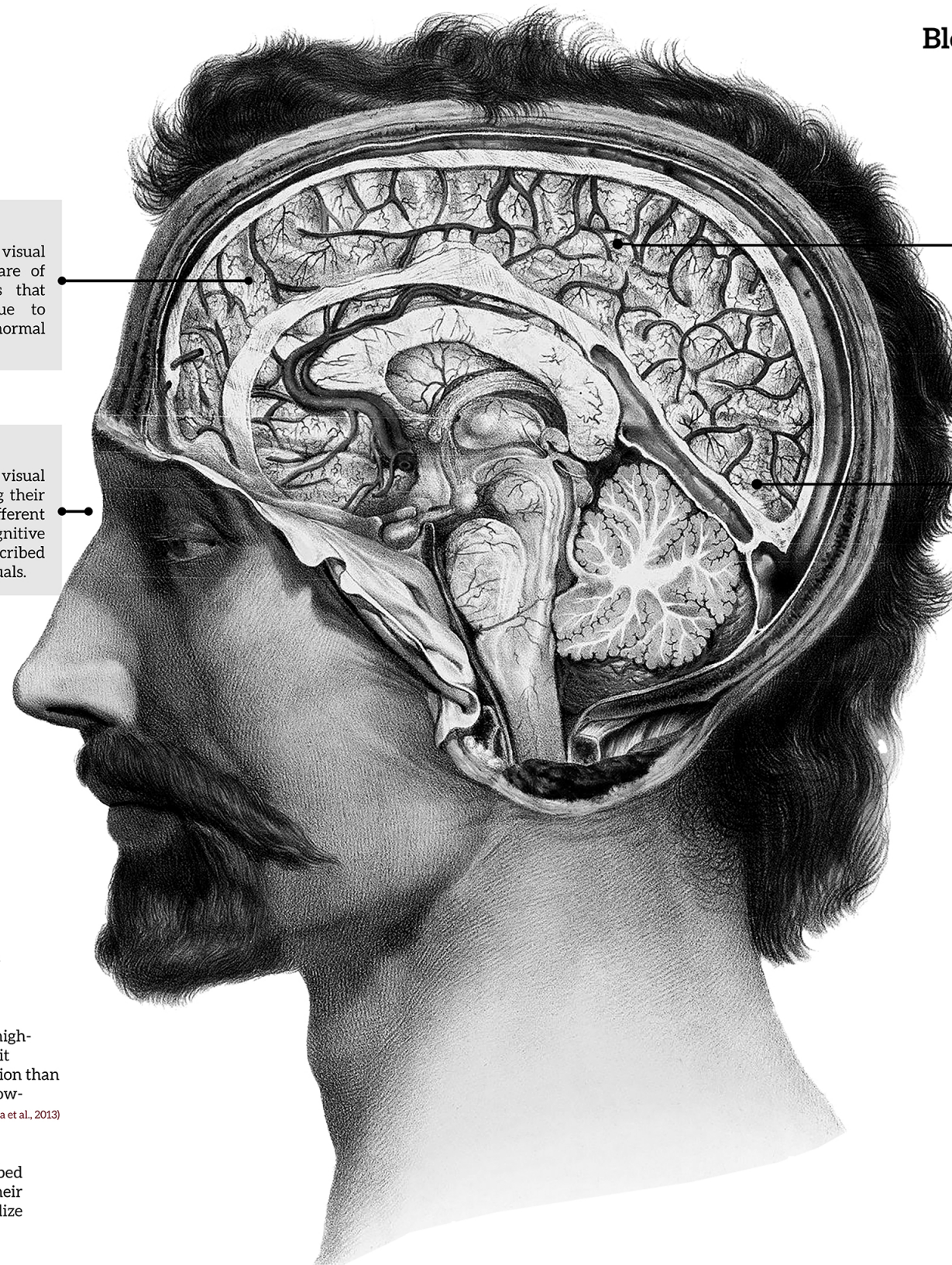
Physiological (binocular rivalry, luminance conditions, pupillometry tests)

Words conveying brightness elicit greater pupil constriction than words conveying darkness (Mathôt et al., 2017)



Grayscale pictures of high-luminance objects elicit greater pupil constriction than grayscale pictures of low-luminance objects (Binda et al., 2013)

Unlike visualizers, self-described aphantasics do not adjust their pupil size when asked to visualize high-luminance objects.



DISCONNECTION

Individuals who report no visual imagery have sub-personal mechanisms with imagistic representations that are not accessible at a personal level.

ABSENCE

Individuals who report no visual imagery have no sub-personal mechanisms with imagistic representations but use alternative cognitive strategies to compensate in activities that would otherwise involve visual imagery.

Philosophical task

First, to provide a conceptual articulation of what is as yet only a diverse array of empirical studies.

Second, to call attention to the distinction between failures of introspection and lack of access, something too often blurred by vague use of terms like "consciousness," "experience," and "awareness."

Third, to call for greater precision in what we mean by "mental imagery" in relation to aphantasia—and thus avoid the ambiguity of whether it refers to personal-level events or sub-personal imagistic representations.

Questions?

