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"*Behind a dark curtain*": The lived experiences of aphantasia

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1. Introduction

Our mind not only expertly interprets continuous signals from inside our body and the outside world, but also creates a rich inner world unique to each of us. For most readers of these lines, "think about your favourite film" would produce stills of breathtaking scenes, and "think about a pink elephant blowing confetti" would, even though it is unlikely to come from a visual memory, also conjure up an image – albeit with varying levels of realism. Indeed, for mental imagery as for any other cognitive process, there is a wide array of differences in the way people can intentionally – or unintentionally – create, maintain, and manipulate mental images. However, for a few readers, these cues would generate a faint and fleeting image, or none at all.

Aphantasia, the experience of faint to absent mental visual imagery (Zeman et al., 2015), has an estimated prevalence of 3.9% (Dance et al., 2022). Aphantasia is, in most instances, congenital, and present from birth, often with a family history (Zeman et al., 2015, 2020), though it can also be acquired (Knowles et al., 2021) following neurological injuries (Thorudottir et al., 2020), medical procedures (Bumgardner et al., 2021; Zeman et al., 2010), or psychiatric or psychogenic conditions and emotional trauma (de Vito and Bartolomeo, 2016).

Congenital aphantasia is not a monolith. There is evidence (Zeman et al., 2020) for variations in the type and amount of imagery experienced by aphantasic people, the frequency, quality and amount of unintentional visual imagery in their dreams, their experiences of imagery in other sensory modalities (Dawes et al., 2020) – a minority being able to experience synaesthesia (Dance et al., 2021), their ability to imagine and recognise faces (Monzel et al., 2023), their spatial navigation skills (Palermo et al., 2022), and their autobiographical memory (Dando et al., 2023; Dawes et al., 2020, 2022; Milton et al., 2021; Monzel et al., 2022). This complex account hints at the existence of subtypes within aphantasia (Digard et al., 2026).

In relation to the self-rated imagery skills of seven sensory modalities (auditory, gustatory, kinaesthetic, olfactory, somatic, tactile, and visual), Dawes et al. (2024) identified two distinct and homogenous subtypes: visual aphantasia with floor visual imagery but imagery in all other modalities (around 30% of both samples used in the cluster analyses), and multi-sensory aphantasia with floor scores on all modalities (around 24%). They also described two less precise subtypes representing the remaining participants: weak visual aphantasia with low but not absent visual imagery and typical imagery in all other modalities (24.0-36.0%), and weak multi-sensory aphantasia with low but not absent imagery in all modalities (9.7-19.9%). Authors therefore delineated that within sensory experiences, aphantasic people varied along two main dimensions: whether other senses than vision were concerned (vision only versus most or all), and the amount of imagery experienced in the concerned sensory modalities (total absence versus faint presence). These findings are replicated by our team in Digard et al. (2026) in this issue, with the addition of an additional dimension, the presence versus absence of additional cognitive correlates (i.e. autobiographical memory difficulties). Indeed, our latent class analysis with 3883 aphantasic respondents highlighted that the self-reported cognitive correlates generally clustered, with volunteers usually experiencing several jointly.

While research on the sensory and cognitive features of aphantasia is expanding, studies of the lived experience and daily life of aphantasic people are scarce. To date, the richest account is the collection of online testimonies *Aphantasia: Experiences, Perceptions and Insights* (Kendle, 2017). While it did not seek to provide a systematic analysis of these contributions, Kendle's book was the first – and for almost a decade the only – report of the wide range of experiences of and attitudes towards aphantasia within the aphantasic community. Indeed, across all the topics covered in the book (i.e. social interactions, early years, imagery, dreams, memory), the diversity of experiences is striking, in line with that reported in Digard et al. (2026). Focusing on a topic not covered by Kendle (2017), Mawtus et al.'s (2024) recent mixed-method study reported that aphantasic people were likely to present mental health and psychiatric disorders differently from typical visualisers, while standard

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therapies were likely to be ineffective due to their reliance on imagery. Importantly, their qualitative account of the mental health experience of aphantasia – the first qualitative study of aphantasia – highlighted that aphantasia greatly impacted people's identity, especially regarding long-standing feelings of "being different".

The findings from this first systematic qualitative account of mental healthcare in aphantasia stress the need to put aphantasic people's real daily life at the heart of aphantasia research. For instance, building upon the evidence that aphantasic people often report poor autobiographical memory, it is imperative to consider how these memory difficulties impact their day-to-day life. Similarly, alongside understanding the precise amount and quality of imagery they can experience, it is essential to understand how discovering their inner world was atypical shaped the way they understand themselves, and others. In short, we need to understand the experience of aphantasia holistically. This study addresses this gap by exploring the experiences of 52 aphantasic adults, and addressing the simple question: "What is it like to live with aphantasia?"

2. Methods

2.1. Respondents

A total of 6436 respondents completed the original online survey between October 2020 and January 2025. Of the 4140 volunteers who had scored between 16 and 23 (inclusive) on the Vividness of Visual Imagery Questionnaire (VVIQ (Marks, 1995)), 52 contributed additional information about their lived experiences via unprompted email testimonies. These volunteers are a subset of those presented in the joint study on aphantasia subtypes Digard et al. (2026). To summarise, this joint study explores the existence of subtypes in aphantasia using self-reported mental imagery and cognitive skills (e.g. autobiographical memory, face recognition, spatial navigation), within the wider sample of 4140 aphantasic volunteers. We identified 3 main subtypes: 1) 'global aphantasia', characterised by extreme sensory imagery difficulties in most to all sensory modalities; 2) 'non-global aphantasia', with milder uni- or multisensory imagery difficulties; and 3) 'Aphantasia +', with self-reported difficulties in both sensory imagery and cognitive skills (in the domains listed above). The volunteers from the present study were not selected based on their subtype belonging, and therefore, all identified subtypes are represented in this subsample. The proportion of these subtypes in the present study is included in Table 1 alongside other demographic characteristics, to provide additional context regarding the self-reported sensory and cognitive differences illustrated by our data.

2.2. Online questionnaire

The Visual Imagery Assessment (VIA) is an online Qualtrics questionnaire available to view at https://osf.io/3t9zv/, which replicates and expands the questionnaire presented by Zeman et al. (2020). The VIA has been extended several times since its opening in October 2020, leading to some missing data in items added subsequently. In addition, most items were optional to ensure answers were provided voluntarily, even though this could increase the proportion of missing data. Respondents provided informed consent within the online questionnaire, before accessing the questions, in compliance with the guidelines of the British Psychological Society and with the ethical approval PF/CB/CA108 granted by the University of Exeter and the University of Edinburgh.

The VIA is described in the joint study by Digard et al. (2026). Briefly, it contains 6 sections: demographics, VVIQ, Window Counting Task, awareness & life impact, cognitive profile, and neurodiversity profile. The latter three sections included both closed-ended (quantitative or categorical) and open-ended items, for example, the question "Do you experience synaesthesia?" with the categorical answer options "Yes"/"No"/"Unsure" was followed by the open-ended items "Comments" for respondents to add information about synaesthesia if they wished to do so.

Table 1
Respondents' demographics.

	n = 52
Age in years, M (SD, range)	50.2 (14.9, 16 – 81)
Gender, n (%)	(n = 39)
Women	14 (35.9)
Men	23 (59.0)
Other gender identities	2 (5.1)
Highest Education, n (%)	
Less than an undergraduate degree	17 (32.7)
Undergraduate degree	19 (36.5)
Postgraduate degree	16 (30.8)
Country of residence, n (%) [a]	
UK	20 (38.5)
USA	18 (34.6)
Canada	4 (7.7)
VVIQ, M (SD, range)	16.5 (1.5, 16 – 23)
VVIQ group, n (%)	
Extreme aphantasia	48 (92.3)
Aphantasia	4 (7.7)
Subtype [b], n (%)	(n = 49)
1 – Global aphantasia (extreme sensory features)	13 (26.5)
2 – Aphantasia + (sensory and cognitive features)	12 (24.5)
3 – Non-global aphantasia (mild sensory features)	24 (49.0)
Senses impacted, n (%)	
All senses	19 (36.5)
Some other senses	15 (28.8)
No other senses	9 (17.3)
Unsure	9 (17.3)
Autobiographic memory, n (%)	
Poor	25 (48.1)
Good	24 (46.2)
Unsure	3 (5.8)

[a] All other countries (Australia, Denmark, Ireland, Nepal, New Zealand, Slovakia, South Africa) each represented under 4% of the respondents (i.e. 1 to 2 respondents).

[b] See section 2.1 Respondents, and joint study (Digard et al., 2026) for details about these subtypes.

2.3. Email testimonies

Many respondents first contacted us of their own accord to share extensive details about their experience, and enquire about the possibility of joining aphantasia research. After directing them to the VIA, we also offered them the possibility of adding the testimony of their first email. As per the ethical approval granted by the University of Edinburgh, we asked them to explicitly consent via email response to the inclusion of the exact text in their email to their VIA responses (after completion). We informed them that the identifying information would be removed from their testimony, that it would be analysed alongside the other open-ended questions in the VIA, and that only anonymised quotes would be included in academic and non-academic reports.

2.4. Descriptive statistics

Descriptive statistics were completed in R 4.4.1 (R Studio, 2024.12.0 + 467).

2.5. Qualitative analysis approach

Following Braun and Clarke (2021a,b) 6 steps, a reflexive thematic analysis was conducted to explore patterns of meaning within the combined open-ended text data from the VIA and email testimonies. This involved (1) data familiarisation; (2) generating initial codes across the dataset; (3) collating codes into meaningful patterns to construct themes; (4) ensuring themes captured coherent patterns of shared meaning, joined by a central concept; (5) refining and defining themes;

and (6) reporting analytic findings using supporting quotes. After each coder had familiarised themselves with the entire dataset, each coder independently coded the entries of 34 respondents using NVivo v.14, with 16 respondents being coded by both coders. This generated two separate lists of inductive codes, which were then fed into visual tools such as mind mapping in PowerPoint, and were then used to conceptually cluster, interrogate and construct candidate themes. The theme development stage was an iterative, collaborative process, guided by fortnightly meetings where we engaged in reflexive and analytic discussions to reach a nuanced understanding of the data (Braun and Clarke, 2019).

2.6. Positionality statement

This analysis was informed by our positionality as researchers. BGD has developmental prosopagnosia and brings an interdisciplinary mixed-methods background. KS is autistic, with moderate aphantasia and has experience conducting interpretative qualitative research. Reflexivity is an important component of reflexive thematic analysis (Braun and Clarke, 2019). We hence acknowledge how our neurodivergence may have informed our critical realist epistemological stance, which assumes participant accounts reflect real experiences shaped by sociocultural constructs (Bhaskar, 1975). That is, we understand aphantasia as a real cognitive phenomenon, experienced internally and expressed through language that we can meaningfully interpret as researchers (Wiltshire and Ronkainen, 2021). We see this proximity to participant accounts as an analytic strength which, coupled with reflexivity, helped us generate deeper insights towards our interpretations (Lazard and McAvoy, 2017). Attending biweekly meetings also provided space for us to consider how our positionalities influenced the analytic process, encouraging transparency and conceptual coherence (Braun and Clarke, 2021a,b).

3. Results

Four central themes (Fig. 1) were generated from the data: (1) Not just a figure of speech: Understanding the "mind's eye" in a world of visualisers; (2) Just out of reach: The experience of knowing without seeing; (3) A double-edged sword: The protective & disruptive ways that aphantasia shapes life and thoughts; (4) Making sense of the missing piece: The search for meaning. Additional quotes for each theme and subthemes are available in Supplementary Material 1.

3.1. Theme 1 – not just a figure of speech: understanding the "mind's eye" in a world of visualisers

This theme refers to the overall experience of understanding how their imagery differed from that of other people around them. In other words, it presents the almost ubiquitous experience of suddenly discovering that "picturing" something is not a figure of speech but the actual experience of most people, and the consequential internal and external comparisons they draw between their experiences and those of others around them. It encapsulates 4 subthemes: (a) Comparing worldviews; (b) The meaning of "seeing"; (c) Lacking certainty/trust in [their] own perceptual reality; (d) Social communication mismatch.

Respondents pointed out that comparisons with other people either (or both) led to or followed their discoveries of aphantasia, often leading to an idealisation of extreme imagery: *"[My parent's] mind is superpowered with an ability to manipulate what [they] visualize[s]"*[1] [P2]. In addition, a few respondents reported being able to dream visually, which allowed them to compare their imagery skills when awake to their dreams, used as a reference point, even when this discrepancy was puzzling. For example, P34 shared, *"I still dream visually and quite vividly too which I find fascinating, why can't I just replicate the process while wakeful like all you folk can??*"

These comparisons sometimes coincided with reflections about what people actually mean when they say they "see" things in their mind. Most respondents explained that before learning about aphantasia, they had always believed this expression was a metaphor or a "*literary device*" (P59), assuming most people had perceptual experiences similar to theirs ("*For 40+ years when someone said 'visualize' - I 'thought about' whatever it was - I know many people who do this. You frame your world around your life experience*", P23). However, some volunteers also pondered how much people around them actually "see" in their mind's eye, and whether there were semantic barriers preventing comparisons ("*Language is shared but interpretations of words clearly differ*", P60), especially after unclear explanations of what others can express about their own inner experiences. Such semantic differences, added to a poor understanding of what constitutes average or typical mental imagery, lead some respondents to doubt other people's ability to assess their own imagery as well ("*Over and over I get the same reaction from others 'well you don't really see the images, you just think about the thing' […]. These people believe their reduced/absent imagery is normal - as you would until you investigate. […] I am very convinced you are dealing with a semantic issue where people think they are visualizing, when they are not*", P23).

The idealisation of imagery, and the possible overestimation of the typical skills of typical visualisers, also paralleled a feeling of uncertainty, or lack of confidence, in their own perception, self-assessment, and skills. Volunteers expressed how their difficulty understanding what constitutes 'typical' mental imagery led them to question how faint their imagery is. This experience is illustrated by P28 with "*I sometimes dream that I can see images, accompanied by a belief that I'm "tricking" myself about not seeing them when awake*". This lack of confidence sometimes also extended to hypothetical real-world events, such as reliable eyewitness testimonies, with P28 adding "*you certainly wouldn't want me as a witness in an important trial, as I don't see things to recall, I would be very unreliable*".

Finally, the realisation that visualisation was not a figure of speech unveiled some social communication discrepancies. A dual conflict with understanding and perspective-taking often emerged, with volunteers facing challenges to convey their own experiences, whilst feeling misunderstood or dismissed by others ("*It took us 10 min of close questioning for me to understand exactly what [my fellow student] meant and for [them] to accept that I couldn't do what [they] did. I think we were both not really inclined to believe each other*", P18) instead of assuming aphantasia can be "fixed" with more effort ("[*My parent] thinks my aphantasia is fixable*", P2; "*Initially, when I explained it to my family, they thought I wasn't trying hard enough to 'see'*", P28). The latter specifically included connotations of laziness and guilt towards the aphantasic person sharing their experience.

3.2. Theme 2 – "just out of reach": the experience of knowing without seeing

This theme covers respondents' description of their image-less thinking experiences, from the feelings of "knowing" despite not picturing, to the various strategies to access imagery or adapt to its absence, to the different kinds of faint imagery that can be experienced. In other words, it reports the experience of understanding how to navigate their own (faint or absent) imagery. The theme brings together 4 subthemes: (a) Intuition & "just knowing"; (b) Dimensional variations of visualisations; (c) Attempts to retrieve images; (d) Using tools & compensatory techniques.

Respondents discussed how they complete cognitive tasks that, for most people, involve imagery at least in part, without relying on this skill, at least not that they can tell. Indeed, they report completing these

[1] All quotes are reported exactly as they appear in the original data from the online survey, regardless of spelling, capitalisation, and/or grammatical errors. Only identifying details such as age, relatives, and relatives' gender were edited and generalised for anonymisation.

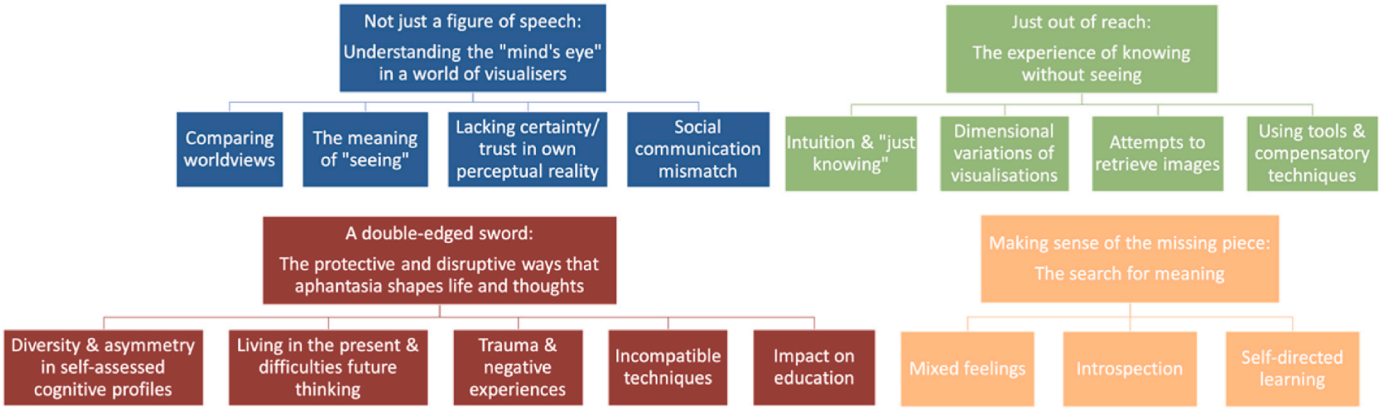

Fig. 1. Thematic map of (sub-)themes identified in the data
Note. Themes are represented in the upper hierarchical levels, and sub-themes are represented in the lower levels.

tasks 'intuitively'. They cannot articulate *how* they 'get there', they simply 'do' ("*It's pretty hard to explain that you just 'know'*", P28). As they only have their aphantasic experience as a reference point, it was likely difficult to find the language to describe how they navigate their internal landscape. This led some respondents to suspect that they might have functioning imagery skills that they were simply not able to access consciously, as exemplified by P12: "*Maybe I do have a very good "minds eye", but it is subconscious and only for specific tasks. It could be somewhat like blindsight […] When asked why they have chosen that specific path, they cannot tell - they just felt like walking the way they did*".

This supposition of an imagery that is felt as present but inaccessible illustrates one of the aspects alongside which respondents described the diversity of 'faint' imagery. Indeed, the respondents' accounts varied along three main dimensions: temporality (i.e. brief versus lasting), quality (i.e. vague or blurry versus crisp), and agency or accessibility (i.e. unintentional – such as dreams – versus voluntary). These three dimensions are included in the following quote by P20: "*if I could do a phone "snapshot" of the image in my head right now, what would the end JPEG be like – for me, hardly a thing, blurred, deliberate-masking … […]. Also if I remember someone's face from a distant photo, for a split second (nano second tbh) I "see" the whole picture from a distance but then something applies the mask before I focus…. and it's gone…*". Here, this volunteer described that they can only intentionally generate brief, blurry images. Other volunteers like P12 above reported somewhat different experiences, and mostly felt that images were present but out of reach, like a word on the tip of their tongue. This is detailed by P28 as well: "*If I have seen something physically, I don't 'see' it in my mind. I just know the image is there, perhaps behind a dark curtain. Separate from this, if I am thinking about something as an archetype, […], there may be a fleeting 'shadowy image', but it is behind, say, a net curtain. I don't really 'see' it, but it does not appear as distant or concealed as something that is real. […] Occasionally, I think I can almost see or make out an image, […] like the tail end of an image that has faded off a screen, but I can't stop it from fading […] Should I have to explain it again, I'll try: "It's like all the hardware is working - but the monitor is switched off.*"" Analogies of curtains and switched off monitor blocking the access to existing imagery were shared by many volunteers, though others did not mention any experiences of imagery, even feelings of out-of-reach imagery ("*It's a wonder I can remember anything at all - my brain seems like a vaccuum!!*", P39).

Across these different experiences of absent to faint imagery, many respondents acknowledged efforts to generate or retrieve images. These efforts were reported both to access memories visually thanks to prompts ("*I do think my memories are there but they need a prompt to access them - like a photo, piece of clothing or artifact of some kind that triggers the memory*", P26) and to create original images thanks to meditation, mental work out or practice ("*I plan on trying to imagine colored shapes next, but honestly it's a LOT of work just to see the colors at the moment. My brain still feels sore like a muscle after a workout but a good sore*", P34], or drugs, though with inconsistent efficacy ("*I love [prescription opioid medication] because it's like movie pictures in my head from my life while awake and it feels absolutely fascinating!!*" P6; "*Ingestion of cannabinoids seems to cause some slight ability for me to see and manipulate shapes in my blind mind's eye. Very fuzzy, and very vague*", P30).

Like the prompts mentioned above, multiple tools and compensatory strategies appear to be spontaneously developed to facilitate day-to-day functioning. External strategies included photos, mentioned by many to gain access to memories ("*The only way I can see a memory is a photo or a video and when I see this for the first time it is as if it never happened and I am living it for the first time but when it's done the memory is gone again!*", P56), and writing or note-taking, used to support both memory and other cognitive tasks ("*I can't see the numbers in my mind, so I need the paper to hold the values for me*", P21). However, some respondents also discussed internal strategies, such as intentional attention to details and 'organisation' of thoughts and knowledge ("*My memory is not good nor my facial recognition but I have designed a filing system in my head that usually works*", P16).

3.3. Theme 3 – A double-edged sword: the protective & disruptive ways that aphantasia shapes life and thoughts

This theme refers to the benefits and disadvantages of faint imagery perceived by the respondents. Interestingly, many features of aphantasia could be seen as or linked to both a positive and a negative experience. The theme envelops 5 subthemes: (a) Diversity & asymmetry in self-assessed cognitive profiles; (b) Living in the present & difficulties with future thinking; (c) Trauma & negative experiences; (d) Incompatible techniques; (e) Impact on education.

Overall, there was an immense array in the self-reported cognitive profiles of the respondents. Some – but not all – reported difficulties in a number of domains (i.e. maths, reading, spatial navigation, memory, face recognition, mental representation of other sensory modalities, dreaming). For example, P26 listed "*I don't have any of the senses in my mind, don't have an inner monologue and also have SADM. I struggle to recognize faces unless I've met them several times. […] I'm not an overly emotional person. I do find spatial awareness difficult*". On the contrary, others self-assessed as having typical or excellent skills in these same domains ("*I also have a high ability to recognise faces which seems to be counter to most with this condition*", P58). Importantly, several respondents were puzzled by the asymmetry of their own (self-assessed) cognitive profile. For example, P14 declared "*My audio memory is however what I would term somewhat hyper, in that I can hear a tiny part of a song, a few beats only or a tiny sliver of a sample, that I haven't heard for decades, and my brain instantly knows it*", which they hypothesised as being a consequence or a trade-off for their "*lack of visual memory*".

Similarly, P30 – who unusually reported having excellent autobiographical memory – expressed "*I tend to belive that my ability to remember so many events in my life is linked to my lack of ability to visualize. Just like those who are blind have a heightend sense of sound or smell. I have a super power and that is my memory of events*". Regarding higher order skills, many respondents did consider themselves as having a more 'analytical' mindset, such as P7: "*My actual autistic and aphantasia super power is conceptualizing research problems, unpacking taken-for-granted assumptions, and identifying flaws/challenges in programs of inquiry*". However, several volunteers also described themselves as being creative and imaginative ("*I have a vivid imagination and I can create stories. I just can't see anything*", P55), enjoying reading novels, drawing, designing, or creating music.

As detailed above, many respondents reported poor autobiographical memory. These volunteers often suffered from being unable to visualise their past – especially cherished moments ("*It also makes me sad that I can't picture the faces of past loved ones in my mind or remember past experiences*", P57), and for some, felt emotionally disconnected from their past ("*it feels like my past has not really existed apart from what verbal memory I can pull from it which is very vague!*", P56). These experiences are akin to their lack of visual imagery, leaving them without an anchor for their emotional memories, resulting in those memories fading away. However, this distance from the past was sometimes approached more positively. Indeed, many respondents explained living in the 'here and now' and being 'present in the present'. According to them, due to their difficulty imagining both the past and the future, their experience is dominated by the present moment. For example, P7 shared "*My thought processes are focused on here and now. I don't easily hold grudges or worry about the future. My brain is present. Everyone else is elsewhere.*", framing their ability to only think about the present as an advantage against "*everyone else*" instead of thinking about any other point in time. This ability to not "*dwell on [the past]*" (P26) and instead have an "*easier time moving on*" (P34) was discussed by many, hinting at an appreciation for this trait that allows them to live without too great a weight of their past. A few volunteers indeed linked their feeling of presence in time and space to an overall inner calmness ("*I feel the lack of the stimuli in my mind that I'm quite content with just existing*", P49).

Building upon these feelings of detachment from the past, respondents also discussed how their difficulties in visually accessing and reliving their memories moderated the impact of traumatic events. The majority of respondents who mentioned this matter considered this a key benefit: aphantasia had been a shield against past negative experiences, allowing them to detach themselves from traumatic events in their past. For example, P18 opposed the protective role of aphantasia against their trauma to the experience of their hyperphantasic acquaintances: "*I have concluded that it's often better not to have vivid imagery. My lack of imagery has protected me from post traumatic stress. I'm at a loss to know how vivid imagers can live with the ghastly things they conjure up or remembe*r". However, some respondents considered that this inability to revisit their past also had negative impacts on their mental health. For example, P56 detailed how not being able to access positive memories at will exacerbated their mental ill-health ("*The effect especially remembering good fun memories is huge when you live with anxiety and depression as the only way I can see and recall my kids being born or fun time is by looking at a picture or a video*"), while not being able to access negative memories prevented them from successfully overcoming them in therapy ("*I cannot see my traumas or explain them well so for me […] I have had no traumatic events in my life but my therapist & psychiatrist would disagree!*") – which will be mentioned later as well. Finally, it is worth noting that a few respondents believed that their aphantasia was caused by emotional trauma in their early life, with the inability to visualise developing as a coping strategy.

Linked to the experience of P56, several other respondents detailed their difficulties accessing efficient therapies that did not rely on visualising abilities, and identified aphantasia as a barrier to their recovery, often leading to frustration. For example, P46 shared "*It definitely impacted my getting treatment for my trauma and complex PTSD. My therapist tried EMDR and because I couldn't see anything it was utter useless*", highlighting how standard therapeutic practices are incompatible with poor imagery. Outwith mental health therapy, visualising is also a key element of various training and learning practices that are inaccessible to the respondents, for example, in professional sport or meditation, though aphantasia could also be considered as a benefit for the latter ("*I am finding it helpful in meditation - easy to imagine space, nothingness*", P33).

Building upon this sub-theme, a frequently mentioned domain where mainstream techniques were ill-suited to aphantasia was education. Frustration with the education system was often linked to the other difficulties mentioned above in domains that can heavily rely on imagery (i.e. mental maths, reading, memory). Within this, being unable to use visual memory, even short-term, was often identified as a key obstacle to efficient learning ("*When it comes to learning something new, not having any mental images makes things very difficult and I think I've had it longer than I can remember because I have struggled*", P46), with solutions being available only when accessing support for other difficulties or disabilities ("*This defintily had an impact on my learning as a child. The requriment to copy off the board in elementary school, note taking in high school was impacted. At colledge they provided a note taker for my dyslexia. This was a game changer for my education*", P30). Overall, a need for more research into best practices to support learning and education was identified as a priority, with some volunteers working in school settings describing how they reflected on their own experience to adapt teaching strategies for lower reliance on visualisation, hence developing more inclusive practices for aphantasic learners.

3.4. Theme 4 – making sense of the missing piece: the search for meaning

Finally, the last theme envelops respondents' references to their feelings after discovering aphantasia, as well as their attitudes towards aphantasia, including their search inward and outward for a better understanding of themselves. It reflects their journey towards understanding their own identity as aphantasic. The theme gathers 3 subthemes: (a) Mixed feelings; (b) Self-directed learning; (c) Introspection.

Learning about aphantasia, and learning their experience of poor to absent imagery was not the norm, was for most respondents a pivotal discovery, and brought a range of reactions amongst the volunteers. While some were unbothered by the knowledge that most people can visualise and were neutral towards aphantasia ("*I was about [middle age] when I realized, 'hey … other people see pictures'! Not that it ever hindered me in the least*", P11; "*not bad or good, simply just is*", P39), others felt disillusioned and missing out a key experience of life("*I do believe that I am missing out on a lot of things not being able to see things in my mind*", P55), even despite an otherwise positive attitude towards their life ("*My life is amazing and I have been what people would say is successful on paper but I will forever grieve and feel I was cheated out of the passionate life I should have had*", P56). More often than the general ability to visualise, it seemed to be the realisation that others were able to picture their loved ones that was distressing ("*A source of sadness to me because I am unable to see my [spouse]'s face when i close my eyes*", P43), particularly passed relatives they missed. These different attitudes fed into a more general matter of whether aphantasia should be considered a disability. On the one hand, some volunteers viewed aphantasia as a deficit or disability ("*I know this is not considered a disability in the US or UK, in my opinion it definitely is a disability*", P30) that should be cured or "*conquered*" (P34). Indeed, many respondents' efforts and hopes to gain imagery illustrate some levels of dissatisfaction with being aphantasic. On the other hand, several volunteers considered aphantasia simply as a difference ("*I am not placing my condition as a disability, or restriction - it has many benefits - but like other conditions, it affects some things which others take for granted*", P23). For example, P28 shared their positive outlook on their aphantasic experience: *"I live life with joie de vivre. I don't feel like I miss out on*

anything. I certainly don't think I need to be fixed or cured. It doesn't make my life lesser, or diminish my love of beauty in real life or what I can imagine or dream of without 'seeing". Importantly, it must be noted that there was overall a positive response to discovering their experience had a name, and they were part of a community – albeit a minority ("*Though I am happy to see that I am not all alone, it is kinda rough being in a 5% of all humans*", P55)

Respondents also discussed their drive for introspection and a deeper understanding of themselves as individuals. This drive for self-exploration led many of those with no family history of neurodiversity to search for the cause of their aphantasia, often suspecting generational or early childhood emotional trauma, and sometimes childhood physical head trauma. In addition, realising they had long failed to notice their imagery difference, some volunteers wondered whether they differed from the general population in other ways. For example, P51 declared, "*Despite my intelligence, curiosity, study, therapy, etc, I have managed to miss that pretty much everyone else can visualize, until a few weeks ago. Makes me wonder what else I am missing?*", which also highlights the lack of open dialogue around aphantasia in the wider society. Indeed, while some volunteers already had diagnoses of autism, ADHD or dyslexia when learning about aphantasia, others started noticing those traits afterwards. Interestingly, those with these pre-existing diagnoses explored how aphantasia had shaped their experience of this known neurotype. For example, P57 shared "*My ADHD probably has less of an effect on my daily life as I'm not distracted by internal visuals, only wandering thoughts*", suggesting a protective influence of aphantasia in their case.

Finally, discovering aphantasia was often accompanied by an outward drive to learn more about and explore aphantasia in general. Many volunteers explained being "*fascinated by this topic*" (P4). Their motivation for independent research led them to consult social media platforms extensively, read news articles, and, when possible, read scientific publications. They displayed a striking desire to take part in research to contribute to the global understanding of aphantasia. They also shared numerous questions for future research that were detached from themselves specifically, for example, around the topics of cognitive processing in aphantasia, developmental trajectories, causes (including wondering "*whether there might be an evolutionary aspect to aphantasia*" (P27)), learning and education, mental health correlates, or cognitive advantages of aphantasia. For some, these investigations took them further than aphantasia, into deeper research in neurodiversity, with P14 sharing their conclusion: "*Most people assume everyone is built and wired the same way*".

4. Discussion

4.1. Summary

This study is the first to report the wider lived experiences of aphantasic people. The findings reveal numerous ways in which aphantasia shapes one's life, from everyday functioning to aspects of self-understanding and perspective. Building upon previous findings, the themes presented here illustrate how living with faint or absent imagery has ramifications far beyond the specific cognitive task of visualising.

4.2. Key findings

Our sample represented a wide range of experiences of aphantasia, in line with Kendle (2017) and the quantitative descriptions in Dawes et al. (2020), Palermo et al. (2022), and Digard et al. (2026). Indeed, the visual experiences reported by the volunteers who could visualise did not fit a one-dimensional conceptualisation of imagery ability, ranging from faint to vivid, as usually tracked in standardised self-ratings. Instead, their descriptions – admittedly all fitting under the umbrella term 'faint' – would be more precisely interpreted alongside a three-dimensional model considering agency or accessibility, quality, and temporality. For instance, some volunteers could experience imagery in vivid dreams only (unintentional, high quality, high duration), others could create flashes of images quickly fading away (deliberate generation of brief images of average quality), and yet others declared being able to see blurry images only (deliberate generation of low-quality images that could be maintained). It transpired that some volunteers could experience several of these, further complicating the 'picture' of visualisation experiences in aphantasia. Overall, these accounts might explain some discrepancies in direct measures of mental imagery at the group level. Indeed, this range of descriptions brings a valuable nuance to consider when designing future research aiming to measure and quantify the imagery of aphantasic people. Interestingly, many volunteers, even those with no imagery, felt that images were just out of reach, present but inaccessible. In light of the findings by Chang et al. (2025) that aphantasic people show altered imagery-related representation in the primary visual cortex compared to typical visualisers, these experiences support the hypothesis that some aphantasics could have (at least) a partial neurocognitive processing of imagery, with a decoupling before reaching imagery perception. Such hypotheses feed into the question expressed by many respondents, some of them distressingly, of whether it would be possible to gain, or improve, their visual imagery skills.

Outwith visual imagery, our volunteers also reported a vast range of cognitive and sensory experiences, as anticipated. Their testimonies indicate the importance of considering individual differences and the potential wider ramifications of faint imagery. Notably, while some volunteers reported no issue other than visual imagery, many reported a series of difficulties, in line with the previous findings mentioned above. As might be expected, the increased experience of sensory and cognitive difficulties was accompanied by numerous hurdles in daily life. Volunteers raised concerns about learning and education. In particular, they regularly mentioned issues with visualising notes or patterns in visual memories. These testimonies align with evidence of the scaffolding role of imagery on learning, at least in certain fields such as language, reading, maths, or geography (Commodari et al., 2024; Suggate and Lenhard, 2022; Zhou et al., 2024). Interestingly, Baade et al. (2025) found similar performance between typically visualising and aphantasic learners of chemistry, suspecting the presence of compensatory mechanisms in aphantasia. The impact of aphantasia on learning and education, the role of alternative or compensatory strategies, and the optimal approaches to teaching aphantasic learners all require further study.

In line with Mawtus et al. (2024), mental health therapy was a prevalent topic of concern for the volunteers, who explained how therapeutic techniques were often ill-suited to their neurotype, especially in the case of absent imagery and poor memory. Imagery is indeed the bedrock of practices to treat many illnesses, including depression (Ma and Lo, 2022), anxiety (Stavropoulos et al., 2024), social anxiety (Thunnissen et al., 2024), post-traumatic stress disorders (PTSD) (Langkaas et al., 2017), obsessive-compulsive disorders (OCD) (Strachan et al., 2020), or bipolar disorder (van den Berg et al., 2023), all of which are compatible with aphantasia (Mawtus et al., 2024). Crucially, while many respondents described themselves as living in the present, detached from both past and future, without strong emotions (be they positive or negative), and considered that aphantasia had the benefit of protecting them against trauma and mental ill-health, others certainly displayed poor mental health. Some reported suffering from depression, anxiety, or PTSD due to life events unrelated to aphantasia, but a few volunteers also expressed intense distress caused by the realisation that their experience was atypical. Importantly, circling back to the testimonies of a protective effect of aphantasia, it is essential to consider that mental ill-health might present differently in aphantasic people due to aphantasia masking existing issues (Dance et al., 2025). For example, as recurring flashbacks and nightmares are part of one cluster of the DSM-5 criteria for PTSD (Blevins et al., 2015), this condition could present differently in aphantasia.

Also in relation to mental health, several respondents with no known

family history of aphantasia or other type of neurodiversity suspected that their aphantasia was due to childhood emotional trauma. These volunteers supposed that they developed aphantasia as a child as a coping and protective strategy to shield themselves from traumatic experiences, inhibiting all visual memories to avoid re-exposure. Research into psychological or psychiatric causes of aphantasia has so far been limited and tentative, limited to the interpretation of a few cases (de Vito and Bartolomeo, 2016). While possible mechanisms have been suggested to explain this phenomenon (Bartolomeo, 2025), the existence of psychogenic aphantasia is still debated (see note 8 in Lorenzatti (2025)). As such, considering the testimonies presented in this study, this topic deserves dedicated and cautious research. Indeed, such a developmental response to childhood trauma would require bespoke therapeutic support.

According to our volunteers, aphantasia has also affected their sense of self, their self-understanding, and their understanding of others around them. Most respondents realized comparatively late in their lives that their experience was not the norm, possibly due to their ability to compensate. However, most had simply assumed that "picturing" was nothing more than a figure of speech. P23's "*you frame your world around your life experience*" acutely exemplifies the challenge of not having a point of reference beyond one's own experience. In turn, volunteers described how being aphantasic had led to a mismatch in social communication, with issues in understanding others and being understood themselves. In particular, they were often not believed, or considered as lazy for not "*trying hard enough*" (P28) to improve their skills, reinforcing feelings of guilt, inadequacy, and isolation. Such attitudes towards their imagery skills resonate with those of people with developmental prosopagnosia (Yardley et al., 2008), who are unable to imagine or recognise faces exclusively. Finding a name for their experience and, by extension, finding a community, provided comfort and support for aphantasic people as it often does in the context of other types of neurodiversity (Crane et al., 2021; Crowson et al., 2024; Ginapp et al., 2023).

In addition, volunteers reported relevant conversations which highlight how semantics, one's understanding of the meaning of words, might lead someone to misjudge their own abilities, even with the knowledge that aphantasia exists. Indeed, while some people qualify as faint imagers even though they believe their experience to be typical, others might believe they have faint imagery when their experience is typical. This helps to explain the large sample of respondents in Digard et al. (2026) who joined the study self-identifying as faint or vivid imagers when their imagery fits within the typical range.

The discovery that they had been misjudging their mental imagery was, for some respondents, accompanied by a low confidence or trust in their own abilities, or at least in their ability to assess their abilities (i.e. thinking they might be tricking themselves). Others, noticing their difficulties, found reasons to dismiss and ignore them ("*I can't visualise the faces of my wife, our daughters, my parents, friends etc … but always dismissed it because I knew them enough to recognise them*", P20). In keeping with their self-doubt, several volunteers expressed uncertainty regarding their other abilities (i.e. being a witness in court), matching the high proportion of uncertain answers ("maybe") in the self-assessments of skills reported in Digard et al. (2026). These reports of self-doubt align with Monzel et al.'s (2023) proposition that people with aphantasia might have low confidence in their ability to recognise faces, even though at the group level they perform similarly to typical visualisers. Of course, it is also possible that this absence of group-level differences masks the presence of prosopagnosia in a specific subset of the population.

Finally, respondents displayed extensive interest in learning more about aphantasia and other psychological topics. As described by Mawtus et al. (2024), awareness of being aphantasic, and that their mind functions atypically, was often considered a key part of their identity. Many respondents described first learning about aphantasia, and recognising themselves in its description, as a pivotal, '*light-bulb*' moment, similar to people with developmental prosopagnosia (which is still poorly represented in the public discourse) first learning about it (Lowes et al., 2025). However, they did not all have a positive attitude towards aphantasia. Following the same pattern as other neurotypes in the past years (Botha et al., 2024; Grummt, 2024; Kapp et al., 2013; Sinclair, 1993), there were differing views as to whether aphantasia should be considered as a difference, or as a deficit or disability. Indeed, several were actively trying to gain imagery (including via the use of psychedelics (Koenig-Robert et al., 2025)), enquired about the best ways to learn visualisation, and urged for future research to find a "cure". Strikingly, the imagery elements that were the most frequently mentioned as missed were positive memories from their past, and the faces of loved ones. Indeed, missing those faces was a frequent source of sadness, which may be shared by those with developmental prosopagnosia.

Others, however, had a more positive outlook, instead focusing on understanding their own mind, understanding how their mind came to be, making sense of their past experiences, and finding their unique strengths.

4.3. Limitations & future directions

Our findings should nonetheless be interpreted in the light of certain limitations. First, the data were collected in two unrelated steps, in a survey and in voluntarily provided email testimonies, which limited the standardisation of the data collection method. Indeed, email testimonies were in the majority provided as first interactions with the research team, and while all contents added to the dataset (after securing informed consent) concerned lived experience, those emails varied greatly in length, level of detail, and topics spontaneously mentioned, unprompted. While this has the strength of covering the elements that were the most salient to them, likely some topics were only covered by some volunteers, simply because the others did not think about those when writing. Using testimonies provided via online survey has the strength of providing more standardised prompts across volunteers, but the limited accessibility of open-ended text boxes in online surveys could also restrict the depth of the contributions. In addition, as the volunteers answered these open-ended questions after having been asked to self-rate their abilities in various imagery and cognitive domains, it is likely some volunteers were primed to discuss their experiences in those domains, leading them to provide more details about them than about other aspects of their lived experiences (e.g., social communication, schooling). Our method was suitable for a first research on the general lived experiences of aphantasia, but future research should investigate specifically each topic we reported here, with methods such as interviews or focus groups to prioritise depth over breadth.

In addition, as raised above, there is robust evidence suggesting that aphantasia is a heterogeneous experience including several subtypes. Here, we included the voices of aphantasic volunteers fitting into multiple profiles of aphantasia. This method had the benefit of presenting the experiences broadly shared across aphantasia, though it is also likely that some aphantasic people will not recognise themselves in these accounts, and that some specific experiences that are particularly salient in some subtypes of aphantasia might have been lost in the analysis. Instead, future research should group volunteers who share specific forms of aphantasia. Similarly, aphantasia is but one of our volunteers' identities, and the lived experience of one's neurotype is evidently shaped by one's intersectional identities (Botha and Gillespie-Lynch, 2022; Digard et al., 2022). While we provided as rich a description of this predominantly UK and USA-based group, it is likely that their experiences were also shaped by intersectional identities that were not recorded here, be they other neurotypes (i.e. ADHD, autism), personal history (i.e. traumatic childhood), educational context (i.e. public or private schooling, education policies in the country of residence), or cultural background. For example, even when focusing only on the individual differences characteristics of aphantasia such as the varying

levels of imagery experienced, it is possible that aphantasic people without any sensory imagery and with additional cognitive differences (e.g. people with the 'aphantasia +' subtype described in the joint study Digard et al. (2026)) do not rely on the same compensatory strategies (Theme 2) and do not experience the same protective and disruptive correlates of aphantasia (Theme 3) as those with faint visual imagery but otherwise typical sensory imagery (e.g. people with the 'non-global aphantasia' subtype). Turning towards another individual difference, the relatively high level of education in our sample of volunteers, likely related to a self-recruitment bias and survivorship bias, may have led to a disproportionate representation of certain insights, implicit compensatory strategies, strengths, and difficulties. For example, in the context of autism, higher educational attainment was linked with having access to more compensatory strategies, and in experiencing the strengths and challenges of being autistic differently (Cook et al., 2021). As such, just as autism research has showed that many aspects of the lived experiences of autism cannot be generalised across intersectional identities such as general intelligence and socioeconomic context (both influencing educational attainment), it is likely that some of the impacts of aphantasia and strategies for adaptation reported by our volunteers may not generalise to the broader aphantasic population.

This is also particularly relevant when considering the findings of Theme 4 – Search for meaning. Indeed, while our volunteers displayed a drive for exploration of aphantasia in general, and in their own aphantasic experience in particular, it may be that this drive is over-represented in aphantasic people who volunteered to take part in research and to contribute qualitative data.

4.4. Implications

Our findings have implications for research, education, and clinical practice. The range of experiences described by volunteers adds to the evidence for heterogeneity in aphantasia, and the hypothesis of subtypes. In particular, the feelings of images present but out of reach, as well as the feelings of intuitively knowing, suggest that some subtypes of aphantasia might involve a decoupling of some form of imagery processing and conscious visualisation, while, jointly or independently, some subtypes might involve alternative cognitive processing routes. In addition, this study also re-centres people at the heart of aphantasia research. Cognitive research into aphantasia must consider the real lives of those involved, including their doubts, worries, and hopes. These were, for example, identified in their research priorities, which included cognitive advantages of aphantasia, diagnoses, causes, links with creativity, and potential ways to develop imagery.

We conveyed the volunteers' motivation to advocate for the next generation of learners, grounded in their own schooling experiences. In addition to dedicated research into the ways aphantasia can shape learning, it is urgent to provide evidence-based training to education professionals to help them identify and, to the best of our current knowledge, support aphantasic students.

We also shared the respondents' call for more training on aphantasia amongst clinicians and therapists, to alleviate their frustration. While aphantasia could somewhat protect from mental health issues, it does not prevent them, and aphantasic people need therapeutic practices adapted to their neurotype. In addition, the discovery of their aphantasia could cause distress, which deserves attention and support from health professionals. While aphantasia is still poorly known, recognised, and understood, clinicians should, to the best of their knowledge, limit the risks of missing aphantasia amongst other conditions (i.e. autism), or miss other conditions under the cover of aphantasia (i.e. memory difficulties).

4.5. Conclusion

This study is the first to centre the voice and perspectives of aphantasic people regarding their overall daily life and their overall experience of aphantasia. In line with previous findings, we report a wide array of experiences of visualisation, of sensory imagery, and of overall cognitive skills. The experience of aphantasia goes far beyond imagery and cognition, instead shaping how people understand themselves and others, how they communicate, how they learn, how they consider their past, how they approach their future, and how they face their mental health. We raise new questions regarding the cognitive correlates giving rise to these experiences. Finally, we emphasise the need for bespoke professional training for educators and clinicians, to ensure aphantasic people are supported, understood, and seen.

CRediT authorship contribution statement

Bérengère Galadriel Digard: Writing – original draft, Visualization, Supervision, Resources, Project administration, Methodology, Investigation, Formal analysis, Data curation, Conceptualization. **Kiera Schul:** Writing – review & editing, Visualization, Investigation, Formal analysis. **Adam Zeman:** Writing – review & editing, Validation, Supervision, Resources, Project administration, Methodology, Investigation, Funding acquisition, Conceptualization.

Declaration of generative AI in scientific writing

No generative AI was used to write this manuscript.

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Appendix A. Supplementary data

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