Aphantasia: A life without mental images

Close your eyes and imagine walking along a sandy beach and then gazing over the horizon as the Sun rises. How clear is the image that springs to mind?

Most people can readily conjure images inside their head - known as their mind's eye. But this year scientists have described a condition, aphantasia, in which some people are unable to visualise mental images.

Niel Kenmuir, from Lancaster, has always had a blind mind's eye. He knew he was different even in childhood. "My stepfather, when I couldn't sleep, told me to count sheep, and he explained what he meant, I tried to do it and I couldn't," he says. "I couldn't see any sheep jumping over fences, there was nothing to count."

Our memories are often tied up in images, think back to a wedding or first day at school. As a result, Niel admits, some aspects of his memory are "terrible", but he is very good at remembering facts. And, like others with aphantasia, he struggles to recognise faces. Yet he does not see aphantasia as a disability, but simply a different way of experiencing life.

Mind's eye blind

Ironically, Niel now works in a bookshop, although he largely sticks to the non-fiction aisles. His condition begs the question what is going on inside his picture-less mind. I asked him what happens when he tries to picture his fiancee. "This is the hardest thing to describe, what happens in my head when I think about things," he says. "When I think about my fiancee there is no image, but I am definitely thinking about her, I know today she has her hair up at the back, she's brunette. But I'm not describing an image I am looking at, I'm remembering features about
her, that's the strangest thing and maybe that is a source of some regret."

The response from his mates is a very sympathetic: "You're weird." But while Niel is very relaxed about his inability to picture things, it is often a cause of distress for others. One person who took part in a study into aphantasia said he had started to feel "isolated" and "alone" after discovering that other people could see images in their heads. Being unable to reminisce about his mother years after her death led to him being "extremely distraught".

**The super-visualiser**

At the other end of the spectrum is children's book illustrator, Lauren Beard, whose work on the Fairytale Hairdresser series will be familiar to many six-year-olds. Her career relies on the vivid images that leap into her mind's eye when she reads text from her author. When I met her in her box-room studio in Manchester, she was working on a dramatic scene in the next book. The text describes a baby perilously climbing onto a chandelier.

"Straightaway I can visualise this grand glass chandelier in some sort of French kind of ballroom, and the little baby just swinging off it and really heavy thick curtains," she says. "I think I have a strong imagination, so I can create the world and then keep adding to it so it gets sort of bigger and bigger in my mind and the characters too they sort of evolve. I couldn't really imagine what it's like to not imagine, I think it must be a bit of a shame really."

Not many people have mental imagery as vibrant as Lauren or as blank as Niel. They are the two extremes of visualisation. Adam Zeman, a professor of cognitive and behavioural neurology, wants to compare the lives and experiences of people with aphantasia and its polar-opposite hyperphantasia. His team, based at the University of Exeter, coined the term aphantasia this year in a study in the journal Cortex.

Prof Zeman tells the BBC: "People who have contacted us say they are really delighted that this has been recognised and has been given a name, because they have been trying to explain to people for years that
there is this oddity that they find hard to convey to others." How we imagine is clearly very subjective - one person's vivid scene could be another's grainy picture. But Prof Zeman is certain that aphantasia is real. People often report being able to dream in pictures, and there have been reported cases of people losing the ability to think in images after a brain injury.

He is adamant that aphantasia is "not a disorder" and says it may affect up to one in 50 people. But he adds: "I think it makes quite an important difference to their experience of life because many of us spend our lives with imagery hovering somewhere in the mind's eye which we inspect from time to time, it's a variability of human experience."

Questions 1–5

Do the following statements agree with the information in the IELTS reading text?

In boxes 1-5 on your answer sheet, write

TRUE if the statement agrees with the information
FALSE if the statement contradicts the information
NOT GIVEN if there is no information on this

1. Aphantasia is a condition, which describes people, for whom it is hard to visualise mental images.

2. Niel Kenmuir was unable to count sheep in his head.

3. People with aphantasia struggle to remember personal traits and clothes of different people.
4. Niel regrets that he cannot portray an image of his fiancee in his mind.

5. Inability to picture things in someone's head is often a cause of distress for a person.

6. All people with aphantasia start to feel 'isolated' or 'alone' at some point of their lives.

7. Lauren Beard's career depends on her imagination

8. The author met Lauren Beard when she was working on a comedy scene in her next book.

Questions 9–13

Complete the sentences below.

Write NO MORE THAN TWO WORDS from the passage for each answer.

Write your answers in boxes 9-13 on your answer sheet.

9. Only a small fraction of people have imagination as ______ as Lauren does.

10. Hyperphantasia is ______ to aphantasia.

11. There are a lot of subjectivity in comparing people's imagination - somebody's vivid scene could be another person's ______.

12. Prof Zeman is ______ that aphantasia is not an illness.

13. Many people spend their lives with ______ somewhere in the mind's eye.
Section 1

1. False
2. True
3. Not Given
4. True
5. True
6. Not Given
7. True
8. False
9. Vibrant
10. Polar-opposite
11. Grainy picture
12. Adamant
13. Imagery hovering

READING PASSAGE 2

You should spend about 20 minutes on Questions 14–26, which are based on Reading Passage 2 below.

Life lessons from villains, crooks and gangsters

(A) A notorious Mexican drug baron’s audacious escape from prison in July doesn’t, at first, appear to have much to teach corporate boards. But some in the business world suggest otherwise. Beyond the morally reprehensible side of criminals' work, some business gurus say organised crime syndicates, computer hackers, pirates and others
operating outside the law could teach legitimate corporations a thing or two about how to hustle and respond to rapid change.

(B) Far from encouraging illegality, these gurus argue that – in the same way big corporations sometimes emulate start-ups – business leaders could learn from the underworld about flexibility, innovation and the ability to pivot quickly. “There is a nimbleness to criminal organisations that legacy corporations [with large, complex layers of management] don’t have,” said Marc Goodman, head of the Future Crimes Institute and global cyber-crime advisor. While traditional businesses focus on rules they have to follow, criminals look to circumvent them. “For criminals, the sky is the limit and that creates the opportunity to think much, much bigger.”

(C) Joaquin Guzman, the head of the Mexican Sinaloa drug cartel, for instance, slipped out of his prison cell through a tiny hole in his shower that led to a mile-long tunnel fitted with lights and ventilation. Making a break for it required creative thinking, long-term planning and perseverance – essential skills similar to those needed to achieve success in big business.

(D) While Devin Liddell, who heads brand strategy for Seattle-based design consultancy, Teague, condemns the violence and other illegal activities he became curious as to how criminal groups endure. Some cartels stay in business despite multiple efforts by law enforcement on both sides of the US border and millions of dollars from international agencies to shut them down. Liddell genuinely believes there’s a lesson in longevity here. One strategy he underlined was how the bad guys respond to change. In order to bypass the border between Mexico and the US, for example, the Sinaloa cartel went to great lengths. It built a vast underground tunnel, hired family members as border agents and even used a catapult to circumvent a high-tech fence.

(E) By contrast, many legitimate businesses fail because they hesitate to adapt quickly to changing market winds. One high-profile example is
movie and game rental company Blockbuster, which didn’t keep up with the market and lost business to mail order video rentals and streaming technologies. The brand has all but faded from view. Liddell argues the difference between the two groups is that criminal organisations often have improvisation encoded into their daily behaviour, while larger companies think of innovation as a set process. “This is a leadership challenge,” said Liddell. “How well companies innovate and organise is a reflection of leadership.”

Left-field thinking

(F) Cash-strapped start-ups also use unorthodox strategies to problem solve and build their businesses up from scratch. This creativity and innovation is often borne out of necessity, such as tight budgets. Both criminals and start-up founders “question authority, act outside the system and see new and clever ways of doing things,” said Goodman. “Either they become Elon Musk or El Chapo.” And, some entrepreneurs aren’t even afraid to operate in legal grey areas in their effort to disrupt the marketplace. The co-founders of music streaming service Napster, for example, knowingly broke music copyright rules with their first online file sharing service, but their technology paved the way for legal innovation as regulators caught up.

(G) Goodman and others believe thinking hard about problem solving before worrying about restrictions could prevent established companies falling victim to rivals less constrained by tradition. In their book The Misfit Economy, Alexa Clay and Kyra Maya Phillips examine how individuals can apply that mindset to become more innovative and entrepreneurial within corporate structures. They studied not just violent criminals like Somali pirates, but others who break the rules in order to find creative solutions to their business problems, such as people living in the slums of Mumbai or computer hackers. They picked out five common traits among this group: the ability to hustle, pivot, provoke, hack and copycat.
Clay gives a Saudi entrepreneur named Walid Abdul-Wahab as a prime example. Abdul-Wahab worked with Amish farmers to bring camel milk to American consumers even before US regulators approved it. Through perseverance, he eventually found a network of Amish camel milk farmers and started selling the product via social media. Now his company, Desert Farms, sells to giant mainstream retailers like Whole Foods Market. Those on the fringe don’t always have the option of traditional, corporate jobs and that forces them to think more creatively about how to make a living, Clay said. They must develop grit and resilience in order to last outside the cushy confines of cubicle life. “In many cases scarcity is the mother of invention,” Clay said.

Questions 14-21

Reading Passage 2 has eight paragraphs A-H. Match the headings below with the paragraphs. Write the correct letter, A-H, in boxes 14-21 on your answer sheet.

14. Jailbreak with creative thinking
15. Five common traits among rule-breakers
16. Comparison between criminals and traditional businessmen
17. Can drug baron's espace teach legitimate corporations?
18. Great entrepreneur
19. How criminal groups deceive the law
20. The difference between legal and illegal organisations

21. Similarity between criminals and start-up founders

Questions 22–25

Complete the sentences below.

Write ONLY ONE WORD from the passage for each answer.

Write your answers in boxes 22–25 on your answer sheet.

22. To escape from a prison, Joaquin Guzman had to use such traits as creative thinking, long-term planning and  

23. The Sinaloa cartel built a grand underground tunnel and even used a  to avoid the fence.

24. The main difference between two groups is that criminals, unlike large corporations, often have  encoded into their daily life.

25. Due to being persuasive, Walid Abdul-Wahab found a  of Amish camel milk farmers.

Question 26

Choose the correct letter, A, B, C or D.

26. The main goal of this article is to:
A. Show different ways of illegal activity

B. Give an overview of various criminals and their gangs

C. Draw a comparison between legal and illegal business, providing examples

D. Justify criminals with creative thinking

Section 2

14. C
15. G
16. B
17. A
18. H
19. D
20. E
21. F
22. Perseverance
23. Catapult
24. Improvisation
25. Network
26. C
Britain needs strong TV industry

Comedy writer Armando Iannucci has called for an industry-wide defence of the BBC and British programme-makers. "The Thick of It" creator made his remarks in the annual MacTaggart Lecture at the Edinburgh TV Festival.

"It's more important than ever that we have more strong, popular channels... that act as beacons, drawing audiences to the best content," he said. Speaking earlier, Culture Secretary John Whittingdale rejected suggestions that he wanted to dismantle the BBC.

'Champion supporters'

Iannucci co-wrote "I'm Alan Partridge", wrote the movie "In the Loop" and created and wrote the hit "HBO" and "Sky Atlantic show Veep". He delivered the 40th annual MacTaggart Lecture, which has previously been given by Oscar winner Kevin Spacey, former BBC director general Greg Dyke, Jeremy Paxman and Rupert Murdoch.

Iannucci said: "Faced with a global audience, British television needs its champion supporters."

He continued his praise for British programming by saying the global success of American TV shows had come about because they were emulating British television. "The best US shows are modelling themselves on what used to make British TV so world-beating," he said. "US prime-time schedules are now littered with those quirky formats from the UK - the "Who Do You Think You Are"s and the variants on "Strictly Come Dancing" - as well as the single-camera non-audience sitcom, which we brought into the mainstream first. We have changed international viewing for the better."
With the renewal of the BBC's royal charter approaching, Iannucci also praised the corporation. He said: "If public service broadcasting - one of the best things we've ever done creatively as a country - if it was a car industry, our ministers would be out championing it overseas, trying to win contracts, boasting of the British jobs that would bring." In July, the government issued a green paper setting out issues that will be explored during negotiations over the future of the BBC, including the broadcaster's size, its funding and governance.

Primarily Mr Whittingdale wanted to appoint a panel of five people, but finally he invited two more people to advise on the channer renewal, namely former Channel 4 boss Dawn Airey and journalism professor Stewart Purvis, a former editor-in-chief of ITN. Iannucci bemoaned the lack of "creatives" involved in the discussions.

"When the media, communications and information industries make up nearly 8% our GDP, larger than the car and oil and gas industries put together, we need to be heard, as those industries are heard. But when I see the panel of experts who've been asked by the culture secretary to take a root and branch look at the BBC, I don't see anyone who is a part of that cast and crew list. I see executives, media owners, industry gurus, all talented people - but not a single person who's made a classic and enduring television show."

'Don't be modest'

Iannucci suggested one way of easing the strain on the licence fee was "by pushing ourselves more commercially abroad".

"Use the BBC's name, one of the most recognised brands in the world," he said. "And use the reputation of British television across all networks, to capitalise financially oversees. Be more aggressive in selling our shows, through advertising, through proper international subscription channels, freeing up BBC Worldwide to be fully commercial, whatever it takes."

"Frankly, don't be icky and modest about making money, let's monetise the bezeesus Mary and Joseph out of our programmes abroad so that money can come back, take some pressure off the licence fee at home
and be invested in even more ambitious quality shows, that can only add to our value."

Mr Whittingdale, who was interviewed by ITV News' Alastair Stewart at the festival, said he wanted an open debate about whether the corporation should do everything it has done in the past. He said he had a slight sense that people who rushed to defend the BBC were "trying to have an argument that's never been started". "Whatever my view is, I don't determine what programmes the BBC should show," he added. "That's the job of the BBC." Mr Whittingdale said any speculation that the Conservative Party had always wanted to change the BBC due to issues such as its editorial line was "absolute nonsense".

Questions 27-31
Do the following statements agree with the information in the IELTS reading text?

In boxes 27–31 on your answer sheet, write

TRUE if the statement agrees with the information
FALSE if the statement contradicts the information
NOT GIVEN if there is no information on this

27. Armando Iannucci expressed a need of having more popular channels.  

28. John Whittingdale wanted to dismantle the BBC.
29. Iannucci delivered the 30th annual MacTaggart Lecture.

30. Iannucci believes that British television has contributed to the success of American TV-shows.

31. There have been negotiations over the future of the BBC in July.

Questions 32–35

Choose the correct letter, A, B, C or D.

Write the correct letter in boxes 32-35 on your answer sheet.

32. Iannucci praised everything EXCEPT

   A  ○  US shows
   B  ○  British shows
   C  ○  Corporation
   D  ○  British programming

33. To advise on the charter renewal Mr Whittingdale appointed a panel of

   A  ○  five people
   B  ○  two people
   C  ○  seven people
D ○ four people

34. Who of these people was NOT invited to the discussion concerning BBC renewal?

A ○ Armando Iannucci
B ○ Dawn Airey
C ○ John Whittingdale
D ○ Stewart Purvis

35. There panel of experts lacks:

A ○ media owners
B ○ people who make enduring TV-shows
C ○ gurus of Television industry
D ○ top executives

Questions 36–40

Complete the summary below.

Write NO MORE THAN TWO WORDS from the passage for each answer.

Write your answers in boxes 37–40 on your answer sheet.
Easing the strain on the licence fees

Iannucci recommended increasing BBC’s profit by pushing ourselves more 36. _______. He suggests being more aggressive in selling British shows, through advertising and proper international 37. _______. Also, he invokes producers to stop being 38. _______ and modest about making money and invest into even 39. _______ quality shows. However, Mr Whittingdale denied any 40. _______ that the Conservative Party had always wanted to change the BBC because of its editorial line.

Section 3

27. True
28. False
29. Not Given
30. True
31. False
32. A
33. C
34. A
35. B
36. commercially abroad
37. subscription channels
38. icky
39. more ambitious
40. speculation