# APHANTASIA

## An Essay About Nothing

Peter/Armstrong

#### **Aphantasia**

#### An Essay About Nothing

#### Peter Armstrong

This book is available at http://leanpub.com/aphantasia

This version was published on 2024-12-13



This is a Leanpub book. Leanpub empowers authors and publishers with the Lean Publishing process. Lean Publishing is the act of publishing an in-progress ebook using lightweight tools and many iterations to get reader feedback, pivot until you have the right book and build traction once you do.

© 2024 Peter Armstrong

## **Contents**

Aphantasia: An Essay About Nothing	1
Imagine a Table	1
The Queen's Gambit	2
Einstein	3
Tradeoffs	5
Sleep and Meditation	6
Intellectual Empathy	8
The Roommate With No Sense Of Smell	9
Inner Monologues	11
Religion and Art	12
Books and Movies	13
Why Travel, Hike or Take Pictures?	14
Code, Math, and Malls	15
An Essay About Nothing	16
ndex	19

### **Aphantasia: An Essay About Nothing**

#### **Imagine a Table**

If you want to see the world in a new way, I have a simple exercise for you:

- 1. Close your eyes.
- 2. Imagine a table.
- 3. Imagine a ball rolling off the table.

(Seriously, before you read anything more, please do this now. I'll wait.)

Done?

Now, answer the following two questions:

- 1. What color was the ball?
- 2. What color was the table?

\* \* \*

If you're a typical person, you probably answered that the ball was red, yellow or blue. I've also heard more elaborate descriptions of the ball, like yellow with blue stripes.

For the table, you might have thought of a color, or a material like wood . You may have even picked a specific wood, like pine or oak .

Now, for some of you, the answer might be more like mine...

I don't see anything.

The ball isn't blue, red or yellow. It isn't there.

No ball. No table. Nothing at all.

Now, I obviously understand the concepts of ball, table, and what happens when a ball rolls off a table, but I cannot close my eyes and see them.

They're. Just. Not. There.

(Not only do I not see images, I don't see wireframes or anything.)

If you offered me a million dollars to imagine a ball rolling off a table, and see the images in my mind, I couldn't do it.

For me, "imagine a ball rolling off a table" is akin to "conceptually understand a ball rolling off a table", not "make a picture or movie in your mind of a ball rolling off a table".

It's not just balls and tables, either.

I can't imagine my wife's face. Or my son's. I know what they look like, of course. I just can't close my eyes and see them, even though I've been looking at my wife's face for about thirty years, and my son's for about twenty. Same with my own face: I know what I look like, and I recognize my passport photo, but I can't "picture" it.

When I close my eyes, I literally see nothing.

Now, it turns out that I'm not a special unique snowflake. Instead, this is a way that a lot of people's minds work. It even has a name:

**Aphantasia** 

#### The Queen's Gambit

I only learned that Aphantasia was a thing, and that I had it, about four years ago when watching *The Queen's Gambit* with my wife. There's a scene where the protagonist, chess prodigy Beth Harmon, is lying in bed, under the influence of drugs, and playing chess games on the ceiling.

I remarked that I couldn't do that at all. My wife said she could1.

This was shocking!

What was she, an Avenger? Or someone like a Sherlock Holmes villain who could construct a "mind palace" of memories, and walk around inside it?

Now, I was very interested to discover that my wife had superpowers. After discussing it more, however, the fact that I couldn't "picture" anything seemed to possibly be the anomaly. A few minutes on the internet later, an article and a reddit thread confirmed this was indeed the case.

Needless to say, this was quite a surprise.

Was I defective?

After all, not being able to make pictures in my mind means that-strictly speaking—I have no imagination. Or at a minimum, that I don't have the free "Brainflix" type of unlimited movie machine that many people seem to have with their imaginations. And people seemed to value their imaginations. If I had one, I probably would as well. (I can't imagine what it would be like, however!)

But besides missing out on all the entertainment, was I fundamentally limited as a human being as a result?

Was this as much of a disability as being blind or deaf? After all, I have two functioning eyes, but I don't have a "mind's eye".

Even worse, was it a cognitive limitation?

#### **Einstein**

Upon learning I had Aphantasia, my thoughts pretty rapidly turned to Einstein. After all, Einstein's most famous quote was this:

"Imagination is more important than knowledge."

The first time I saw this quote was probably on some dorm room wall in first year university, on a poster of the picture of Einstein sticking out his tongue. You may have seen the same poster: it's a pretty popular image of Einstein, and that's his most famous quote.

Now, Einstein was probably the most brilliant person who has ever lived. So was the smartest person in human history essentially posthumously sticking his tongue out at me, telling me that I was essentially a fundamentally limited, defective and deficient person?

(Obviously, I'd never be Einstein even with an imagination—and neither would you, regardless of how good your imagination is. But upon learning that I had no imagination, I wanted to get a sense of the importance of what I was missing. And according to Einstein, it was pretty damn important.)

Frankly, I was pretty devastated about this for a while.

But self-pity is a vice, and I've found that two of the best ways out of it for me are introspection and learning more.

So, if I was going to be depressed about what Einstein said, it would help to learn more, to get a fuller version of what he actually said. After all, maybe it was even worse! Perhaps the full quote was something like "Imagination is more important than knowledge, and if you can't make elaborate mental pictures you should spend your life cleaning toilets."

Now, this is where it gets really interesting. There's a good article about the origin of Einstein's quote, starting with the first version of it in a 1929 interview for the *Saturday Evening Post*, and then quoting the fuller formulation in 1931. This was the 1929 exchange as quoted in the article:

Einstein: "I believe in intuitions and inspirations. I sometimes feel that I am right. I do not know that I am. When two expeditions of scientists, financed by the Royal Academy, went forth to test my theory of relativity, I was convinced that their conclusions would tally with my hypothesis. I was not surprised when the eclipse of May 29, 1919, confirmed my intuitions. I would have been surprised if I had been wrong."

Viereck: "Then you trust more to your imagination than to your knowledge?"

Einstein: "I am enough of the artist to draw freely upon my imagination. Imagination is more important than knowledge. Knowledge is limited. Imagination encircles the world."

Einstein's framing of the importance of imagination was mirrored in his subsequent fuller formulation in 1931:

"At times I feel certain I am right while not knowing the reason. When the eclipse of 1919 confirmed my intuition, I was not in the least surprised. In fact, I would have been astonished had it turned out otherwise. Imagination is more important than knowledge. For knowledge is limited, whereas imagination embraces the entire world, stimulating progress, giving birth to evolution. It is, strictly speaking, a real factor in scientific research."

From my perspective, the full versions of both of these quotes are fantastic! I have intuitions and inspirations too—and as my employees could tell you, I often feel certain that I am right!

The idea that one's intuitions and inspirations are more important than just the experimental observations made to date is something that I agree with. Even better, having those intuitions and inspirations is something that I can do. My intuitions and inspirations are equally real to me, but they are purely conceptual, without the mental pictures to accompany them.

So, Einstein wasn't saying what some first year student with this poster would think. Fundamentally, he was just making a point about the importance of intuition and inspiration. And intuition and inspiration are available to everyone, with or without mental pictures to accompany them.

#### **Tradeoffs**

Over the past few years since I learned I had Aphantasia, I've thought a fair bit about it. I've come to realize that, as with basically everything in life, there are tradeoffs.

Not being able to make pictures in my mind actually has a number of benefits. For example, I think quickly. This was especially true when I was young, but it's still relatively true now, in my late forties.

Growing up, I felt intellectually confident, not in any way defective. I did well academically, graduating with the highest average from one of the top high schools in the Canadian province of Saskatchewan , and winning a number of university entrance scholarships. One of my teachers wrote a

reference letter praising my "natural, incredible intelligence" and saying I would succeed at anything I tried.

I ended up trying a lot of things in university.

Academically I did well, taking classes from a number of departments as I figured out what I wanted to do with my life. The requirements to get a B.Sc. were 60 credits (with one-semester classes being 1.5 credits and full-year classes being 3 credits), and I graduated with 84 credits—almost 2 extra years of classes. I ended up with a double major in Computer Science and Psychology . I only added the Computer Science major halfway through: I was a third year Psychology major thinking I was going to do graduate school in Cognitive Psychology . My Cognitive Psychology professor told me that if I wanted to do something great in cognition I should also major in Mathematics. I told him I didn't love Mathematics, and asked "How about Computer Science?" (At the time I had never taken a Computer Science course, or even written a single line of code.)

He thought for a moment, stroking his chin, and replied: "Ninety percent as good."

Four words can change a life.

It turned out I loved programming , and that it suited my highly abstract, pictureless brain very nicely indeed! So, I ended up in Silicon Valley instead of graduate school, and later I went on to move back to Canada and to found Leanpub .

Aphantasia partially describes how my mind works. If I like how my mind works, then logically I can't dislike Aphantasia.

#### Sleep and Meditation

Besides being able to think quickly, I can also go to sleep *really* quickly. My wife hates me for it.

I typically fall asleep in two to three minutes . I just get in bed, turn onto my right side, adjust the pillow, tuck the edge of the duvet between my legs, stop thinking, and sleep. Occasionally I'll get derailed if I find myself planning, scheduling, or thinking through some code or a decision. If that

happens, I just take a deep breath ... and then I just stop thinking. (Also, I sleep with an eye mask, earplugs and a nose strip. Control your inputs.)

One thing I don't do when falling asleep is "count sheep".

I'm sure that by now you can understand why that idea would make no sense to me at all. For me, counting sheep is "1 sheep. 2 sheep. 3 sheep." What help could that possibly be? Growing up, the idea that counting sheep could somehow make it easier for me to go to sleep seemed just bizarre. I don't fill my mind with, say, the cartoon sheep with big eyes from the Serta mattress commercial jumping over some cartoon fence. But I didn't realize that other people could actually do that.

I assume that if you do make pictures in your mind, the reason to count sheep is to replace potentially stimulating, distracting or disturbing pictures with some innocuous ones. And what could be more harmless and calm than happy, fluffy sheep jumping over a fence? (Well, I assume it wouldn't be innocuous to a shepherd. Maybe they go to sleep counting all the sheep staying put in their pens?)

If you make calm, relaxing pictures in your mind, then presumably eventually those pictures fade away, and you can then relax and fall asleep. Well, for me, that's the default state when I close my eyes. It's no special accomplishment. It happens *instantly*.

Similarly, consider the idea of a "happy place". I've heard that when people are trying to relax or meditate, they're sometimes told to imagine themselves in their happy place. That has never made sense to me. Aren't you trying to just clear your mind? Why are you having to think about some specific thing to do that?

But once I realized that when many people closed their eyes they had pictures or movies playing in their minds, then I finally got it:

You have to turn the movies off.

That must be so hard.

For me, these movies are just nonexistent. I close my eyes and it's blank. Not black, blank. No colour, no images, nothing. After all, when I close my eyes, no photons hit my retinas. How could I expect anything else to happen?

There's definitely a kind of peace to this. When I close my eyes, I'm starting with emptiness . Literally, nothing is there. No images need to be stilled, or replaced with sheep, or some happy place. By default.

I'm certainly no Zen monk, but in terms of quieting my mind and going to sleep, or just taking a moment to reset, I'm enlightened.

#### **Intellectual Empathy**

So, why am I writing this essay?

First, for myself. I believe it's important to try to think as clearly as possible, *especially* about one's own thoughts. Learning I had Aphantasia was obviously very interesting to me, and writing this essay helped me understand myself better. Also, I'm not normally this personally vulnerable. So, this is kind of like rejection therapy, but on a global scale.

Second, for other people who have Aphantasia . When I first learned I had Aphantasia I had some very dark thoughts about it. My hope is that if this describes you, this essay can help you get past them.

Third, for neurotypicals without Aphantasia. (Yes, most of you.) I actually think this essay may be of interest to you as well. After all, from talking with a number of you about Aphantasia over the past four years, many of you certainly think that your imaginations are important to how you live your lives. So, can you imagine what it's like to *not be able* to imagine? And what the consequences of that would be on how you would think and live?

Maybe by the end of the essay you will.

My intention in this essay is to share my perspective with you, so that you can better understand not only my perspective, but your own perspective as well.

What I'm going for here is something I call intellectual empathy .

I've never been formally diagnosed, but I'm very confident that I'm also somewhere on the Autism spectrum. So, I'm bad at the intuitive type of empathy that comes naturally to many people, like how standing up comes naturally to newborn horses. But what I lack in "horse empathy",

I try to make up for with intellectual empathy, the kind of empathy that results from introspection about one's own position, and that of others. So intellectual empathy is what I'm going for here.

"Know thyself," after all.

I also want to share my perspective trying to understand what it's like to *not* have Aphantasia , since some of my thoughts will probably be totally strange to you. After all, I do not have direct experience of what so many people claim to be able to do. I believe them, of course, but it's still something which is fundamentally foreign to me.

This may prompt you to have interesting thoughts of your own, and then you may understand yourself better as well.

But the first thing you may wonder is an obvious question:

How could I not have known I had Aphantasia?

More specifically, how could I have made it *into my mid-forties* without knowing? An interesting perspective on that will come from a roommate I once lived with.

#### The Roommate With No Sense Of Smell

Almost thirty years ago, when I was in third year university, I briefly had a roommate we'll call W. Now, W was really thin.

Why?

Well, W literally had no sense of smell. So, for W, food was something he ate when he was hungry, and he stopped immediately once he wasn't hungry. After all, if you have no sense of smell, taste is pretty basic, and food is pretty boring. So, you won't be doing any recreational eating, and you'll stop eating as soon as your hunger is satiated. (Maybe the real cure to the obesity epidemic is nose plugs?)

Anyway, for W, food was fuel, not enjoyment.

Supposedly it took him until he was twelve before he figured out that smell was a thing people could actually do, and that he couldn't do it.

Do you know how he learned this?

He asked someone what the big deal was about farts.

(Think about it! With no sense of smell, a fart is just a noise people sometimes made. What would be the big deal about that?)

But it's really interesting to be able to go through eleven years of life not knowing that smell was a thing that people could actually do. Even though there are clues *everywhere* in our language!

However, for me to go through over forty years of life not understanding that "visualize" was actually something that people could *literally do*, by *making actual pictures in their minds*, is far more ignorant of self! I mean, there are clues *littered everywhere* around our language about that as well, and I managed to get through my twenties and thirties without figuring it out!

Visualize world peace. Visualize using your turn signals. Use your imagination. And, of course, imagination is more important than knowledge.

How could I not understand?

What would "visualize" even mean, if not literally that?

In retrospect, I think that I must have interpreted "visualize" as "conceptually understand", not "make a picture in your mind". Since, again, how could anyone do that? (Other than some mind-palace-using Sherlock Holmes villain, who, since they're doing a noteworthy thing, must not be normal, right?)

Ironically, W and I were both Psychology majors at the time. And while W had discovered he had no sense of smell at twelve, it took me until first year Psychology to discover I probably had Asperger's Syndrome . (Back then it was considered different from Autism , as Autism hadn't gotten its promotion into Autism Spectrum Disorder , or ASD.) I did realize that Asperger's probably explained a lot about myself and my experience in the world. But I didn't discover I had Aphantasia, probably because I didn't discover Aphantasia: it hadn't been named yet in the 1990s, when I was in university.

So, in case you ever think there's nothing to discover, just imagine this: certain things are possible to discover with pure introspection, coupled with conversations with other people! (Well, *you* might be able to imagine it. I certainly can't!)

In case you don't believe that it's possible to discover something just by thinking and talking, consider the curious phenomenon of the inner monologue.

#### **Inner Monologues**

It turns out there's something called an "internal monologue" or "inner monologue".

A few months ago I was talking about Aphantasia with my Leanpub cofounder Len, and he started talking about his inner monologue, and how surprised he was to recently learn that some people didn't have one. From the way he described his inner monologue, it sounded absolutely insane to me. Now, he claimed it served him, so I guess it does, but it sure sounded strange.

Now, this was also a bit of a meme on the internet recently, so I assume this is another Aphantasia-like situation: presumably many (or even most) people have an inner monologue, and if they do, they clearly think it is important to them. So no, I don't think I have an inner monologue either. And unlike the ability to see pictures in my mind, I don't even think I'd want an inner monologue. Frankly, the world is noisy enough as it is.

(Also, I'm more of a visual person than an auditory person, so missing out on something visual seems like far more of a loss.)

Now, this is an essay about Aphantasia, not inner monologues, so I'm not going to say much more about them. However, there are a few things worth noting:

First, I'm pretty certain I do not have an inner monologue, unless I vastly misunderstand what such a thing is. (I can look at these words and hear them without moving my mouth, but I don't think that's what an inner monologue is.)

Second, I can think perfectly well without an inner monologue. I honestly don't feel like I'm missing out on anything.

Third, I can communicate effectively without an inner monologue. I don't need to mentally say or even think things in advance before I say or write them. This is another of my traits which annoys my wife: she'll be

telling me something someone said to her, and I'll immediately make some punchy retort, and she'll say she wished she'd said that at the time. With no inner monologue, I don't think before I speak. I speak in full sentences and paragraphs, but I don't think those things out first. They come out that way, immediate and fully-formed. Also, given that there's less delay, there's less risk of l'esprit d'escalier.

Now, sometimes I do backtrack when I speak (or write), either to add nuance or to go off on tangents—and I'm doing this more, like right now, as I grow older—but I do not believe this is related to my lack of an inner monologue. I think it's because as I age I feel a stronger desire to tell related stories. Or maybe it's because I helped raise a *very* intelligent son (who can also make pictures in his mind), who would constantly debate and interrupt me, so I think I've internalized trying to pre-empt counterarguments. Or maybe it's because I enjoy tangents, and I've grown a bit self-indulgent as I age. Frankly, it's probably all of the above.

Finally, having no internal monologue may or may not be correlated with Aphantasia. I have no way of knowing, but I have a hunch that there is a positive correlation. (That's actually why I'm bringing it up here, to be honest.) This would be an interesting thing for someone to investigate as a doctoral thesis. My assumption is that there is some underlying mental system at work in both visualizing and inner monologues, and that Aphantasia is correlated with having no inner monologue. And if you want to go hunting for even more correlations, you could also go looking for a correlation with being somewhere on the Autism spectrum, as I presumably am.

#### Religion and Art

Understanding that most people have images, cartoons or movies running in their minds, I now turn to the Sistine Chapel .

I've seen it twice in my life, once as a child, and once as an adult. Both times I was herded through it like a sheep—but not a Serta cartoon sheep jumping over anything. The first time was so long ago that it hadn't been cleaned yet, so it looked very serious and like a lot of work. The second time it had been cleaned, so it looked like a lot more bright and vivid.

In both instances, I didn't quite get the point. Why would a church put so much work into what was on the ceiling?

However, if most of the congregation could *make pictures in their minds*, then when they got bored of the sermon and stared at the ceiling, those pictures would be stuck straight into their minds and they would stay there.

Now the Sistine Chapel , and religious art in general, makes a lot more sense to me—in terms of why a religion would go to all the effort to either produce it or ban it. It must be really powerful for some people. For me, on the other hand, almost all religious art has had no effect on me at all, other than that I was stunned by the artistry of Michelangelo's La Pietà . (Seriously: how could someone produce that with marble?)

I find I connect more with Zen gardens than with traditional religious images. While I can't close my eyes and visualize Zen gardens either (not even the one that was a background image choice on macOS, despite the fact that it was my desktop background for a long time and that I've seen it in person), at my most calm and focused I feel much like I do when I look at them.

#### **Books and Movies**

Like religion, literature also employs imagery. In fact, now that I understand Aphantasia, I understand imagery in literature a lot better. (In fact, just think about what the word "imagery" actually means, on a deep level!)

When reading fiction, I could never understand why an author would go on and on describing what some person or place looked like. Once I understood that for my wife, she could actually see the person or place being described, that changed it completely for me. The author is literally making movies in the minds of the readers, but with words!

When my wife told me that she could see the people or places described, frankly I was flabbergasted. Strictly speaking, there is not enough information in the words to create any scene. Not even close. The amount of invention that is taking place when a reader visualizes something an author describes is incredible. My wife reads much more slowly than I do. I used to not understand why, and I'd occasionally tease her about it. Now that I

understand she's creating entire movies as she reads, I'm shocked she reads so quickly.

I now also understand why historically many cultures banned books they considered obscene. Books can be a lot more obscene if people are creating vivid pictures or movies in their minds! But thinking about this as dispassionately as possible, the real question is whether the true obscenity comes from the author's imagination, or that of the reader!

#### Why Travel, Hike or Take Pictures?

I enjoy traveling, hiking and taking pictures. Now, given that I can't close my eyes and teleport myself into my memories, you may ask:

Why bother?

Why go anywhere or do anything if you can't relive it in your imagination afterward?

It is true that some moments are truly wonderful, and it is an obvious negative to not be able to visualize them afterward.

However, if you are *truly in* the present moment, it doesn't matter if you can relive it afterward. If it wasn't worth living, it isn't worth reliving. And if you're busy reliving your current moments at a later date, then you're not in *those* present moments.

Or if you're on your phone, then you're not truly in any moment–past, present or future.

This is why I try to be either fully focused on the present moment (when in a flow state, such as when coding or writing), or fully focused on the future (such as when planning or making decisions). I remember reading a blog post by Derek Sivers , talking about how people are either present-focused or future-focused. I actually think that for people who can strongly visualize, the real danger is being past-focused. If you spend a lot of time reliving the past, you are neglecting both the present and the future.

I have a couple walks in my neighbourhood that I do, which range from 5 to 10 kilometers. I know what they look like, but I can't see them unless I either look at a picture or actually go for the walk. Now, I am incredibly

fortunate to live less than three kilometers from an amazing ocean view. So, any day I can walk there and see it—but I can't see it if I don't.

Do I walk to the ocean every day because of this, leading me to be in incredible health?

Unfortunately, no. Instead, I work too much. But I think I go on those walks more than I would if I didn't have Aphantasia. It's the same with hiking trails: there are a handful of very nice hikes near me, and I always enjoy them when I do them. Arguably, it could be an amazing health hack for me to just never take pictures: then I'd have to get out more to see the views that I love and can't visualize. But the flip side is, frankly, that I want to focus on my work, so the pictures are very nice to have. You do the hike once, and the desktop background is forever!

The same applies to travel: I love to travel, even though over the past four years that love has mostly been theoretical, not applied. Even though I cannot teleport myself places in my mind or see them when I close my eyes, I do know what the places look like, and what it feels like to be there. I don't know if being a repeat traveler is more or less enjoyable with Aphantasia, but I do know I enjoy it.

#### Code, Math, and Malls

From a vocational perspective, Aphantasia has had a few notable effects.

First, I'm very comfortable with abstraction. By default, everything is more abstract for me than it is for most people. Because of this, learning algebra was straightforward, and I really took to computer programming . However, dealing with 3D shapes has always been less intuitive for me. And I'm certainly not going to be Nikola Tesla , inventing things in my mind without building them. (His description of doing this seems to be the exact opposite of Aphantasia. Maybe imagination is a continuum, with Aphantasia on one end, and Nikola Tesla on the other?)

Speaking of 3D environments, I have a good conceptual understanding of directions. When I lived in Silicon Valley I could navigate my way to the freeways easily, even though I have way less recall of the location of specific landmarks than my wife did. For example, if you were to parody the ways that we would give each other directions, here are essentially "drive down

the road, turn left at the big tree past that store with the red awning, etc.", whereas mine are "well you're here and the freeway is over there so you just need to go along doing things which are directionally correct those two ways until you get an onramp".

I always thought her way of thinking of directions was completely bizarre. Now I realize way more people are like her than me, and why she gives directions the way that she does.

Also, while I'm fine in a city, I always turn the wrong way out of a store in a mall. Seriously, a fair coin would do way better than me. Or if I just remembered to always change my mind when walking out of a store, I'd be fine. (My wife is basically always right here, of course.)

#### An Essay About Nothing

I wrote the first draft of this essay on a 10 hour flight from Vancouver to Tokyo (a flight to Asia, Aphantasia).

When I started writing I'd been on the flight for about 4 hours, and just finished watching GODZILLA MINUS ONE / MINUS COLOR . Then I had about 6 more hours to sit there, with no possibility of internet access, and no ability to procrastinate by doing research or scrolling Twitter or reddit . But my laptop could open fully, even in economy class.

So, I wrote.

I've considered writing this essay before. I even wrote a few hundred words once. But then I'd get stuck, and I'd procrastinate (typically by working), and then I'd abandon the project.

So, this time, I shipped something. Constraints are wonderful things.

I also used the same productivity trick I used when writing my first book (Flexible Rails ) about 17 years ago: put on Beethoven's Symphonies and play them in order from the beginning of #1 to the end of #9, without stopping except to go to the bathroom. This takes 5 hours and 28 minutes, which was about the amount of flight I had left when I started writing.

I then put the essay aside for a few months and finished editing it one day in June. Since I'm the co-founder of Leanpub, this essay is also published on Leanpub as a (very) short book.

Just as how Seinfeld was a show about nothing, this essay is literally an essay about nothing. But I hope you enjoyed it, and that you maybe even learned something.

#### **Notes**

1 Ironically, my wife isn't a chess player, and I played chess in high school. Even though I cannot "see" any moves ahead, after reading a couple of books (my favourite being How Not To Play Chess ) I was the best player ("board one") on my high school's chess team, and I even won some trophy. It turns out that focused aggression can go a long way, even without the mental pictures to back it up. (The opening I typically played as white was, ironically, the King's Gambit. And with Black it was typically Alekhine's Defense. Anything to get my opponents out of their opening books and to get fighting, and also to simplify the position either by winning or by getting to the endgame.) If you wonder how I could play chess at all: I could achieve something like visualization by staring at the chessboard of the game I was playing, with its pieces in their positions, then essentially keeping track of which pieces would no longer be in a position and pretending that they were in their new positions after a move or moves. When I look at a square on the chessboard, it's easy to understand which squares a given piece on that square could get to. But in a middlegame this all breaks down after a few moves, so my skill ceiling is very low compared to people like my wife who could actually visualize positions. And I'll never be able to play blindfold chess: I can't even visualize a chessboard or the pieces in their starting positions, let alone play a game that way.

#### Index

l'esprit d'escalier, 12

Aphantasia, 2, 3, 6, 8, 9, 11-13, 15 La Pietà, 13 Asia, 16 Leanpub, 6, 11, 16 Asperger's Syndrome, 10 Autism, 10 Nikola Tesla, 15 Autism Spectrum Disorder, 10 oak, 1 B.Sc., 6 Beethoven's Symphonies, 16 personal growth, 8 programming, 6 Canada, 6 Psychology, 6, 10 Cognitive Psychology, 6 computer programming, 15 quieting the mind, 8 Computer Science, 6 count sheep, 7 reddit, 16 Einstein, Albert, 3 Saskatchewan, 5 emptiness, 8 Saturday Evening Post, 4 Seinfeld, 17 fall asleep quickly, 6 self-reflection, 8 Flexible Rails, 16 Sherlock Holmes, 10 Silicon Valley, 6, 15 GODZILLA MINUS ONE / MINUS Sistine Chapel, 12, 13 COLOR, 16 Sivers, Derek, 14 happy place, 7 The Queen's Gambit, 2 Harmon, Beth, 2 travel, 15 Holmes, Sherlock, 3 How Not To Play Chess, 18 university, 6 Imagination is more important than Vancouver to Tokyo, 16 knowledge, 3 inner monologue, 11 wood, 1 Intellectual Empathy, 8

Zen gardens, 13