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Synesthésies visuelles

Two Kinds of Visions, Synesthesia and Hypnagogia: A Comparison

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Two Kinds of Visions, Synesthesia and Hypnagogia: A Comparison

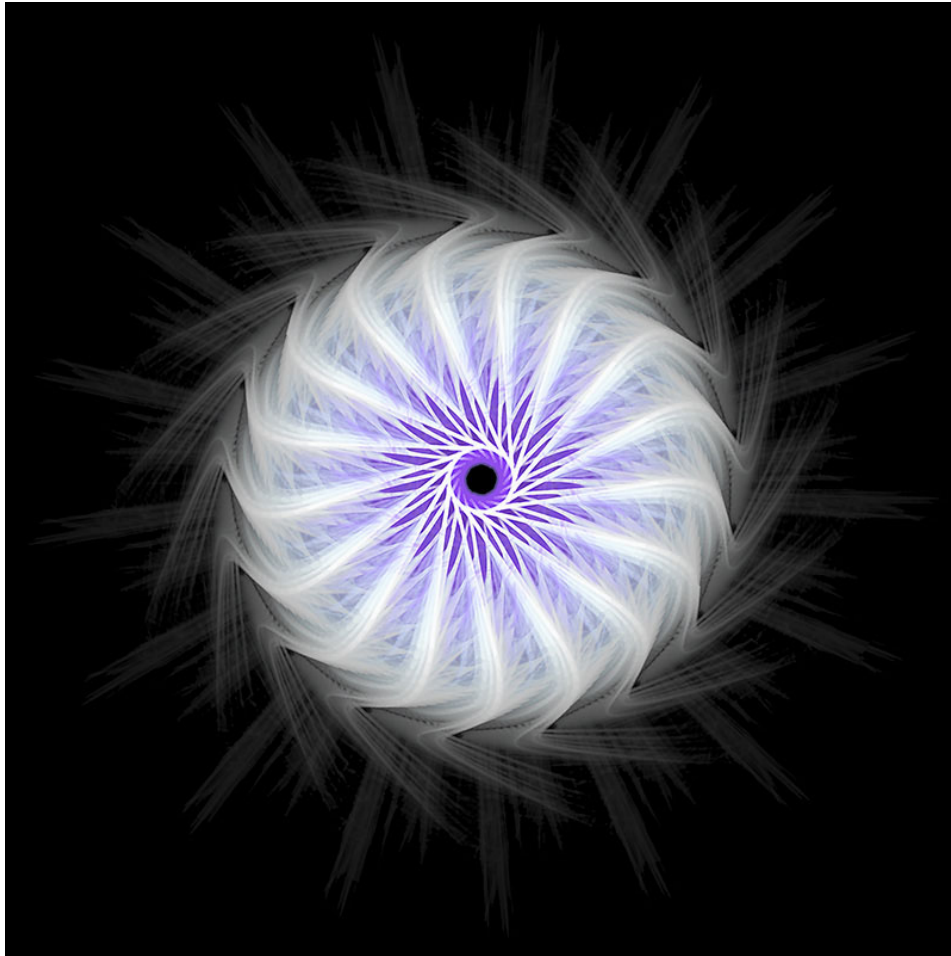
Comparaison de deux types de vision : synesthésie et hypnagogie

Carol Steen

TEXT

- 1 I was seven years old on that Fall day when I mentioned to my best friend and classmate on our usual walk home from school that the letter 'A' was the prettiest pink I had ever seen. I expected she would agree but instead she stopped walking, was quiet for a moment, letting the cool breeze blow around our bare legs before she looked at me and said, "You're weird." We continued our walk home but now we walked in a chilly silence, as cool as the weather. And we never spoke to each other again. It didn't take me long to decide that perhaps it would be best not to talk about such things. Silence was safer.
- 2 I didn't know then that most other people didn't see their alphabetic letters and numbers in color. It took me many years to discover that this ability had a name—synesthesia, that colored graphemes were one of the more common forms, and that I was not the only one who saw these things. Over the years I learned a lot about synesthesia and eventually started an organization, the American Synesthesia Association, Inc. to provide a place where synesthetes, researchers, and creatives could learn about their abilities and connect with each other. The ASA, now in its 22nd year, held its most recent conference at Harvard University this past October.
- 3 In November 2013, I started to see a second kind of visions, though I can't remember the exact date they began. All I know is that Peter Brook and Marie-Hélène Estienne had asked me to consult with them about synesthesia. I am an artist, a painter and sculptor and a synesthete. They were doing research for their new play, *The Valley of Astonishment*, a play about people who see the world differently and who 'go through hell for a glimpse of paradise' (Brook & Estienne, 2014).

Figure 1. – Carol Steen (July 20, 2017). Hypnagogic vision, digital image.



- 4 Their new play's title was taken from the one of the chapter headings in the 12th century Sufi classic entitled the *Conference of the Birds* (Attar, 1971). They asked me if I had read this book. I hadn't. Soon an interesting book to read arrived in the mail for me. It came wrapped in a brown paper mailer from an out-of-print bookstore in Philadelphia. The package looked small, and innocent. I discarded the brown wrapping paper and sat down in my favorite chair to read this thin, worn, old paperback that had all the best signs of a well-loved book. I was cautioned 'don't skip ahead, read it from the beginning'. I did (Steen, 2017).
- 5 Two weeks later, I noticed that when I shut my eyes, just before I fell asleep, I would see what would later be called hypnagogic images. These visions are a normal state of consciousness and are known to occur somewhere between wakefulness and sleep. They have a

different name, hypnopompic visions, if one sees them upon waking. I was seeing images that Peter Brook and Marie-Hélène Estienne would later name “Mandalas”. They just began. Ninety-nine percent of the time I could only see these images when my eyes were shut, they moved so fast. One vision would appear on top of a previous vision at the rate of change of about two or three images being seen per second. I would shut my eyes and try to go to sleep but these symmetrical, brilliantly colored, moving images would instantly appear with no warning. Intrigued and mystified, I would watch them intently. But they also interfered with my ability to fall asleep. Some nights I would have to open my eyes to make them stop, which would then make me wonder if it were possible to fall asleep with my eyes open.

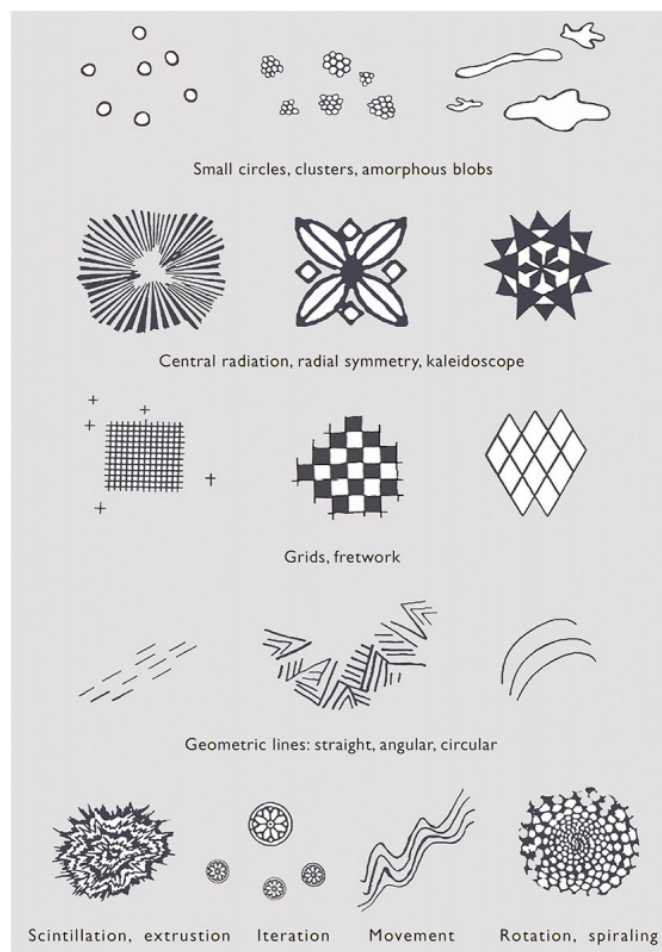
- 6 Many months after those first kaleidoscopic visions started I stopped seeing them before falling asleep and started to see them in the shower instead. Additionally, on occasion, I could look at a person, shut my eyes and see a hypnagogic image that would disappear when I opened my eyes. All of this happened very quickly—in just the amount of time it takes to greet a friend with a kiss on the cheek. On a few very rare occasions, and with my eyes open, I would see a beautiful, circular image behind their head. It looked like the halos of translucent, luminescent colored light that one sees around the heads of saints in painted liturgical masterpieces.
- 7 Initially, these visions didn’t mean anything to me, but soon I began to wonder why I was seeing them. I thought I could explain them to myself and told myself, ‘It’s another form of synesthesia.’ And there were a few similarities. But there were also substantial as well as some disconcerting differences. The main one was that, unlike synesthesia, I couldn’t identify any trigger. A trigger for me, for example, would be hearing a sound (the trigger) and instantly seeing a color, or during an acupuncture treatment feeling the slight sting of an acupuncture needle and immediately seeing a moving, shaped color. The sounds I heard, or the touches I felt, would immediately cause me to see my synesthetically moving, colored, shapes. But when I realized that I didn’t know what caused me to see my hypnagogic images, that there was no trigger, I became afraid because I remembered back to when I was seven years old and had no name, or any information at all about what I was experiencing.

- 8 Back then, no one, except for a very few scientists knew what synesthesia was or that it was real and normal. Then, I had no one I could ask, and I already knew that talking about what made me different from other people could cause serious problems. It had already cost me my best friend. So once again in my life I kept my silence. But these visions were so beautiful. I really wanted to talk about them. Knowing words couldn't convey even a glimpse of what I was seeing, I began to create them digitally using Photoshop because the colors seen on a computer are very much like the colors of my visions. Over a period of months I worked to create them as accurately as I could but never showed them to anyone except my husband, Carter. I wondered if others saw them too. Finally, I took a chance and showed them to two synesthetic friends. I asked them if they saw such things, but they said they didn't. That worried me for once again in my life I thought I was alone and seeing things that no one else could. But what exactly was I seeing this time?
- 9 This time, however, my circumstances were different because I had people to whom I could ask questions. I knew scientists who knew about such things. I asked four highly respected researchers, who are also my friends, what they thought. One told me that these kinds of visions were often seen before sleep and were called hypnagogic images, but when I told her I also saw them when I took a shower she said she wondered about that. Another suggested that they might be classified as hallucinations and to warn me, gently mentioned that hallucinations were included in the DSM, which is short for the *Diagnostic and Statistical Manual of Mental Disorders*, the book that psychiatrists use to determine someone's mental state. A third friend told me about the visions some people see if they have the Charles Bonnet Syndrome. This can occur in about twenty percent of people who are either losing their vision or who are already blind, they would report seeing colorful moving visions, too.
- 10 Now I had a name for what I was seeing and began to do a lot of reading. I discovered there were lots of things that caused hallucinations; most weren't good things to have. But those things I had read about didn't apply to me. I made a checklist: I wasn't on drugs, I had no history of stroke, no psychiatric illness, no epilepsy, and my eye doctor said I had no vision problems, well, except I needed to have my prescription for my eyeglasses changed.

- 11 Finally I heard back from one researcher who said, “I see these things too. I believe that most everyone experiences such images during the process of falling asleep. At least they have been familiar to me personally throughout my life. Probably it has to do with the loosening of control of activity in the visual cortex ...” (Sagiv, 2014). That was the reassurance I sought. I wasn’t alone. Encouraged, I went on a more focused search for knowledge. I read many articles, chapters in books, and whole books, and contemplated the writings of Francis Galton, Noam Sagiv, Oliver Sacks, and Dominic H. Ffytche.
- 12 I learned that hypnagogic visions are well known and are not considered to be pathological. And I learned that the estimate of how many people experience them ranges from 33% to 72%. Two researchers’ writings seemed to be the most helpful initially, Oliver Sachs and Dominic H. Ffytche. Sachs, because he described these visions as normal and wrote about quite a few famous people who not only saw them but were inspired by them and used them in their writings. In particular he mentioned Francis Galton, Edgar Allan Poe, Vladimir Nabokov, and Charles Baudelaire (Sachs, 2012).
- 13 Ffytche did many fMRI studies to determine where in the brain specific hallucinations occurred, and in his paper, “The Anatomy of Conscious Vision: An fMRI Study of Visual Hallucinations”, he describes a ‘striking correspondence between the particular hallucinatory experiences of each patient and the particular portions of the ventral visual pathway in the visual cortex which were activated. Where there were colored hallucinations, there was activation of areas in the visual cortex associated with color construction.’ He observed, moreover, ‘a clear distinction between normal visual imagination and actual hallucination, thus imagining a colored object, for example, did not activate the V4 area, while a colored hallucination did.’ (Ffytche et al., 1998)
- 14 I already knew that numerous researchers had done fMRI brain scans on synesthetes. They were very aware of the activation in the V4 area of the brain and considered this to be important. I noticed that evidence of both synesthesia and hypnagogia was showing up in the V4 area. Could it be possible that there was a connection between hypnagogic visions and synesthetic ones?

- 15 In addition, Oliver Sachs had written that ‘the commonest things seen were described as geometric shapes, phosphenes, blobs, and clouds of brightness or color’ (Sachs, 2012, pp. 22–3). What he described was consistent with some of the visions I was seeing but, because I did not see everything he mentioned, I was happy to also read that ‘not everyone has all the perceptual phenomena.’ I also noticed that some of the shapes he described not only appeared in the diagrams of Heinrich Klüver’s Form Constants, but that they perfectly matched my hypnagogic visions (see Figure 2).

Figure 2. – Heinrich Klüver’s Form Constants, pen and ink drawing on paper.



Reproduced from M. J. Horowitz (1975). With permission.

Some of the diagrams in this image I never see synesthetically.

- 16 As I learned more about my hypnagogic visions I asked myself many questions hoping that one of them might lead me to a trigger, a

reason or reasons as to what caused me to see these things. I started to keep a journal. I asked myself:

When did the hypnagogic visions begin?

- 17 They started in the Fall of 2013, about two weeks after I had finished reading the Conference of the Birds. I had gone to bed as usual, closed my eyes to go to sleep when suddenly these beautiful, quickly changing visions appeared. I watched them for about an hour.

What were the triggers? Were there any?

- 18 I don't know. I began to look for anything that might be different in my life. I observed the obvious things, but there was no neighbor's music playing, no street noises, and there were no outside lights turning on or off. Lying in bed, I considered other factors like the temperature in the room, or the texture of the sheets and blankets. But everything was the same as usual.

Where do I see them? Do they appear in the same circumstances each time?

- 19 I see my hypnagogic visions in my mind's eye, the place where we watch our daydreams. When they first began I saw them just before I fell asleep. About four months after they had begun I noticed that when I took a shower I would see them there as well. It occurred to me that now I was seeing them during the day as well as at night.
- 20 When I saw them in the shower I would only see them when my eyes were closed to shampoo my hair, or wash my face under the running water. The visions would disappear the instant I opened my eyes. But if I shut my eyes again they would continue though the colors and patterns I'd see would be different; new color schemes would occur in new moving, changing complexities. Sometimes these new images would be simpler, sometimes they would be much more detailed. Each series of changing visions would appear like a rapidly changing permutation. One progression, or sequence, as I call them, would start, then, after opening and closing my eyes, a second set of visions would begin. I wouldn't say that what I was doing was my being able to control what I saw. For, in effect, all I could do was stop one progression of visions and start a new one (see Figure 3).

21 After about eight months of watching these visions, which continued to occur both in the shower and before I fell asleep, I noticed that I could look at a person, a friend or a stranger, and if I closed my eyes briefly, sometimes I would see a hypnagogic vision instantly. But this did not happen every time or with everyone, though with some people I would always see a vision. Sometimes I would see a vision with person 'X', but the next time I met them I wouldn't. Instead, all I would see would be blackness that looked like the blank movie screen we see in the theater while waiting for the movie to begin. I wondered, did seeing a vision after looking at someone mean something, did not seeing a vision mean something else. I do not know.

22 Soon after that, the next thing I noticed was that I would see a hypnagogic vision when I closed my eyes and hugged a friend, either when first meeting them or afterwards when we said goodbye. Sometimes I would hug them just a tiny bit longer to enjoy what I was seeing, because as soon as I would open my eyes and move away the vision would vanish.

23 There were two notable exceptions to seeing the visions while either looking at a friend and then closing my eyes briefly, or giving them hug with my eyes shut. These exceptions occurred when I hugged one friend in particular with my eyes open. I saw a vision around her head like a halo. This seen vision was far paler and less distinct than those I usually watch, but I was seeing it with my eyes open. I remember I watched it for a few seconds, but when I looked away and then quickly looked back, hoping to see it again, it was gone.

The last change I am aware of is that recently I see these visions when I wake up.

Did anything cause the visions to change while I was watching them, such as moving my head in the shower, or changing the lighting in the bathroom, or covering my eyes with a face cloth?

24 I changed the lighting in the bathroom to see if that would affect what I would see. It didn't, except the colors I see are always brighter and the patterns are more distinct in a darkened room. I tried to notice if changing the shower's water temperature made any difference. It didn't. I approximated a strobe lighting effect by

covering my eyes with the face cloth then removing it rapidly all the while keeping my eyes closed. Nothing I tried seemed to make a difference. Sometimes the visions changed faster than at other times but I have no understanding for what caused this alteration in speed.

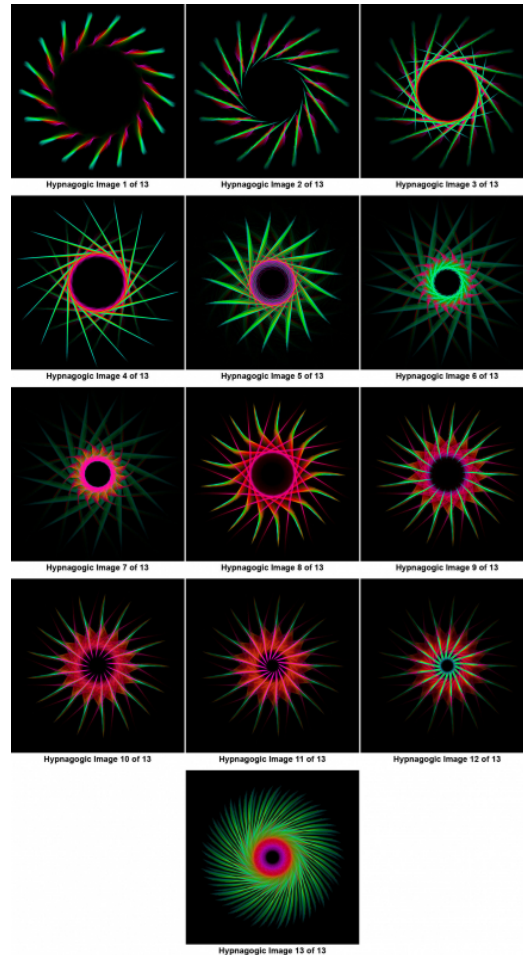
What do my hypnagogic visions look like? Are they more detailed than the real objects I see normally?

- 25 My hypnagogic visions are extremely detailed and always symmetrical in the round. They appear to be made up of numerous, very fine, colored lines. The colors I see include every color of the rainbow, but I do not see metallic colors or opalescent colors that look like worlds full of fire. The visions are made of repeating designs and the center of the vision is always black, like a hole, but the blackness does not feel empty. Sometimes the hole I see is as large as the size of a fat lemon, sometimes it is as tiny as a pinprick. But it is always there.

Did I see repeating patterns? How do they change?

- 26 There are repeating patterns within each image I see. They appear on a non-moving black background. When the visions change from one to the next they can form from the center toward the edge of the image like a perfect permutation. Other times, the changes happen around only the outermost edges. Additionally, some changes will happen to the center parts of the image. Sometimes there will be a sudden change of palette, followed by a new set of images even though I have not opened my eyes to cause this to happen.
- 27 There also appears to be a regular order to the changes from one image into the next. Watching them, it's like comparing one of my visions to a Bach piece. When you hear his music you don't know what note will be played next, but when you hear it, it makes perfect sense. In the same way I do not know what colors or shapes I will see next, they're unexpected, but always sequentially wonderful (see Figure 3).

Figure 3. – Steen’s hypnagogic images as they occurred in one vision lasting about ten seconds.



- 28 Sometimes, after watching a linear hypnagogic sequence, what I see will change for no reason, and become much more complex, more solid looking, and dimensional. I do not know why this happens.

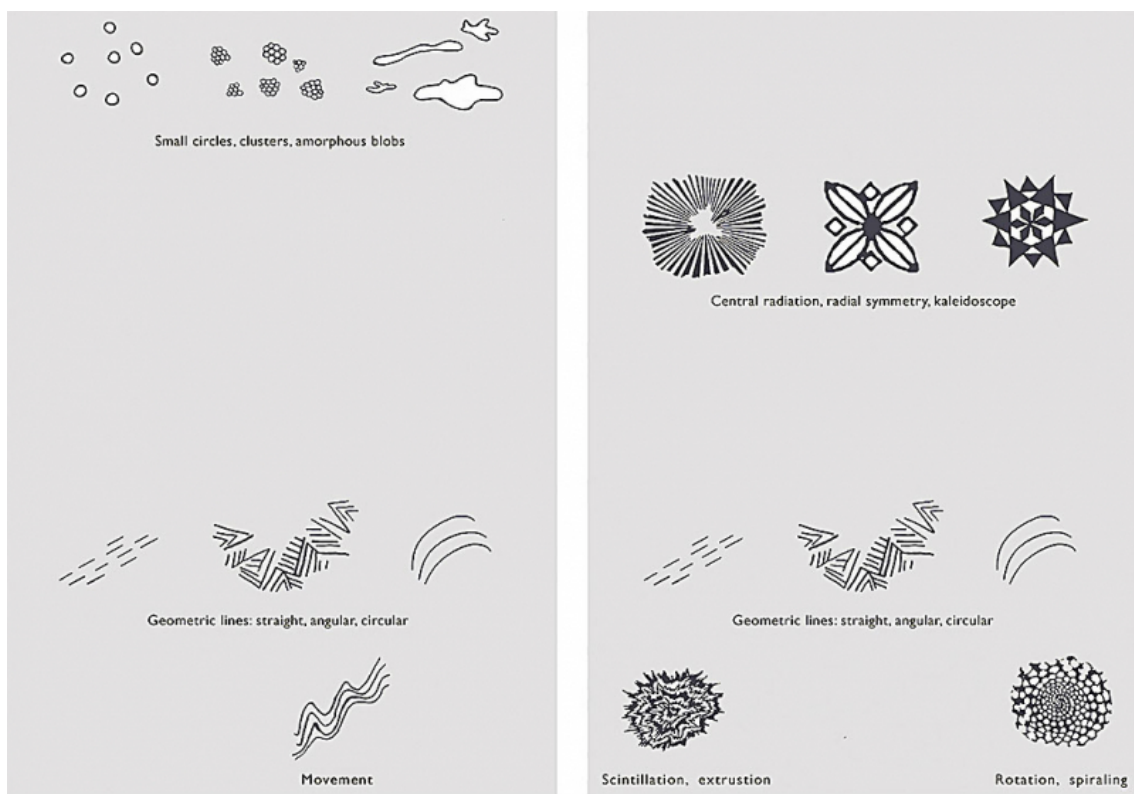
Are the colors I see the colors of light?

- 29 The colors of light can best be described as the colors we see on our television sets, or on our computers. They are wonderfully bright, much more beautiful, to me, than the colors of painters' pigments or printers' inks. These colors can also be seen in stained glass church windows or in a jeweler's shop where we can look at a beautiful, glowing emerald or ruby under their perfect shop lights. The colors of my hypnagogic visions and my synesthetic photisms are these colors. They shine.

Are there categories of shapes, lines, zigzags? Were these in any way like my synesthetic visions?

- 30 Yes, there are some similarities. In the 1920's, a German American experimental scientist at the University of Chicago, Heinrich Klüver, discovered that there are certain shapes and combinations of shapes that are common and familiar to all of us. He called them form constants. I see them synesthetically and use them to create my work. But, among the ones I was familiar with, there were some drawn diagrams that I have never seen. I had always wondered why I saw some of the Klüver form constants but not others. When my hypnagogic visions began I finally saw some of the forms I had never seen synesthetically. This was another reason, besides seeing the colors of light in both kinds of visions, why I started to explore a possible connection between synesthesia and hypnagogia. I have observed that there is a crossover for me. I saw some of the same form constants in both types of visions (see Figure 4).

Figure 4. – Heinrich Klüver's Form Constants, pen and ink drawing on paper.



On the left: Klüver's Form Constants. What I see synesthetically.
On the right: Klüver's Form Constants. What I see hypnagogically.

Reproduced from M. J. Horowitz (1975). With permission.

How long do they last?

- 31 My hypnagogic visions do not stay visible for long, and when a progression occurs, I see them in constant movement, changing from one to the next at a rate of about two or three per second. I cannot make them stay and sometimes will interrupt watching my visions to run to my computer to try to capture what I have just seen before I forget it. I work in Photoshop and will try to create an image in the remembered colors and shapes to the best of my ability while completely understanding that I am never going to be able to capture a vision perfectly. But there is the truth of feeling, and likeness, in what I create from these brief visions.

Did anything cause me to lose seeing these visions?

- 32 I have been watching these hypnagogic visions for almost four years now. When they first began I saw them every night. Later, I would see them in the shower for the duration of my shower and for as long as I kept my eyes closed. It remained this way for about three years, and then I started seeing them less frequently. There was no reason why I should see them less often, just as there was no reason why I had started to see them. I still see them on occasion, both in the shower, upon waking, and when I greet friends and loved ones. They are just as bright and complex as when I first started seeing them. I just don't see them as frequently as I used to.

Can I show a visual comparison between my synesthetic photisms and hypnagogic visions?

- 33 I have five main forms of synesthesia. My synesthesia can be triggered by: seen or spoken graphemes—letters, numbers, and punctuation. Those shapes give me highly specific colors but they don't move or change enough to make me want to use them to create a painting or a sculpture. I create from the moving colored forms I see when I heard sounds, both ambient sounds and music. I also see colors when I listen to people speak; their individual accents are in color, too. I create from the beautiful visions that I see when I feel the touch of the acupuncture needles during a treatment. During an acupuncture session, once all the needles are in place, I will watch the colored shapes move. It's very much like watching a movie. Pain causes synesthetic visions for me as well, and I use those colors to

diagnose the state of my health. I have colored smell/taste but I don't use it for making art, I use it in cooking.

- 34 My synesthetic experiences and the visions that I create from them were previously described in more detail in my paper "Visions Shared: A Firsthand Look into Synesthesia and Art" (Steen, 2001), interview *Spotlight on Science: Carol Steen* (Steen, 2016), and "Synesthesia and the Artistic Process" (Steen & Berman, 2013).

What do my synesthetic visions look like? What do my hypnagogic visions look like? How are they different?

- 35 Both the kinds of visions I see are quite different from one another, and I need to use different media to portray them accurately. I use synesthetic visions when I create my paintings and sculpture. I use my hypnagogic visions when I create my digital images.
- 36 Here are eight pieces I created over the past ten years. They are accurate representations of actual visions I've seen. They also illustrate the differences between my synesthetic and hypnagogic visions (see Figures 5–12).

Figure 5. – Carol Steen, *Wind on the Mountain*.



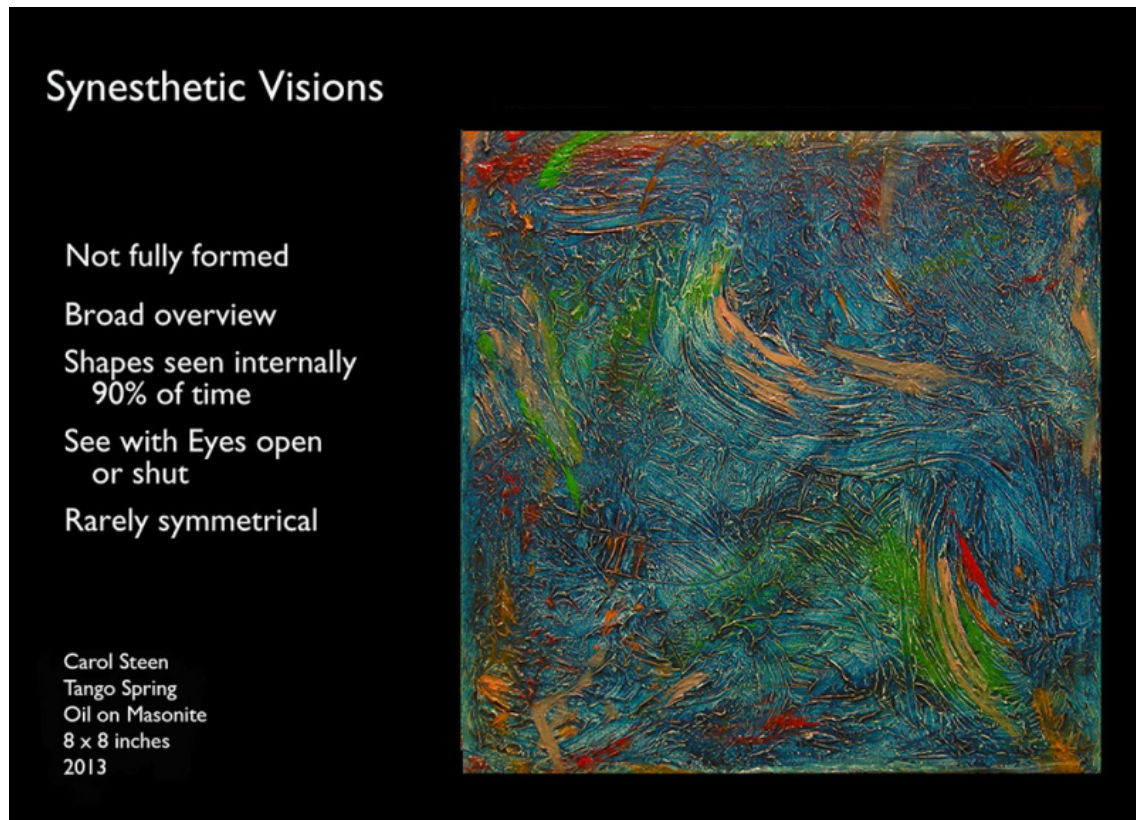
- 37 The trigger for this painting was acupuncture. My synesthetic visions move slowly, always have identifiable triggers, and are made up of colored shapes that are soft edged.

Figure 6. – Carol Steen, *Tfana 3650*.



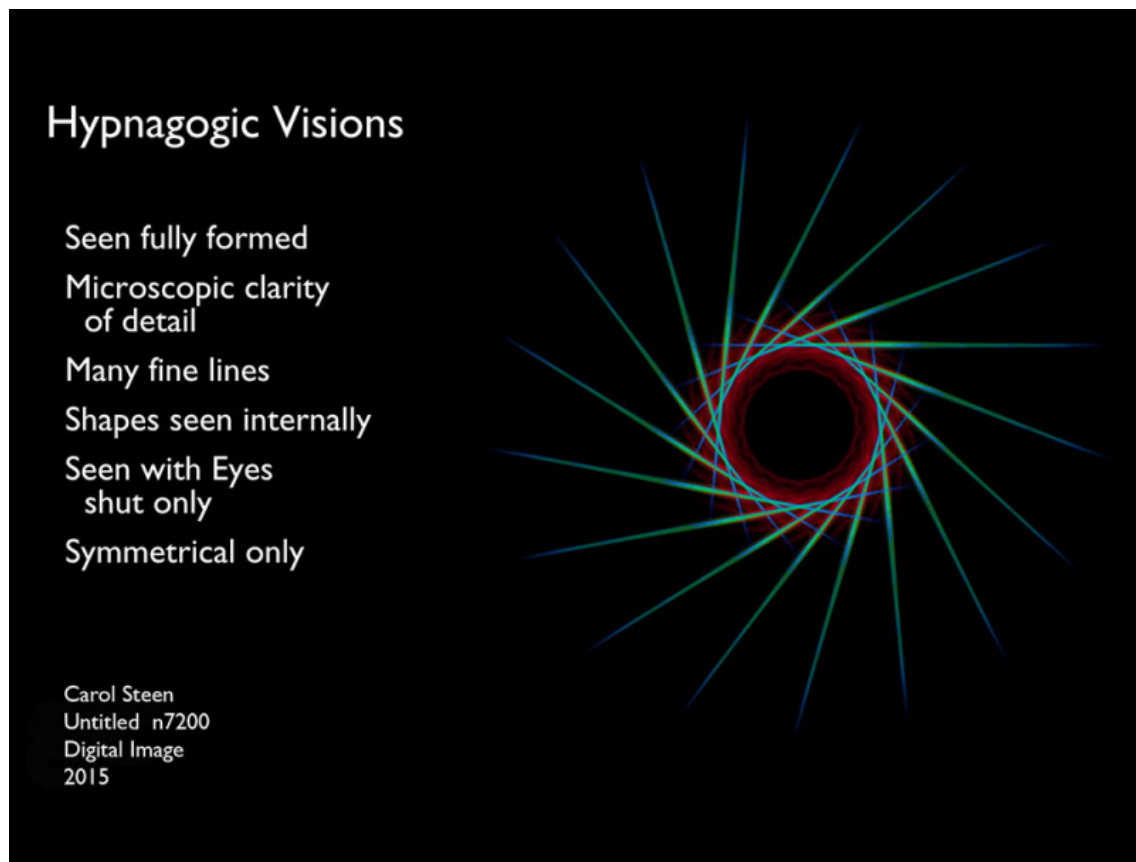
- 38 My hypnagogic visions change very rapidly and are made up of crisp lines. These visions are highly detailed, more detailed than anything I can see when I look at things with my eyes open.

Figure 7. – Carol Steen, *Tango Spring*.



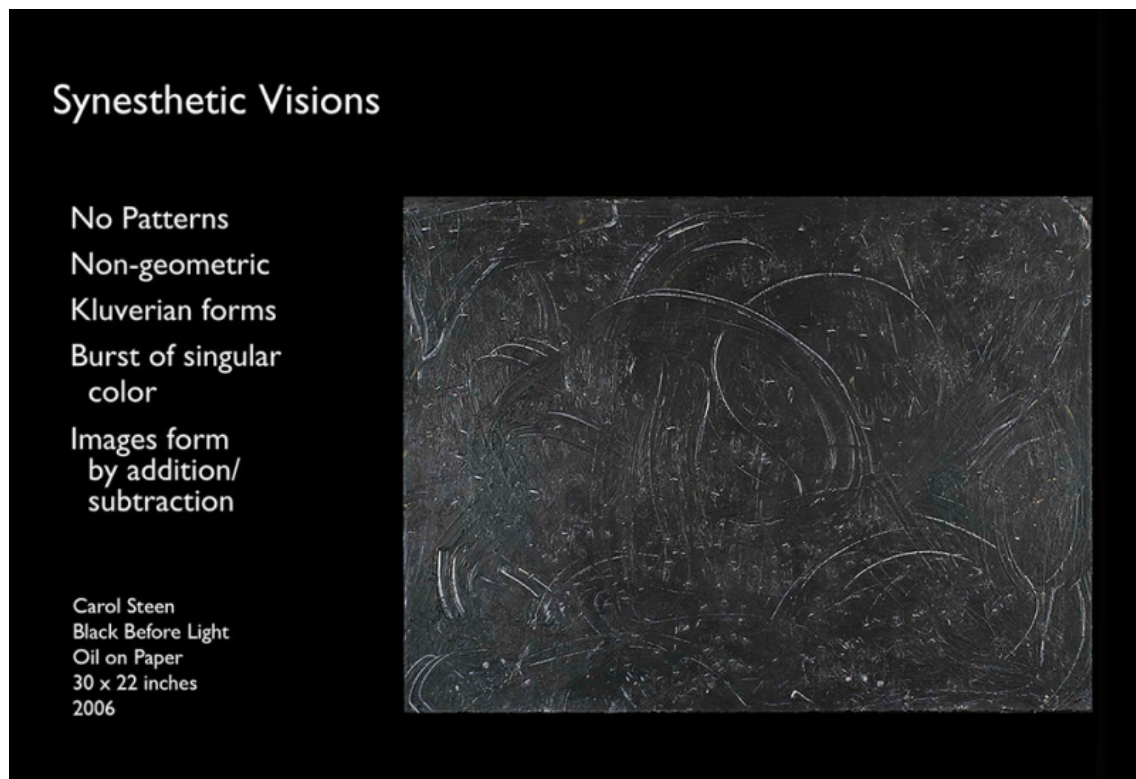
- 39 The trigger for this painting was music. My synesthetic visions have shapes in them that move independently from one another. They can move in multiple directions at the same time. The black background I see behind them also moves.

Figure 8. – Carol Steen, *Untitled n7200*.



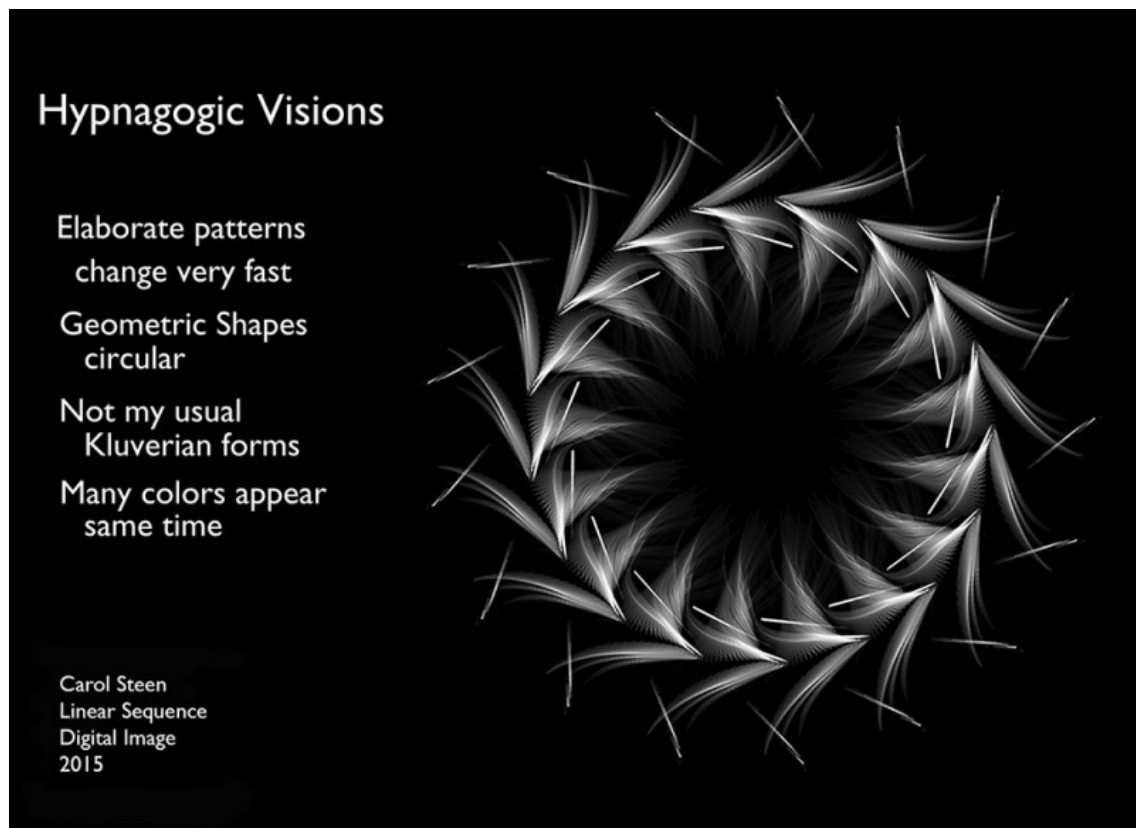
- 40 My hypnagogic images are seen fully formed on a black background that never moves. The center of a hypnagogic image is always black but it doesn't feel like a hole, rather, to me, it feels like a place one could journey into.

Figure 9. – Carol Steen, *Black Before Light*.



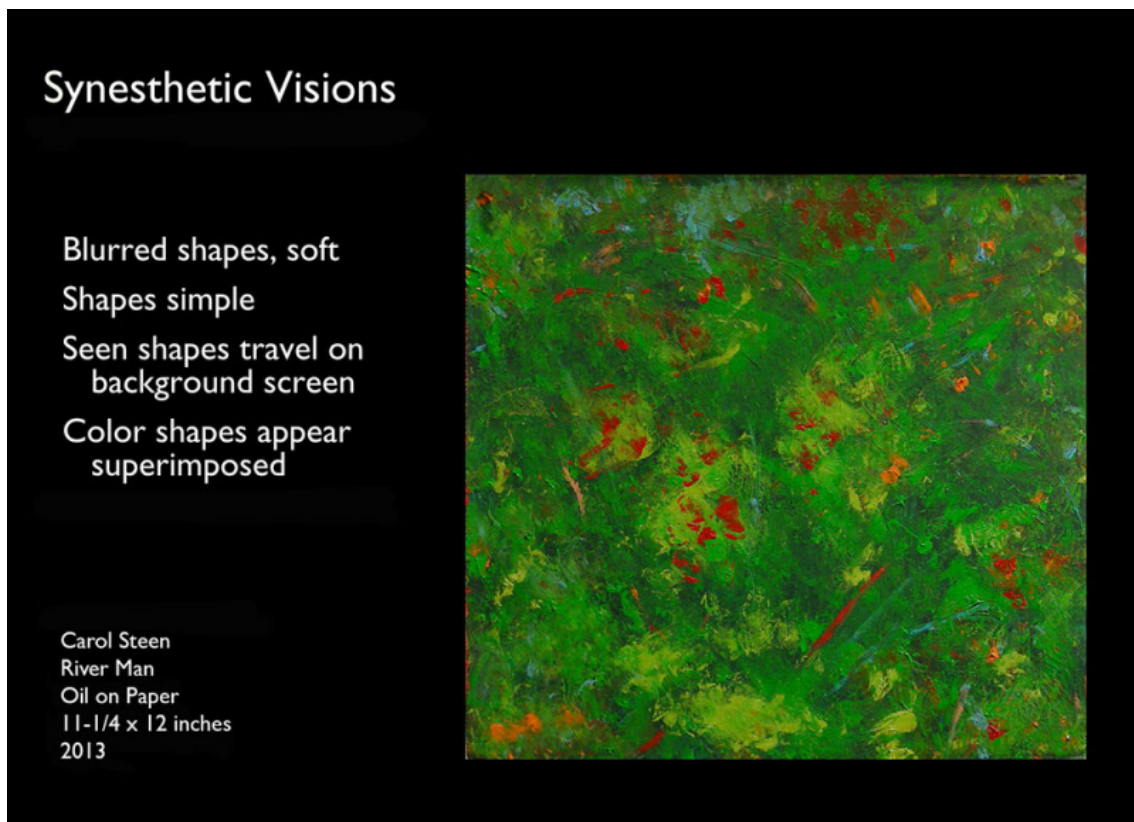
- 41 The trigger for this piece was music. My synesthetic visions are formed by addition and subtraction. Numerous shapes will appear, move around, then disappear. I cannot make them stay. Each form can be replaced by a different moving, colored shape that can form on top of one previously seen. New shapes can appear nearby then travel to the top, or to the side. I see them with my eyes closed. This happens slowly enough that I can watch and remember what I've seen.

Figure 10. – Carol Steen, *Linear Sequence*.



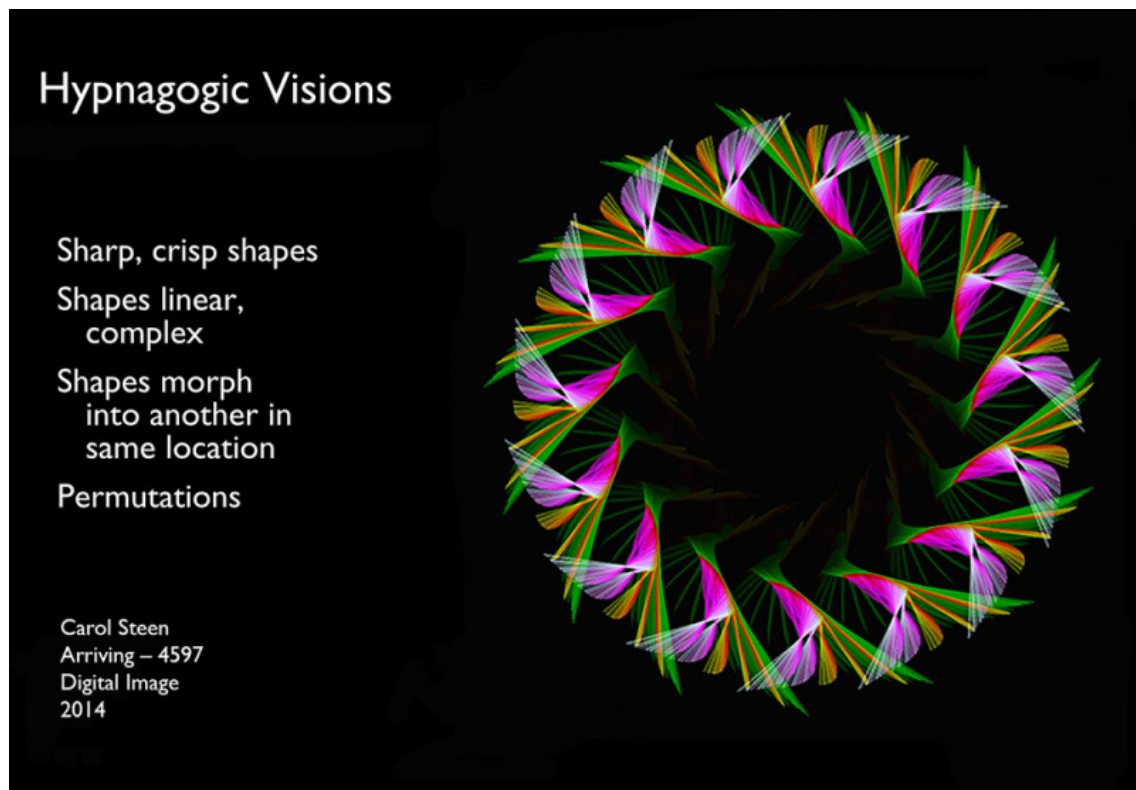
- 42 My hypnagogic visions change so quickly that I can only get a sense of how they're changing. I do not get to watch the changes long enough to remember exactly what changed each time a vision morphed into a new one.

Figure 11. – Carol Steen, *River Man*.



- 43 The trigger for this painting was music. In my synesthetic visions there is no order or structure to what I see. There is a wonderful randomness in what I will see first, then next, then next. The synesthetic visions that I see in acupuncture can last for about 10 minutes. There is a lot to watch, and it is hard to remember more than ten percent of all that I've seen. But, if I want to create from what I see when I listen to music, I can replay the music as many times as I need to, and as long as I pay attention to the same voice, same instruments, or same tempo, I can re-see what I saw originally. When I see my visions in acupuncture I am completely dependent on whatever I can remember. Those visions, like my hypnagogic ones, can't be repeated.

Figure 12. – Carol Steen, *Arriving* – 4597.



- 44 How the different visions move, change, vanish, and their timing—how long I get to watch them: A comparison.

Figure 13. – How the different visions move, change, vanish, and their timing.

How they move, change, vanish, timing:	
Synesthetic	Hypnagogic
Background moves	No movement in background
Forms in gentle motion randomly	Forms in rapid motion from center
Slow, can observe images	Fast, 3 images per second
Gradual, capricious, little continuity	Rapid, definite continuity
Affected by known trigger	Not affected by any trigger
Can't be controlled	Can't be controlled

- 45 The colors I can see in both kinds of visions are similar, but there are a few differences: A comparison.

Figure 14. – Similarities and differences between the different kinds of visions.

Colors:	
Synesthetic	Hypnagogic
One color missing	All colors seen
Colors relate directly to trigger	Colors not related to any known trigger
Colors of light	Colors of light
Metallic colors seen	No metallic colors
Colors blend at their edges	Colors don't blend

- 46 There is a lot more information about the similarities and differences between these different kinds of visions. I have put some of this additional information in a list as it makes the comparisons easier to follow.

Figure 15. – Summary of both kinds of visions.

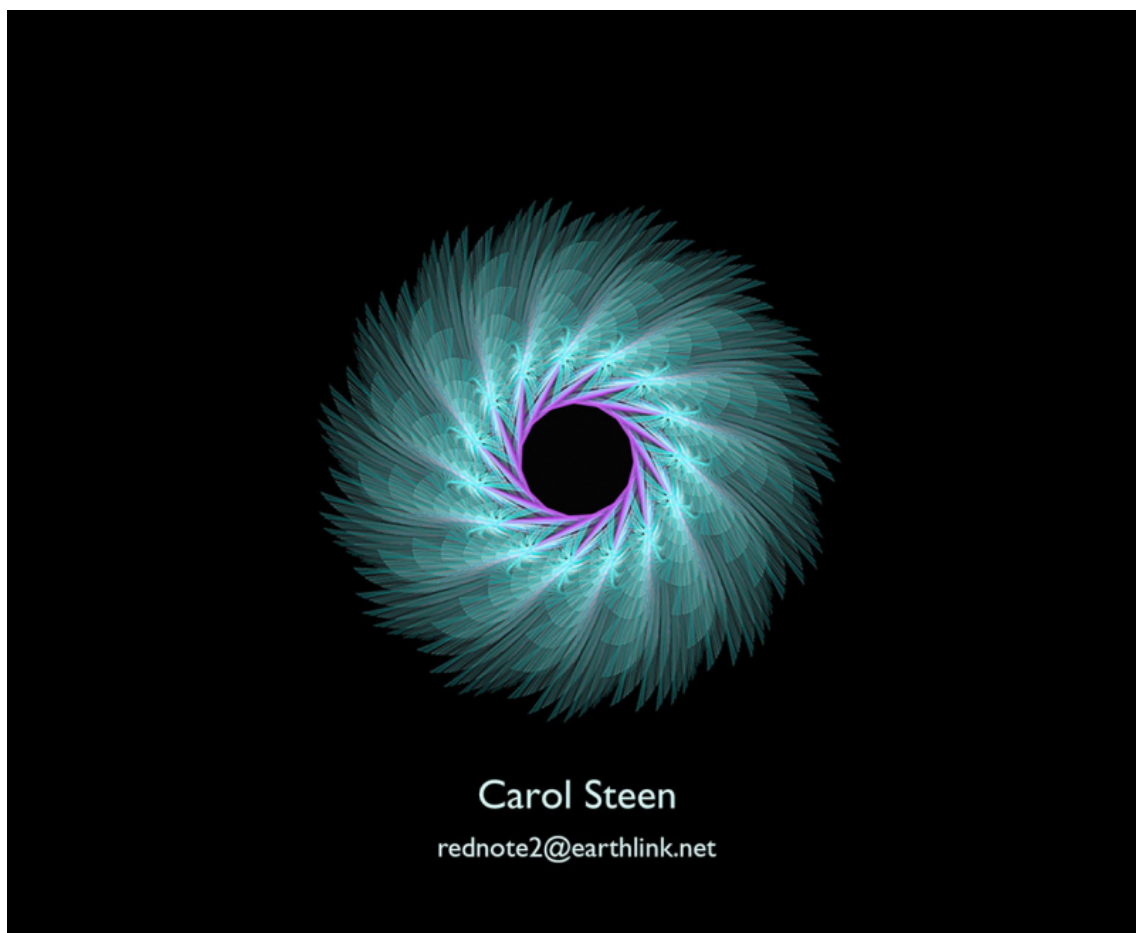
<p>Summary of both kinds of visions</p> <p>Both found in V4</p> <p>Both kinds of visions are the colors of light</p> <p>Some Kluverian Form Constants in both - though their presentation is different</p> <p>Hypnagogic visions are hard edged</p> <p>Synesthetic visions are soft edged</p>
<p>Both types of visions are devoid of meaning</p> <p>Neither has the quality of a dream or story</p> <p>Seen as barely perceptible to vivid, elaborate</p> <p>Symmetrical under drugs vs. symmetrical all the time</p> <p>Images exquisitely beautiful</p>

- 47 The only times I ever see symmetrical forms in my synesthetic photisms is when I'm in the dentist's chair using nitrous oxide while he fixes whatever tooth needed to be treated.
- 48 There was one last thing that convinced me that there was a definite connection between my synesthetic and hypnagogic visions. It started about a year ago during a usual acupuncture treatment. I was lying on a futon, stuck full of needles—looking very much like a porcupine. Even though the room was dark I also wore an eye mask to cover my eyes to eliminate any ambient light. The colors I see are brightest when the room I'm in is dark despite the fact that my eyes are closed. I settled in to watch what can be best described as a movie of moving colors I almost always see in acupuncture. This particular vision was usual when it started, but after about 5 minutes that changed. At first, I watched my usual moving, soft edged, forms

which, that day, were a lovely shade of bice green mixed with yellows, much like golden daffodils in the Spring. This vision was suddenly pierced by a hard-edged, extremely detailed, bice green and yellow colored, symmetrical hypnagogic vision. I was seeing both kinds of visions at the exactly same time! Since that first time, this has continued to happen.

- 49 I still see my synesthetic visions and my hypnagogic ones, and I still have no idea what the possible trigger for my hypnagogic visions could be. I also asked more synesthetes if they see hypnagogic visions in addition to their synesthetic ones. They tell me they do and send me drawings.

Figure 16. – Carol Steen email address.



- 50 Please contact me if you see hypnagogic visions.

BIBLIOGRAPHY

- ATTAR Farid ud-Din, 1971, *The Conference of the Birds*, Shambhala, Berkeley.
- BROOK Peter & ESTIENNE Marie-Hélène, 2014, *Mandalas: An Installation Inspired by the Valley of Astonishment*, 360° Series, Theatre for a New Audience, Brooklyn, New York. Available on <www.tfana.org/wp-content/uploads/2014/10/The-Valley-of-Astonishment-360.pdf>.
- FFYTCHÉ D. H., HOWARD R. J., BRAMMER M. J., DAVID A., WOODRUFF P. & WILLIAMS S., 1998, "The Anatomy of Conscious Vision: An fMRI Study of Visual Hallucinations", *Nature Neuroscience*, Vol. 1, No. 8, pp. 738–42.
- HOROWITZ Mardi J., 1975, "Hallucinations: An Information Processing Approach", in R. K. Siegel & L. J. West (eds.), *Hallucinations: Behaviour, Experience and Theory*, New York, Wiley, pp. 163–96.
- SACKS Oliver, 2012, *Hallucinations*, New York, Vintage Books.
- SAGIV Noam, 2014, Email correspondence from April to June.
- STEEN Carol, 2001, "Visions Shared. A Firsthand Look into Synesthesia and Art", *Leonardo*, Vol. 34, No. 3, pp. 203–8.
- STEEN Carol, 2016, *Spotlight on Science: Carol Steen*, Cambridge, The MIT Press. Available on <<https://mitpress.mit.edu/blog/spotlight-science-carol-steen>>.
- STEEN Carol, 2017, "Synesthetic Photisms and Hypnagogic Visions: A Comparison", *Multisensory Research*, Leiden, Netherlands.
- STEEN Carol & BERMAN Greta, 2013, "Synesthesia and the Artistic Process", in J. Simner and E. M. Hubbard (eds.), *The Oxford Handbook of Synesthesia*, Oxford, Oxford University Press, pp. 671–91.

ABSTRACTS

English

When I was seven years old I discovered that I had been seeing the world differently from other people. My senses were joined. I was a synesthete. Over the years, I learned quite a bit about my synesthesia, but I was surprised in 2013 when I suddenly began to have another kind of vision, hypnagogic images. At first, I thought these new visions were part of my synesthesia, that I was seeing a new form, one I didn't have a name for. But synesthesia needs a trigger, a trigger that causes us to see what we see. This form did not have a trigger, and that concerned me. In this paper I will explore the visual similarities and differences between my synesthetic

photisms and my hypnagogic visions. I will compare the triggers or lack thereof, where I see the images, the ways in which the shapes I see appear, their colors, and their commonalities. I will discuss how the hypnagogic visions have changed, along with the fact that now both synesthetic and hypnagogic visions occur during the same experience, and that I have found other synesthetes who also have both synesthesia and hypnagogia.

Français

À l'âge de sept ans j'ai découvert que je voyais le monde différemment des autres. Mes sens étaient reliés. J'étais une synesthète. Avec les années, j'ai beaucoup appris sur ma synesthésie mais j'ai été surprise en 2013 quand soudain j'ai commencé à voir une autre sorte de vision, des images hypnagogiques. Au début j'ai pensé que ces nouvelles visions faisaient partie de ma synesthésie, que j'en voyais une nouvelle forme, dont j'ignorais le nom. J'ai commencé à être préoccupée par cette forme qui n'avait pas de déclencheur. Dans cet article j'explorerai les similarités visuelles et les différences entre mes photismes synesthétiques et mes visions hypnagogiques. Je comparerai les déclencheurs ou leur absence, les espaces où je vois les images et de quelles manières apparaissent les formes que je vois, leurs couleurs et leurs points communs. J'examinerai comment changeaient les visions hypnagogiques et le fait que je vois des visions à la fois synesthésiques et hypnagogiques se produire dans la même expérience, et que j'ai trouvé d'autres synesthètes qui eux aussi ont à la fois la synesthésie et l'hypnagogie.

INDEX

Mots-clés

synesthésie, hypnagogie, photismes synesthétiques, visions hypnagogiques, Carol Steen artiste, Carol Steen synesthète

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