

Thank you, Creator, for all that is possible and your abundant gifts.
Thank you, Nature, for the forces that formed us and shape our reality.
Thank you, Science, for the path and the tools we use to explore and understand both nature and the divine.
Thank you, friends and fellow humans, for choosing to walk this path.

Hello, seekers, and welcome back.

We all have been endowed by our Creator with amazing minds that allow us to engage in systematic and rational inquiry. In our modern world that tool has significance. The path of the spiritual seeker is often guided by the heart. As we *add* the methods and practice of science in pursuit of the Creator, it is our rational capacity that must now serve as guide. We won't forgo the heart as a tool — it is used in service to our inquiry and it allows us to take a leap of faith even when we don't yet have the data to support our observation or validate a gut feeling. Both heart and mind serve us, but our rational capacity is better for navigating the terrain of the modern world.

Humans have been asking questions about the divine and the nature of God for thousands of years and still can't agree on an answer. Today's world seems more polarized, more tribal in protecting differing ideas.

We're an inquisitive species and have been seeking answers since before there was a true means to find them. Why is there rain? What causes death? Why do we exist? From the simple to the profound, there have been so many questions beyond understanding during the hundreds of thousands of years of *Homo sapiens*. The creation of religion as an attempt to understand a seemingly supernatural world beyond comprehension appears almost as common as seeking food or clothing or shelter. There are roughly 4,200 existing religions in the world and the formation of religion is pervasive in almost all cultures.

Unfortunately, no religion has yet given us a verifiable answer regarding the Creator.

In today's world, we can take humanity's deeply-rooted desire to pursue the divine and add new lenses. Today, we're not limited to *blind* faith and can develop actual protocols to test our spiritual beliefs, which is incredibly exciting!

“Why would you do that?” some may ask. Isn't the point of faith *not* to demand proof...?

No.

Science and faith are intertwined. For the first time in human history, we live in an era of information, technology, and communications. The process of inquiry is different. Modern physics began only around 150 years ago — an eye-blink in human history.

Scientific thinking and tools take our pursuit of the Creator out of the supernatural realm so we can tackle the big questions of existence with more than just speculation. The simple act of scientific unfolding — asking questions, peering into the very structure of

reality, and beginning to understand the form and function of nature — strengthens and justifies our faith.

So we turn our attention to the divine. In doing so, one has to use the capacity to see and to understand. That may sound obvious, friends, but remember we're seeking something that most religions believe is beyond comprehension. The monotheist god warns you cannot see His face and live.¹ Before we can discuss what science or technology can add to the process, we have to consider comprehension: whether we can see what is revealed and then understand it. This is where we'll begin, with a biological lens on seeing and understanding. These functions are foundational to our endeavor and are gifts we believe come from the Creator, so we should understand how they work. We'll also need to start with a simple yet crucial reminder of our own limitations.

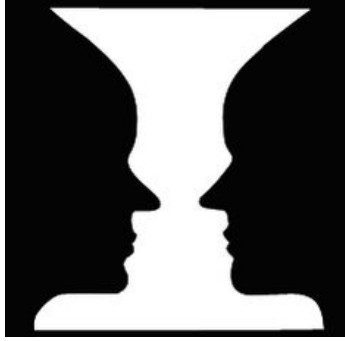
We forget that our perception of the world only encompasses a narrow spectrum. We can't smell as well as dogs. They have up to 300 million olfactory receptors, seven times that of humans. We don't see as well as birds. They can see in the ultraviolet spectrum and, in the case of hawks, have two fovea, responsible for sharp central vision employed for complex activities. We don't have the sonar of dolphins or bats or the magnetic navigation of sea turtles. What we have is our minds, our curiosity, and our drive. To compensate for lesser abilities we build devices that allow us to perceive and do the things we otherwise couldn't.

We construct the world relative to our limitations, our perceptual threshold, which is why the dog whistle isn't used in making music. It's easy to overlook that fact. Even with our limited range of perception, our organs of sight, smell, sound, and touch still take in far more than we can consciously process, which is important to remember. There is a sub-conscious level of processing that "decides" if something is crucial to your conscious mind. Part of our process of seeing is actually to exclude things.

We don't see with these photo receptors we call eyes but with our brains, which process the visual signals. It turns out "paying attention" also means tuning things out. You get a sense of this in those crowded gatherings when your name or a particular word suddenly jumps out louder from the background noise and grabs your attention. Your subconscious mind is always monitoring, filtering, and seeking patterns. It parses information and feeds the conscious mind with what is deemed important. Vision is partly an editorial process, but it's also an agreement between the brain and the senses.

Consider the optical illusion of the two faces and the vase and you immediately realize that sometimes, when there is ambiguous data, our brains make the best guess, even if we don't realize that there was another one available.

¹ Exodus 33:19-20: And the Lord said, "I will cause all my goodness to pass in front of you, and I will proclaim my name, the Lord, in your presence. I will have mercy on whom I will have mercy, and I will have compassion on whom I will have compassion. But," he said, "you cannot see my face, for no one may see me and live."

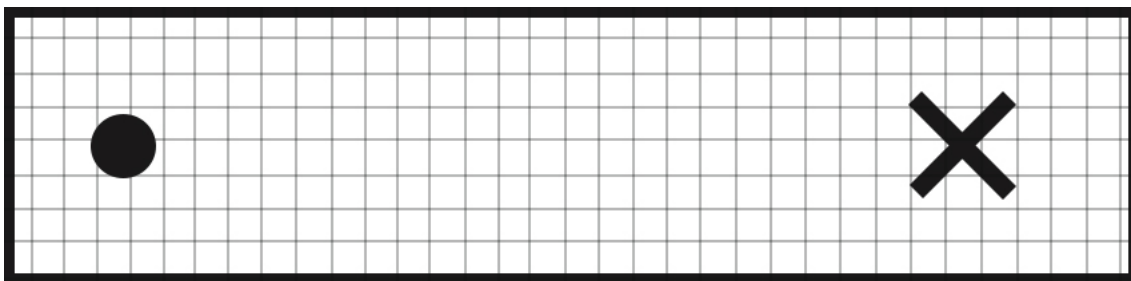


If what we perceive is subject to interpretation by our brains, then an interesting question arises: What part of our reality is misperception or fabrication? To illustrate our flexibility of perception, let's try a fun experiment. Cover your left eye. [I'll do this mirrored.] Now look straight ahead with your right eye and observe carefully. Be aware of the space just slightly above your horizon and a little to the right... Is something missing? Do you see a blank spot in your peripheral vision as you look straight ahead?

Right now, you are fabricating a part of your reality. All vertebrate's eyes have a blind spot. At the place where the optic nerve connects to the eye, there are no light receptive rods or cones, the cells that perceive brightness and color. This creates a visual dead spot just above your horizon and 12-15° outwards from the center. If you were to think of this as your LED television set, you'd see black pixels in that blind spot. However, our brain seamlessly fills in the missing visual information, never making us aware of this trick, this unnoticed act of mental Photoshop.

In many ways, you see what you believe.

We can illustrate this simply. Fold a piece of paper until it's a strip a couple of inches high, preferably graph paper if you have it, and mark it with a dot and an with "X" near the opposite edges.

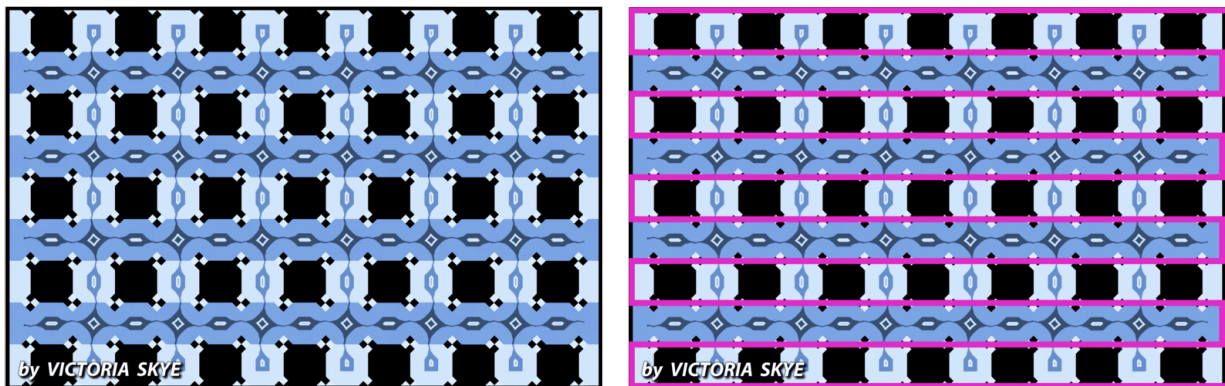


Cover your left eye and hold the paper in your right hand about a foot or so away from your face, with the dot directly in front of your right eye and the X to its right. Move the paper back and forth and around until you find the place where the X disappears. You can see it pop in and out of perception. What's really interesting is that you still perceive an uninterrupted grid pattern!

Take a moment with this thought: your brain can and does invent things for you to see. When something is missing, the brain may simply add it back, seamlessly and without your knowing.

Let's take seeing and perception one step further. I suspect everyone here has a favorite optical illusion. If not, and even if you do, I encourage you to take a moment and do an online search of "optical illusions." As I said in the last sermon, we live in this wonderful time of information, hard-won and fought for by our ancestors. **Ignoring what has been left to us is not a spiritually reasonable choice.** So find a moment to do a visual search and look at the images that are offered.

I really love this illusion, which is an animated gif by Victoria Skye. It brilliantly highlights how easily our perception and our understanding can be influenced and tricked, which is crucial to remember. In both of these images, the horizontal lines are parallel.



Whether by misperception or fabrication, your brain may be changing what's before you. You won't always realize this. My aim is not to suggest that nothing is real or that we can never understand reality. My aim is to open up your capacity to experience the world without being tethered to expectations *so you can be malleable* when the data suggests something other than what's expected or experienced.

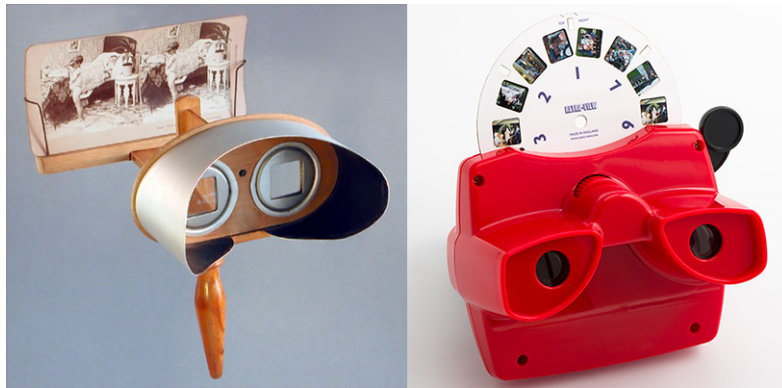
We are engaging in a process of attunement. Part of our pursuit of the Creator is about aligning ourselves with what is right in front of us but not available. Expectations can sometimes rob us of an experience. We may unconsciously reject things that don't fit with our predetermined narrative, what's known as implicit bias. Even the conscious way we choose to focus our attention can edit out things that are right in front of us.

As an illustration, there's well-known experiment in psychology that explores what we perceive, colloquially know as the "invisible gorilla" test. You can find this online. Subjects watch a video of two interwoven teams of three people, one team wearing white and one wearing black, each passing a basketball. Subjects are asked to count how many times the players wearing white pass the basketball. When then asked, "But did you see the gorilla...?" half the subjects hadn't.

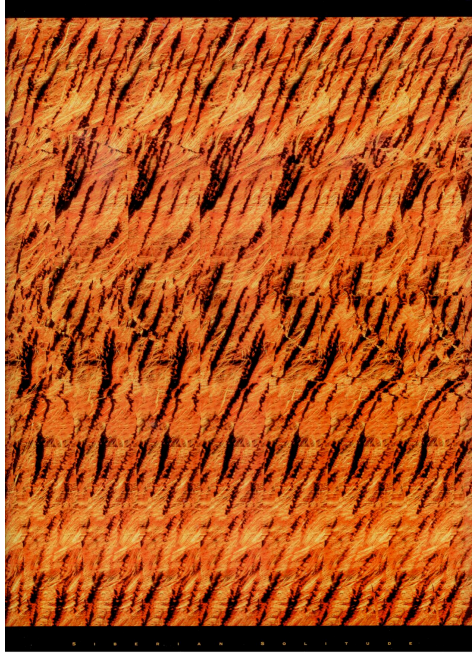
A person in a gorilla suit walks right through the frame as the basketball is passed between the players. It turns out that people can focus so hard on something that they become blind to the unexpected, even when they seem to be staring right at it. The phenomenon is called “inattention blindness” and highlights how we miss a lot of what goes on. We don’t realize how often we exclude information that is right in front of us.

In terms of the divine, it isn’t simply that if you “see correctly” or focus on the right thing, God will pop into existence. Our pursuit of the divine is process, a path to walk, and right now we’re just looking for the trailhead.

Do you recall the old-fashioned stereoscopes? Originally they were two lenses on a handle, focused on a strip with two identical photographs side by side. Some of you may remember a later commercial version called the View-Master. The devices enable our brains to dissolve one image into another while deepening the depth of focus, combining the two separate flat images into a single three-dimensional one. Quite a neat trick!

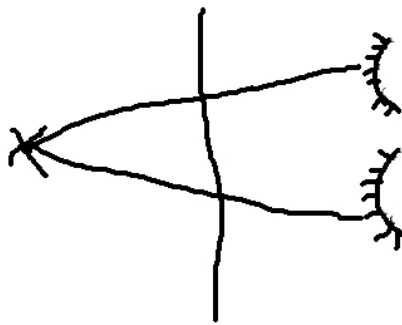


A single-image stereogram found its way into popular culture in the early 1990s through something called Magic Eye books, where a hidden 3D image could be experienced without a device when viewed correctly. I discovered a version called Holusion Art in '93 that I first saw it as part of a marketing campaign to win something I no longer remember. I had no clue what I was looking at beyond an abstract pattern printed on a postcard, but prizes awaited. I stared at it for a good long time trying to make sense of the image, which I couldn’t do at the time. I had no idea the random dense pattern of lines was a digitally produced stereographic image where both fields had been combined.



In the hollusion image, the two images are superimposed so that the underlying one is hidden. The image you see on the screen is a tiger.² It's standing edge-to-edge, just above center, with its head to the right. This is not a trick, it is simply a different way of seeing because it uses our perceptual tools in a slightly different way. It also illustrates an important point: understanding can be subject to and can follow expectation.

This image is an ingenious and infuriating bit of art that plays with your visual perception. Because of our binocular vision, there is the capability to play with parallax, which is the slightly different view each eye has due to the space between them. To explain parallax, imagine a dot floating two feet in front of you and a line drawn from it to each eye, forming a triangle. Now imagine inserting a piece of paper halfway between your eyes and the dot. At that point of intersection, there is a measurable distance between the two sides of the triangle. Because each eye actually sees something very slightly different, we can exploit that fact to trick the brain.



² The image is called Siberian Solitude, from the book *Hollusion Art*, by Michael Bielinski and Paul Herber. ©1994 NVision Grafix, Inc.

If you don't have good binocular vision, have an astigmatism or contacts that focus with different corrections, you may not be able to “unlock” the image. That's okay. While it's fun and weird to do, the point is to remember that there are two different things available to see — if you can change the way you look at it.

To shift the image from 2D to 3D, you'll need to focus on a place well behind the image, making it appear out of focus. If you're looking at a laptop, I suggest you look at something in the distance and then put the screen right in front of you without changing where your eyes are focused. If you're looking at a computer monitor, just lean in too close to see. You'll want to relax your eyes and look *through* the image.

Keep your eyes relaxed and the image blurry. Now *slowly* move the image back, increasing the distance between it and your eyes...keep going...more...

You should see the image begin to “open up” into a 3-D space and you'll feel your eyes relax into that way of seeing. It's kind of amazing. You can easily flip back to the 2-D image by focusing on it. To return to the 3-D image takes effort but with practice, you could well imagine how it would be easy to shift from one perception to another, just as a person who spoke multiple languages could easily shift from one to the other.

Take a moment to play with the image and seek out other ones. You can find many images online at magicseye.com.

In a world of holusion perception, you could be changing your relationship to the world around you, able to access or unlock the thing that was previously invisible yet in plain sight. Keep that thought in mind. We'll play with other ways to shift our perception of reality down the road.

As a general rule, **what you think you see is incomplete**. Depending on the level of resolution, it can be completely incorrect, but that's for later. Fortunately, our vision is adapted to see the world as we generally interact with it, so this misperception is inconsequential — mostly. However, as we turn this capacity to see towards the Creator, those things become significant because what we seek is well beyond the realm of the usual. To see what is unusual requires guidance.

So we ask: What happens when you expect something different? That's a particularly important question if we're going to seek something that, by its nature, is completely beyond anything known to us. Remember, no one actually knows what the Creator is. We've been trained to the expectations written about in holy books. Expectations become veils that obscure the divine. In our process, we'll move beyond them. We'll keep in mind our Four Questions:

- What do we know?
- How do we know what we know?
- What does it mean?
- How we apply it?

By the way, there's a physical correlate to this question of expectation and perception and at some point we'll talk about the placebo effect, which is a fascinating window into expectation and the way the *body* responds.

My friends, we are adding something new to this old path of seeking the Creator. We are adding the methods and practice of science, along with an empirical expectation. This is not at the expense of faith, it is in service to it, just as faith is used in service to science. They are intertwined.

Our modern tools can reveal much beyond our usual expectation. The better we learn to see and the more we free ourselves from the conceptual shackles of expectation, the more things come into focus. We are still in the early stages of understanding the workings of consciousness and our physical beings. We are in unexplored territory, but have an ever expanding set of tools and techniques and each other and patience. I have faith that together we'll discover something amazing.

Keep seeking, sisters and brothers! Honor the Creator; honor the creation.