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.

Welcome back, seekers.

The Church of Inquiry believes that the universe has a Creator, that we exist for a purpose, and that the path of evidence suggests the Creator is knowable to us through the methods and practice of science. We believe our purpose is to follow that path of evidence in acknowledgement of the gift and because we believe it is within our power to achieve a verifiable, repeatable experience of the Creator.

This is an inquiry-based religion that unifies science and faith, adding the methods and practice of science in our pursuit of the divine. You'll notice, however, that I start each sermon with a simple prayer, which I do as part of my attunement. Another time we'll delve into the form and function of prayer, but for now, it is a simple statement of gratitude and a reminder of science in service to faith in service to science in an ongoing cycle. As I said in an earlier sermon, science itself is rooted in faith, although not blind faith, and perhaps not faith in a creator. Scientists have faith in their observations, inspirations, methods, data, and thus the models they create.

My friends, we've talked about learning to see and how expectation can become a veil that hides the divine. We have started on our path and, as with learning a new language or any new skill, we'll begin simply and with the basics. The basics include understanding the tools at hand and how they work. There is also a process of attunement that aligns intention, purpose, and attitude to suit us as seekers. It guides how we will use our tools and opens us to the wonder of discovery. For clarity, the dictionary says to "attune" means to make receptive or aware, or to bring into accord, harmony, or sympathetic relationship. We wish to do all of this.

From a practical standpoint: breathe. Be supple. Open your heart. Be as curious as a child. Remember that expectation can undermine experience. And remember that we are seeking the Creator, which is exhilarating. Assume that posture.

We've started by bringing awareness to our own processes of perception and how expectation affects our ability to perceive. So, how does one learn to see what could be the most obvious thing in the world, yet evades perception? If the Creator is responsible for everything, then we should be able to find evidence for the Creator everywhere. Yet for thousands of years no one has been able to *verify*, as that word is used in the scientific realm, that there is a creator who is responsible for everything. Then again, they didn't have our modern tools!

Of course, we're bound by the rules of empirical proof, so it's possible — possible — that the atheists are right, and we're compelled to accept that possibility equally. This takes us to a foundational element and a crucial point: along this path, and in life in general, **one can seek the truth or defend the truth you think you already have, but one**

can't do both. Just like with children who naturally practice theory revision, a scientist who forms a hypothesis and collects data towards it is required to amend that hypothesis in the face of contradictory data. To discover being wrong is a to find a gift that frees us to continue the search.

Fortunately, we humans have been endowed with minds that allow us to engage in systematic and rational inquiry. As we proceed along our path, we will use this gift, along with our hearts and our creativity, to hone our built-in tools and create techniques and pathways that we believe will allow us to experience the Creator. This is a process thousands of years in the making, but only today do we have the benefit of modern technology, a vast aggregation of knowledge, a means by which to access it, plus the potential to connect with other seekers among the billions of people who are interconnected by technology.

So let's jump right in with a fun and simple meditation on seeing and expectation. One day I walked through a street fair. It was a lovely, sunny day and I was wearing a pair of sunglasses designed for use in sports because they provided greater contrast separation and clarity of image. The lenses were tinted yellow.

I didn't have a thought of the glasses as I passed the tables of street vendors and came across a black sweater that was just the thing I was looking for. I picked up the sweater to examine it, eventually lifting up my sunglasses. I was momentarily startled to discover that the sweater was, in fact, blue. Blue and yellow are opposite colors in the light spectrum, and with the blue color information nullified, the sweater looked black. Change the lenses, change the reality. Of course, what happens if you don't realize you're wearing lenses that hide parts of your reality?

Again, we're starting simply, with the notion of seeing, the precursor of understanding. Seeing can be influenced by expectation. It's the release of those expectations, like the unclenching of a fist you didn't realize was held, that starts the process. That can be challenging because you may not have awareness of being clenched so you first have to find what blocks awareness. What is it that can compel you to lift the sunglasses?

Even once you "lift the glasses," there's can be a lag-time as new learning gets integrated into our beings. We get accustomed to things, and change can promote resistance, fear, or sadness. In moments of transition, there may be that tug of the old versus the new and we may need to check in with our hearts. In moments of decision, there's likely a conscious choice that must be made as we wrestle with new data, a new reality.

Science compels us to follow the data; if a hypothesis is wrong, it is amended or set aside. With questions of the heart and of the ego, it's a little harder to decide what to do with a new reality — accept it or oppose it. In the case of the sweater, clearly it wasn't the color I wanted and there was no point to cling to the yellow-lens reality. Had I lived in a world where everyone always wore those lenses, or had a taboo or cultural pressure against blue, there might be a different choice to be made, but I didn't, so there was no resistance. What's key is that I carried forward an expectation that anything I would see that appeared black would now be subject to confirmation. I became aware that *I* was the limiting factor for understanding.

Let's rotate that view slightly and look at an interesting property of our brains. Lag time in processing a new understanding can have a physiological component. At the end of the 1800s, a psychologist named George Stratton conducted some fascinating experiments on *perceptual adaptation*. He wore a set of reversing glasses that flipped his vision upside down. Stratton wore the glasses for eight consecutive days. On the fifth day, something amazing happened: the images appeared upright to him. More than that, if Stratton concentrated on what was before him, the image became inverted again.

This was repeated in the mid 20th century by a pair of Austrian professors. They confirmed that if the altered images are received in a consistent way, our brains reinterpret those images as normal. In this case of Professors Erismann and Kohler, one of their subjects even drove a motorcycle through Innsbruck while wearing the inversion goggles.

This process overall is known as neural or sensory adaptation. When you have a constant stimulus, there will be a change over time in the way a sensory system responds to that stimulus. There are two types: fast adaptation, which happens immediately, like with my yellow sunglasses, and slow adaptation, which may take minutes or even days, such as with the inversion glasses. The period of neural adaptation relies on physiological mechanisms, which means we need to be patient.

By the way, the term neural adaptation is just a fancy way to tell you something you already know intuitively. Ever jump into a pool or the ocean and it's "too cold!" — until ten minutes later when it's delightful and you're yelling to your friends to join you? Rest your hand on a surface and you're aware of hardness, temperature, texture, but not consciously for long. Have you ever looked for something you were holding in your hand, or wondered, *Where are my glasses?*…only to find they're on your head?

We're all subject to varying levels of conditioned reflexes, and slip in and out of our own auto-pilot. It's easy to get distracted, allowing familiar routine and memory to shift into the driver's seat. Instead of leading with attention and intention, we lead with expectations and certainty. We move through the day without focus. We don't seek or even acknowledge the beauty, the patterns, the harmony, the clues. We lose our sense of gratitude.

As we seek the divine, we'll need to be open to different experiences and understandings. We'll approach doing this in multiple ways with the aim of creating what we could call a "baseline of malleability." This is a way to look at expectation and release, which will be necessary as tools to access the divine. In understanding the process of release, there must also be an understanding of patience and how time factors into the realignment — like learning to dance, just watching the move doesn't take the place of practicing it, and we are building a practice. Once you understand what is possible, you have the option to shift between possibilities, change the rhythm or tempo of your dance. As with the stereoscopic holusion image, eventually you can shift your focus from one "reality" to the other, just as George Stratton could toggle between right side up and upside down images.

Seeing happens with the brain and not the eyes, and we process that information with different parts of our brains, and in different ways. The names for things and their functions are actually processed in separate areas, and they can get separated. Freakier still is a phenomenon known as "blindsight," where people are blind due to damage in their cortex, yet can respond to visual stimuli that they do not consciously process. These are things to keep in mind any time we want to claim absolute certainty of something.

Now, if we consider this type of seeing, which relates to our baseline perceptual threshold as a horizontal, let's consider for a moment the vertical. There is an issue of perspective to consider. Another application of seeing has to do with *resolving power*, which is our capacity to separate or distinguish small or closely adjacent items, but is a way to think about the relationship between things. When we shift perspectives, we can open whole worlds of possibilities.

I have a friend who likes to joke, "I may look like I'm sitting here doing nothing, but on a molecular level, I'm really quite busy." Changing your perspective by zooming in or out changes your understanding of reality. Maybe the challenge to understanding is that you're seeing either too little or too much to understand what is being looked at. We say, "you can't see the forest for the trees" when someone is too involved in the details of a problem to look at the situation as a whole.

When I was in junior high school my science class was shown a wonderful film. Little did I know that it would implant in me a key structural understanding. (Go science!) *Powers of Ten* was written and directed by Charles and Ray Eames for IBM in 1977 and starts with a title card saying it is "A film dealing with the relative size of things in the universe and the effect of adding another zero." The film uses math to illustrate something rather magical when you think about it. By the way, this is online and I urge you to watch it.

In the film, a couple sits on a picnic blanket in the middle of a park on a beautiful day. We see them from overhead and are told we're seeing a scene one meter wide from a distance of one meter. The camera pulls back such that every 10 seconds we are 10 times farther away, giving a field of view 10 times wider. In just over a minute, we're at 10^7 meters, or 10 million meters, and can see the entire Earth. In a relatively short amount of time we've hurtled out of the solar system, through the Milky Way and to the edge of the known universe.

It's quite a meditation to see ourselves in that context, within our environment, and then the environment that contains the first, and so on. In pulling back to reveal more and more of the creation, we're given a wondrous sense of systems and scale, and how we are but one piece of that unimaginably vast system.

We return to our original view at five times the speed. When we get back to our couple, an even more interesting shift happens. This time the field of view is reduced by 90% each 10 seconds. It only takes four steps, four orders of magnitude, to be passing through the collagen of the hand and down into the bloodstream, and then to arrive at the size of a lymphocyte but one order of magnitude more. Onward this goes until we get to a proton in the nucleus of a carbon atom in the hand of the man sleeping on that picnic

blanket. When my friend joked she was very busy on a molecular level, I already had an understanding of that truth.

On that reverse journey what is revealed are the systems within the systems. Everything at each level functions together to create the emergent property of us. You can pause at one of those levels — one of the floors on that vertical, our conceptual elevator of magnification — and contemplate the 40 trillion cells of our body and the 40 trillion bacteria living inside of us in collaboration and cooperation. It's funny to me the that creationists say the world is "irreducibly complex" yet bypass the science that might prove them right.

I mentioned in the last sermon that, as a general rule, what you think you see is incomplete and, depending on the level of resolution, it can be completely incorrect. At the proper level, you can see how we take for granted those many things that happen continuously, invisibly, and in service to our possibility. We also see a *commandment* woven through all levels of our reality: **Cooperate**. *Nothing* exists as a singular entity. Everything exists through increasingly more complex levels of interaction.

In this simple science documentary, we've glimpsed an astonishing truth: we are comprised of many and smaller processes and there are whole worlds of interrelated "realities" at different perceptual thresholds. We are an emergent property of a whole lot of independent and inter-dependent processes. It's humbling and astonishing when you start to consider the enormous number of things from the biological to the cosmic that are required to go right so that we can even have this discussion. It fills me with gratitude.

The vastness of it all is truly staggering. Our ancestors thousands of years ago sat on their conceptual picnic blankets, wondering at this world around us and creating marvelous tales, yet most of reality was beyond their grasp. This wasn't something that could be imagined during the writing of the holy books. In the intervening millennia, our seekers' nature has allowed us to acquire an impressive volume of knowledge about the world. Our innate capacity to contemplate, envision, and implement has brought us to this moment of technological wonder. This is truly a great time to be a seeker, with so much access to so much information, gathered from so many people with so many points of view. Now we work to cooperate, as the commandment says.

Brothers and sisters, life is far more nuanced than we imagine. As we walk our path in pursuit of the Creator, we have to remain unattached to the stories we've told ourselves so we can understand them anew and see what they reveal. We have to ask our Four Questions (What do we know? How do we know what we know? What does it mean? How do we apply it?) We have to be free to see things as they are, freed from the ego, and the fear, and the things we've come to expect. We have to keep our hearts open while thinking like scientists, which is a way of thinking built into our very beings, our divine operating system.

We seek to understand the mechanisms of nature, the functioning of our world, and the underlying cohesion of all things in creation. The key is to be able to see what is revealed.

Thank you for being here, my friends.

Honor the Creator. Honor the Creation.