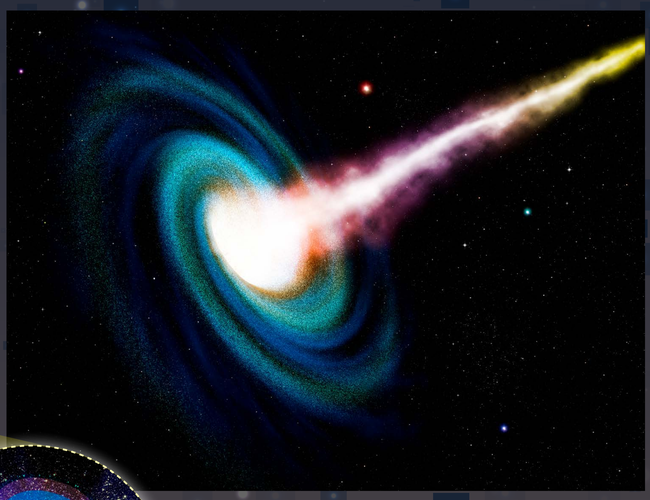
# The Gravity Of Trauma

From the moment we materialize as a human into our 5% universe (and even before!), we are told in incessant and insidious ways, through language, advertising, architecture, and numerous institutions, that we are not enough unless we look a certain way, have prescribed things (e.g., a job, fashionable clothes, a home, a family, an ambition), and behave in a manner that is "appropriate" to our current setting. We then go through our entire lives with a deeply rooted, nagging feeling of not being enough for the mere fact that we exist. Everywhere we turn, we are continually prompted to prove our value and worth. And if we do manage to shed a sufficient amount of our beliefs to feel enough simply because we exist, we will always be reminded one way or another that we fall short of something.

Our 5% universe, which never escapes the measuring apparatus, categorizing everything and everyone within binaries, hierarchies, and capital, is constructed in such a way that our survival is dependent on us not feeling enough. We essentially live in a perpetual state of trauma, which means everything that exists in our 5% reality, from our languages to our relationships, is based in trauma. This ever-present, at times, inconspicuous trauma then begets more trauma, which gets increasingly more oppressive and violent as it compounds on itself.

Just like binaries, hierarchies, and capital, trauma is also an orientation device that fixes us in a 5% universe. But unlike binaries, hierarchies, and capital, trauma is also the key to help us expand beyond the 5%.



Arguably, trauma is believed to be passed down from generation to generation through epigenetics (the study of heritable changes in gene function that do not involve changes in the DNA sequence) and gene expression (variable gene activity influenced by one's social environment).

"Our deepest fear is not that we are inadequate. Our deepest fear is that we are powerful beyond measure.—(Marianne Williamson, *A Return To Love: Reflections on the Principles of A Course in Miracles*) It is heartbreaking to realize we have been conditioned to feel more at ease occupying the space of feeling inadequate and cannot easily occupy the space of knowing we are truly AMAZING!

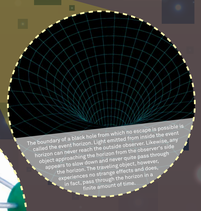
## The General Relativity Of Trauma

In physics, the general theory of relativity is a geometric concept of gravitation. Gravitation, or gravity, is a phenomenon by which all things with mass are brought toward, or "gravitate" toward, one another. The general theory of relativity describes gravity not as a force but as a consequence of the curvature of spacetime caused by the uneven distribution of mass. Out of the four fundamental forces, gravity is the weakest and yet it has infinite range. It is also the most familiar force in our everyday lives.

If we think about the four fundamental forces or interactions in physics (gravitational, electromagnetic, strong, and weak) in terms of the four orientation devices that fix us in a 5% reality (trauma, binaries, hierarchies, and capital), trauma functions and behaves just like gravity. As a consequence of the uneven distribution of resources and access, we gravitate towards one another (either through attraction or repulsion) based on our personal experiences of trauma. Trauma, like gravity, is the most familiar and felt force that grounds us here on earth. And it can be considered the "weakest" out of the four orientation devices that keep us locked in the 5% because trauma holds the potential to expand us beyond the 5%.

Trauma, like the metaphoric use of gravity, gives us a sense of heaviness. And in a literal sense, both gravity and trauma can become so intense that they can collapse spacetime into a black hole, which nothing, not even light or our 5% universe, can escape.

Sometimes the fusion of the three components of force and the pressure of the gravity which holds the star together, it is a balance between the force of gravity and the force of fusion. Gravity is the force that holds the mass of the star together, and the force of fusion is the force that holds the star apart.



The boundary of a black hole from which no escape is possible is called the event horizon. Light emitted from inside the event horizon can never reach the outside observer. Likewise, any object approaching the horizon from the observer's side appears to slow down and ever-so-gradually redshift as it approaches the horizon. The strong effects and dramatic experiences by strong objects and bodies in fact, pass through the horizon, and through the horizon of time.

In physics, the fundamental interactions, also known as fundamental forces, are the interactions that do not seem to be reducible to more basic interactions. There are four fundamental forces: strong nuclear force, weak nuclear force, electromagnetism, and gravitation. In the Standard Model of particle physics, the electromagnetic force and the weak force are actually two different aspects of a single force, the electroweak force, and the strong force is governed by the interactions of quarks and gluons.

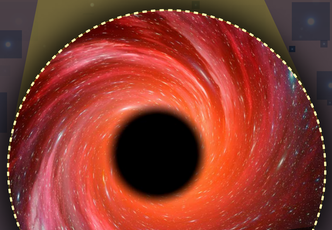
## Black Holes And The Impossibility Of Observation

Black holes are remarkable because, like the queer behavior of quantum particles and dark matter and dark energy, black holes cannot be observed or fully known.

The most common black hole, known as stellar, forms when the center of a very massive star collapses in upon itself, pressing matter into a tiny space, which creates its intense gravitational pull. This compression can take place at the end of a star's life. Another way to form black holes involves an intensity of observation that can result not only in the collapse of two deeply rooted pillars of physics, locality and unitarity, but the collapse of observation itself.

Locality is the notion that particles can interact only from adjoining positions in space and time. When attempting to inspect interacting particles very closely, probing smaller and smaller distances between the particles, at a certain scale, so much energy must be concentrated into such a tiny region that the energy collapses the region into a black hole. Similarly, to prove unitarity (a constraint on the evolution of quantum systems by ensuring probabilities of all possible outcomes add up to one), we would have to observe the same interaction over and over and count the frequencies of the different outcomes. To do this with perfect accuracy would require an infinite number of observations using an infinitely large measuring apparatus. This infinitely large measuring apparatus would again cause gravitational collapse into a black hole. In both cases, it is remarkable to note that it is our intensity of probing, inspecting, observing, and measuring that creates gravitational collapse into a black hole and the impossibility of observation.

There are two other main types of black holes. The smallest types are known as primordial black holes. Scientists believe this type of black hole is as small as a single atom but with the mass of a large mountain. The largest black holes are called supermassive. These black holes have masses greater than 1 million suns combined and would fit inside an ball with a diameter about the size of the solar system. Scientific evidence suggests that every large galaxy contains a supermassive black hole at its center.



Because no light can escape, black holes are invisible. However, space telescopes with special instruments can help find black holes. They can observe the behavior of material and stars that are very close to black holes. Since nothing can escape a black hole, we can never know what occurs inside of it, leading to puzzling theoretical arguments, such as the black hole information paradox.

## The Paradoxes Of Observation and Trauma

A paradox is "a seemingly absurd or self-contradictory statement or proposition that when investigated or explained may prove to be well founded or true." It is a contradiction that, while our insatiable desire to observe and measure forces us into a singular 5% reality, an even more intense act of observation and measurement could create a desired gravitational collapse of our entire system into an impossibility of observation necessary to expand beyond the 5%.

It might also seem absurd (as well as unsavory) to adventure within trauma, similar to how it seems absurd to want to adventure into a black hole. Like black holes, trauma feels like it could suck us in to a point of no return. And, in a very ultimate sense, it is a point of no return—it is a death of self and a death of beliefs—everything that grounds us in a 5% universe so we can venture out into the abyss, the 95% of magnificent darkness where we can discover new forms of freedom, not determined by the binary, hierarchical beliefs of our 5% reality to keep us contained within it, but freedom that is beyond language and beyond anything we can yet imagine.

In science, contradictions and paradoxes are generally assumed to be artifacts of error and incompleteness because reality is assumed to be completely consistent, although this is itself a philosophical assumption. In fields such as quantum physics and relativity theory, when existing assumptions about reality have been shown to break down, this has usually been dealt with by changing our understanding of reality to a new one which remains self-consistent in the presence of the new evidence.