Seeing Systems Spherically

Looking at spherical perspective and spherical awareness



When viewing and thinking about systems as spheres, *The Sphere* is both literal and figurative.

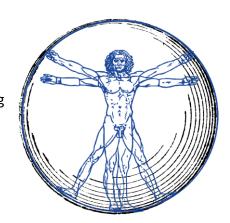
Spherical modeling is geometric. A perfectly round geometric sphere, whether viewed in print, 3D or AR/VR, is a visual representation the whole system. The shape of The Sphere is calculated using a simple scale to determine the length of multiple radii at evenly spaced points on the sphere. Different lengths create deformations in the shape, which represent deviations from the desired or expected state of the system. The continuously changing shape of the sphere model depicts the dynamic changes of the elements, connections and dynamics in the system.

The Sphere, whether depicted or imagined, is also a non-literal, metaphorical representation of the system. It is a holistic, conceptual portrayal of everything that comprises the system—people, groups, characteristics, projects, ideas, needs, etc. Conceiving of the system as a metaphorical shape allows for an integrative understanding that everything in the system is interconnected and interdependent. It provides a way of seeing the system transcontextually—viewing any one part of the system while remaining cognizant of the whole system.

The Visible Sphere

To better understand the geometric application of the sphere in Sphericity, it is useful to consider some of the fundamentals of geometric spheres and the nature of binocular, stereoscopic vision.

To get a sense of the spheres around us and how we see hold a broomstick at arm's length in front of you. Imagine you are at the center of a sphere. The far end of the broomstick marks the circumference of the sphere you are standing in. Now, imagine you are floating and can move the stick in all directions, including below you. As you do, you are transcribing the sphere in the *x*, *y*, and *z* axes. From that vantage point it is easy to see that every point in space is the geographic and geometric center of a sphere. Move a few steps in any direction to change the center point and you are in another sphere.



Try the same thing with a longer stick and a shorter stick. You'll see that concentric spheres radiate outward from where you are with no conceptual limit to size.

Now, standing on a flat surface, look forward without moving your head. Imagine the sphere around you. Moving only your eyes, how much of the sphere can you see? The effective viewing radius from your fixation point determines how much of the sphere you can physically observe.

The quantity of visual information is constrained by the limits of your stereoscopic vision—the combined visual field for most people is limited to 130°-135° vertically and 200°-220° horizontally.

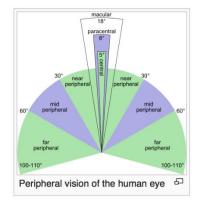
The amount of visual information you can take in is also limited by atmospheric conditions and physical objects. E.g., Low light or haze limit visibility. Solid objects block field of view. If you move your head up and down and turn your body you can observe other parts of the sphere, but without the aid of special lenses, you can never the whole sphere at once.

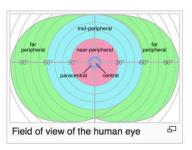
Now, imagine you are standing on an open plain looking up. The sky arches 180 degrees from horizon to horizon, which is often

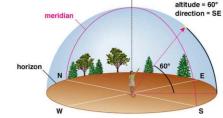
referred to as the dome of sky. You can only see as much of the dome as conditions and unaided eyesight allow. But we know that the layers of atmosphere that comprise earth's dome extend miles into space. We also know, even though we can't see it, that the dome above us is mirrored by a dome below us that arches horizon to horizon to

form a complete spatial sphere.

The point of the exercise is this: We remain consciously aware that complete spheres of visual information exist even when we physically can't see them. That has important implications for seeing and imagining systems as spheres.





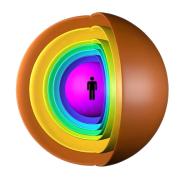


Spherical Awareness

Our place beneath arching domes and in enveloping spheres can be thought of as metaphorical of our psychological awareness of our place in the world. The sphere of our being radiates in all directions from the point of our self-awareness, or ego.

Spherical awareness, in a psychological and metaphorical sense, refers to a multidimensional understanding of our lives and the world around us – an x, y, z awareness. We speak of spheres of knowledge, spheres of activity, spheres of opportunity, spheres of influence.

Just as we see things more clearly when they are close to us, mental and emotional awareness are sharper toward our center, toward the focal point of our lives, than at the edges. We also have mental



and emotional peripheral vision that allow us to know and feel things outside our central field of awareness.

Our conscious and unconscious minds are spheres of awareness and non-awareness, respectively. We see the sphere of our physical world with our eyes; we see the sphere of our being in our *mind's eye*.

Within the sphere of our awareness, thoughts come into and fall out of view. They go in and out of focus. Ideas float in the back of our minds at the edge of consciousness the way a leaf might blow in the wind behind us.



The qualities and characteristics of our mental and emotional spheres, both within and outside our field of conscious awareness, determine our behaviors, attitudes and actions. They shape our worldview.

Physically, we cannot see simultaneously in every direction. Unaided, we cannot observe ourselves at the focal point of one sphere while occupying a vantage point in another sphere. But because our minds are capable of *creative lensing*, we can mentally and metaphorically imagine multiples perspectives.

We can see the geometry of our existence from any angle we choose and from myriad POVs simultaneously. We can observe ourselves as we exist in a both spatial and temporal spheres. We can be inside a sphere looking out while also being outside looking in.





Geographically, the earth is our *plain* of existence. The place we occupy spiritually and psychologically is our *plane* of existence.

Spheres encompass the sensory, geometric and informational spheres we live in as well as the metaphysical and psychic spheres that define our conscious and unconscious experience of living.

In that sense, we are spherical beings.