Continuous Horizons

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What happens to architecture if the horizon bends and closes into a circle? How can the human being identify its location when "up" and "down" are replaced by "center" and "periphery," when the relation to the ground is lost and the emptiness of the sky becomes ubiquitous? The space station *Continuous Horizons* investigates how to satisfy basic human exigencies of orientation, and visual and haptic stimulation in the absence of planet earth.

The station is composed from a ring-shaped agglomeration of intersecting spheres and rotates to provide artificial gravity. The inhabitants are fully immersed in the centrifugal force and cannot perceive it, but the spheres are deformed collectively as if through the rotation and thus indicate directionality.

The sphere is the simplest, purest volume. Unoriented, without focus. It is only the interruption of the continuous surface and the relation to other volumes that gives it definition. Thus, it is ideal for the study of orientation and hierarchy. While the interior of one spherical volume can be viewed at a glance and provides an archaic feeling of wholeness and calmness, the layered depth of a deep, sponge-like structure animates to explore, passing by complex exterior, interstitial spaces.

How to integrate pragmatic, walkable surfaces into this abstract geometry is one of the major questions in this project. What may look like a somewhat random agglomeration is in fact a carefully designed composition. In *Continuous Horizons*, the spheres intersect along concentric cylinders. Thus, the carefully aligned,

circular intersections of the spheres define the outlines of the floor levels. These walkable surfaces are not imposed onto the enclosing geometry, they are defined by it. Further cuts through the levels expose the harmonious integration and become points of connection.

The main level continues all around the station. On two opposing sides, three more levels are inscribed into more fragmented zones where a multitude of overlaid volumes open up to each other. Towards the rotation centre, a multitude of apertures allow the inhabitants to view the opposite side of the station and eventually to spot other beings. Sun light penetrates the windows, illuminates these central activity zones, casts light spots that continuously run over the interior surfaces, creating an effect similar to a disco ball. In outer space, where endless darkness starves the human eye, these moving spots of sunlight provide a vital visual stimulus. To satisfy the haptic sense, some spheres, especially in the peripheral, darker, more introverted zones, do not feature floors. Instead, they are filled with water, sand, upholstery, rubber, etc. With their curved surfaces, that transition smoothly from floor to seating to wall, these experience rooms invite to engage with the offered materials in various positions and using the entire body.

Continuous Horizons is a pure space in an environment of abstraction, a clean canvas for a heightened experience of human sensations.