

‘A universe comes into being when a space is severed into two.’

Humberto Maturana and Francisco Varela

(Spacetime ripples from a binary star)

Consider an observer in regular space. The observer induces a coordinate plane (or metric) to be imposed, as though from the exterior of the system in question. As soon as this coordinate plane is imposed, a regular geometry of space can be developed. Space can be distinguished from motion abstractly and precisely. Now suppose the observer positions a mark somewhere in this space. Based on an arbitrary origin-point (the ‘blind spot,’) a coordinate can be determined. A moving mark ‘carves out’ shapes, just as shapes triangulate inner spaces: motion obeys intuitive geometrical principles. All space remains ‘exterior’ due to the fact that shape is dependent upon the coordinate plane (even in higher dimensions,) that is, the coordinate plane is hyper-regulated: a transformation of coordinates results in a re-parameterization, or at worst, deformation. In regular space, then, all motion is abstract, superficial; all durations are qualitatively indistinct.

Now, let’s consider an observer in a fractal space, that is, a space with a self-constructing metric scale. As opposed to a regular or regulated space, we can say such a space (or collection of spaces) is organizing rather than organized, that is to say, it has no ‘origin’: such a space is essentially autopoietic rather than purely theoretical. In a fractal space, positions represent topological structures, and paths or movements represent ways of breaking apart and ways of forming unities. The situation on the hinge, or threshold, where one fractal subspace folds in upon itself, would be a contradiction in regular space, and an overdetermination of coordinate maps. In other words, regular space is too ‘brittle’ to handle such extreme ‘torsion,’ and this sort of infinite spatial intensity between ‘inside’ and ‘outside’ would amount to a fracturing of a well-ordered space into an infinitely-ordered fractal subspace/superspace.

Therefore, in a fractal system, where the coordinate system is self-induced, the ‘break’ which would disrupt the metric order is *continuously* realized and, as it were, externalized from an inner space which has no dimension. In a fractal ordering, a dimensional break exhibits rather an unintegrated, *intimate* spatiality. That is to say, the dimension of a fractal system is that quality of space which is aroused by motion. More simply, movement is the evolution (and so coordination) of a self-organizing system. As a position is translated through subspaces, it passes through an infinite number of origins, it attains countless numbers of possible coordinate (dis)locations: space radiates from a motion, time radiates through a space. Space and time are not abstract, distinct quantities, but waves which deterministically interfere, overlap, intertwine and unfold. Fractal space is not just knotted; it is broken, a differential transversal, ‘sublimely’ interconnected. Every position is an infinite sum of partial spaces; every motion is the arising of a new coordination: have we finally arrived at the observer, as the autogenesis of self-organizing space, or perhaps more vividly, of an *autometric time*? At any rate, the observer can only be appropriately considered in the context of a fractal space, as constituting a severance of ordering-rules, or as a bursting of the structural integrity of dimensionality.

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