## Motivation for a Biophysical Metamathematics via Multiply Connected Phase Space

There are really very few original philosophical roots for scientific endeavor. In fact, to put a fine ironic point on the matter, in essence there is only One. Or, perhaps an act which is neurotic distortion whereby the mind willfully turns away from such a method. This turning away is epitomized precisely by a faulty inculcation of fantastic chimeras as science. Such are the notions of thermodynamic and temporal reversibility. To dispel this as pure sophistry at best, it were necessary to recapitulate the principle of the Parmenides dialogue as Cusa has done in Learned Ignorance and the microcosm to macrocosm functional ensemble. (Also see Moses Mendelsohn's Death of Socrates from the standpoint of a Leibnizian reworking of Plato's principle of Deism and immortality.)

Firstly, we can only falsely imagine a walled off division of "space" which is not functionally interacting with the totality of the "universal" space. In our wrongful such imagining, we then compound the error with a false construct of energy potential. That is, for a reversal of so called entropic disorder, we imagine a chimerical isolated event that can supposedly be reversed in forward extension of time. This is patently absurd, as is the equally absurd construct of time reversal, due to the reification of time as the "fourth dimension." (Interpolate Leibniz' principle of the monad as a "window" on the universal substance or more importantly everywhere embedded process of striving for perfection.)

Secondly, this leads directly into the necessary debunking of dimensionality qua dimensionality. While it has been useful to depict multiple dimensions as a tool in the theory of functional space, the idea that we should believe that there are "hidden" physical extra dimensions a la "string theory" is quite frankly infantile poppycock. When we believe that the mere labeling of points in an extended Cartesian coordinate space is somehow a substitute for reality, as Felix Klein appears to have done, we really lose our moorings in an Alice in Wonderland sort of way. In this way, we make several untested hidden assumptions about the essence of what constitutes space. This, by the bye, is why Riemann's dissertation on the groundwork of space is so lastingly "immortal" in the sense given above.

Why should we insist on imagining such points given by a Grassmanian network of simultaneous linear equations in an extended flat entropic multidimensional grid as anything other than purely at best a useful fiction at times? Can anything actually "live" in this at worst nightmarish imaginary domain? (Unfortunately, alas, this is precisely the miasma that high energy theoretical physics terms an elegant universe today.) A related dead end stultification, in this regard is the wrongheaded question of the transfinite power of the numerical continuum. The problem here is that not every such quest will by necessity bear fruit as has the development out of the "imaginary" number field the complex functions. Indeed, it is this idea of "functional space" which gets to the quick of why this is so. The physical continuum can only be properly approached in scientific methodology as distinguished by a capability of producing a necessary existent creative cognitive being, and nothing less than this. As Cusa has so forcefully epitomized there can never be an end of a progression toward the universal principle perfection in this finite

noetic domain. (This, as an aside, is what characterizes the theme to a degree in all art that is truly sublime.)

It is apparent in surveying the current state of biophysical science, in the broad sense, that there is a density of diverse multi-modal functions within the proteome. It is here that a sweeping reorganization of scientific method for the better may be forthcoming. This is so because the mission at its base of saving and perfecting human practice can not so easily be perverted by the malaise of the cult of Schopenhauerian death wish pervading our intellectual "culture" today.