

UnIntelligibility in Quantum Mechanics on the Frontiers of Self-Organization

By **Paolo Manzelli** <pmanzelli@gmail.com> ;<http://www.chim1.unifi.it/group/education/>

ABSTRACT. - (*work-shop in Padua (IT) organized by Paola Zizzi <zizzi@math.unipd.it>*)

Albert Einstein claimed that we do not know what it means to say that **non-local** events are **simultaneous**, because there is no way to propose an intelligible operation in Quantum Mechanics to demonstrate how a signal can be transferred at superluminal speed .

In spite of the experimental impossibility to get faster than light signals, all the **self-organization** phenomena in bio-chemical transformations share, *as a common roots*, the need to understand the role of "**simultaneity**" for sharing information between the two contemporary dynamics : a) disorganize the reactant molecules in fragmented subsets of atom groups, destroying the old equilibria, and b) act to re-assemble, at the same time, a new molecular reorganization in a new equilibria of products.

Erwin Shroedinger (1935) in his booklet on "*What is Life*" proposed a possible solution for "**Simultanean Activity**" in QM , thinking about the Entanglement of quantum particles. Einstein replys defining "*spooky action at a distance*" to describe these situations illogical and inconsistent activities of simultaneity, which exhibit the hypothesis of "**Quantum Entanglement**".

To escape from the dogma of local realism of mechanical science, that today produces radically misunderstanding of the self-organization phenomena of transformation in the Universe, a new kind of experience was proved by **Alain Aspects (1982)** , that permits rethinking the arbitrary basic assumption of the sequential linear dimension of time in space defined through three dimensional coordinates.

In this context of rethinking the space-time matrix , (as it is proposed in various articles of mine, in www.wbabin.net), **Quantum Entanglement** influences the energy-coorganizations between Information , Energy and Matter both in chemistry and biology of quantum information processing.

Henceforth, transformative causation can be understood in terms of "INFORMATION ENERGY", the last is a pure wave-field, produced through the entanglement of quantum particles.

In fact while the collapse of the wavefunction, creates the possibility of the measurement of a three-dimensional particle, at the same time it is disinforming about the position of the complementary wave. Differently the "Entanglement" is an "enforming action" creating a new possibility of **simultanean communication** based on interlinked waves that are able to share "Information Energy" (EI-field), demonstrating a single identity in a " non-local dimension". In fact the physical confinement action connected with the Entanglement is destroying the associated Quantum-particle vanishing of the relative kinetic mass of the particle.

Therefore the (EI "non-local" field) influences also the observability in "self-organizing interactions" between matter, energy and information.

To debate new fundamental ways of thinking of Quantum Bio-Physics about the Self Organization Phenomena in Science and Art see www.EGOCREANET.it and collaborators will organize after

the work-shop in Padua the meeting in Firenze (ITALY) that will be held in Palazzo Strozzi (hall Ferri/VIEUSSEUX), the next 20-21/NOW-2008
see: www.wbabin.net; www.egocreanet.it ; www.edscuola.it/LRE.html