

Abstract Directions of Research **Elizabetha Levin, PhD**

Today time in physics remains a fundamental concept. It is meaningful only at the level of physical bodies, and not at the level of desires, thinking or feelings. Given the multifaceted nature of time, a new view of time should emerge from a variety of disciplines. This interdisciplinary approach is reflected in the studies of Elizabetha Levin (PhD, a member of ISST - International Society for the Study of Time and of *Hamatara Emet*, The Interdisciplinary Science and Consciousness Institute).

1. Time, Temporality, Temporology

In physics, any kind of duration is postulated to have the topology of the real, one-dimensional continuous line. On the contrary, for biologists or historians, time is connected with cycles. In *Space-Time in Highly-Organized Biological Systems* (Levin, 2012) it was argued that when applied to the living systems, both these paradigms are misleading and should be revised in accordance with the open and hierarchic universe in which mankind exists. A new definition of the generalized time has been introduced. Generalized time is defined as a manner of marking the events or processes and a way of arranging, ordering or coordinating them. Such definition allows constructing bridges between quantitative approaches and poetical visions, between "time" as it is seen in physics and "time" as it appears in aging, in chronology, in astronomy and in personal and collective narratives.

2. Biographical Methods and the Effect of Celestial Twins, ECT

The experimental data connected with the Effect of Celestial Twins (ECT) were first published in *Celestial Twins* (Levin, 2006). They show that from the moment of birth, our personal potentials are constrained by the limits of our times (*Zeitgeist*), and those limits are shared by all those (so-called *celestial twins*, CT) who share the same time of birth.

This effect demonstrates that even though each human being is unique, there is an isomorphic matching between the biographical data of members in each and every group of celestial twins. In other words, people who were born simultaneously tend to experience (under certain conditions) seemingly non-causal synchronic correlation of their life paths throughout the entire span of their existence. As a result, it was suggested that the factor of birth time (or "Theta-factor") is an important

temporal factor, which in addition to heredity and environment influences patterns of human development.

3. Long-term cycles and the Clock of the Phoenix.

Based on the extensive historical data over the last 3000 years, the chronological model of the Clock of the Phoenix (first described in *The Clock of the Phoenix*, 2013) shows that at the end of every long-term Neptune-Pluto cycle (with periodicity of about 493 years) the cultural world comes to its critical junction of disruption, the so-called "Hour of the Phoenix." The generations of passionate individuals born during these radical periods of transition (ranging in our epoch from 15 to 30 years) are responsible for setting time-tables for the developing social and cultural "scripts" during the following 493 years. The cross-cultural findings seem to reflect the intrinsic characteristics of the generalized time rather than to be based on more culturally-relative concepts.