

# Time-Entanglement Between Mind and Matter

Primas, Hans (2003) Time-Entanglement Between Mind and Matter.

Full text available as:

[PDF](#) - Requires a viewer, such as [Adobe Acrobat Reader](#) or other PDF viewer.

## Abstract

This contribution explores Wolfgang Pauli's idea that mind and matter are complementary aspects of the same reality. We adopt the working hypothesis that there is an undivided timeless primordial reality (the primordial "one world"). Breaking its symmetry, we obtain a contextual description of the holistic reality in terms of two categorically different domains, one tensed and the other tenseless. The tensed domain includes, in addition to tensed time, nonmaterial processes and mental events. The tenseless domain refers to matter and physical energy. This concept implies that mind cannot be reduced to matter, and that matter cannot be reduced to mind.

The non-Boolean logical framework of modern quantum theory is general enough to implement this idea. Time is not taken to be an a priori concept, but an archetypal acausal order is assumed which can be represented by a one-parameter group of automorphisms, generating a time operator which parametrizes all processes, whether material or nonmaterial. The time-reversal symmetry is broken in the nonmaterial domain, resulting in a universal direction of time for the material domain as well.

**Keywords:** Mind-matter problem / Wolfgang Pauli / Entanglement / Tensed and tenseless time / Time operator / Time-reversal symmetry

**Subjects:** [General Issues: Laws of Nature](#)  
[General Issues: Reductionism/Holism](#)  
[Specific Sciences: Physics: Quantum Mechanics](#)

**ID Code:** 1565

**Deposited By:** [Primas, Hans](#)

**Deposited On:** 12 January 2004

**Additional Information:** Published in "Mind and Matter", vol, 1 (2003), pp.81-119