

Transdisciplinarity and systems thinking

The main message of the lecture is that systems thinking is the ideal scientific framework for enabling disciplines to go transdisciplinary (not least for conceptualising informatics as part of a bigger picture – a science of information). Transdisciplinarity has three characteristics: a praxiological one, an ontological one and an epistemological one, which are: including stakeholders through participatory opportunities in research and development as well as the diffusion of innovations; recognising interdependencies between phenomena across space (long-range effects), time (long-term effects), and matter (side effects); and constructing a common code that accomplishes translations from one domain into another one. By providing meaningful implementations of a new *weltanschauung* (world view), a new scientific world picture, and a new way of thinking, systems thinking is in the position to facilitate the transdisciplinary endeavour and to transform disciplines into transdisciplinary systems sciences.

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