

---

## *A new network logic?*

A presentation on 23 Feb. 2010 , at GUT, EA 122, 12:15-13:00  
by Robert Beckett, M.B.A., B.A.

Research Associate at the Centre for Computing and Social Responsibility,  
De Montfort University. UK.

---

Manuel Castell's (2000) argues that 'network logic', is necessary to confront informational complexity in 'network societies'. Unfortunately, he leaves his concept largely unspecified.

This presentation theorises such a logic, founded in the work of transdisciplinary writers, Basarab Nicolescu (2002) and Edgar Morin et al (2008). These writers have re-conceptualised a limiting 'classical logic', while identifying possibilities for the emergence of 'multi-modal logics' that directly respond to the complexities of 'informationalism'.

Soft, or modal logics can now be designed and operationalised within computing environments due to the increased capacity of programmes to visualise and conceptualise network complexity, thus enabling calculation of heuristics such as symmetry/asymmetry, multiplicity/singularity, statistical and stochastic, etc.

A network logic is a critical tool for design and construction and importantly, integration of an almost infinite variety of neural, social and natural networks and for the interconnected construction/deconstruction of semantic meaning. Thus a macro and micro logics require to operate in sequence/parallel across both technological and social domains.

Social networks are no less important for the new network logic, with the recent success of online social networks suggesting that users want to self-define and control their own learning through open logical approaches. Thus, the emphasis is on programming environments that offer users integrated heuristic tool-sets that work across multiple platforms.

The conclusion of this 'theoretical' presentation is that we are only at the beginning stages of a profound revision of classical logic, that will offer new design criteria for the integration of complex, multimodal networks built on logical openness.

---

Castells, M. (2000). *The Information Age: Economy, society and culture: Vol. 1. The Rise of the Network Society*. 2<sup>nd</sup> Edition. Oxford, UK: Blackwell.

Nicolescu, B. (2002). *Manifesto of Transdisciplinarity*. Translated from the French by Karen Claire Voss. Albany: State University of New York Press.

Nicolescu, B. (2008). *Transdisciplinarity: Theory and practice*. Edited by Basarab Nicolescu. Cresskill, NJ: Hampton Press.