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Abstract:

This study summarises the methodological aspects of the most important computerised world models and describes their prospects for the near future. Throughout the three stages of the evolution of world modelling, the development of computer technology has had a definitive role, hence this study regards computer technology as a framework of world modelling. The first evolutionary stage is related to the spread of IBM computers at the beginning of the 1970s, its milestone being the model published in The Limits to Growth (Meadows et al. 1972). With the spread of desktop computers in the second stage, world models that could run on PCs appeared; the first one being MicroIFs (International Futures) in the second part of the 1980s. The third wave was generated by the proliferation of the Internet and the continuing acceleration of the processing speed of computers. Models have become downloadable, virtually simultaneous processing options enable multi- agent-based simulations. As a result of these, models can be extended with the analyses of dynamic and emergent phenomena. Recent methodological concepts and trends promise new theoretical synthesis of world modelling.