

Open Simulation for Global Shift
Tools for opening mindsets?
Take #2

On occasion of the XV International Colloquium organized by
the World Academy of Art and Science (WAAS), Université Paris 13, Universidade de
Brasília and the World University Consortium (WUC)

Co-organized by Carlos Alvarez Pereira and Robert Hoffman,
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The workshop was conducted with the attendance of a qualified audience of thinkers and practitioners. It followed the reflections initiated in Vienna in November 2017 to promote a paradigm shift in the foundations of modelling and how it is used for policy assessment. This shift is made necessary by the unsustainabilities of modern human civilizations, which call for a socio-ecological transformation before deepening into collapse and tragedy. Such a transformation needs to start in the way we conceive reality, shifting from Newtonian to evolutionary systems views. Instead of the conventional story-telling of evolution going linearly in a purposeful direction, we should assume the unpredictable nature of complex evolutionary systems, shaped as they are by the interactions with biophysical limits and also by how we make choices. Unpredictability is what makes possible to open the futures and give to human choice a relevant role in building desirable ones. From that point, open simulation can be effectively used as a tool to educate ourselves in the complexity of our relationships with biophysical limits. By reconnecting the planes of physical and social sciences and the realm of humanities, we can move from a hopeless situation to a space of infinite potentialities. The workshop discussed the conditions to engage in a new kind of simulation exercise, a Minimum Useful Model (MUM) designed to simulate the stocks and flows of human economies at a global level and in relationship with their biophysical limits. Next step of this activity is to convene a community of interested parties in the implementation of such a model for educational purposes.