

TÄLLBERG FOUNDATION

From Systems Thinking to Systems Doing

19th January, 2010, at 15.30-18.30, IVA Conference Center, Stockholm

The objective of this seminar is to highlight the need for the application of systems approach to problem solving as opposed to more reductionist approaches. We have invited W. Brian Arthur of the Santa Fe Institute for studies of complex systems to present his new groundbreaking book, “The Nature of Technology”. Brian W. Arthur has established himself as one of the worlds leading systems thinkers and practitioners. We will also, at this seminar, take a close look at systems thinking in earth sciences and in industrial situations.

With the rise of globalization the world is re-organizing itself as complex, interdependent and adaptive systems, be they financial, economic, industrial, logistical or markets. Still, many of our approaches to govern the risks that globalization entails are basically still embedded in a world organized according to concepts like sovereignty, conflict of interest and independence.

Copenhagen illustrates graphically the point in case. Climate change and the interconnected destabilization of eco-systems can, we believe, only be resolved by a systems approach addressing the interdependences and interactions of the components of these complex systems. This is not a problem that lends itself to political compromises based on economic, political or military power positions.

As the world is transforming itself into tight, global interdependences, we are left with no other choice than to adapt our constitutional forms to deal with the issues on a systems level.

“Our deepest hope as humans lies in technology; but our deepest trust lies in nature. These forces are like tectonic plates grinding inexorably into each other in one, long, slow collision. This collision is not new, but more than anything else it is defining our era. Technology is steadily creating the dominant issues and upheavals of our time.”

The quote above, from W. Brian Arthur, keynote speaker at this seminar “From Systems Thinking to Systems Doing”, unveils a critical analysis for our time. As the wonders of the fossil fuelled industrial revolution dramatically transform into the dangers of climate change, our hope is threatening our trust.

Could it be that the way we developed our technological infrastructure was wrong, and that too much has been excluded from the equations of our engineers? Have the systems, in which they have become so expert, not been whole? Has the dichotomy between technology and nature been too great – and perhaps false – in that there should be no division of our technological systems from nature? If the two are understood as one and the same system, may some of the collisions be avoided?

If the dominant system is the “Whole”, should human development be based on harmonisation between nature and our many, increasingly powerful technologies?

This seminar will, together with Professor W. Brian Arthur, tackle these questions and ask, Would systems thinking, and a transformation of this into “Systems doing” bring our hope and our trust closer together? And is this the road our of today’s converging crises of ecosystem dysfunction, social inequality and financial instability?

Other speakers at the seminar will be Bo Ekman of the Tällberg Foundation and Dr Graham Barnes of Inform. They will reflect on the evolution of systems thinking and on the scientific legacies of two legends in the field: Dr Gregory Bateson and Dr Russel Ackoff.

After a coffee break Dr Johan Rockström, Stockholm Environment Institute, will reflect on From Copenhagen to Systems Thinking – using a systems approach to his analysis. He will be followed by an industrial case where systems approach has benefited productivity and profitability.

The afternoon will be closed by an open panel discussion, moderated by Ulla-Britt Fräjdin-Hellqvist, Chairman of the Swedish Foundation for Strategic Research.

Program

15.30 Welcome
Ulla-Britt Fräjdin-Hellqvist, Chairman, Swedish Foundation for Strategic Research

Introduction
Björn O. Nilsson, President, IVA

The Evolution of Systems Thinking - The Legacies of Gregory Bateson and Russel Ackoff
Bo Ekman, Chairman, Tällberg Foundation and Graham Barnes, Inform

The Nature of Technology
W. Brian Arthur, External Professor, Santa Fe Institute

16.45 Break

17.15 From Copenhagen to Systems Thinking
Johan Rockström, Executive Director, Stockholm Environment Institute

Industrial Case
Peter Anderberg, Managing Director, LOGSTOR

Panel Discussion & Questions
Moderator, Ulla-Britt Fräjdin-Hellqvist

18.30 Closure
Bo Ekman and Björn O. Nilsson