



Herbert A. Simon
International Society

In collaboration with Master in Economics and Complexity of the Collegio Carlo Alberto
and University of Turin

International Workshop

Adaptive and Ecological Rationality in Complex Environments

December 16th and 17th 2015

Campus Luigi Einaudi
Lungo Dora Siena 100 - Turin

PROGRAMME

16th December

Room C4

3.00 p.m.

Welcoming Remarks and Introduction

Pietro Terna President, Collegio Carlo Alberto

Chairman

Magda Fontana University of Turin and
Master in Economics and Complexity of the Collegio Carlo Alberto

3.15 p.m.

Keynote speech

Gerd Gigerenzer

Max Planck Institute for Human Development, Berlin
President, International Herbert A. Simon Society

4.00 p.m.

Discussion

4.20 p.m.

Selected papers for the WS

5.20 p.m.
Coffee break

5.35 p.m.
Selected papers for the WS

6.35 p.m.
General Assembly of Herbert Simon Society

7.15 p.m.
End of the Assembly

17th December
Room D5

9.00 a.m.
Introduction and Chairman
Massimo Egidi Vice President, Herbert Simon Society and LUISS, Roma

9.10 a.m.
Selected papers for the WS

11 a.m.
Coffee Break

11.15 a.m.
Selected papers for the WS

1.30 p.m.
Conclusion



Herbert A. Simon
International Society

International Herbert A. Simon Society

The Herbert Simon Society brings together cognitive scientists, economists, social scientists and philosophers aiming to renew the fundamental concepts of rationality and social action. Starting from the seminal work of Herbert Simon in economics, psychology, computer science, organizational theory, philosophy of science, the HSS wishes to tackle the current debate about the crisis of economic and social rationality, the alternative architectures of mind, the mind-brain relations and the simulation of creativity.

1) Introduction

What is Bounded Rationality (Simon, 1956; Gigerenzer and Selten, 2001)? Simon's metaphor of the pair of scissors is the best representation of the concept and of the connected naturalizing nature of the research program. One blade is the nature of our reasoning and decision making processes with all its limits in computation and time and the other blade is the nature of the environment, with all its complexity. The first blade is characterized by limited features compared to the ideal optimization model. The second is characterized by a changing complex structure. Sometimes the first blade fits with the second and those rational scissors work, but sometimes this does not happen. The rationality, that is the ability of the scissors to cut, is bounded by the fitting of one blade, that is reasoning and decision making, with the other blade that is the environment. Fitting, in other words, means adaptive choices in a given environment. Therefore, bounded rationality is a research program aiming to discover what are the natural specific decision rules that are adaptive in specific different environments. From this point of view, the natural decision rules of bounded rationality are the only rules that can be labeled as rational in a prescriptive meaning. Their label of rational is obviously non universal but local to the specific environment or problem space where the rule is adaptive. In other words human beings are often, but not always, bounded rational. Actually, sometimes they are also irrational, that is when their choice is not adaptive to the environment because they don't use the specific natural rule of bounded rationality that is suitable for the particular environment.

Economics and organizational studies have been mainly the dominion of the application of bounded rationality. Actually, the application of bounded rationality is much more wide and inclusive. It covers any field that implies human choice. The adapting features of bounded rationality should deal with many disciplines that usually are outside the field, such as developmental psychology, social psychology, psychopathology, evolutionary psychology, complexity sciences and cognitive anthropology. These different areas could help deepen aspects of bounded rationality and might also be very useful in their application to the field of economics.

FOUNDING MEMBERS

Kenneth Arrow (Stanford Univ.); **Mie Augier** (Stanford Univ.); **William Baumol** (New York Univ.); **Philip Bromiley** (Univ. of Minnesota); **Richard Day** (Univ. of Southern California); **Giovanni Dosi** (Sant'Anna School of Advanced Studies, Pisa); **Peter Earl** (Univ. of Queensland); **Massimo Egidi** (LUISS, Rome); **Edward Feigenbaum** (Stanford Univ.); **Shane Frederick** (Massachusetts Institute of Technology); **Gerd Gigerenzer** (Max Planck Institute for Human Development, Berlin); **Yuji Ijiri** (Carnegie Mellon Univ.); **Daniel Kahneman** (Princeton Univ.); **David Klahr** (Carnegie Mellon Univ.); **Kenneth Kotovsky** (Carnegie Mellon Univ.); **Pat Langley** (Stanford Univ.); **Axel Leijonhufvud**

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