

Innovative Public Policy and the Role of Complexity Science

Recent economic events have deeply shaken the socioeconomic systems all over the world. As policy makers are being asked to provide remedies a growing concern is mounting about the fact that the approaches used so far simply are ineffective and do not work any longer.

While the dissatisfaction about the so called standard model has been recently acknowledged also in an institutional arena[1], the feeling that a change of paradigm is needed to deal with human organizations and their behaviors has been around for some time by now.

Indeed over the last fifty years a number of epistemological, technological and cultural changes have occurred which have progressively dismantled many of the underlying axioms of conventional approaches to human activity systems, such as perfect rationality, equilibrium and linearity. As the system complexity features have become increasingly apparent, a flourishing number of studies have been carried out in different domains to investigate their building blocks and production processes. Scientists in physics, geography, computer science, sociology, economy and management, have engaged to provide insights into how human behaviors, organizations, social norms and cultural institutions encroach in and superimpose one another, generating novel organizational patterns and evolution paths.

A policy activity which purports to give advantages to human systems' well being cannot neglect these novel features. Today societal transformations, such as those brought about by globalization, ICT impacts, sustainability and democratic progress, add further stimuli policy approaches cannot overlook. Concerns about efficiency, effectiveness and equity therefore need to be extended to include additional issues, such as citizen participation, ethics, peer-to-peer communication and responsibility in resource generation.

As the complexity of policy design and management has to match the complexity detected in the human activity systems, it is increasingly apparent that the current policy production process shall change; it has to align itself with the transformations occurring in society but also engage in leveraging those more socially viable.

Although there is plenty of evidence for this need, the ways by which policy activity have to transform (innovate itself !) raise challenging questions in a peer extended community, where both scientific and lay knowledge are involved, i.e.:

1. *Enhancement of the capability* in linking expectations, aims and outcomes of policy initiatives: policy makers are more and more required to have both an external point of view (understanding dynamics and features of the policy landscape) on problems and an internal perspective (re-aligning public organizations, improving social participation, sharing information) to integrate a top-down and bottom-up perspective;
2. *Innovative spur*: policy effectiveness calls for innovative procedures, foresights in detecting criticalities and creativity in problem solving, while having to comply with (or modify) existing normative rules and practices;
3. *Societal outcome*: policy evaluation and accountability need to be reinterpreted within a learning process able to support also by means by ICT empowered networks, management and control, whereby the system is not a passive but an active recipient.

This Special Issue E:CO would like to take the challenge and be a catalyst for the many interdisciplinary research efforts which are already being undertaken to address these questions in the light of complexity science. In fact, all members of a peer extended community who care to

improve policy activity for the sake of humanities progress should feel concerned. We therefore highly welcome contributions from the complexity science community as well as from other fields such as cybernetics, system theory, hard sciences, cognitive science, computer science, organization and management science, philosophy, political science, sociology and economics.

Contributions (max 20 pages) should be broad in scope and have both theoretical and practical relevance, with special attention to real world problems. Moreover, to be of interest to policy makers and appealing for an interdisciplinary audience, contributions dealing with general approaches and case study are both welcome. Formal and meta-models, as well as computer programs and simulations, meant to make it easier the understanding and communication of more abstract concepts are valued.

Dead lines:

1. Submission: June 15th, 2012 (please adhere to the submission guidelines at <https://emergentpublications.com/ECO/submissions.aspx>);
2. Revised version: October 30th, 2012;
3. Publication December 31st, 2012.

Please send all submissions to both Dr. Sylvie Occelli (occelli@ires.piemonte.it) and Dr. Simone Landini (landini@ires.piemonte.it). If you intend to submit, please send an email, with a short abstract to Sylvie as soon as possible.

NOTES

[1] See the statement by Jean-Claude Trichet at the 2010 Annual European Central Bank Conference. *“As a policy maker during the crisis, I found the available models of limited help. In fact, I would go further: in the face of the crisis, we felt abandoned by conventional tools”*.