■ *Editorial*

This special issue of *Systems Research and Behavioural Science* concentrates on a particular aspect of social problem solving: collaborative conflict resolution. Conflicts of perspectives, beliefs, interests and/or values are now widely regarded as one of the major sources of problematic situations. In recent decades, collaborative problem solving amid conflicts has become a shared focus of many disciplines of research and practice. This special issue is selected from some 40 submitted proposals and eventually includes eight research papers plus two case studies. With it, we do not claim a comprehensive presentation; rather, we wish it could supply the systems community a stimulating snapshot of the fast-moving challenges and diverse efforts in this increasingly significant applied area.

The first five papers present theoretical or empirical studies on collaborative conflict resolution in different application domains: natural resources management, airport governance, urban planning and conflicts in organizational, societal and international settings.

In 'Lessons from the Trenches: Twenty Years of Using Systems Thinking in Natural Resource Conflict Situations', Steven E. Daniels and Gregg B. Walker provide a retrospective overview of two decades experience in employing systems thinking to design and facilitate processes of natural resource management. After introduce the context for understanding the complexity, controversy, uncertainty of natural resource conflicts, they outline their device—collaborative learning methodology. The paper also reflects on the important lessons from practices, and highlights the use of situation mapping tools in this methodology.

Arwin van Buuren, Frank Boons and Geert Teisman's paper 'Collaborative Problem Solving in a Complex Governance System: Amsterdam Airport Schiphol and the Challenge to Break Path-dependency', argues that in complex and compounded governance system, the high degree of self-organizing capacity of actors has been neglected in previous studies. By comparing the processes and consequences of two collaborative governance attempts of Amsterdam Schiphol Airport, the paper posits that the impact of collaborative governance is influenced by the way in which collaborative attempts are organized and connected to the other parts of the governance system.

'Recognizing Uncertainty and Linked Decisions in Public Participation: A New Framework for Collaborative Urban Planning', by Arnab Chakraborty, takes the readers on a journey through a framework that explicitly recognizes uncertainties and issues of problem framing/analysis. Taking a controversial road extension project in Urbana (Illinois) as an illustrative exercise, the author argues that such considerations can help to identify commonalities among stakeholders, advance collaborative planning, and remove biases of insular single-future driven analysis or position-based discussions.

Mediation is widely used during the transformation of destructive large-scale conflicts. In his informative review paper 'Mediation in Conflict Systems', Louis Kriesberg takes conflict as a system and the institutionalized regulation of social conflicts as a dispute resolution system. He investigates a great variety of mediation services and the diversity of categories of mediators. With illustrative cases examined, the paper presents how mediation can possibly contribute to transforming a highly adversarial relationship into a more collaborative one.

Zhenjiao Chen, Xin Qin and Douglas Vogel's contribution, 'Cooperation is a Panacea? The Effect of Cooperative Response to Task Conflict on Team Performance', focuses on conflict, cooperation and performance in organizational

context. They try to explore how and when cooperative response to task conflict increases team performance. Based on a survey of 71 Chinese work teams, the empirical study explains the inconsistent effects of cooperation on team performance, validates the mediating effect of 'knowledge integration' as well as the moderating effects of 'need for cognition' and 'resource interdependence'.

The following two papers are related to group model building (GMB). As a popular topic of systems research in recent years, GMB contributes a collaborative approach for stakeholders to collectively construct policy-oriented system dynamics models.

In their paper 'Group Model Building "Scripts" as a Collaborative Planning Tool', Peter S. Hovmand, David F. Andersen, Etiënne Rouwette, George P. Richardson, Krista Rux and Annaliese Calhoun describe how scripts can be used as a tool for helping facilitation teams to visualize and solve problems in the design of GMB sessions. Moreover, they introduce *Scriptapedia*, an effort to document GMB scripts, which can be used to design more effective GMB sessions that address cultural and ideological barriers to collaboration. A practical case is presented to illustrate the use of *Scriptapedia* and scripts.

Laura Black and David F. Andersen's paper, 'Using Visual Representations as Boundary Objects to Resolve Conflict in Collaborative Model-Building Approaches', suggests that visual representations can play a critical role in the collaborative process of model-building approaches. By using a sociological theory of boundary objects, the authors argue that when visual representations function as 'boundary objects' they can promote collaboration in conflict situations. The authors also employ three vignettes to discuss the conditions in which visual representations can help to build collaboration.

The next research paper 'Learning from Conflict Resolution: An Opportunity to Systems Thinking', from Ya Li, Zhichang Zhu and Catherine M. Gerard, attempts to build a bridge between the two disciplines: conflict resolution (CT) and systems thinking (ST). The paper first introduces the systems community to the developments and achievements of CR. After

an investigation of the similarities between CR and ST, the paper highlights three insights that ST can beneficially gain from CR: deepening understanding of systems complexity; enriching the understanding of the variety of intervention and expanding the application of ST in urgent global issues.

The special issue ends with two case studies. The first, 'The Grit that Makes the Pearl: Collaborative Problem Solving in the Midst of National Crisis', by Indianna D. Minto-Coy, investigates the successful collaborative governance efforts in the midst of a nation-wide social-economic crisis in Barbados in 1990s. As the real world is currently suffering from severe economic difficulties, the 'social partnership approach' illustrated in this case study is particularly timely.

The other case study 'Resolving Forest Property Rights Disputes in China: The Bailian Case' by Zhen Lin, Fan Dai and David A. Sonnenfeld, examines a forest property rights dispute occurred in southeast China. Unlike the success story in the Barbados case, this case study presents how a dispute evolved into violence and discusses the essential factors that led to the failure.

We are delighted to see the rich diversity in the contributions: in the special issue there are overall reviews, theoretical analysis, empirical studies and case reports. Geographically, the contributors come from both developed and developing countries/region, the West and the East, which include Barbados, China, Hong Kong, the Netherlands, the United Kingdom and the United States. In terms of research discipline, the authors spread across sociology, communication, social work, public administration, public policy, urban/regional planning, organizational behaviour, corporate strategy, environment, forestry and ecology.

In our view, the diversity is a vivid evidence of the wide spread and deep penetration of the research and practice on collaboration/conflict. By presenting this issue to the readers, we wish to bring fresh thoughts to the systems community and to set collaborative problem solving amid conflict firmly on systems research agenda.

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