

Handbook of Group Decision and Negotiation

Advances in Group Decision and Negotiation

Volume 4

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The book series, *Advances in Group Decision and Negotiation* — as an extension of the journal, *Group Decision and Negotiation* — is motivated by unifying approaches to group decision and negotiation processes. These processes are purposeful, adaptive and complex – cybernetic and self-organizing – and involve relation and coordination in multiplayer, multicriteria, ill-structured, evolving dynamic problems in which players (agents) both cooperate and conflict. These processes are purposeful complex adaptive systems.

Group decision and negotiation involves the whole process or flow of activities relevant to group decision and negotiation – such as, communication and information sharing, problem definition (representation) and evolution, alternative generation, social-emotional interaction, coordination, leadership, and the resulting action choice.

Areas of application include intraorganizational coordination (as in local/global strategy, operations management and integrated design, production, finance, marketing and distribution – e.g., as for new products), computer supported collaborative work, labor-management negotiation, interorganizational negotiation (business, government and nonprofits), electronic negotiation and commerce, mobile technology, culture and negotiation, intercultural and international relations and negotiation, globalization, terrorism, environmental negotiation, etc.

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Editors

Handbook of Group Decision and Negotiation

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Preface

Publication of the *Handbook of Group Decision and Negotiation* marks a milestone in the evolution of the group decision and negotiation (GDN) field. On this occasion, editors Colin Eden and Marc Kilgour asked me to write a brief history of the field to provide background and context for the volume.

They said that I am in a good position to do so: Actively involved in creating the GDN Section and serving as its chair; founding and leading the GDN journal, *Group Decision and Negotiation* as editor-in-chief, and the book series, “Advances in Group Decision and Negotiation” as editor; and serving as general chair of the GDN annual meetings. I accepted their invitation to write a brief history.

In 1989 what is now the Institute for Operations Research and the Management Sciences (INFORMS) established its Section on Group Decision and Negotiation. The journal *Group Decision and Negotiation* was founded in 1992, published by Springer in cooperation with INFORMS and the GDN Section. In 2003, as an extension of the journal, the Springer book series, “Advances in Group Decision and Negotiation” was inaugurated.

The journal and book series are motivated by unifying approaches to GDN processes. These processes are purposeful, adaptive and complex – cybernetic and self-organizing – involving purpose, relation, communication, negotiation and decision in multiplayer, multicriteria, ill-structured, evolving, dynamic problems in which players (agents) both cooperate and conflict. In short, this is problem solving by purposeful complex adaptive systems. Approaches include (1) computer GDN support systems, (2) artificial intelligence and management science, (3) applied game theory, experiment and social choice, and (4) social and cognitive/behavioral sciences in group decision and negotiation.

The four departments of the journal are organized around these four approaches. Led by Editor-in-Chief, Melvin F. Shakun, *Group Decision and Negotiation* greatly benefits from the knowledge, expertise and work of its senior, departmental and associate editors. The fundamental source of its high quality is collectively the authors of its papers. Now in volume 19 (2010), the journal publishes six issues and approximately 600 pages annually. Starting with volume 20 (2011), the number of pages will increase by about 25%.

The *Handbook of Group Decision and Negotiation* is part of the book series, “Advances in Group Decision and Negotiation”. Other volumes in the book series so far concern cultural differences in resolving disputes, computer-aided international conflict resolution, multicultural teams, and an upcoming book on negotiation and e-negotiation.

Before the year 2000, GDN Section meetings were always part of INFORMS meetings. For the millennium and intended as a one-time event, the Section decided to have a meeting of its own. A very successful stand-alone meeting, GDN 2000, was held in Glasgow, Scotland, United Kingdom. The excellent papers, increased connect-edness among participants facilitated by a smaller meeting, and resulting professional synergies motivated a spontaneous move to hold a similar-type meeting in 2001. La Rochelle, France was selected as the site for GDN 2001. Meetings GDN 2002 through GDN 2010 followed with some being held as a meeting-within-a-meeting at larger INFORMS-affiliated meetings. The complete list of meetings from GDN 2000 to GDN 2010 is as follows:

GDN 2000, Glasgow, Scotland, United Kingdom
GDN 2001, La Rochelle, France
GDN 2002, Perth, Western Australia, Australia
GDN 2003, Istanbul, Turkey (as part of EURO-INFORMS 2003)
GDN 2004, Banff, Alberta, Canada (as part of CORS-INFORMS 2004)
GDN 2005, Vienna, Austria
GDN 2006, Karlsruhe, Germany
GDN 2007, Mont Tremblant, Quebec, Canada
GDN 2008, Coimbra, Portugal
GDN 2009, Toronto, Ontario, Canada (part of CORS-INFORMS 2009)
GDN 2010, Delft, Netherlands

The GDN Section meetings generally have been partnered with the EURO Working Group on Decision and Negotiation Support, and the EURO Working Group on Decision Support Systems. Often special issues of *Group Decision and Negotiation* have come out of the GDN meetings.

The INFORMS-GDN Section Award (Certificate) honors leading contributors to GDN research, teaching and the profession. When given, it is presented at the GDN meeting banquet for that year. Award recipients to date are as follows: Melvin Shakun (2004), Gregory Kersten (2005), Marc Kilgour (2007), Colin Eden (2008), Gert-Jan de Vreede (2010).

This brief history is dedicated to all of us: Colleagues who individually and collectively have made history in evolving the GDN field.

New York, NY

Melvin F. Shakun

About the Editors

D. Marc Kilgour is Professor of Mathematics at Wilfrid Laurier University, Research Director: Conflict Analysis for the Laurier Centre for Military Strategic and Disarmament Studies, and Adjunct Professor of Systems Engineering at University of Waterloo. His main research interest is optimal decision-making in multi-decision-maker and multi-criteria contexts, including deterrence and counter-terrorism, power-sharing, fair division, voting, negotiation, and infrastructure management.



Colin Eden is Associate Dean and Director of the International Division of the University of Strathclyde Business School. He is Professor of Strategic Management and Management Science. His major research interests are into the relationship between operational decision making practices and their strategic consequences; the processes of strategy making in senior management teams; making strategy; managerial and organisational cognition; 'soft OR' modeling approaches and methodologies, including particular emphasis on the role of cognitive mapping; the theory of consultancy practice; the process and practice of 'action research'; and the modelling of the behaviour of large projects disruptions and delays, including issues of the dynamics of productivity changes, and learning curves; and the use of group decision support in the analysis, negotiation and making of strategy.



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