Panel Proposal: System Dynamics Research in Conflict, Defense, and Security

The recent attempted or actual overthrow of long incumbent governments in Egypt, Iran, Libya, Algeria, and Tunisia, the continuing engagement of Western powers in a number of counterinsurgencies, and a rise in global religious, nationalist, narco- and cyber-terrorism have highlighted the continuing importance of modeling conflict, defense, and security issues. System Dynamics, because of its ability to integrate political, organizational, and material factors, is ideally suited as a vehicle to investigate these great problems. This potential, however, contrasts greatly with the relative sparseness of academic publications in this area.

The goals of this panel are:

1. Identify specific conflict, defense, and security (CDS) issues that system dynamics academics should be researching and publishing. In particular, are there specific aspects of CDS that need special attention, which have been neglected in the past?
2. Encourage academic research in the CDS area, particularly by discussing the upcoming System Dynamics Review special issue on "Modeling and Simulation of Terrorism and Insurgency Movements."
3. Highlight those areas of system dynamics "wisdom" that is not part of the conventional wisdom with respect to CDS issues.
4. Identifying the barriers to conducting quality system dynamics research in this area.
5. Discussing how best to share data and insights, such as through a model repository.

The panel is composed of several distinguished panelists, all of whom have conducted research in these areas, including Joel Bagnal, Senior Vice President—Cybersecurity of L3 Communications, Dr. Igor Frolow of 21st Century Technologies, Dr. Ignacio Martinez-Moyano of Argonne National Labs, Professor Geoffrey Seaver of National Defense University, and Colonel Todd Chamberlain of U.S. Army's Training and Doctrine Command, with Professor Edward Anderson of the University of Texas as the panel's moderator.