Gaming the (semi-)cooperative: peace operations, HADR, and beyond

Rex Brynen
Department of Political Science, McGill University
senior editor, PAXsims

Background

Professor of Political Science, McGill University
- Middle East politics
- peace operations, humanitarian assistance

Other stuff
- policy staff, Department of Foreign Affairs
- intelligence analyst, Intelligence Assessment Secretariat
- senior editor, PAXsims (http://www.paxsims.org)
- game designer
- hobby wargamer
Background

my games typically address topics such as:
- complex multidimensional peace operations (Brynania/educational)
- humanitarian assistance/disaster relief (AFTERSHOCK/educational)
- refugee policy (Lebanon/educational)
- refugee policy (UN/analytical)
- peace negotiations (MEEP/analytical)
- political transition (Libya/analytical)
- intelligence analysis (ISIS/analytical)
- mass atrocity prevention (ISIS/analytical)

Most traditional Blue on Red kinetic wargames
growth in cooperative games

- how does one get players to “semi-cooperate”?
- delicate balance between cooperative and adversarial play

Source: Leacock 2016, using data from BoardGameGeek
What might be termed a “game theoretic approach” generates semi-cooperation through the assignment of extrinsic payoffs, explicit objectives, and/or player scores.

Limited information can also be used to induce conflict in otherwise cooperative settings (and vice-versa).

Examples:
- defection and cooperation in Prisoner’s Dilemma
- dual scoring in AFTERSHOCK
- player briefings in Brynania
- demographic data in ISIS CRISIS

Increased danger of “minimaxing” and “gamer mode” (Frank 2012).

Game research on the intrinsic vs extrinsic rewards and games-based learning suggests that the latter can distort learning outcomes.

The artificiality of an explicit reward can damage the game narrative (the problem of being forced to cooperate, or to conflict).

Research into game play suggests important role of social interaction as player goal.
challenges and issues

- Player orientation to utility maximization/extrinsic rewards is shaped by normative preferences, socialization, culture, and experience.
- Robust evidence from large number of studies of ultimatum and dictator games in experimental economics and psychology that participants do not maximize (game theoretic) material gain.
- Organizational and professional cultures are at least as important (and possibly more important) as other socialization factors.

professional subculture and game-play

- Economists (Bauman 2012)
  - more likely than others to free-ride
  - less generous offers in Dictator Game
- Military officers:
  - inclined to action (even when no clear incentive)

<table>
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<td>90</td>
</tr>
<tr>
<td>Military</td>
<td>4</td>
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- The AFTERSHOCK experience
  - Texan IR students vs Canadian IDS students
challenges and issues

Research strongly indicates that player behaviour varies dramatically depending on the framing of a game.

Figure 1: Peer review and overall cooperation in the Community Game versus Wall Street Game by associated “most likely cooperators” and “most likely defectors” (Study 1).

(player psychology)

What might be termed a “player psychology approach” manipulates non-material factors to shape the way players conflict and cooperate.

Peter Perla and ED McGrady (2011) on the importance of constructed, immersive narrative on wargame design.
limited information can be used to generate internalized senses of injustice.
- demographic data in ISIS CRISIS and BRYNANIA

- time pressures and sense of crisis may simultaneously produce bonding and friction
- timed version of AFTERSHOCK

- physical environment may be manipulated to generate appropriate game orientations
- Chatham House refugee negotiation exercise

player assignments may be socially engineered to produce friction or cooperation

- Sunni-Shiite tensions in ISIS CRISIS

- The impact of player personalities/styles/knowledge—and hence player selection—may be one of the most important, yet least addressed, aspects of analytical game design.

- White cells and game facilitators may also subtly manipulate cooperation/conflict through interaction with players.
tips from the toolbox

“fluff” and “chrome” matter too
- helps generate sense of national/ethnic/organizational identity
- fosters engagement of moral and normative values
- encourages responsibility to (fictional) subordinates/constituents

final comments

Important insights from experimental social science.

Both game theoretic and psychological approaches can and should be used to sustain limited cooperation.

The value of synergy in game design can get lost in the art vs science debates which are still characteristic of many debates over the analytical value of wargaming.

There is considerable value in identifying and sharing useful tricks and tools.
https://paxsims.wordpress.com/aftershock/

http://standupeconomist.com/are-economists-selfish-a-lit-review/


