The Uses of Simple Games

OPD Event
US Army War College, The Ether
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[image: Nanda van Dijk]
Once over lightly…

- The value of simple games
- Simple games develop innovative minds
- An application of simple games
- Slides: http://brtrain.wordpress.com/
1. Two rules for game design:

- Keep it simple.
- Plagiarize.
“In anything at all, perfection is finally attained not when there is no longer anything to add, but when there is no longer anything to take away.”

- Antoine de Saint-Exupery
"The Game of Chess is not merely an idle amusement; several very valuable qualities of the mind, useful in the course of human life, are to be acquired and strengthened by it, so as to become habits ready on all occasions; for life is a kind of Chess....

By playing at Chess then, we may learn: 1st, **Foresight**, which looks a little into futurity, and considers the consequences that may attend an action ... 2nd, **Circumspection**, which surveys the whole Chess-board, or scene of action: - the relation of the several Pieces, and their situations; ... 3rd, **Caution**, not to make our moves too hastily...."
Memory, pattern recognition and manipulation

Decision making with incomplete information

Appreciation of asymmetry and different perspectives
“Wargaming as a Catalyst for Innovation” (Downes-Martin)

“...we are looking for the characteristics of a game that, in a person, would correspond to INTELLIGENCE, COMPULSIVITY and PARANOIA, and for methods to design such characteristics into wargames.”
Intelligence

WHAT IF...?
Compulsivity

WHAT ELSE...?
Paranoia

WHAT NOW...?
Mission

Global ECCO's (Education Community Collaboration Online) mission is to build and strengthen the Regional Defense Fellowship Program's (RDFP) global alumni network of Combating Terrorism (CbT) experts through innovative and engaging technologies and techniques that both enable and encourage collaborative partnership between individuals, nations, organizations, and cultures.

Learn More

Global ECCO Events

- **8 Sep**
  - Strategic Gaming Facilitation: Cyberstrike
  - Advanced — Naval Postgraduate School
  - Online
  - From: Sep 8 - Sep 10

- **9 Feb**
  - Strategic Gaming Facilitation: CyberStrike — Naval Postgraduate School
  - Online

- **26 Jul**
  - Strategic Gaming Facilitation: Contagion — FBI ILEA
  - Online
  - From: Jul 26 - Jul 30

- **9 Dec**
  - Strategic Gaming Facilitation: Dark Networks — FBI ILEA
  - Online
  - From: Dec 9 - Dec 10
Global ECCO has developed 12 strategic gaming campaigns focused on counter-terrorism, terrorist financing, cyberwarfare, social networking, and how terrorists use technology and social media platforms, as well as other CT related topics.
THE GAME
Guerrilla Checkers simulates many of the core interactions between guerrillas and the state. The guerrillas have many, but weak pieces, while the state has fewer, but more powerful pieces. The game is played on a standard checkers board; the State plays similar to playing checkers and the guerrillas play similar to playing the game of "Go".

Roles
**Guerrillas:** Receive 66 pieces and place two pieces each turn.
**State:** Six pieces, all of which are on the board at the start.

Victory
The player who clears the board of all enemy pieces at the end of his turn wins. The Guerrilla player loses if he runs out of stones.

Make Your Moves
**State Movement**
The State player moves one checker per turn, one square diagonally as a King in regular checkers, or makes captures by jumping over the point between two squares. He is not forced to capture if he does not want to, but if he does he must take all possible captures. Captured stones are removed from the board.

**Guerrilla Movement**
The Guerrilla player does not move his pieces. Instead, he places two and only two stones per turn on the board, on the points (intersections) of the squares. The first stone must be orthogonally adjacent to any stone on the board; the second stone must be orthogonally adjacent to the first stone placed. He may not place stones on the board edge points. He captures an enemy checker by surrounding it (i.e. having a stone, or a board edge point, on each of the four points of the square the checker occupies - note this makes the edge of the board very dangerous for the State player). The checker is removed from the board.
1. Asymmetric Warfare

In an asymmetric conflict, the state has the preponderance of power, but very little information; the insurgents have lots of information but very little power. Whoever reverses this dynamic first is likely to win. The state must gain information; the insurgent must grow and become more powerful. This concept, originally articulated by Gordon McCormick, forms the basis of the game, Asymmetric Warfare.
INFO CHESS

THE GAME
Info Chess is a game played on a standard chessboard with standard chess pieces, but with the addition of information warfare (IW) moves. The game is designed to stimulate a deeper appreciation of the interaction between the informational domain and more traditional military affairs.

Set-Up
Each player simultaneously determines the pieces it will use in the game. Each player is given 10 points. Kings are free and each player gets one. Queens cost 3 points; Knights and Rooks cost 2 points; Bishops and Pawns cost 1 point. Players can buy up to one Queen; up to 2 each of Knights, Rooks, and Bishops; and up to 8 Pawns.

Pawns can be placed anywhere on the second row. All other pieces can be placed anywhere on the back row. If two bishops are purchased, they must be placed on different colors.

Kings, Pawns, and Knights start off as invisible to the opponent. Queens, Rooks, and Bishops are visible.

IW Moves
Each player receives 10 IW points that it can use during the course of the game. Players must decide before the game starts how they will allocate their points between two types of IW moves: Psyops and Electronic Warfare.

- Psyops essentially force an opponent's piece to surrender. Psyops capture the pawn furthest from the King. (This is measured by the number of moves it would take the King to get to that piece). If the opponent does not have any pawns, the furthest remaining piece is removed. Kings can be captured using Psyops if they are the last piece.
- Electronic Warfare essentially disrupts the opponent's ability to communicate to its units. Electronic Warfare prevents the opponent from making its next physical move.

Game Play
- All pieces move according to standard chess rules, unless otherwise noted.
- The game ends when the King is captured.
- White moves first. Sides are determined randomly.

1. Notification, if applicable, of whether the player's previous IW move was defended or not.
2. Notification, if applicable, of opponent's IW move (but not whether it was reinforced or a feint).
3. Option to defend against opponent's IW move and notification of success or not.
4. Option to ask about "pawn-capture" (see below)
5. Required physical move
6. Option to make one offensive IW move, either Psyop or EW but not both
Purpose of the gaming portal

- to foster camaraderie through friendly and competitive play
- to broaden and improve specific thinking skills
- to be available as a learning resource for faculty
Do you want to know more?

_The Complete Wargames Handbook_, by James Dunnigan:

"Wargaming as a Catalyst for Innovation”, by Dr. Stephen Downes-Martin:
https://sites.google.com/site/stephendownesmartin/downloads

“Commercial Wargames and Experiential Learning”, by Dr. Roger Mason

GlobalECCO site:
https://nps.edu/web/ecco

Brian Train game design blog:
http://brtrain.wordpress.com

Eight free games by Brian Train, some of them simple:
https://brtrain.wordpress.com/free-games/

[image sources: Amazon.com, Boardgamegeek.com, GlobalECCO, Nanda van Dijk, Wikipedia]