

Wargaming

Matthew B. Caffrey Jr.

17 July 2018

Disclaimer

The following views are those of the author and do not necessarily reflect those of Air Force Research Laboratory, Air Force Materiel Command or the United States Air Force

Purpose

Provide Connections 2018 participants who are new to wargaming with enough of a foundation in the field that they can productively learn from and contribute to the balance of the conference – and beyond.

Matt Caffrey

- DoD Civil Servant – previous positions
 - AFRL Liaison to HQ AFMC for Wargaming
 - Lead Wargaming, Air Force Research Laboratory
 - Professor of Wargaming, Air Command & Staff Col
 - Research, School for Advanced Airpower Studies
- Col USAFR (ret.) - assignments
 - Senior Reservist, AFRL Info Directorate
 - Chief Wargaming, AF/XOOC (Checkmate)
- Author/Speaker
 - Author, On Wargaming
 - Co-author, Gulf War Fact Book
 - Three chapters, a dozen wargames, many articles, hundreds of talks

Overview

- Why Wargaming
- What is Wargaming
- How does it provide an edge

Why Go To a Particular Movie

- Good reviews, from sources you respect
- Popularity, top box office
- Past performance, previous movies by the same director, actor, screen writer...

Why Wargaming

- Endorsed by Masters of War
- Nearly Universal Adoption
- Past Performance
 - again and again wargaming has provided an edge

Why Wargaming Endorsements



FADM Chester Nimitz



Gen Norman Schwarzkopf



Gen William Wallace

Why Wargaming

Near Universal Adoption

- NATO: Live & constructive +
 - Joint Air Power Competence Center,
 - Sweden's Wargames in support of Partnership for Peace
- 1. USA: See next slide
- 2. Russia: Much known of Soviet WGing, catching up
- 3. China: Soviet > OJT > commercial > centralized
- 4. India: Live WGs with US & Russia, ops planning
- 5. UK: Live, virtual, constructive – Civ; def, ed & popular
- 6. France: Live, virtual, constructive
- 7. Germany: 2000 Wargame Center at War College

Why Wargaming

Near Universal Adoption

- Office of the Secretary of Defense
 - Office of Net Assessment (ONA)
 - Office of Cost Assessment & Program Evaluation (CAPE)
 - Policy
- Joint Staff
 - J-8, Studies Analysis and Gaming Division (SAGD)
- Combatant Commands (COCOMs)
 - US Central Command, Combat Analysis Group
 - US European Command, Warrior Preparation Center
 - US Pacific Command, Warfighting Center of the Pacific
 - US Special Operation Command, Wargame Center

Why Wargaming

Near Universal Adoption

- Services
 - Air Force, LeMay Center Wargaming Institute, Global Engagement, Futures
 - Army, Center for Strategic Leadership, AWC, Unified Quest
 - Navy, Wargame Department NWC, Navy Global
 - Marine Corps, Wargame Department, Expeditionary Warrior
- Federally Funded R&D Centers (FFRDC)
 - RAND, Project Air Force
 - Center for Naval Analysis (CNA)
 - MITRE, JHU/APL
- Defense Contractors
 - Booz Allen Hamilton
 - SAIC
- Academic; used wargames to teach & wargaming taught
- Popular; computer, print, miniatures

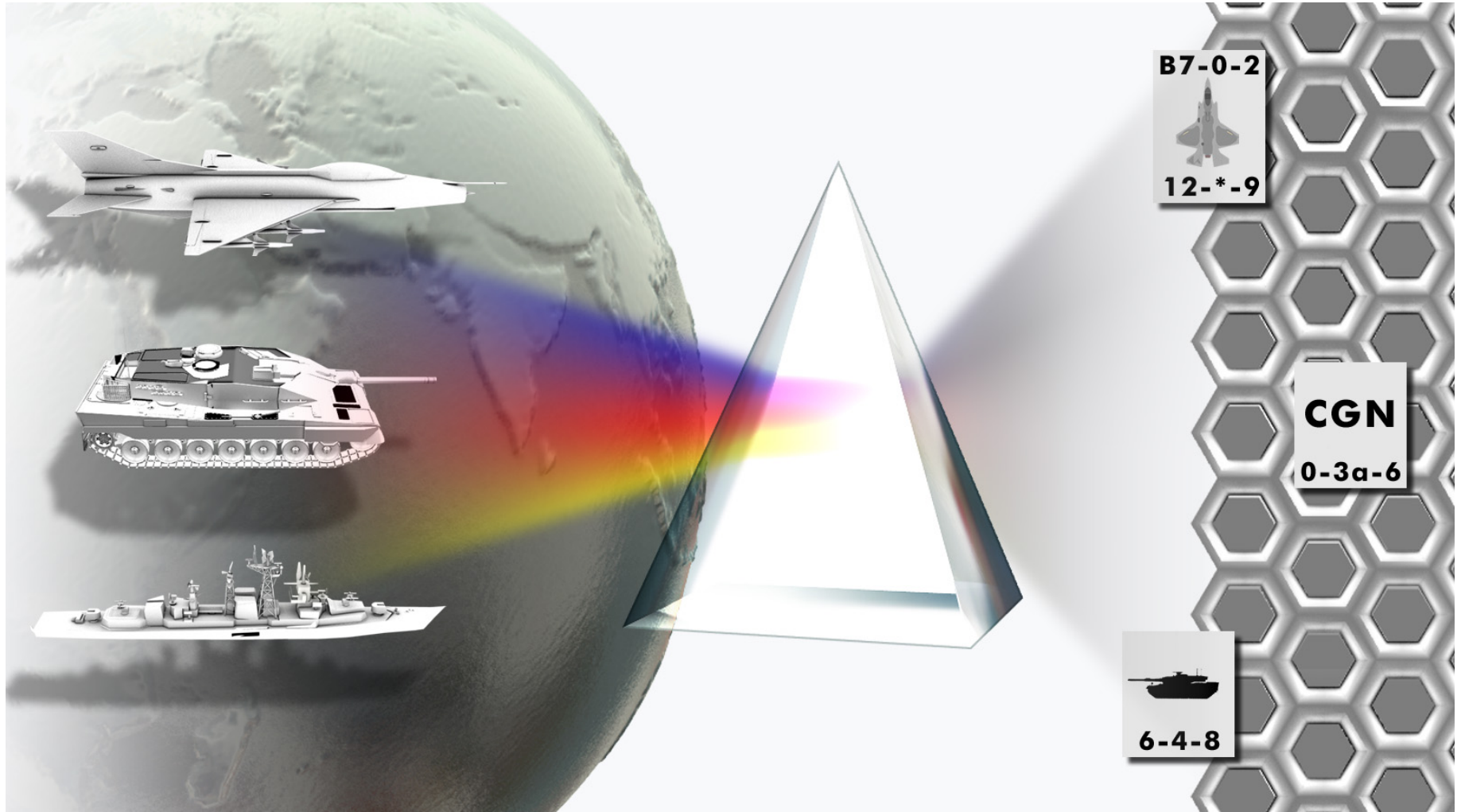
Why Wargaming Past Performance



Why Wargaming

- Wargaming saves lives
- For the side that wargames more effectively

What Is a Wargame?



Definitions

Armed Conflict

Wargame

Multisided

Simulation Game

Simulation

Over Time

Model

Proportional Representation

Reality

Definitions

Wargame: an armed conflict simulation game.

My definition

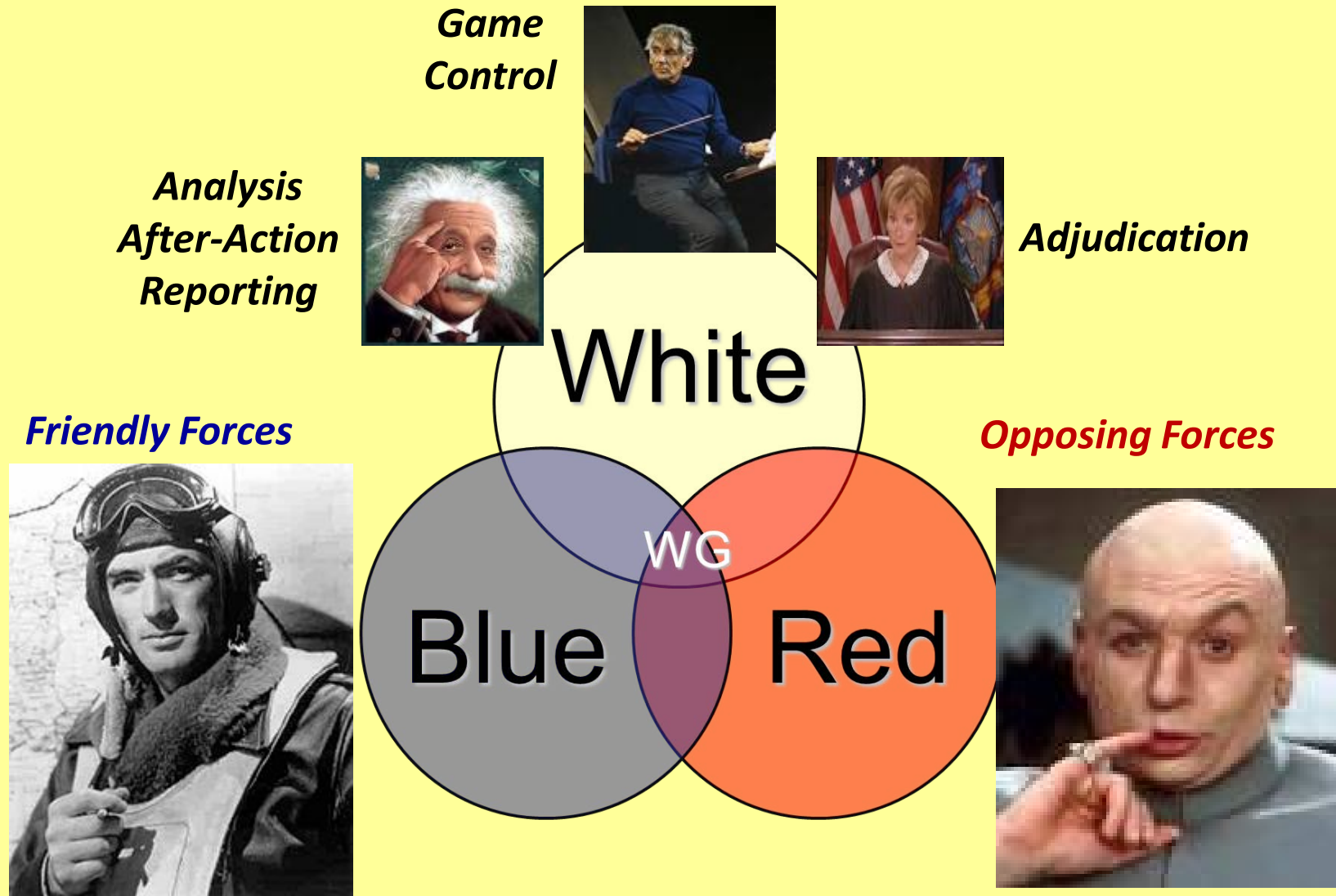
Wargame: A simulation, by whatever means, of a military operation involving two or more opposing forces using rules, data, and procedures designed to depict an actual or assumed real life situation.

DOD Dictionary of Military Terms (now deleted)

Wargame: A simulation of armed conflict in which participant decisions influence outcomes

Emerging, largely Dr. Perla

What Are It's Elements?

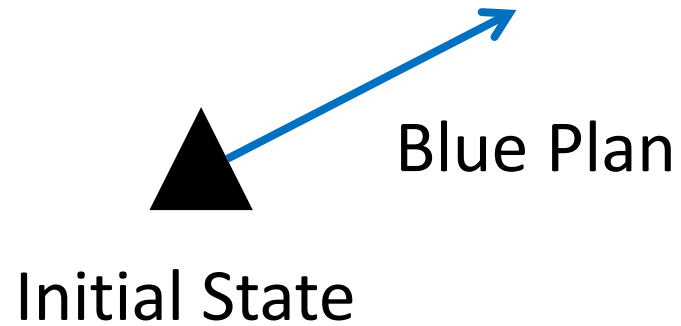


The Wargame Process

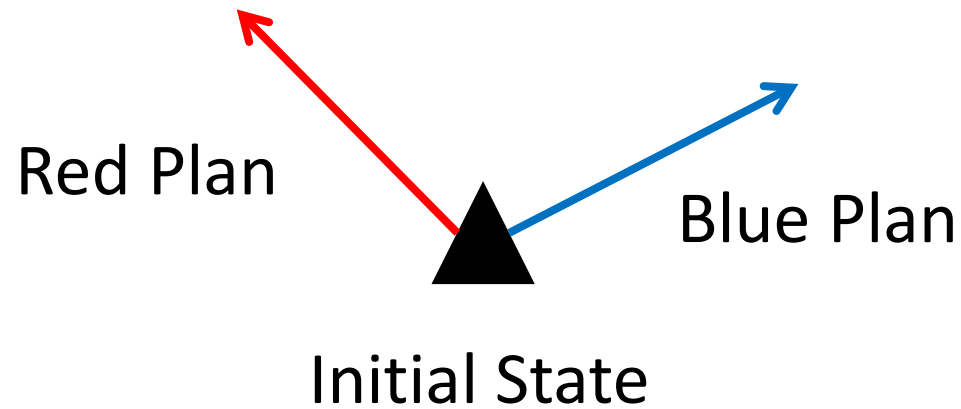


Initial State

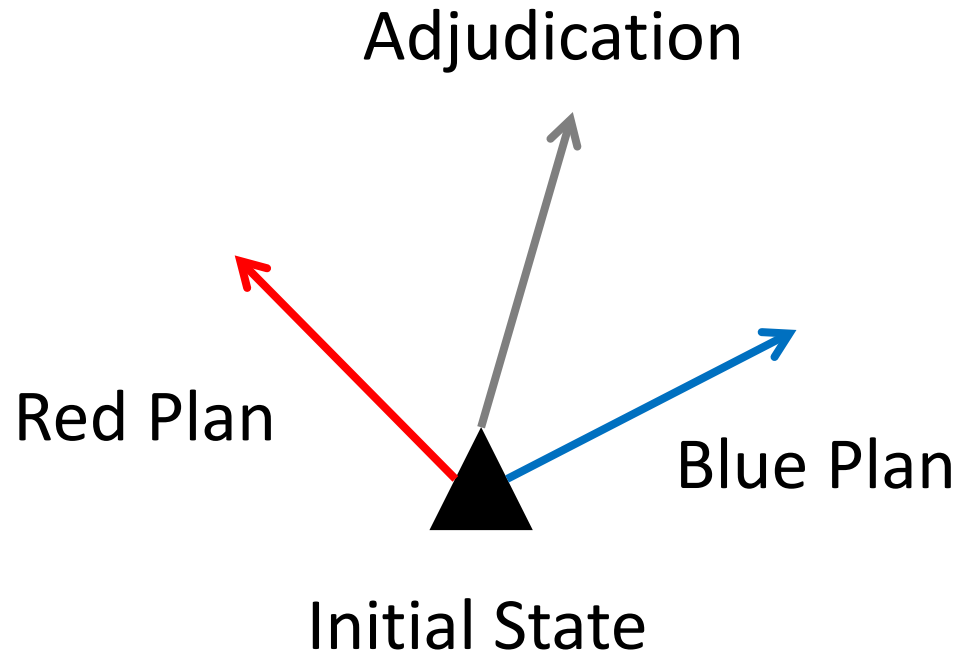
The Wargame Process



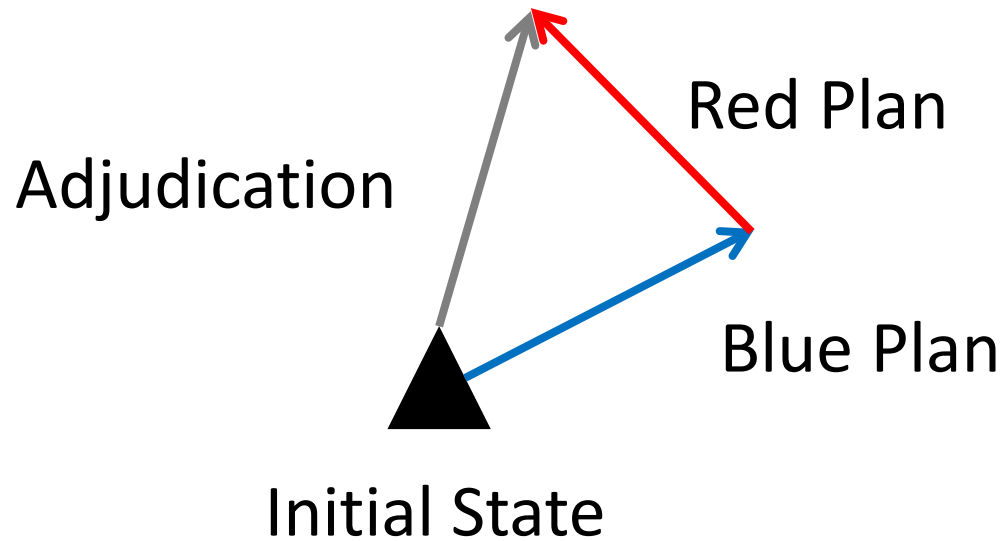
The Wargame Process



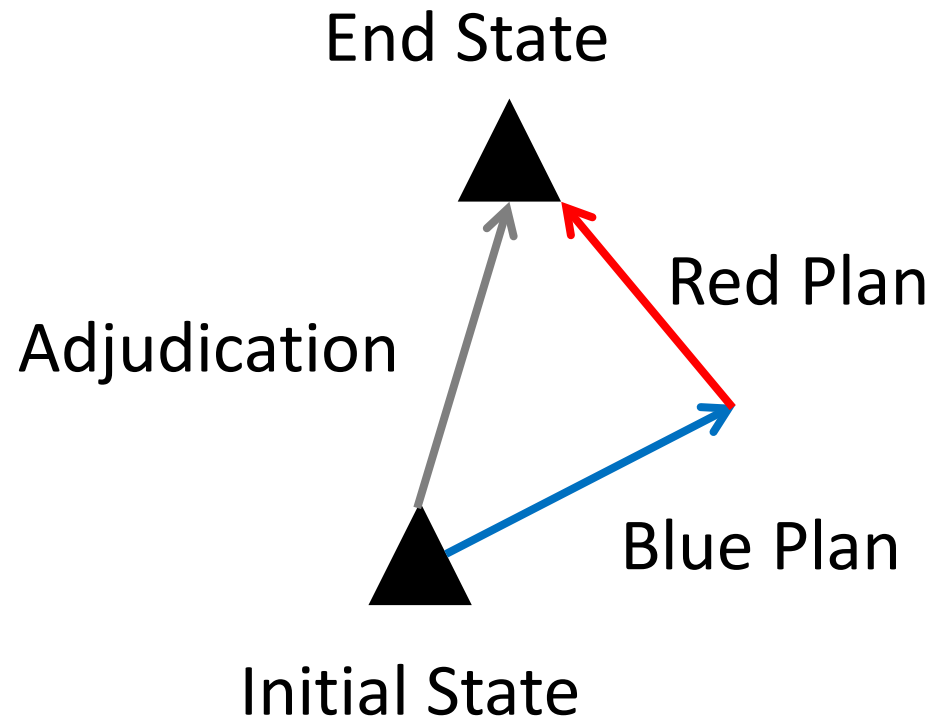
The Wargame Process



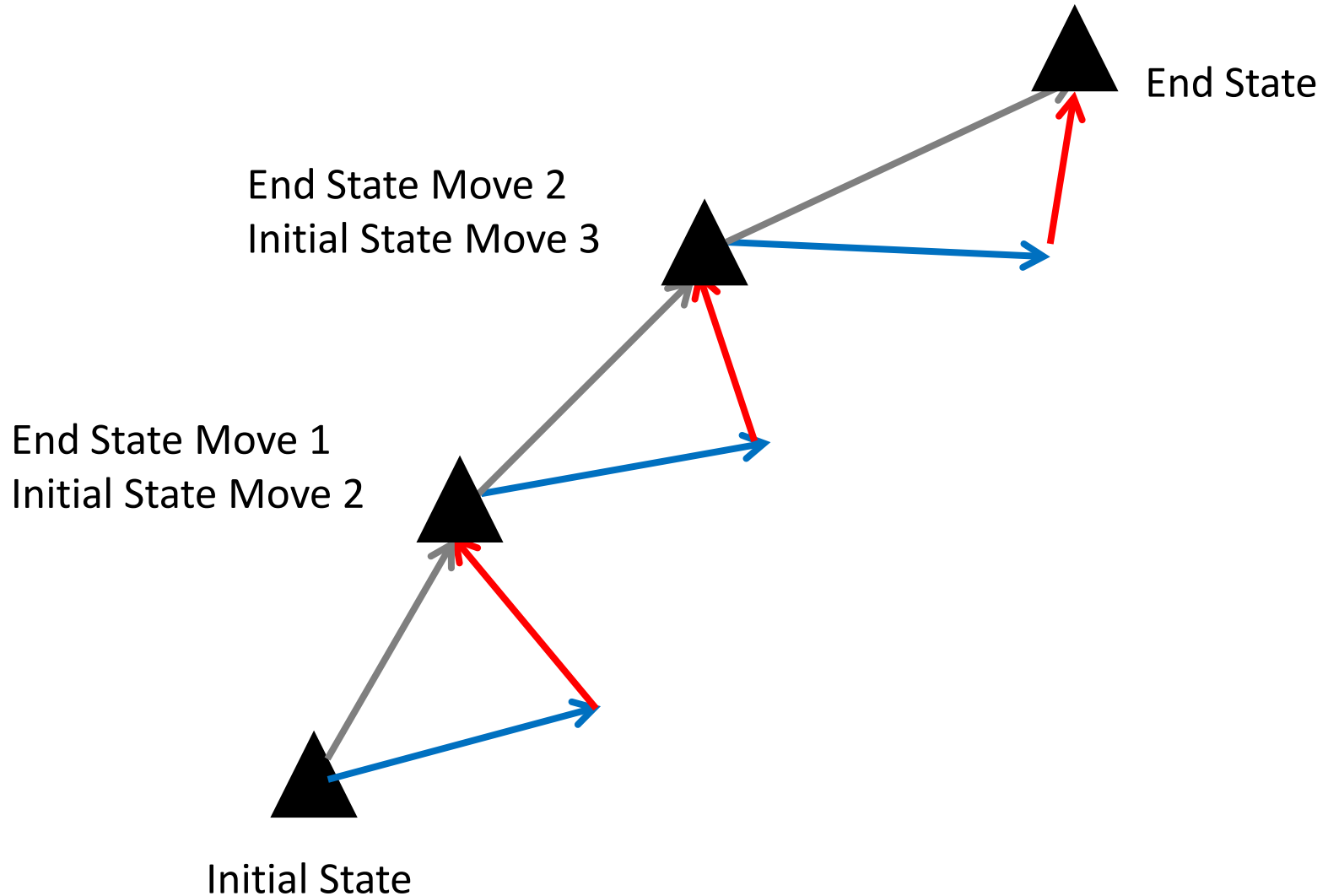
The Wargame Process



The Wargame Process



The Wargame Process

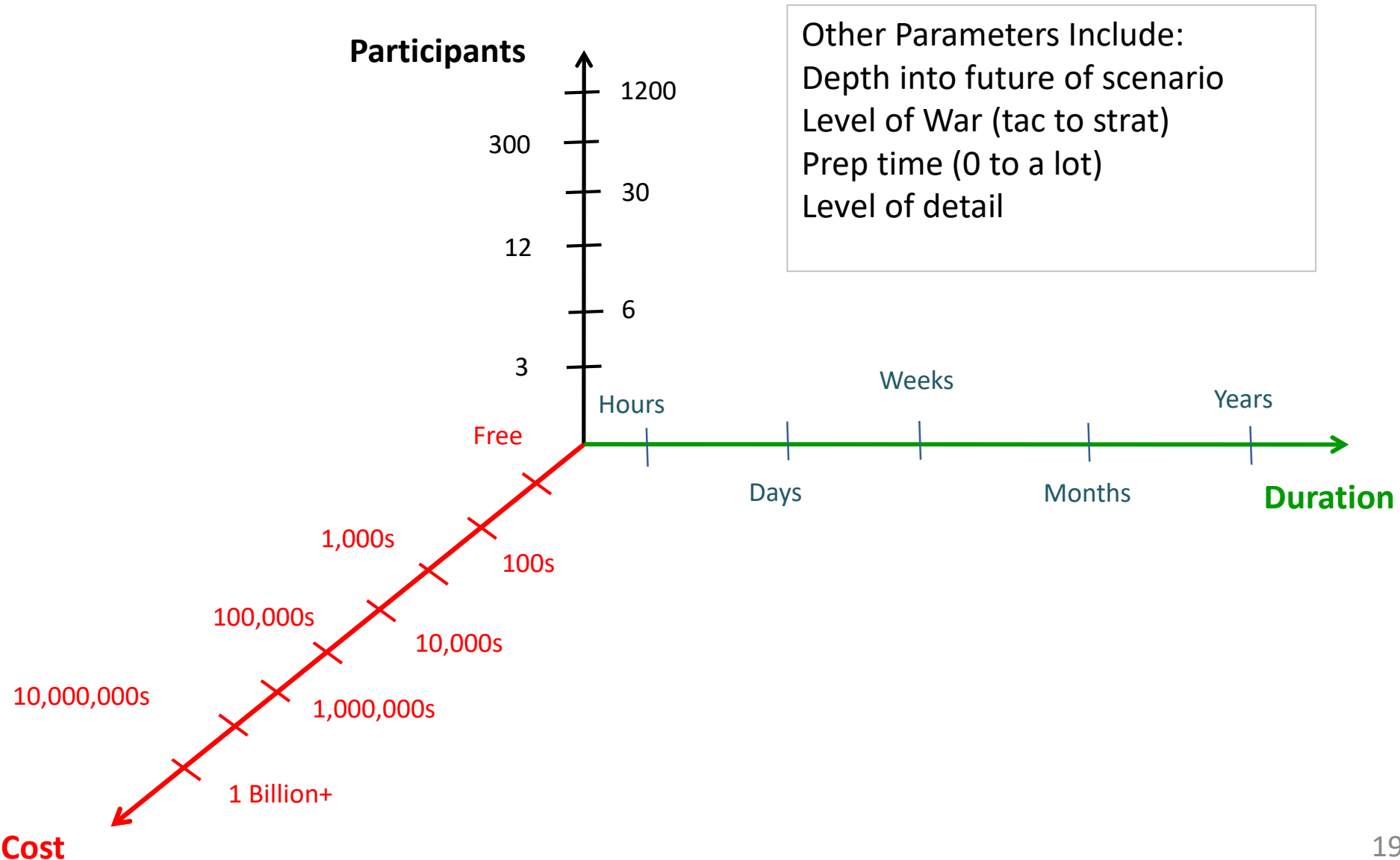


Types of Wargames



Each has advantages and disadvantages.

Parameters of Wargaming



How Does It Provide An Edge

- More effective forces
- More effective employment

More Effective Forces

- Education and Training
- Doctrine and Tactics
- Materiel

More Effective Employment

- Strategic
- Operational
- Tactical

Conclusion

- Wargaming saves lives
- For the side that wargames more effectively