

Hybrid Warfare Wargaming



15th NATO OR&A Conference

What is Wargaming?

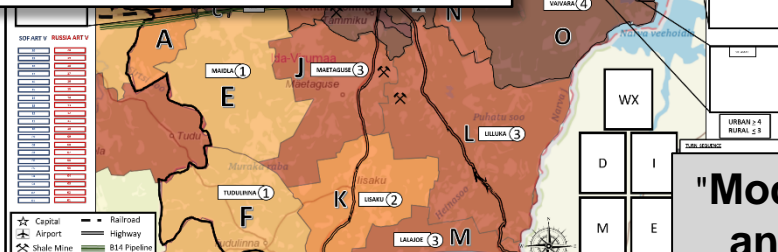
A dynamic representation of conflict or competition in which **people make decisions** and respond to the consequences of those decisions.



Egyptian Border Security 2019



Taiwan 2019



“Influence in IDA VIRU” Wargame

“Modeling and simulation are distinct and separate analytic tools and not the same as wargames.”
 -JP 5-0 16 June 2017, pp. V 32-33



“But also never neglect the psychological, cultural, political, and human dimensions of warfare, which is inevitably tragic, inefficient, and uncertain. Be skeptical of systems analysis, computer models, game theories, or doctrines that suggest otherwise.”

-Secretary of Defense Robert M. Gates

Hybrid warfare techniques seek to leverage vulnerabilities in the psychological, cultural, political and human dimensions of warfare...

Ukraine: Who controls what



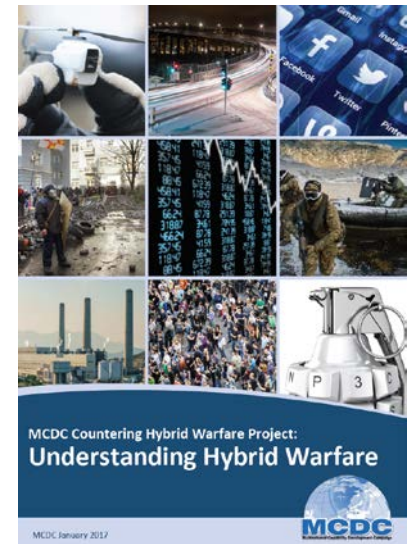
- Russia gained control of Crimea without firing a shot-a hybrid success.
- Donbas region of Ukraine still contested-not so much of a hybrid success...



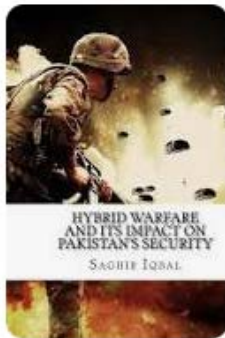
Source: Al Jazeera, LiveUAmap
Updated: February 2017

A Definition of Hybrid Warfare

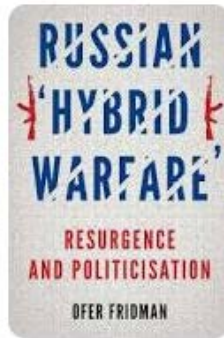
“The synchronized use of multiple instruments of power tailored to specific vulnerabilities across the full spectrum of societal functions to achieve synergistic effects.*”



* From the Multinational Capability Development Campaign, Baseline Assessment



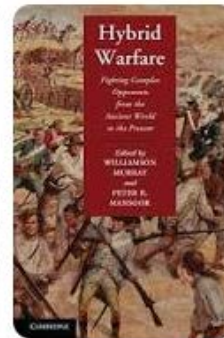
Hybrid Warfare and Its Impact...



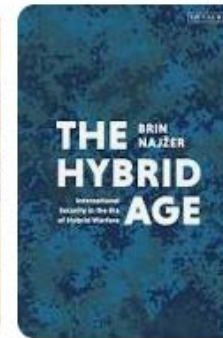
Russian "Hybrid Warfare...



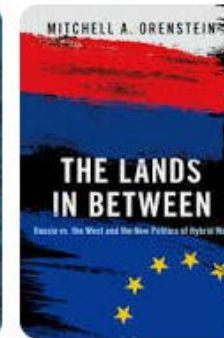
Hybrid Warfare: Security a...



Hybrid Warfare: Fighting C...



The Hybrid Age: Internation...



The Lands in Between: Russia Vs...

“Our common understanding of hybrid warfare is underdeveloped and therefore hampers our ability to deter, mitigate and counter this threat.”



General Principles



- A hybrid warfare aggressor will seek to exploit vulnerabilities of the targeted nation;
 - No two nations will have the same exact set of vulnerabilities or interdependencies.
 - Each nation is likely to have unique vulnerabilities that are different from even it's closest neighbors.
- Each hybrid warfare aggressor may have unique capabilities that can be employed against a targeted nation.
- The “surprise” principle of war is likely the biggest factor in the success of a hybrid attack.
- BLUF: Attempting to create a “one-size-fits-all” checklist for hybrid warfare defense is a fool’s errand.

"One thing a person cannot do, no matter how rigorous his analysis or heroic his imagination, is to draw up a list of things that would never occur to him."

-Thomas Schelling, (2005 Nobel Prize winner)



Some key definitions



- *Deterrence** - the action of discouraging an action or event through instilling doubt or fear of the consequences
- *Resilience** – the capacity to recover quickly from difficulties; toughness
- **The key to success against an opponent who wants to attack your nation is to deter them from doing so.**
- **If deterrence fails, then ensuring the target of the attack is resilient so that recovery is quick is likely the next best option to deterrence.**
- **A nation that ensures their potential targets of hybrid attacks are resilient may be also taking positive steps towards deterrence.**

* Oxford dictionary online: <https://languages.oup.com/google-dictionary-en/>

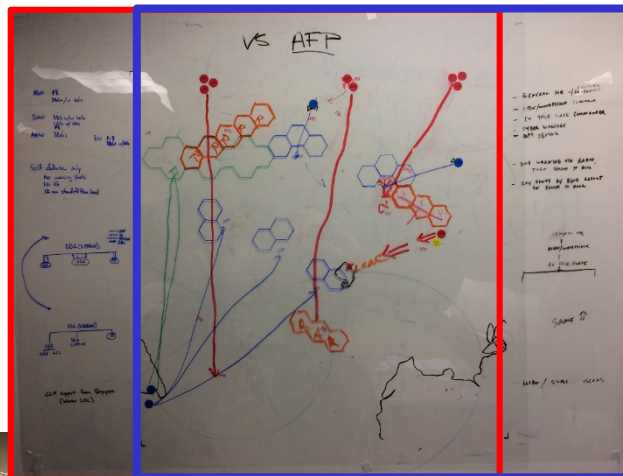


Why is Wargaming a good tool for Hybrid Warfare?



- Mathematical models are of dubious value:
 - What data exists to quantify deterrence or resilience?
- If a potentially damaging action by an adversary does not occur, did you deter it? How do you know?
- Hybrid warfare will often seek to attack on multiple axes, such as:
 - Key infrastructure
 - Population sentiment
 - Economy
- Hybrid attacks will require humans to recognize the attacks for what they are, and coordination and cooperation between civilian leaders (both from public and private sectors) and potentially military leadership may be necessary to mitigate the effects of the attacks.

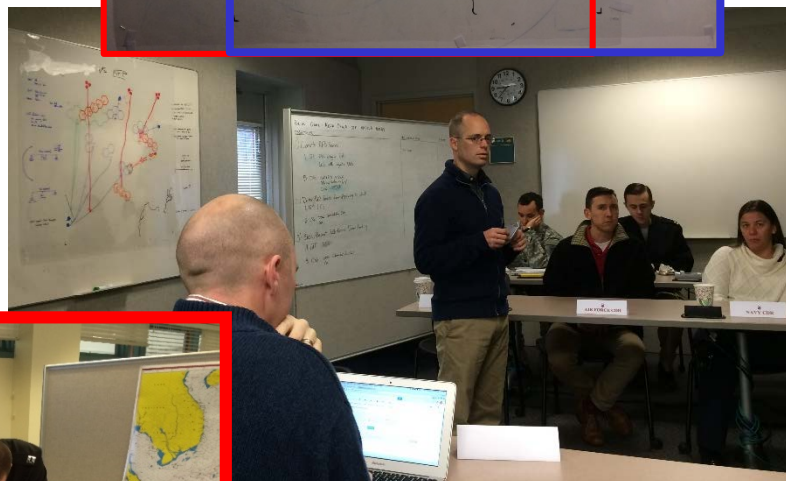
White Cell Adjudication.
Subject matter experts discussed both plans via the graphical overlays and determined which objectives were not met.



United States

Scenario: Deterrence Operations SCS
Format: Seminar & System/Closed & Open

China



Seminar wargame. Each individual team member had the opportunity to discuss the advantages and disadvantages of their plan.



Influence



- The goal of a hybrid attacker is to increase their influence in the nation they are attacking.
- The more influence the attacker has, the more freedom of action the attacker has in the nation under attack to consolidate gains and potentially conduct further attacks.
- The attacked nation can minimize the attacker's influence gain by creating resiliency in potential targets.
- Understanding what a nation's potential targets are, and how resilient they are, can be done through wargaming.

Merging Methods, Models and Tools (MMTs) for a common goal.

12 Related MMTs

- Influence Scale
- Article V Scale
- Effects Cards (Weather, Strategic DIME)
- Assurance Cards
- Deterrence Cards
- Strategy Cards
- Vald Control (Adjudication)
- Region Control
- Terrain
- Time Scale

TURN SEQUENCE

- 1) SELECT STRATEGY CARD
- 2) DRAW ACTION CARDS
- 3) MAKE ONE MONTH PLAN
- 4) RUSSIAN PLAYER PLAYS DETERRENCE CARDS
- 5) SOF PLAYER PLAYS DETERRENCE CARDS
- 6) FLIP WEATHER AND DIME CARDS
- 7) RUSSIAN PLAYER PLAYS ASSURANCE CARDS
- 8) NATO PLAYER PLAYS ASSURANCE CARDS



NPS Wargaming Mobile Education Team (MET) Workshops

Delivered and Projected (2021-2022)



- Basic Analytic Wargaming workshop
- Non-standard Wargaming workshop

North America

Lockheed Martin (Sunnyvale, 2012)

TRAC (WSMR, 2018)

STRATCOM (Omaha, 2014)

Royal Canadian AF (Trenton, 2011)

NAVAIR (China Lake, 2017)

NAVAIR (China Lake, 2019)

NSMWDC (San Diego, 2019)

MARFORPAC (Camp Smith, 2019)

USA Futures Cmd (Picatinny, 2021)

DTRA (Ft Belvoir, 2021)

MCWL (Quantico, 2018, 2019)

MCCDC (Quantico, 2016, 2022)

CENTCOM (Tampa, 2015, 2017[2])

NATO JWC (Stavanger, 2020, 2021)

Nordic Tri-Lateral (Oslo, 2019)

NATO SOF (Mons, 2019)

Swedish DRA (Stockholm, 2018)

Hybrid Centre of Excellence (Helsinki, 2021, 2022)

USAREUR (Wiesbaden, 2021, 2022)

Kazakhstan Army (Almaty, 2011)

AFRICOM (Stuttgart, 2018)

Tajikistan Gov't (Dushanbe, 2014)

Europe and Central Asia

Oceania and Southeast Asia

Taiwan (Taipei, 2019)

Indonesian Navy (Surabaya, 2015)

ADF Joint Experimentation (Canberra, 2021)

ADF Joint Experimentation (Canberra, 2017-2020)

DST-Group (Adelaide, 2016)

DTA (Auckland, 2013)

- Completed first Mobile Education Team (MET) course with Hybrid Center of Excellence (HCOE) in Helsinki August 2021. Students from 10 nations attended.



- Exploring the feasibility of conducting a two-week MET Basic Hybrid Wargaming course for HCOE to be delivered August 2022.
- Challenges:
 - Educational objectives
 - Definitional challenges
 - Resourcing



Questions/comments/concerns?