



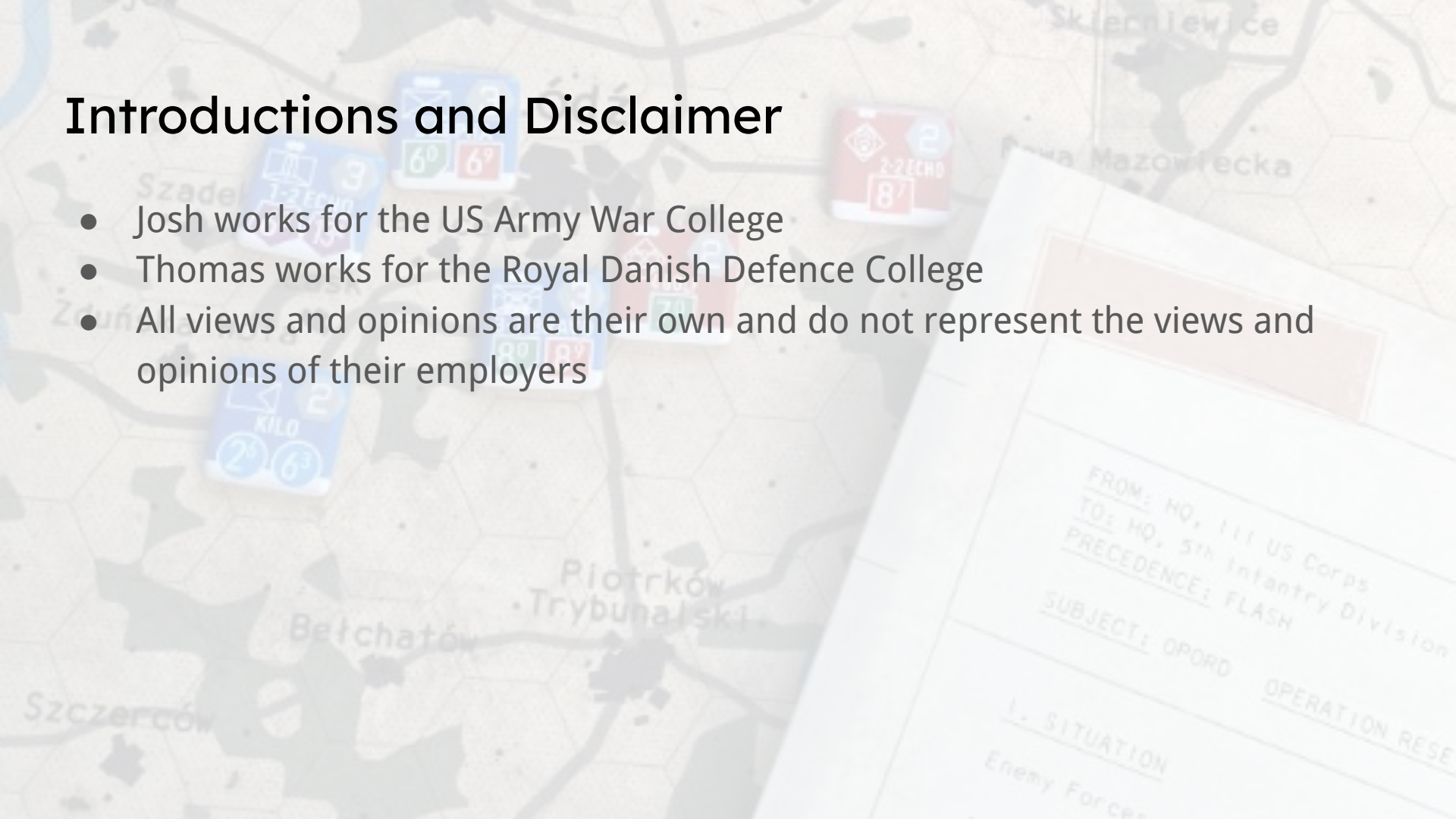
The background features a hexagonal grid map of Poland, with several military call signs and symbols placed on it. These include '3 ALPHA' with '60' and '69', '2-2 ECHO' with '87', '3 T BRAVO', 'KILO' with '26' and '63', and '3' with '13'. A document overlay on the right side contains the following text: 'FROM: [illegible] US Corps', 'HQ, 5th Infantry Division', 'PRECEDENCE: FLASH', 'SUBJECT: OPOD', 'OPERATION RESE', '1. SITUATION', and 'Enemy Forces'.

# “Microgames” Designing Games with Small Footprints

Evan D'Alessandro, Josh Kovan, Thomas Danger

# Introductions and Disclaimer

- Josh works for the US Army War College
- Thomas works for the Royal Danish Defence College
- All views and opinions are their own and do not represent the views and opinions of their employers



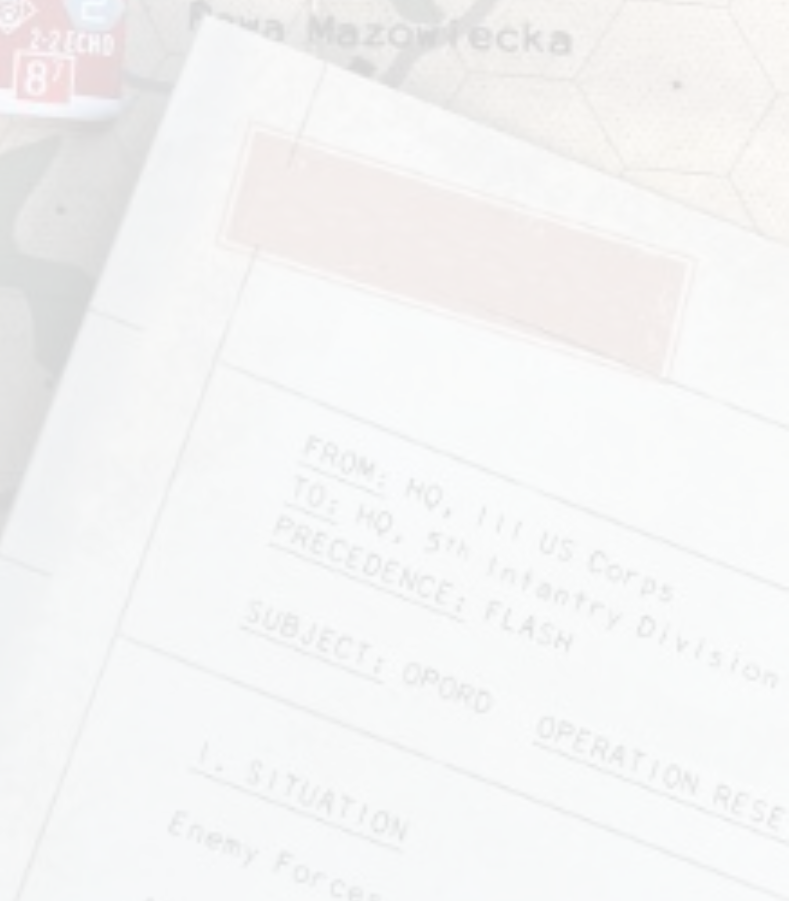
# Where to get Microgames

- Recommendations are based on the small sample of games we have played
- Commercial
  - Postmark Games Battlecards
- Professional
  - European Microgames -  
<https://drive.google.com/drive/folders/1cRPaT3XhD3X0D8sHhbzd2ruJ3vaCxFOC>
    - Highly recommend “How to Stop a Genocide” and “Rearm Europe”
  - Indo-Pac Microgames -  
<https://drive.google.com/drive/folders/1hWtrQs7HSL-rV5btITTX6aIl4m2Ern8Q>
  - GUWS Microgames - <https://www.guwargaming.org/microgames>
    - Play Turning Tides!



# Overview

- Theory (~30 mins)
  - What are Microgames?
  - How do you Design a Microgame
  - Problems with Microgames
- Game Jam (60 mins)
- Game Presentations



# What Are Microgames?



3  
3 ALPHA  
60 69

3  
1-2 ECHO  
60 134

2  
2-2 ECHO  
87

2  
4 GOLF  
70

3  
3-1 BRAVO  
80 89

2  
210

Skiermiewice

Mazowiecka

Piotrków  
Trybunalski

Bełchatów

Szczerców

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Enemy Forces



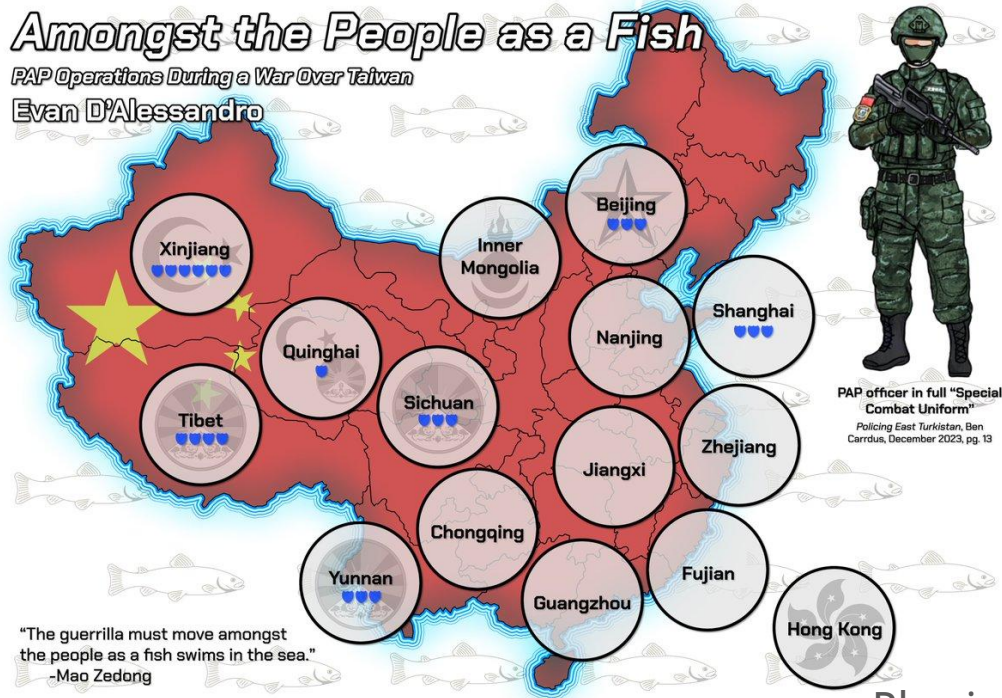


# Evan's Thoughts - What Counts?

## Amongst the People as a Fish

PAP Operations During a War Over Taiwan

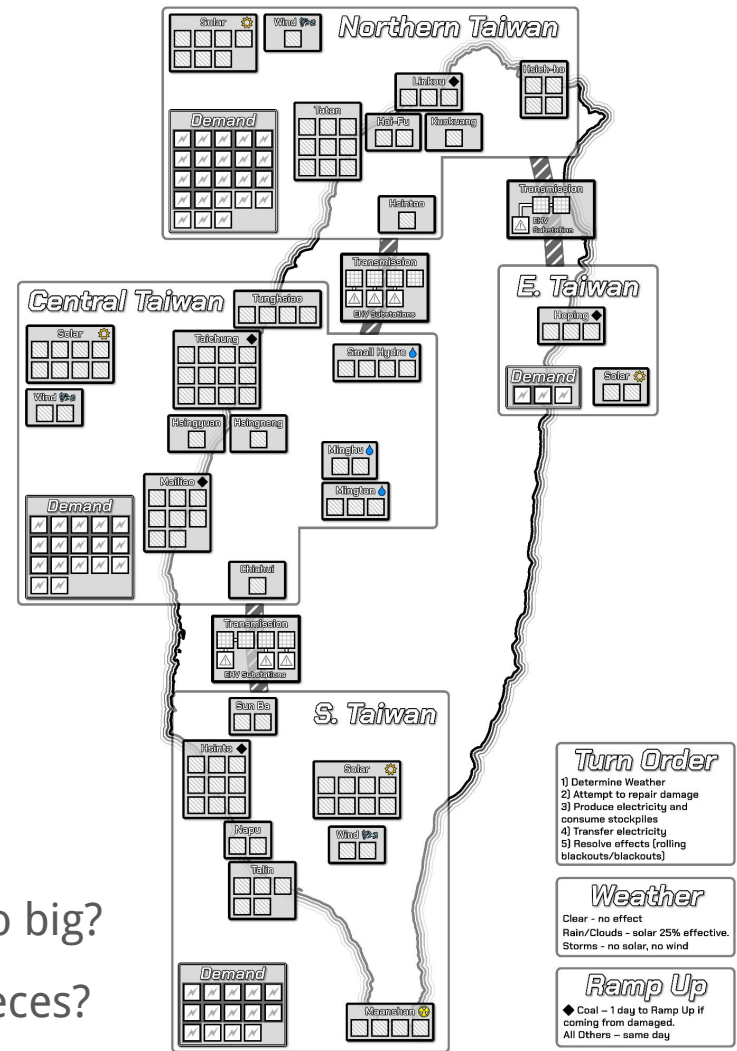
Evan D'Alessandro



Physically too big?

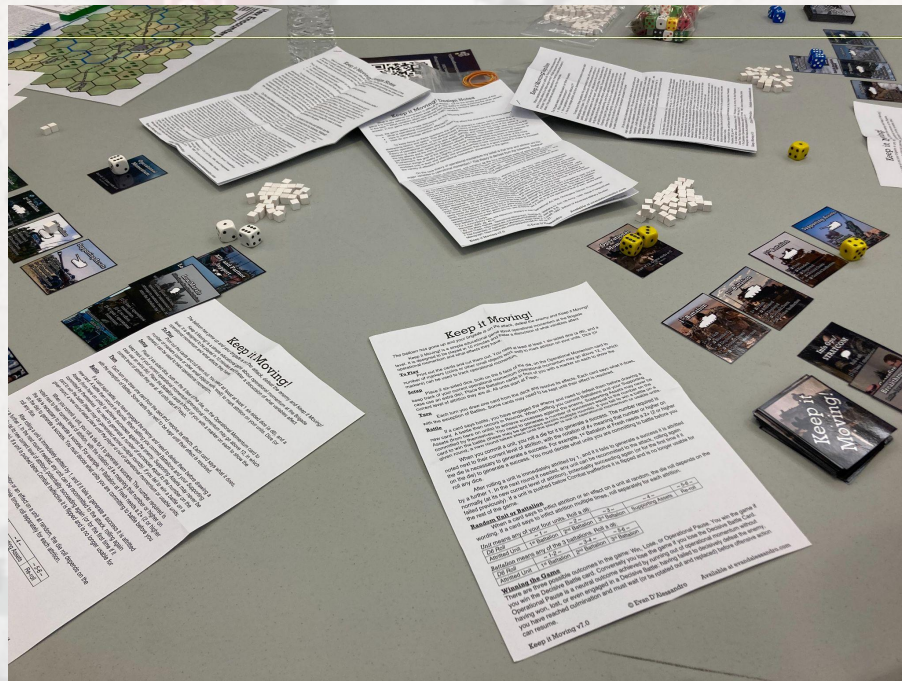
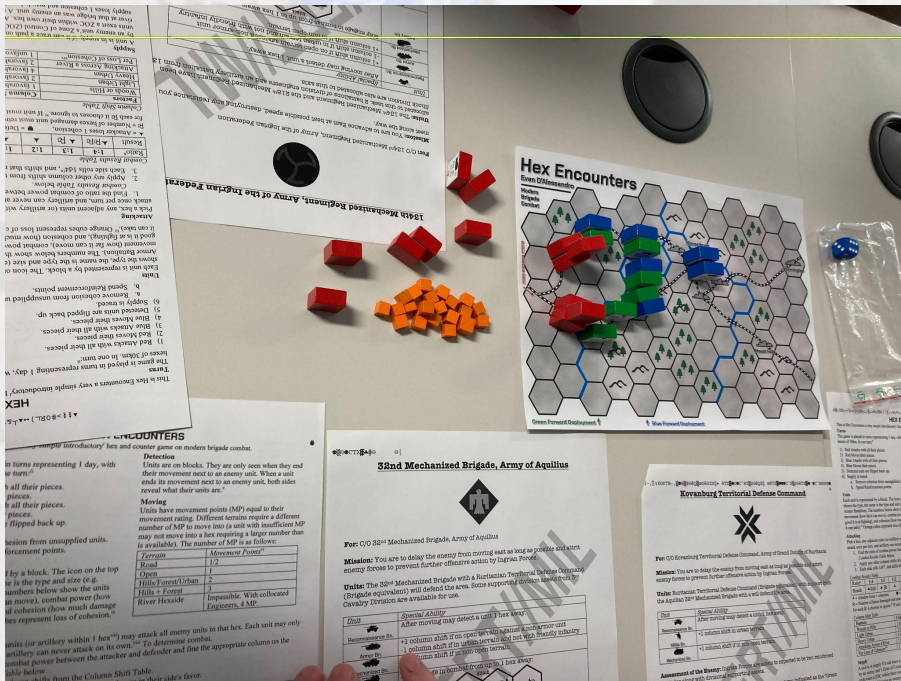
Too many pieces?

Rulebook too long?





# Evan's Thoughts - What Counts? (“I mean technically...”)

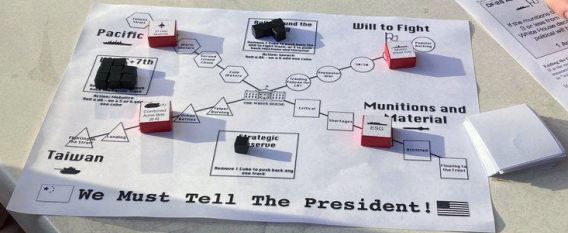


2 pages and handful of units? (but too big)

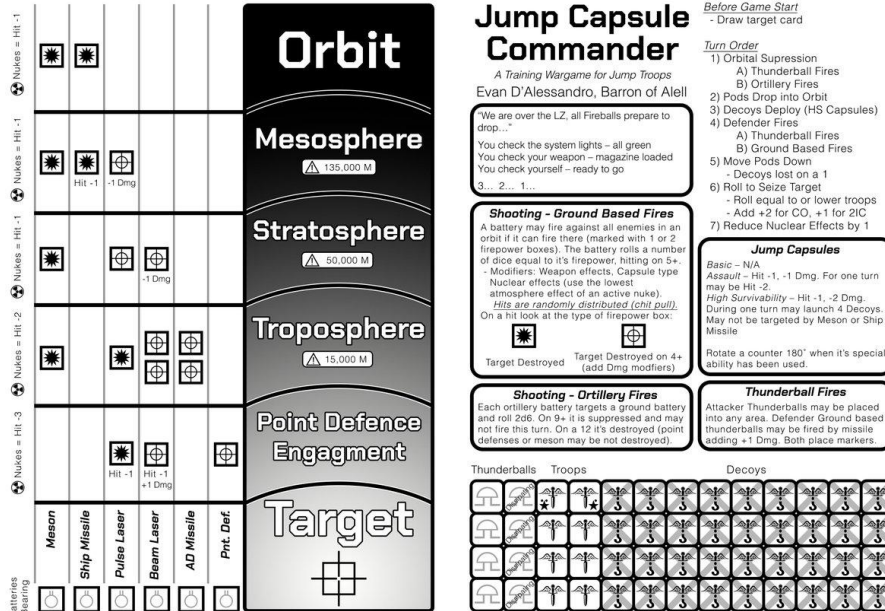
Cards? (don't see those in microgames...)



Thoughts = What Counts? (were getting there)



2 pages, handful of pieces, relatively abstract (but has cards?)



Two pages, simple rules (but has cards...)

# Evan's Thoughts

- Definitions are stupid - the best is "Who Cares?" - Maj. Tom Mouat
- I would suggest that a Microgame is a couple pieces of paper and a handful of counters for a couple of players (single page definitions limit out cards)
- *A microgame is a game with a small footprint!*
- Employ the Supreme Court Test "I know it when i see it"

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# Josh's Thoughts

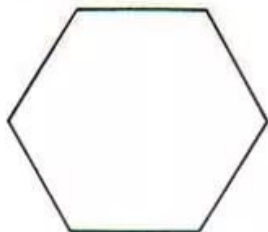
- Microgames are best defined by their benefits
  - Easily accessed (usually\*)
  - Easily distributed (usually\*)
  - Easily produced (usually\*)
  - Easily transported
  - Easily set up
  - Easily taught/learned
- My working definition: A microgame is a game that has few components, requires little effort to set up/learn, and can be played within a short amount of time

\*For print and play games available online

# Simple Wargame

by Steve Jackson

## 1.0 The Board



## 2.0 The Counter



## 3.0 Combat Results Table

<i>Heads</i>	You Win
<i>Tails</i>	You Lose

## 4.0 Play Sequence

4.1 Pick Up Counter

4.2 Place on Board

4.3 Flip Coin\*

4.4 Consult CRT (Combat Results Table)

4.41 Heads: you win (leave counter on board)

4.42 Tails: you lose (remove counter from board)

\*Coin not included. Pennies will suffice, but half-dollars or silver dollars may be substituted for greater complexity and realism.

Designer's Notes: This game dates back to the Persians, who played a crude version in which the board was thirteen feet across. The counter was made of stone and took forty slaves to lift; as a result, play was slow. Modern gamers have speeded play, but have not modified the basic futility of the system.



# Thomas's Thoughts (Yes to everything Josh said, and...)

In a *professional context* (education, training, etc.):

- Microgames have an immediate utility for the user.
- Microgames should be usable with any audience (e.g “what COIN means”).
- FAST, above 30 minutes this is not a microgame. This timer does not include the time for discussion during and after the game.



# How to Design a Microgame

(Some thoughts and practical advice on how to design)

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# Evan's Thoughts - General Thoughts

- Good artists copy great artists steal
- Complexity Budgets and Minimum Viable Complexity
- You get 1 (maybe 2) ideas to impart to the player
- A good idea now is better than a perfect one later (you can always come back later)
  - Games are never finished, they are just published (or run)

# Evan's Thoughts - Decision First Method

1. What is the purpose of the game?
  - a. Is this suitable/compressible to microgame?
2. What decisions will the players make?
3. What information is required for the players to make those
4. decisions?
5. What things are required to generate that information?
6. Which of these things need rules
  - a. Is process modeling needed, or can you do end effects?
7. Is this still suitable/compressible to microgame?

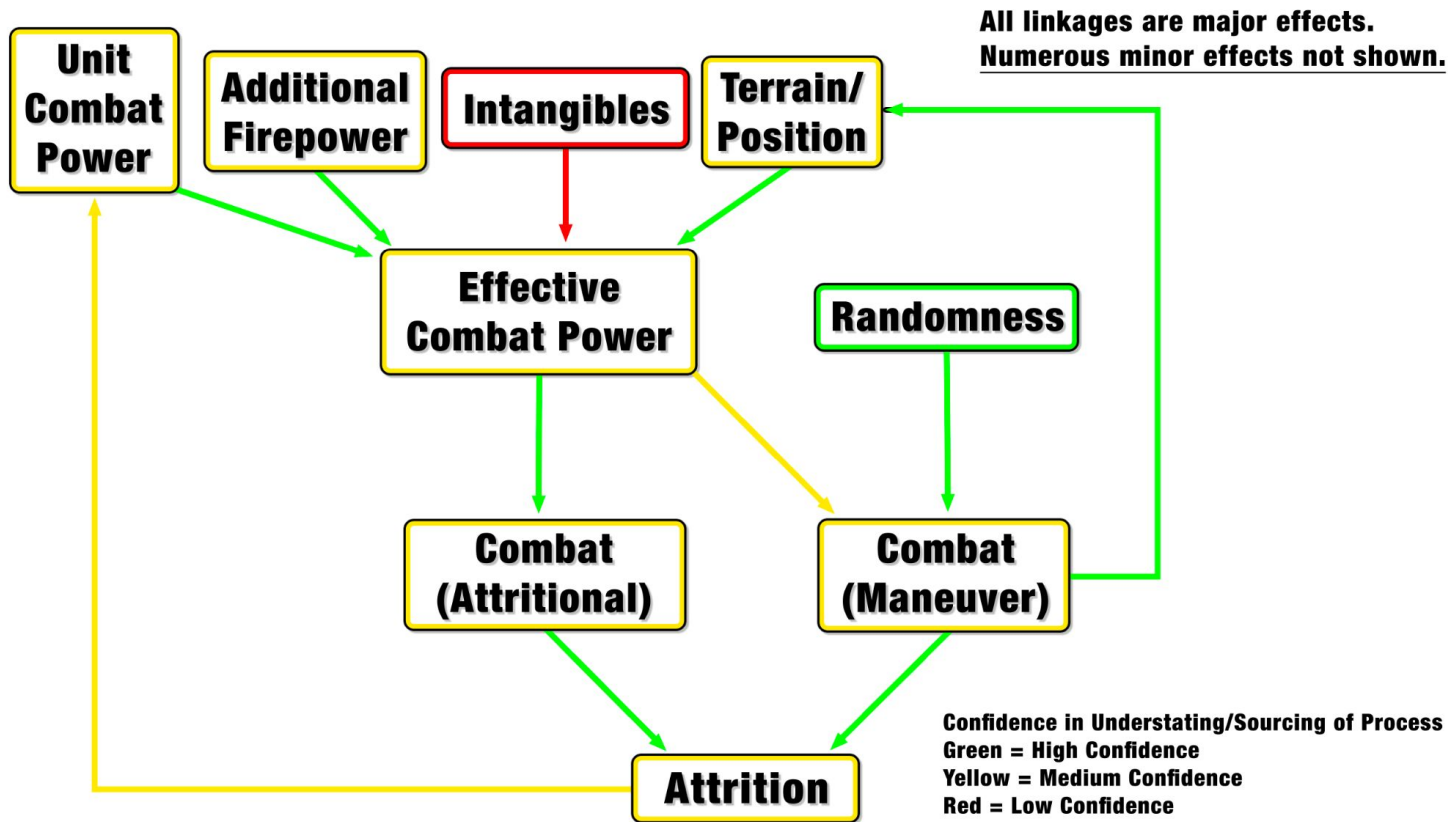


# Evan's Thoughts - System First Design Method

1. What is the purpose of the game?
  - a. Is this suitable/compressible to microgame?
2. What is the system that I need to represent?
3. Are there enough decisions to make that help with the purpose of the game (e.g. is a wargame a necessary/useful tool)?
4. Make the model of the system:
  - a. Is this still suitable/compressible to microgame?

# Jaws of the Dragon

## Simple Theoretical Model of Modern Brigade Combat for Land Combat Rules





# Josh's Thoughts- Design Process

1. What is the purpose of the Game?
  - a. Analytical- What is the analytical objective of the game?
  - b. Educational- What is the learning objective of the game?
2. Research
  - a. How does the system I'm modeling work in real life?
3. Viability
  - a. Is wargaming the best tool to fulfill the purpose on this topic?
  - b. Is the wargame doable within the constraints you have been given? (microgame)
4. Design
  - a. What mechanics best represent the real system?
5. Development
  - a. What UI/visuals/components best communicate the real system and the design?
6. Playtest
  - a. Does my design hold up when played?
  - b. Do the players understand the game as I did? (blind playtest)
7. Refine it
8. Run it
9. AAR-TALK ABOUT IT!

# Josh's Thoughts - Limiting Factors for Microgames

- Scope
  - Microgames are best at modeling scoped down topics (less to model)
- Scale
  - Time
    - Probably want the whole process of setup, learning, and play to take less than 1-2 hours
  - Mechanics/Components
    - Limited to using mechanics that use small/few components

Keep it Simple!



# Josh's Thoughts - Advice for Microgame Design

- Trim the fat
  - If a mechanic isn't important to the model and isn't used frequently **get rid of it**
- Mechanics come last
  - Don't jump to designing before you understand the real system!
- Playtest often
  - More eyes catch more issues
- Keep it simple

# Thomas's Thoughts I: general design remarks

- Wargaming is an art and a science? Then, microgames are the same, but to the power of 10:

*The highest liberty in design, under the highest design constraints.*

- Avoid thinking too much about existing game. They would probably make for a bad microgame.
- The purpose always in mind, as always.



# Thomas's Thoughts II: Design

**Think outside the box:** this is not your traditional COTS game.

*Who needs trackers? Counters? Why a map?*

- If your game is a printable, dispensable A4 sheet... Use this! Draw, colour, cut, and other possibilities that a nice expensive game prevents you to do.
- The player's agency remains central, this is not a flipper.
- Why bother with a blue vs red design? What about a solo game? Or all players compete (or cooperate) with one another?

# Thomas's Thoughts III: Practicalities

- Components suck.
  - The less the better. (e.g cutting 25 small pieces of paper; requiring the player to have 36 dice - true story -).
- Can't do on a single A4?
  - Lie, think harder, this can be reduced.
- Clarity
  - Be super clear and consistent with the vocabulary used.



# Problems with Microgames

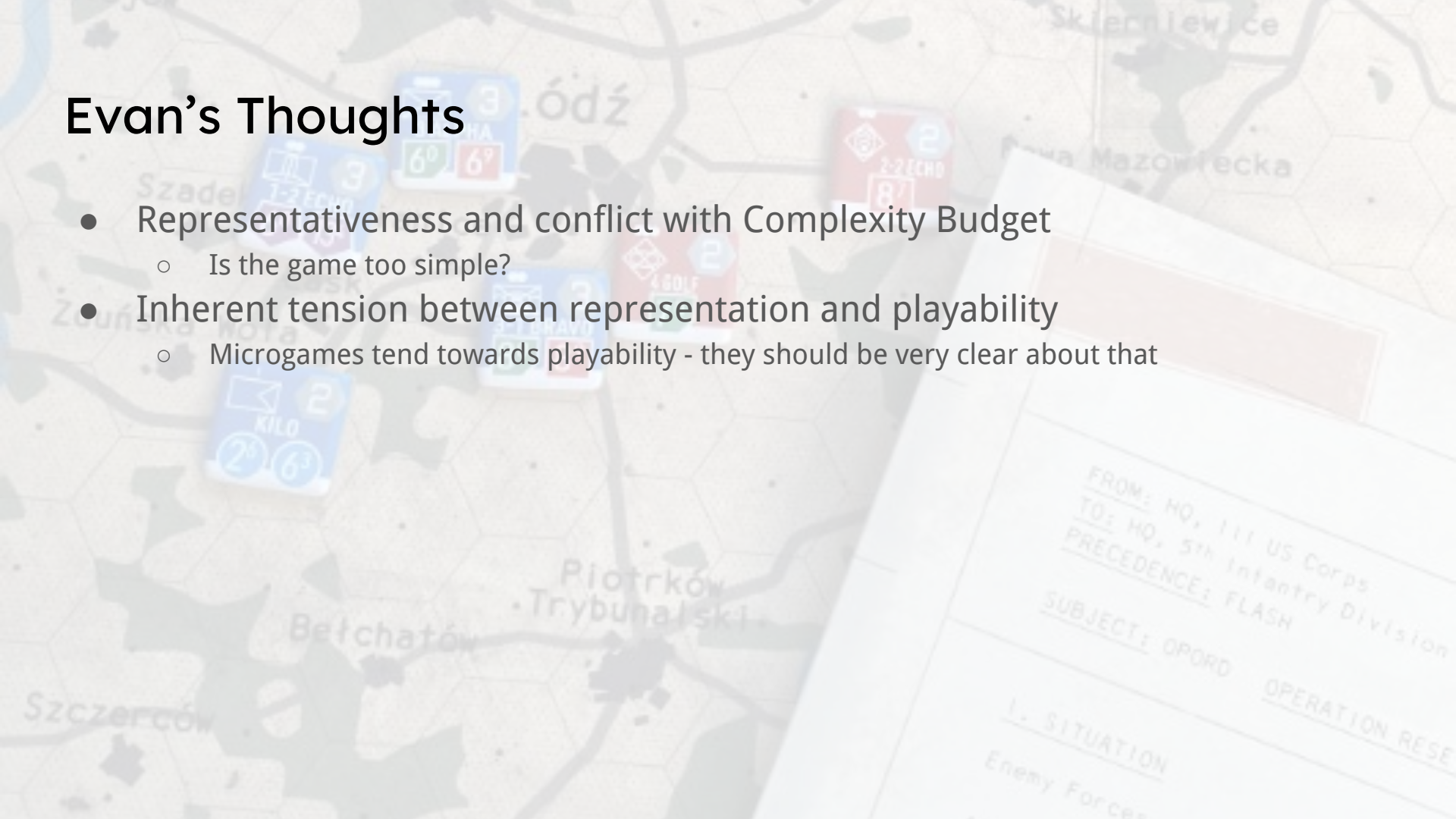
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# Evan's Thoughts

- Representativeness and conflict with Complexity Budget
  - Is the game too simple?
- Inherent tension between representation and playability
  - Microgames tend towards playability - they should be very clear about that





# Josh's Thoughts

- Limited representation
  - The simple design can only represent so much
  - Large/vague topics become barely representative
  - Important pieces become abstracted out of the game
- Limited reflexivity
  - Limited scale and scope means players can only use the game to engage with the topic in limited ways
- Limited decisions (potential)
  - With small models (can) come few decisions, leaving players without much to do

# Thomas's Thoughts

In a professional context: still requires a facilitator. (this is not a problem a such)

- Players can take away bad lessons, even more than usual.



# Game Jam



# Game Jam

- Your objective is to have a finished prototype by the end of the hour
  - Do not be overly ambitious (a game is better than no game)
- We will circulate to help you
- All materials provided can be used (just please return them at the end)
- Groups of 1 or 2 (max 3)
  - If you have never designed a game, find someone who has!



# Game Jam

- Pick a topic you all know something about.
  - Transitions to democracy
  - Large scale combat operations
  - Disease response
  - Etc.
- Pick two of the following design restrictions
  - The game may not have randomness in it
  - The game must use 10 six-sided die
  - The game must use a worker placement mechanism
  - The game must be a solo game
  - The game map must be made as the game is played
- *Hardcore mode: extra restrictions by Thomas (pick any as a bonus):*
  - No map
  - The map / game is your workplace (office?)

# Presentations

Skiermiewice

Mazowiecka

ódź



Szadeł

ianice

task

Żduńska Wola

Piotrków  
Trybunalski

Bełchatów

Szczerców

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**Please return all used  
components to the front!**