Art and Science in Wargaming

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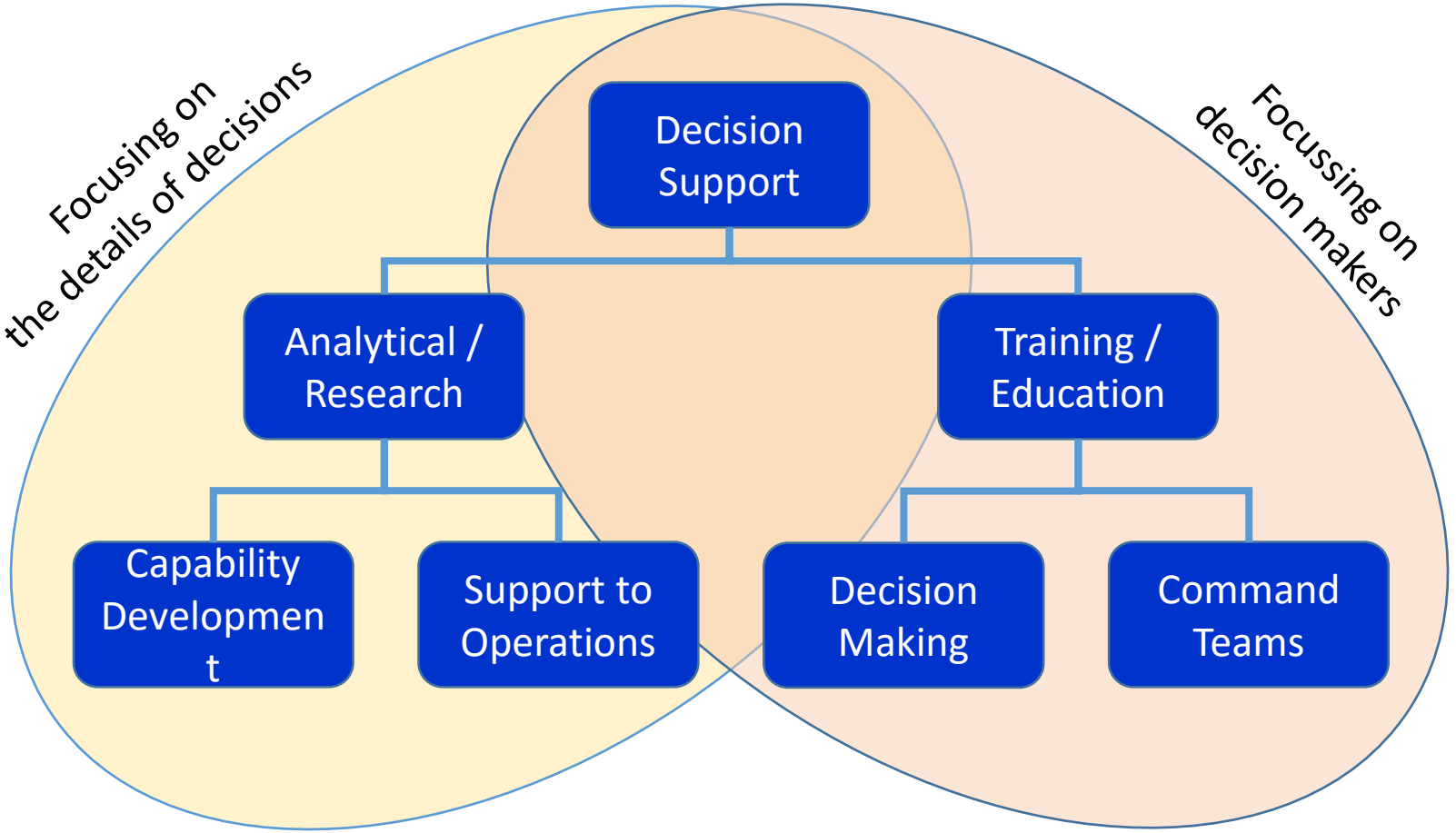
Wargaming Applications



Wargaming is an art, not a science

Important people have discovered wargames

This has not resulted in the abundance of resources and the overflowing benefits of friendship that you might think

“simulations and other techniques – otherwise known as wargaming” – Work memo

Why wargames work

We started with narrative, but that does not provide a compelling counter-rationalist argument

Now we want to explore the idea of play as an answer to rationalist models of gaming

Questions

- Why do I believe wargames are special?
- Why do my sponsors keep making me call what we do anything but gaming?
  - Why did Mouat and Wallman talk so much about die rolling?
  - Are dice as scary as the word “game”?
- Why are programmers, modelers, and program analysts inclined to challenge wargaming as some sort of sorcery?

War, science and the rational

- Science – more like engineering - has done wonderful things to rationalize war and tactics
- Seen as a rational enterprise war demands engineering analysis of all its aspects
- These are great arguments for implementing rigorous, rational, quantitative analysis of war

Wargaming and gaming

- This compounding of the name “wargaming” is fascinating
- If we equate “war” with the rationalistic approach to modeling and understanding conflict – the first word “war” is designed to up-modify “gaming” and give it the allure of the rational and analytic understanding of war
- But I contend something else is also going on
  - There is a bigger reason for wanting to move away from the association of “game”
  - That is because of the social implications of play

What are wargames?

- What makes wargames distinct from other ways of understanding war?
  - “People, making decisions, in a simulated environment, where they get to see the consequences of those decisions”
- Decisions! That’s what Dr. Perla says and so it must be true!
- Games are more than just decisions!
  - The first word is People!
- But, fundamentally, games are about players playing, otherwise they would be called work
  - We have players, we play games

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Play

- Play has been studied by psychologists
  - “the many theories of play expounded in the past are clear proof that the phenomenon is difficult to understand.” – Jean Piaget
- The important features for our purposes are:
  - Separate social contract
  - Flow states
  - No real-world payoffs
  - Boundaries and rules
- Rationalists don’t like play because it creates a new world that does not follow the rules of the existing one

Games are a form of play

- Games have players, we play games, games are a subset of play
  - Even serious games
  - Play is an essential component of games

- Now for the key argument: the role of play in games, whether you construe that as “man in the loop” or actual suspension of social rules, results in games being different than what we have inherited from our rationalist, analytical, view of warfare

- Games are different things, and deserve to be studied, constructed, and used in ways that respect those differences
  - That does not mean we develop bad games, rather good games recognize that both science (accuracy) and art (play) are essential to the gaming experience

- How are games different?

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Games and play

- Games change things, and that makes them scary
  - They change the players
    - Change by experience
  - They change how we view problems
    - Through interaction
    - But also through the mechanic of play that can be independent of player interaction
- What do games change:
  - The view of the players: players now have experience doing the problem not just thinking about it
  - The underlying paradigm of the problem – you thought it was a training problem, instead you have a problem with the adversary owning all your trainees
  - The set of possible solutions – through play we make connections that did not exist before
- This scares the rationalists who have a lot invested in existing solutions

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Games and narrative

- Reading stories is one form of imaginative escape that has been studied at least little bit
  - Between two worlds
  - The suspension of disbelief from Coleridge
  - These all imply that you are somewhere else, but still here
  - They can have significant emotional effects – crying when Lassie dies, for example – you know Lassie is not dead, but you still feel
  - FMRI research suggests the brain does not make much of a distinction between reading about something and actually doing it
- Participating in interactive stories – play can be even more powerful
  - The role of pretend in predicting others actions has been the subject of research that suggests we do better when we pretend to be the decision-maker not just predict what the decision-maker will do
    - Role-thinking or pretending to be other people increased the accuracy of predicting others behavior by a factor of 2
- The rationalists also worry when decision-makers participate in games, because they tend to believe them as experience

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No matter how you think of it games are special

- Games are a special form of kinesthetic narrative creation
  - This takes the effect of story and reinforces it by making you live, and be somewhat in control of, the story
- Games are also a form of shared foolishness, a place where adults can engage in pretend
  - From that comes unanticipated associations and creates unexpected narratives
  - This can have both practical (systems, operations) as well as organizational (human relations) implications
- The implications of games go from the problem set to the players understanding and beliefs
  - They do not end with the single product like analysis, they create a living product, the players
- All of these things make games very different from the rationalist approach toward analysis of war

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Are games rational or irrational?

- Rational = analytical and conforming with physical truth
- Irrational = emotional and conforming with human truth
- So…yes
- For games to work they must be grounded in rationalist behavior
  - The suspension of disbelief and engagement in the narrative requires that the scenario and mechanics of the game be rational from the players perspective
    - I call these required elements “narrative anchors” that fix the game in a world that the players will accept
  - Good practice requires accuracy from the designers perspective
- But once play begins games become irrational
  - Players come in all forms, cranky, happy, playful, shy, not so bright…
  - Play takes on the form of the collective interests and experiences of the players – including the experiences on the day of the game
  - This is not a rational process, it’s a human process and very difficult to duplicate or control

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Why are games so special

- Games work because
  - They incorporate narrative and play elements into problem solving, this is a very powerful tool to innovate and create with
  - They deal with the unusual, irritatingly unpredictable, kinds of things that people create when they interact with each other and systems
  - They draw the irrational, human, elements into the cycle of research (games – analysis – experiments)
- Games are dangerous
  - Because they upset the rationalist worldview that dominates not just in Defense but in the workplace in general
    - They allow grownups to be foolish and in being foolish risk overturning existing power, control
  - They change player's minds because players believe they have participated in something special
- Games are a form of magic
  - They enchant because they can create a flow experience for the players as they engage with the scenario and mechanics

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How do we extend this?

- We need to do more research into how the play element of games affects decisions in serious games
  - How do existing theories and models of play integrate with professional and serious games
  - How does dramaturgical theory apply to the sponsorship of games and the use of game results?
- Are there two kinds of research you can do with games?
  - Rational
  - Irrational
- Is this just another form of postmodernist/realist debate?

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Bottom line

- Wargames are special – they are games not just models, simulations, or mathematics
- They should be placed in a separate category of activity, not mixed in a continuum with other things
- Just because there is a cycle of research – games – analyses – exercises does not mean that all three are identical
- We need to let the players play, and embrace the concept of play as a way to understand the world

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