

# Cognitive Competition, Conflict, and War

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An Ontological Approach

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The views expressed here do not represent the Department of Defense,  
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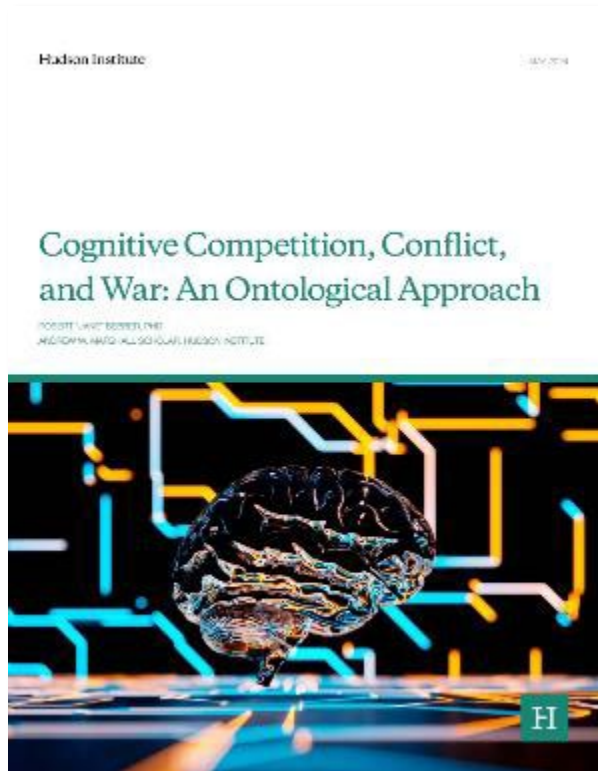
Feedback is welcome!

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# Full Report & Summary Video

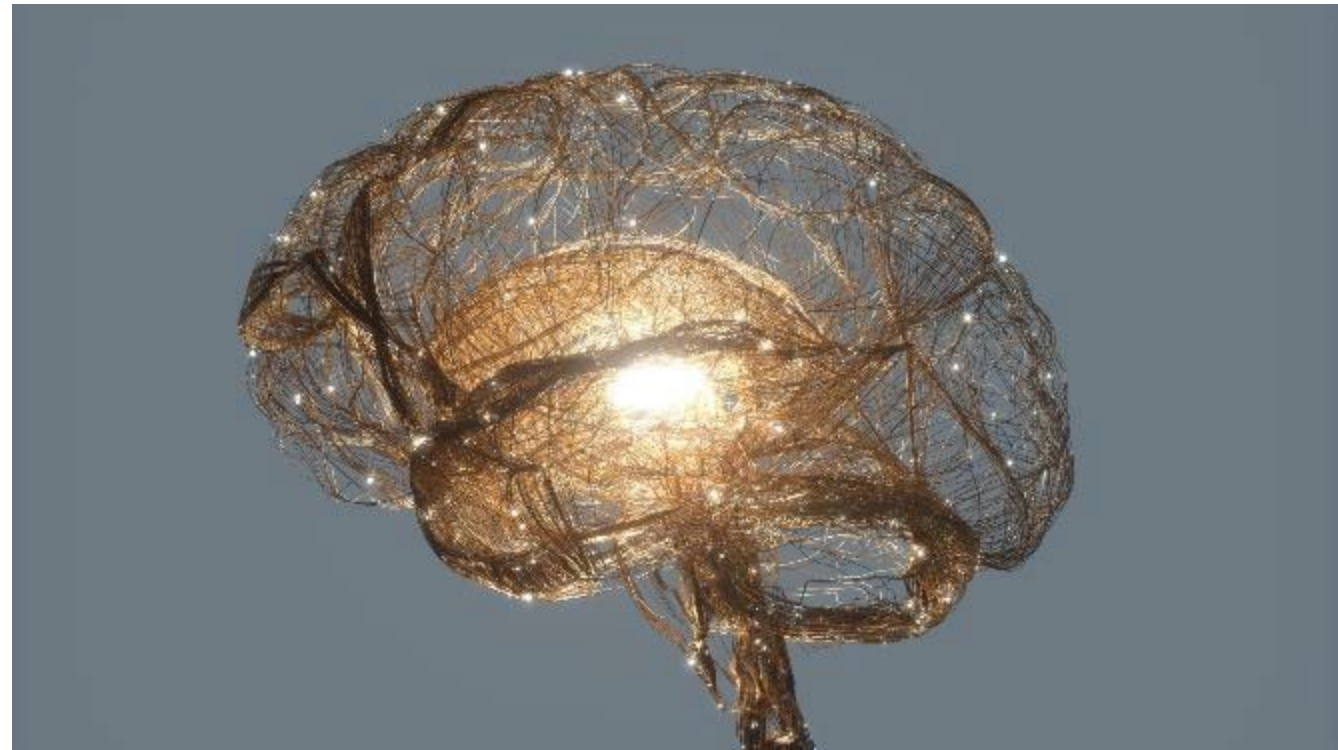
## Full Report:

<https://www.hudson.org/defense-strategy/cognitive-competition-conflict-war-ontological-approach-robert-jake-bebber>



## Summary Video:

<https://www.hudson.org/defense-strategy/cognitive-competition-conflict-war-jake-bebber>



# Contents/Agenda

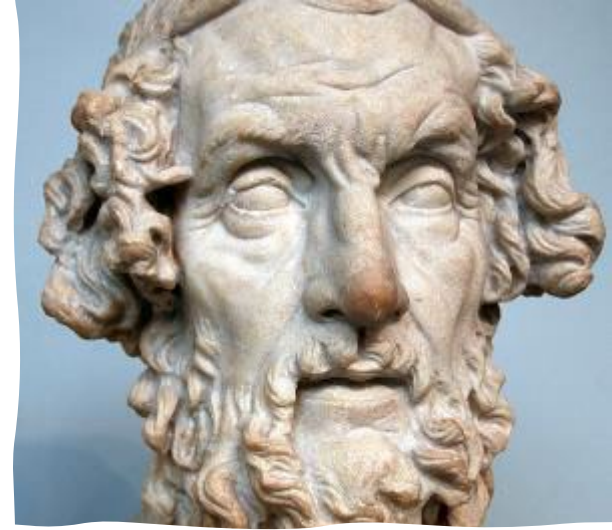
- Summary Points
- What is it? Features and Elements
- What's driving this?
- To understand, we need a common language
- Constructing an Ontology
- Conclusion and Next Steps



# Iliad

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"And so he spoke, and the dream departed, leaving the king with fancies in his heart that were half-formed. He thought in his mind that he should take Troy's citadel at once, not knowing what plans Zeus had framed."  
(Book 2, Lines 36-39)



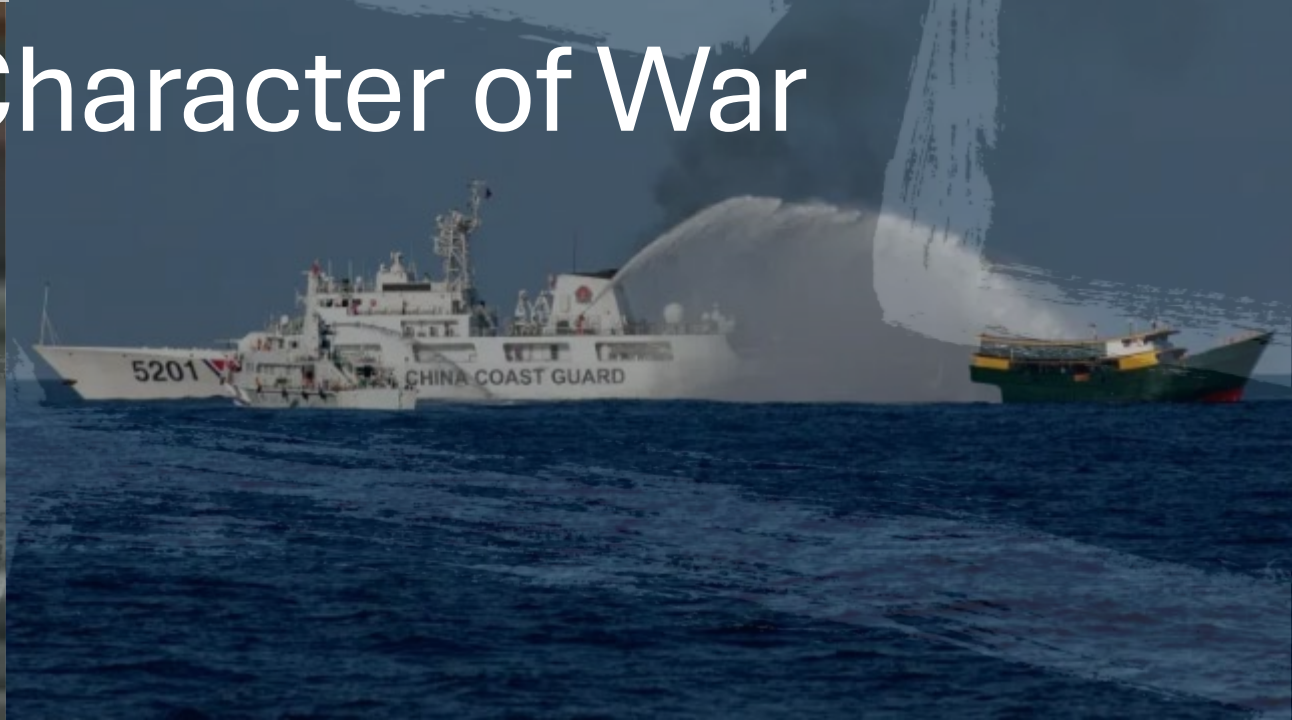
# Summary Points

- The character of war is changing. The nature of war is not.
- Global trends create potentialities in the cognitive space that go well beyond traditional “information operations” or “information war.”
- Words mean things.
- Do not rely on technology to solve what is fundamentally a human problem.

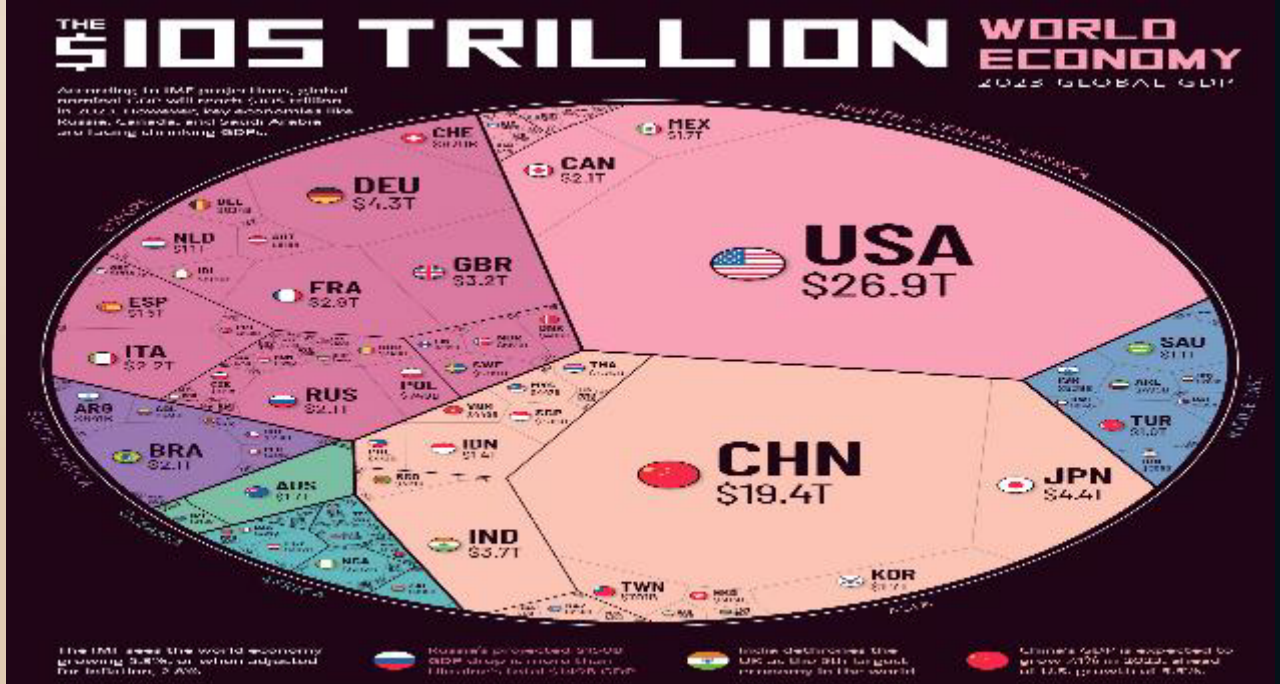
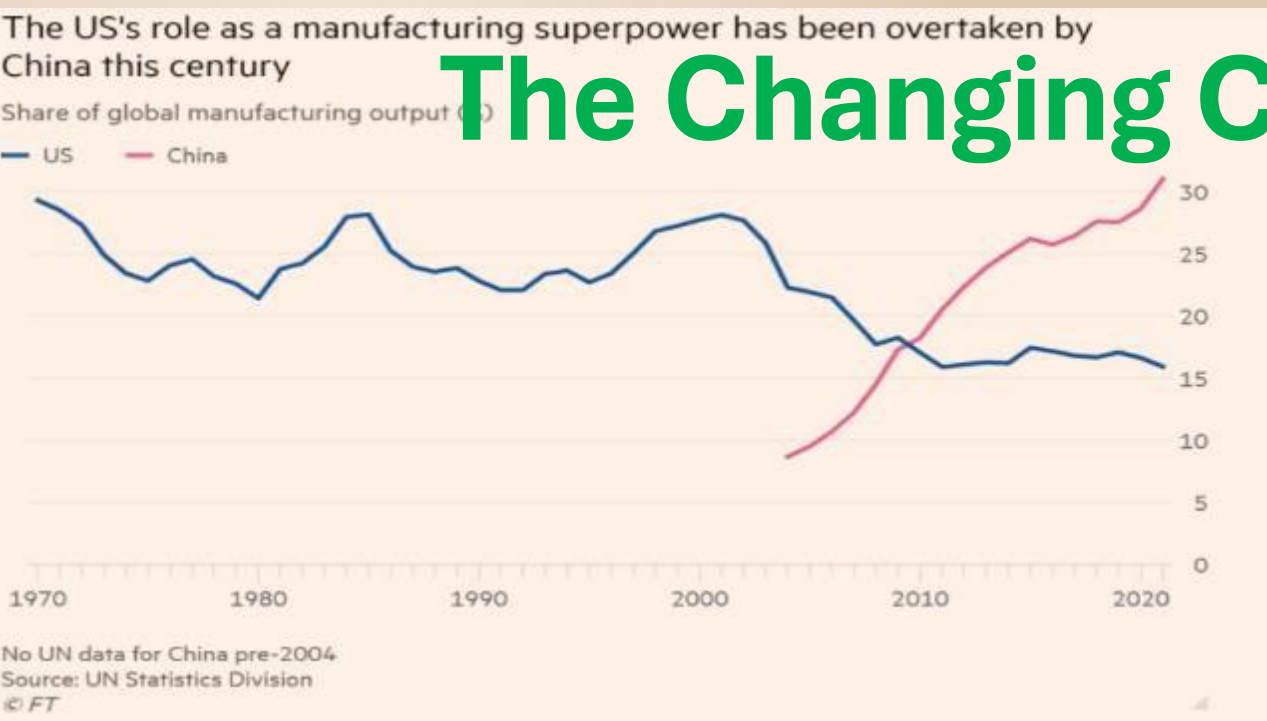
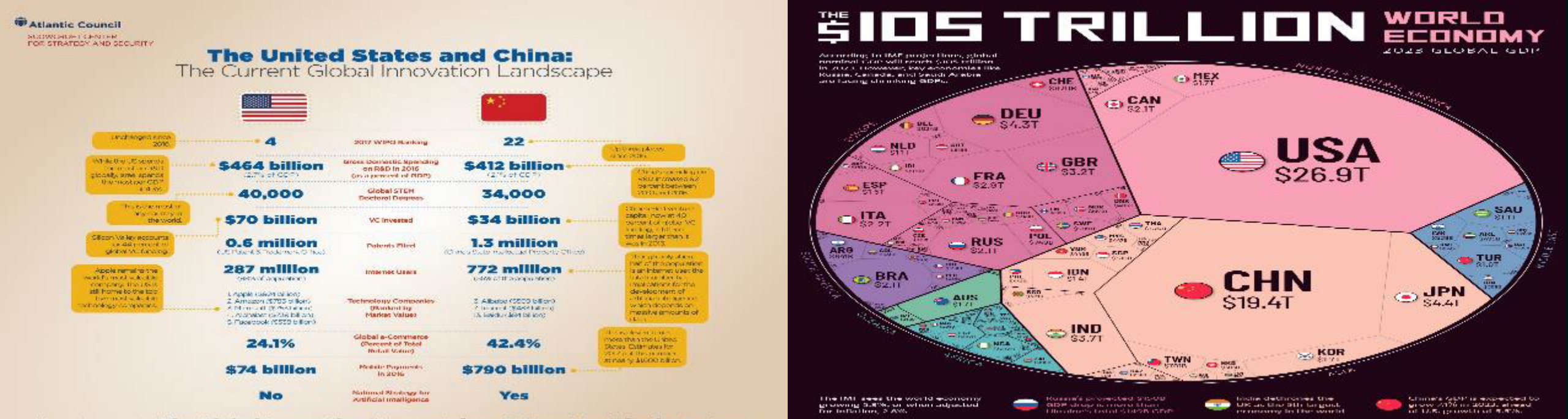




# The Changing Character of War



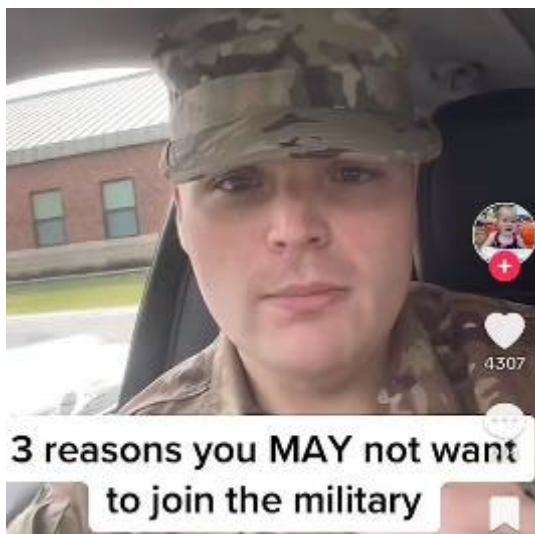
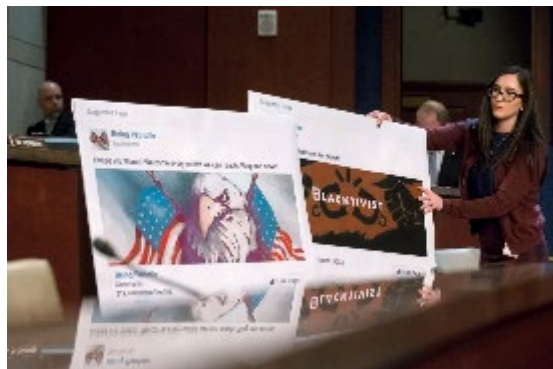




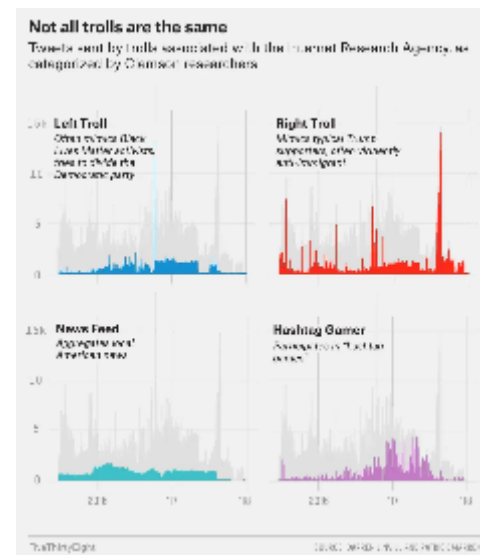


# Cognitive Campaigns Today

## More than Elections and TikTok



## More than Misinformation / Disinformation



# Understanding the Difference

## Information Warfare

- Manipulates what we think
- Focus is on information systems, networks, data of military actors
- Injecting, controlling, distorting information to influence decision
- Hacking the software to feed bad inputs

## Cognitive Warfare

- Manipulates how we think
- Focus is on cognition itself within individuals, groups, and populations
- Alters sensations, perceptions, beliefs, thought patterns, emotions and resulting behaviors
- Rewrite the software entirely, permanently changing the logic of how decisions are made



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# Features and Elements

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Tactical to Strategic



How You Think vs. What You Think



Leverages Advanced Neuroscience



Multiple Engagement Modes



Adapts Behavioral and Attention-based Economics

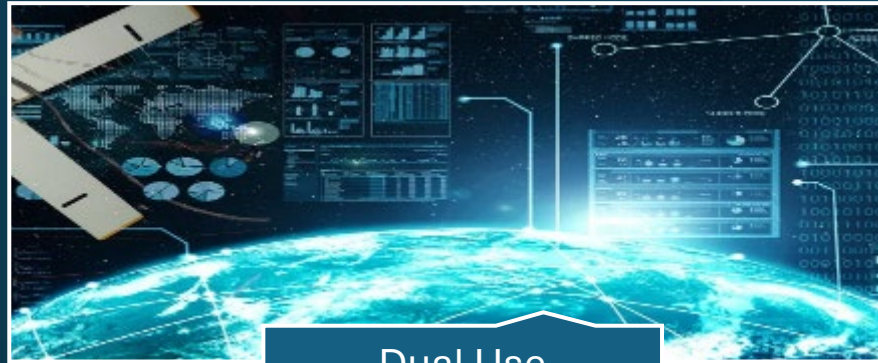


Algorithm-based Capabilities Using Computational Propaganda



Create Self-Sustaining Feedback and Amplification Loops

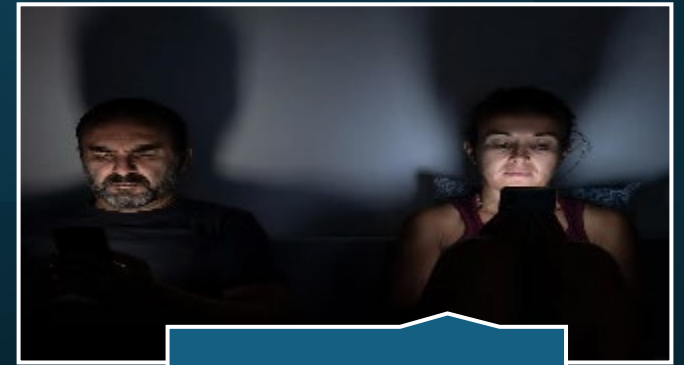
# What is driving this?



Dual Use  
Technology



Brain Science



Attention Economy



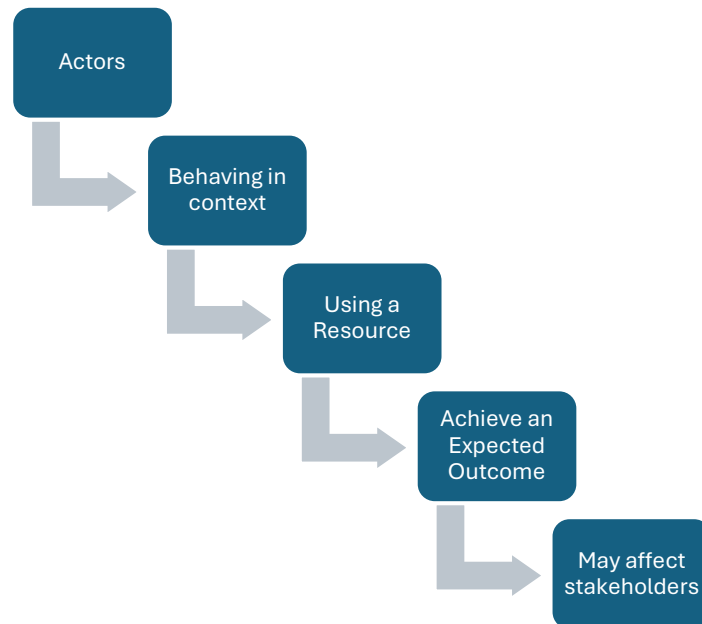
# To Understand We Need a Common Language



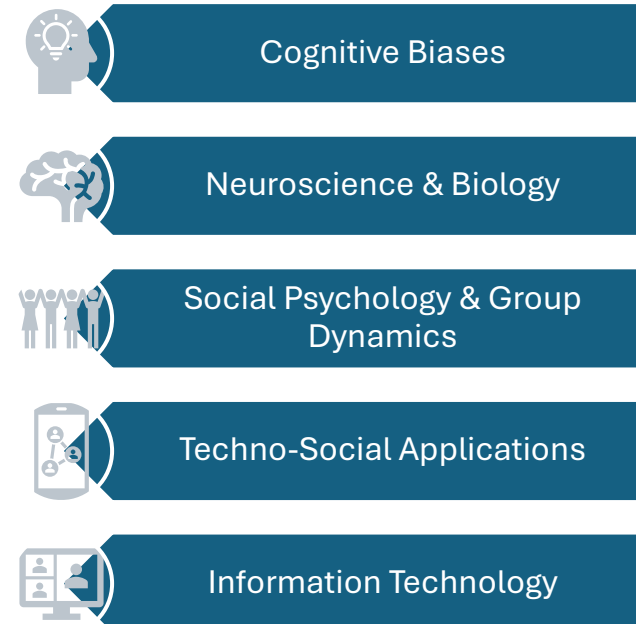
framework  
organizing knowledge

# Constructing an Ontology – Elements

## Use Cases



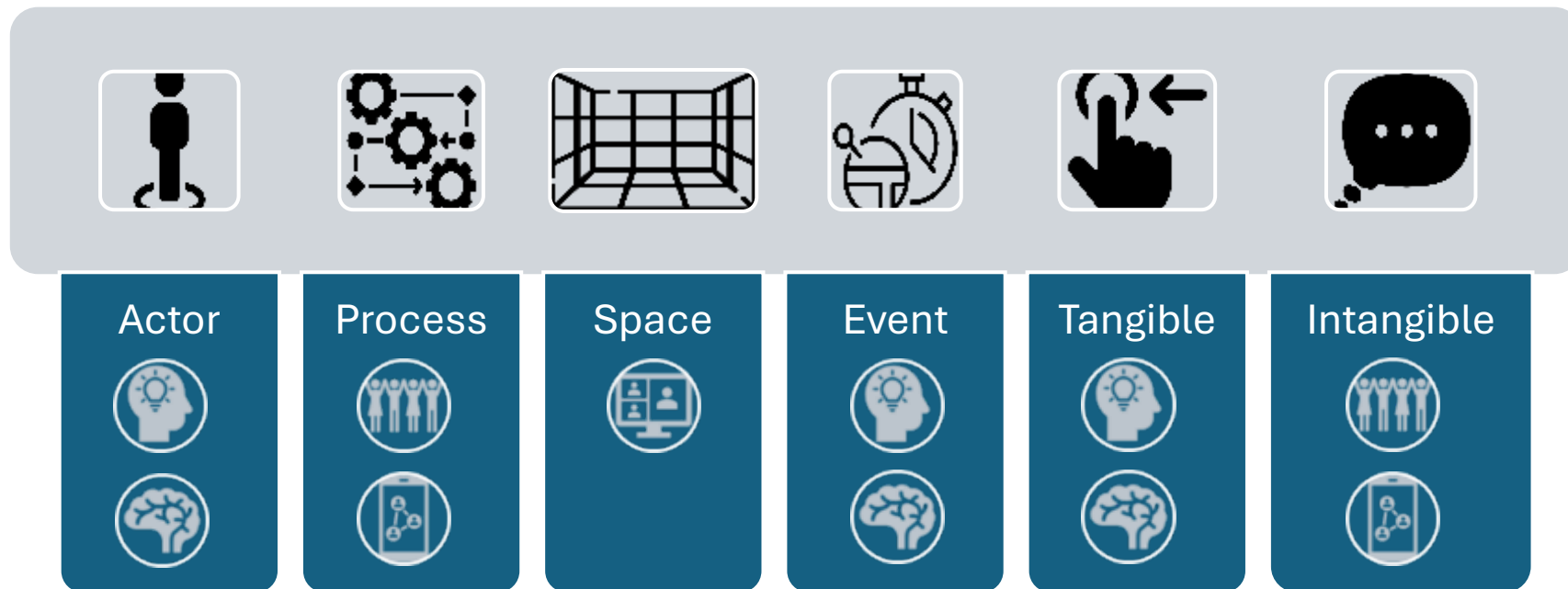
## Tools



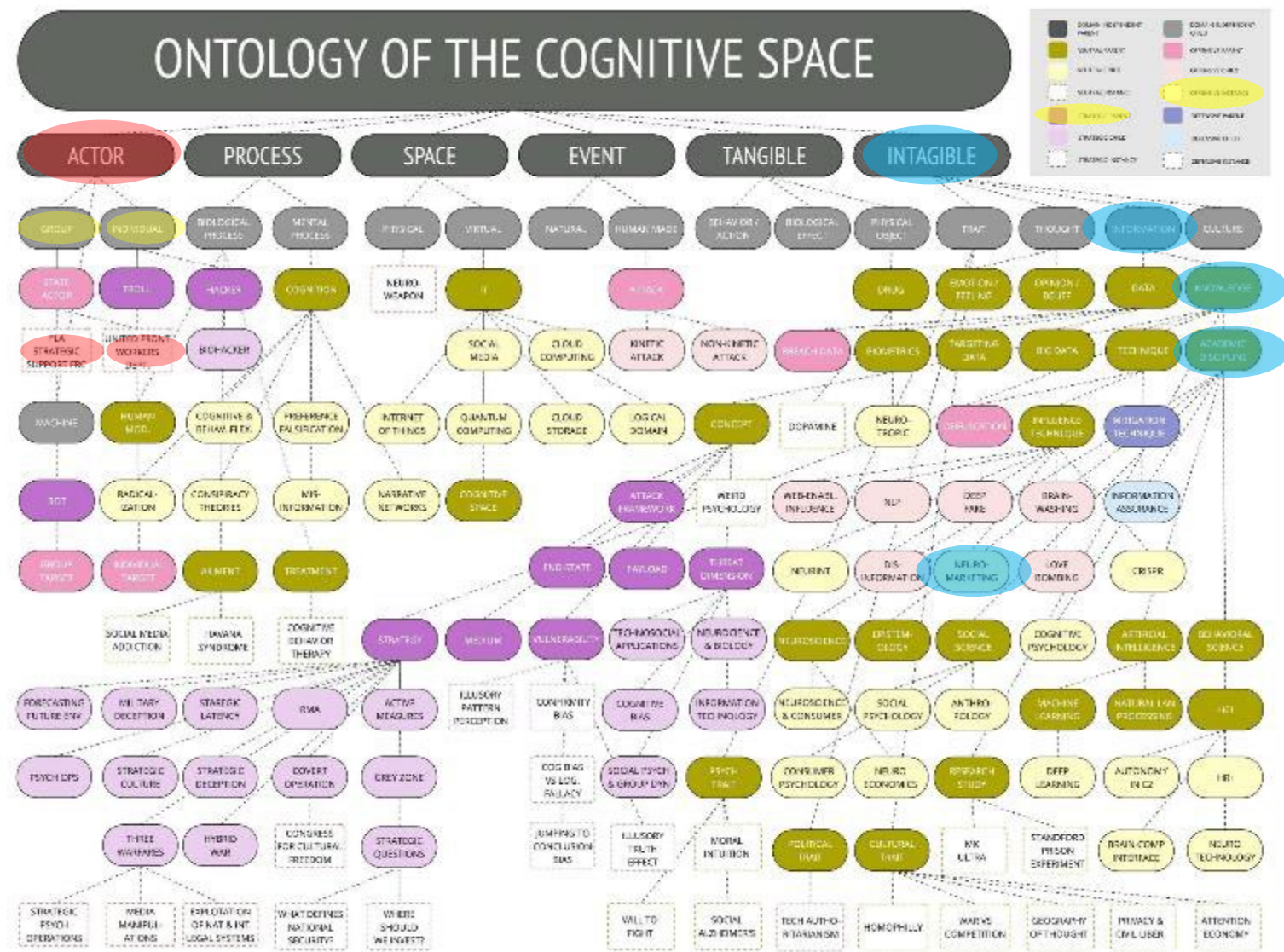


# Constructing an Ontology – Elements

## Classes



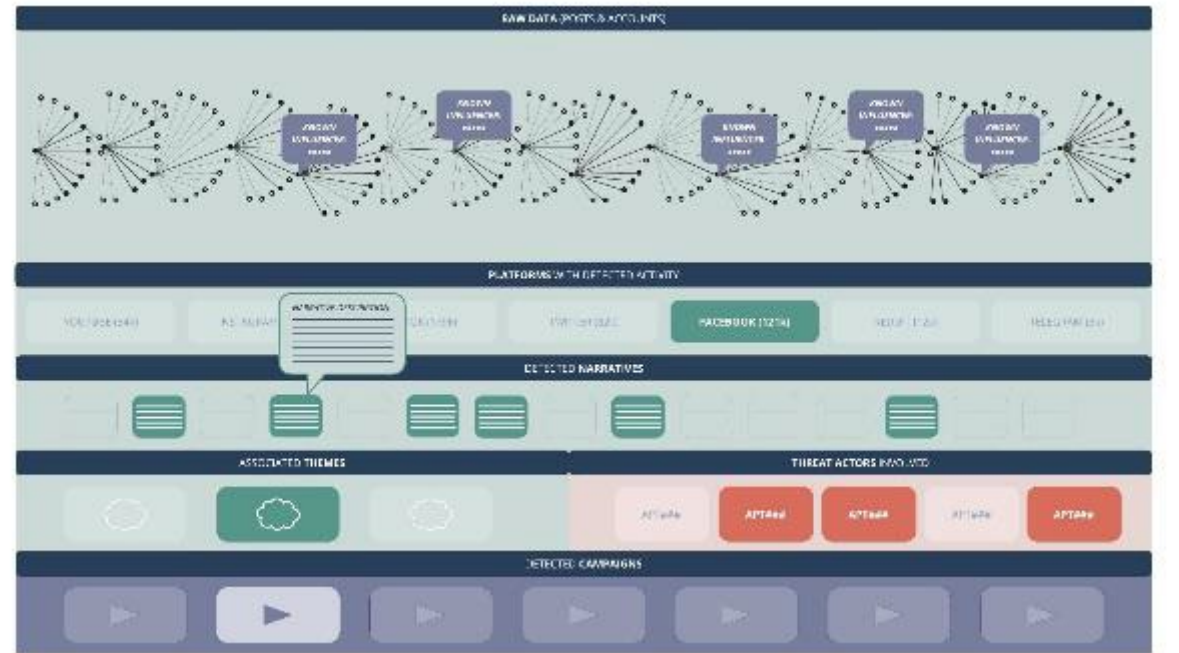
Putting it all together





# Conclusion and Next Steps

- Refine and expand
- Integrate into existing security protocols and practices
- Foundation for Decision Visualization Tools
- Balance legal, ethical, moral imperatives
- Ensure democratic institutions remain tenable



***The Character of War is Changing. The Nature of War is Not.***

# Questions?

Thank you!

Feedback is welcome at [jbebbber@gmail.com](mailto:jbebbber@gmail.com).