



CYBER POLITICS AND POLICIES

CHAPTER 5: CONSTRUCTIVISM

AT THE END OF THIS CHAPTER, STUDENTS WILL BE ABLE TO:

Define the major ideas associated with constructivism – including intersubjective understandings, agency, and discourse/language

List four analogies or metaphors used to describe the internet and their significance

List key military terms associated with the internet – including critical infrastructure, resiliency and domain.

WHAT IS CONSTRUCTIVISM?

States – and individuals – “build” the international system through the use of various tools, including **language**.

How we deploy language, including words and metaphors, to talk about a subject thus affects how we think about that subject.

the internet is not inherently either a battlefield or a marketplace.

Many of the concepts which we point to in the international system are not ontologically real physical realities.

Instead, concepts like race or nationality are products of our intersubjective understandings.

We behave in certain ways because we decide to treat them as real.

WORDS, IDEAS AND IDENTITY

Words or labels can also be used to establish a state or group as legitimate or illegitimate within the world of international relations.

Agency

leaders are more responsible for their environments than we had previously thought.

Leaders and citizens have the agency to shape the international system, rather than being shaped by that system and forced to behave in certain ways (i.e., belligerently).

CONSTRUCTIVISTS AND THE INTERNET: CHOOSING WHAT IT IS

- Individuals make decisions about how to describe and treat the internet and the functions which individuals and groups played within that environment.

CHOICES:

- to describe it as either part of the real world, or as a world apart which was governed by different rules.
- to describe it as a place characterized by cooperation, or as one characterized by hostility.
- to describe it as international in character, or as national in character with fixed 'borders', and 'territory'.
- to describe it as libertarian and not subject to existing laws within the international system or as a system which was in need of regulation.
- to think of anonymity as threatening or liberating
- to describe the speed at which information travelled as a positive or a negative quality.

METAPHORS AND THEIR IMPACT

- Cyber 911
- Information Superhighway
- Cyber Pearl Harbor
- Cyber Armageddon
- “computer virus”

- **STOP AND THINK:** How did the choice of these words affect how citizens and policymakers thought about the internet?
- Can you think about other terms or phrases which affected how people thought about the internet and cyberspace?

NEW VOCABULARY TO DESCRIBE CYBERSPACE

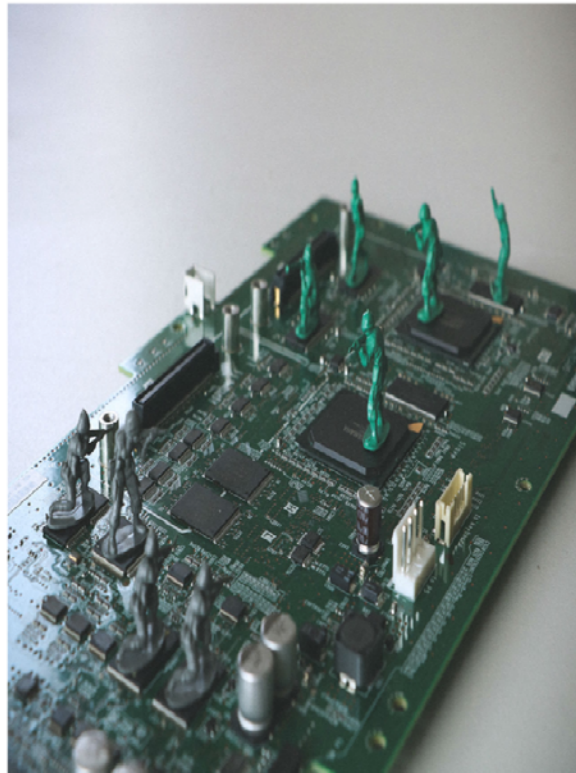
- Cybersecurity (2 meanings: computer technology term; relation to national security)
- The Fifth Domain
- 1996: Clinton Administration uses term “CRITICAL INFRASTRUCTURE”

THE NUCLEAR ANALOGY

- Weapons of Mass Disruption
- Mutual Assured Disruption

CYBER TERRORISM, FAILED SPACE, CYBER INSURGENCIES

- The cyber frontier



- Digital counterinsurgents

USE OF LANGUAGE TO TALK ABOUT OWNING CYBERSPACE

- American cyberspace
- Russian cyberspace
- Cyberterritory

- Social Constructivists suggest that what changed was not the environment –but rather, our **intersubjective understanding** of the cyberspace environment.
- Inventing a new language and new concepts like the cyber threat and cyber security
- Analysts began to perceive this cyber 'territory' differently and to behave differently on a national and international level as a result.

THE CYBER INDUSTRIAL COMPLEX

- Some critics allege that business people/defense contractors “hyped up” the cyber threat, in order to sell better patches and firewalls.
- No vested interest in finding a permanent cybersecurity solution.

- REFERENT OBJECT OF (CYBER)SECURITY

WHAT specifically is being defended in cyberspace?

- People
- Data
- National interests?
- Real world physical weapons?

FOR FURTHER DISCUSSION:

- How does the agent-structure problem relate to the cyber domain?
- Are you a realist, who believes that states are driven to adopt an adversarial view of this domain, and therefore to focus on protecting their borders, distrusting their neighbors in cyberspace, and creating a Cybercommand?

- Are you a constructivist, who believes that the language used by people like Russian cyber experts are instrumental in creating this hostile environment, and could it be changed?