

17.445-17.446

Fall 2015

INTERNATIONAL RELATIONS in the CYBER AGE

The Course is in Three Parts

PART I

Structure & Process in International Relations

PART II

Theories of International Relations

Part III

Strategic Issues

Week 1 Introduction Some Basics



1. International relations

What is that?

Power & Politics

Actors & Activities

2. Cyberspace

Defined

Where is the politics?

Where is the International?

3. Changing Parameters

Legacies of 20th C.

Realities of 21st C.

4. Theory Matters & Matters of Theory

Levels of Analysis

Systems of Interaction

Basic Theories

Growth & Expansion

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Week 1

1. International Relations

Is about what?

Why?

How?

Key Concepts

2. Cyberspace

Global Domain of Human Interaction

- Created through the interconnection of millions of computers by a **global network** such as the Internet.
- Built as a layered construct, where physical elements enable a logical framework of **interconnection**
- Permits the processing, manipulation, exploitation, augmentation of information, and the interaction of **people** and information.
- Enabled by **institutional** intermediation and organization
- Characterized by decentralization and interplay among these **actors, constituencies and interests.**

Dilemmas for the State System

Table 1.1
Characteristics of Cyberspace

- *Temporality*—replaces conventional temporality with near instantaneity
 - *Physicality*—transcends constraints of geography and physical location
 - *Permeation*—penetrates boundaries and jurisdictions
 - *Fluidity*—manifests sustained shifts and reconfigurations
 - *Participation*—reduces barriers to activism and political expression
 - *Attribution*—obscures identities of actors and links to action
 - *Accountability*—bypasses mechanisms of accountability
-

Choucri, Nazli. "Table 1.1: Characteristics of Cyberspace." In *Cyberpolitics in International Relations*. MIT Press, 2012. ISBN: 9780262517690. Used with Permission.

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3. Changing Parameters Legacies of the 20th Century



- Large number of new sovereign states
- Growth in number & size of international institutions
- Growth in private sector size and influence
- Growth in non-state actors with new objectives
- Expansion of the international agenda

RESULT

- “Crowded” system & high density of decision-entities
- Increased uncertainties, collusion & collisions

None of this is due to cyberspace



Realities of the 21st Century



- New vulnerabilities & challenges to security
- Changes in traditional power calculus
- Dominance of new private cyber actors
- Increased complexity of cyber management
- Contentions over US-created cyber institutions
- Growth of cyber-conflicts & need for cyber-cooperation

RESULT

- Increased coupling of “real” and cyber domains
- Growth in “hybrid” policies & responses

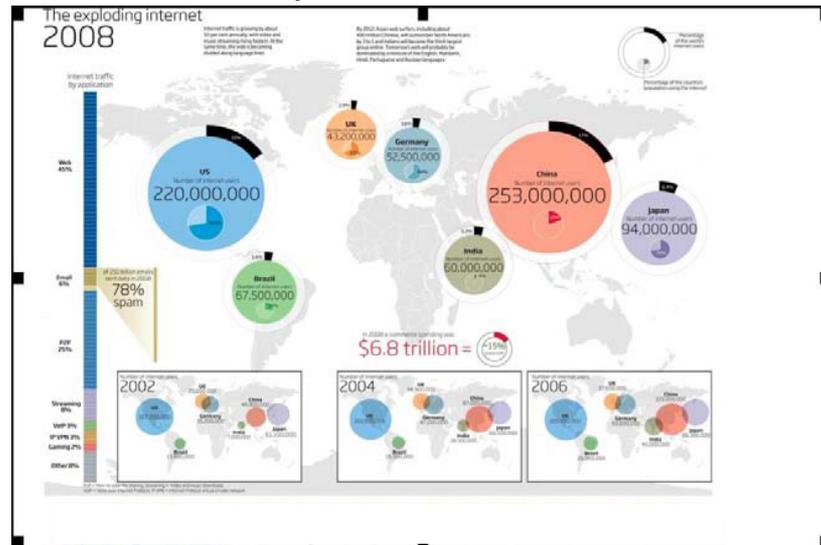
All of this is due to cyberspace

The familiar world map



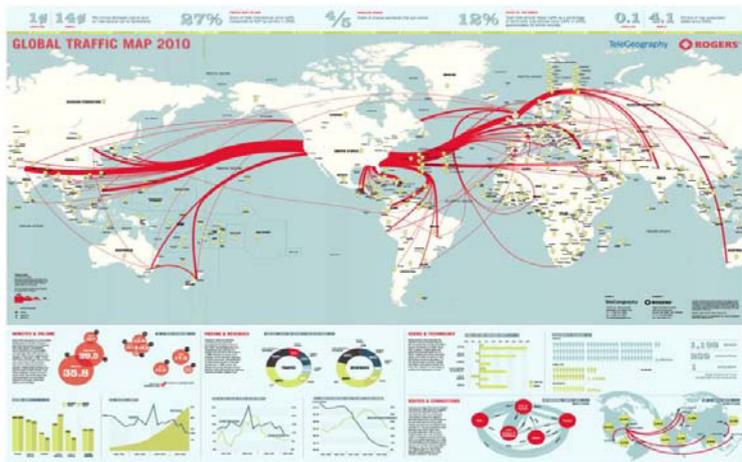
This image is in the public domain.
Source: [The CIA World Factbook](http://www.cia.gov/library/publications/the-world-factbook/).

The Cyber Access View



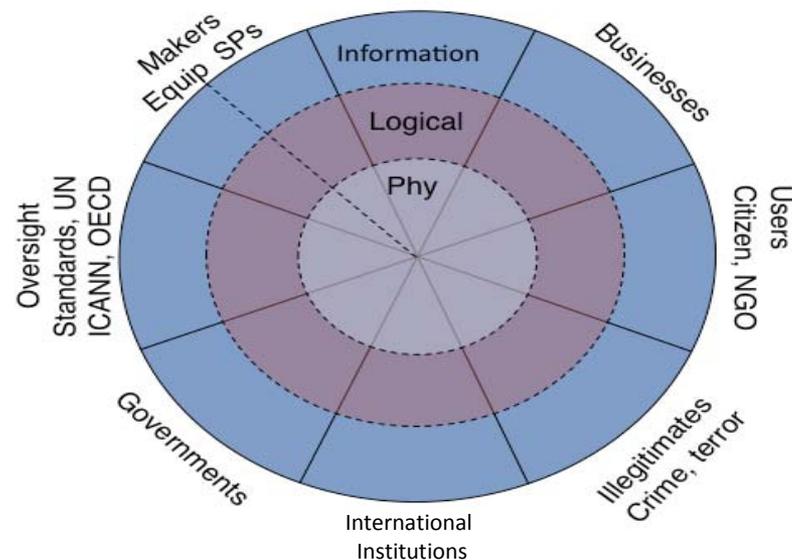
"Exploring the Exploding Internet." *New Scientist*, April 28, 2009. © Reed Business Information Ltd. All rights reserved. This content is excluded from our Creative Commons license. For more information, see <http://ocw.mit.edu/help/faq-fair-use/>.

Global Traffic Map (2010)



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The Cyber Layer Model



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4. Theory Matters & Matters of Theory

Levels of Analysis

Systems of Interaction

Basic Theories

Growth & Expansion

Levels of Analysis

Traditional Theory

Three Levels

Man – Individual

State – The Sovereign

International System

One Domain

The Human System

Levels of Analysis

New View

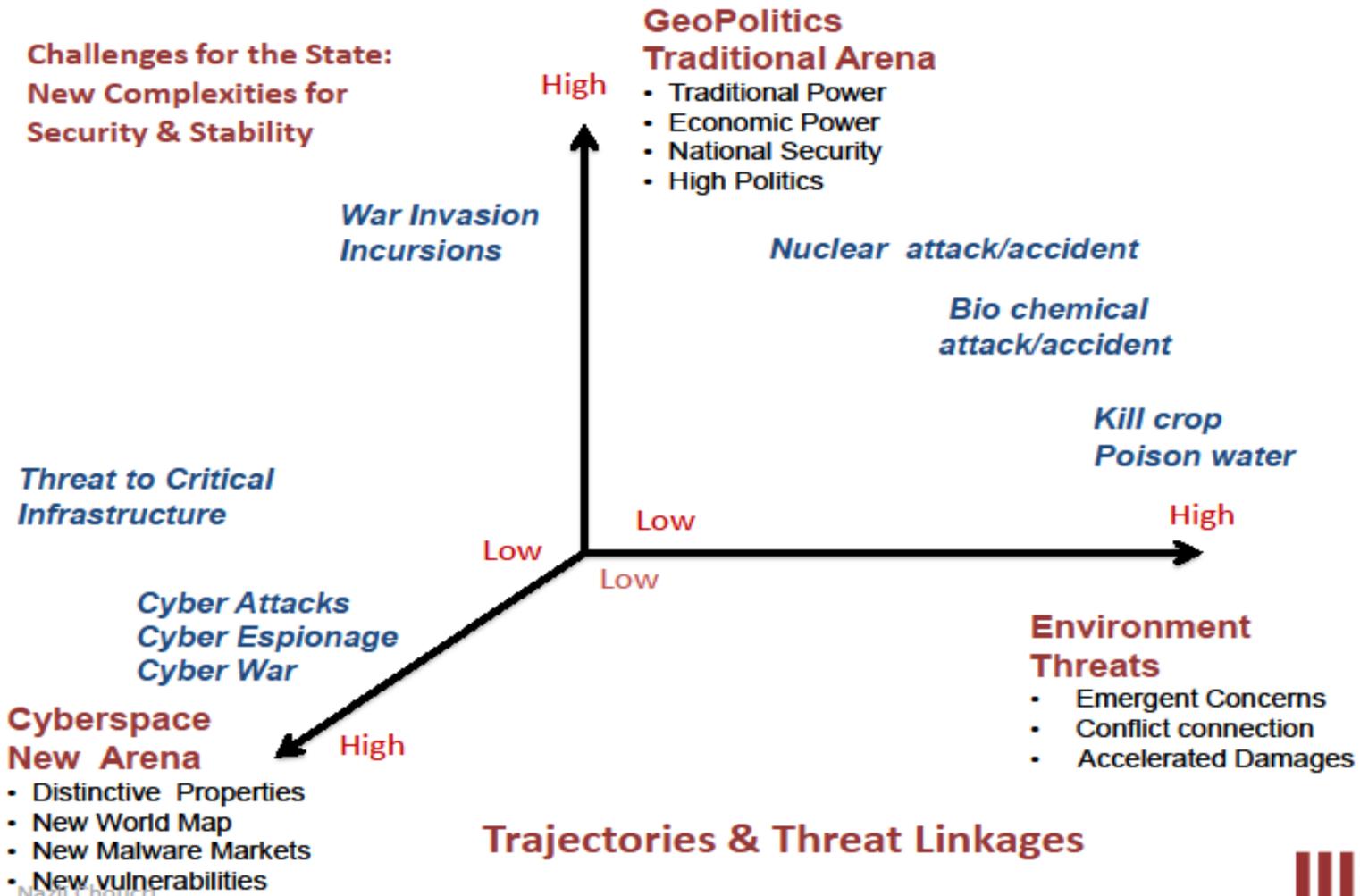
Four Levels

Individual & Aggregates
State & Non State Actors
International System
Global System

Three Domains

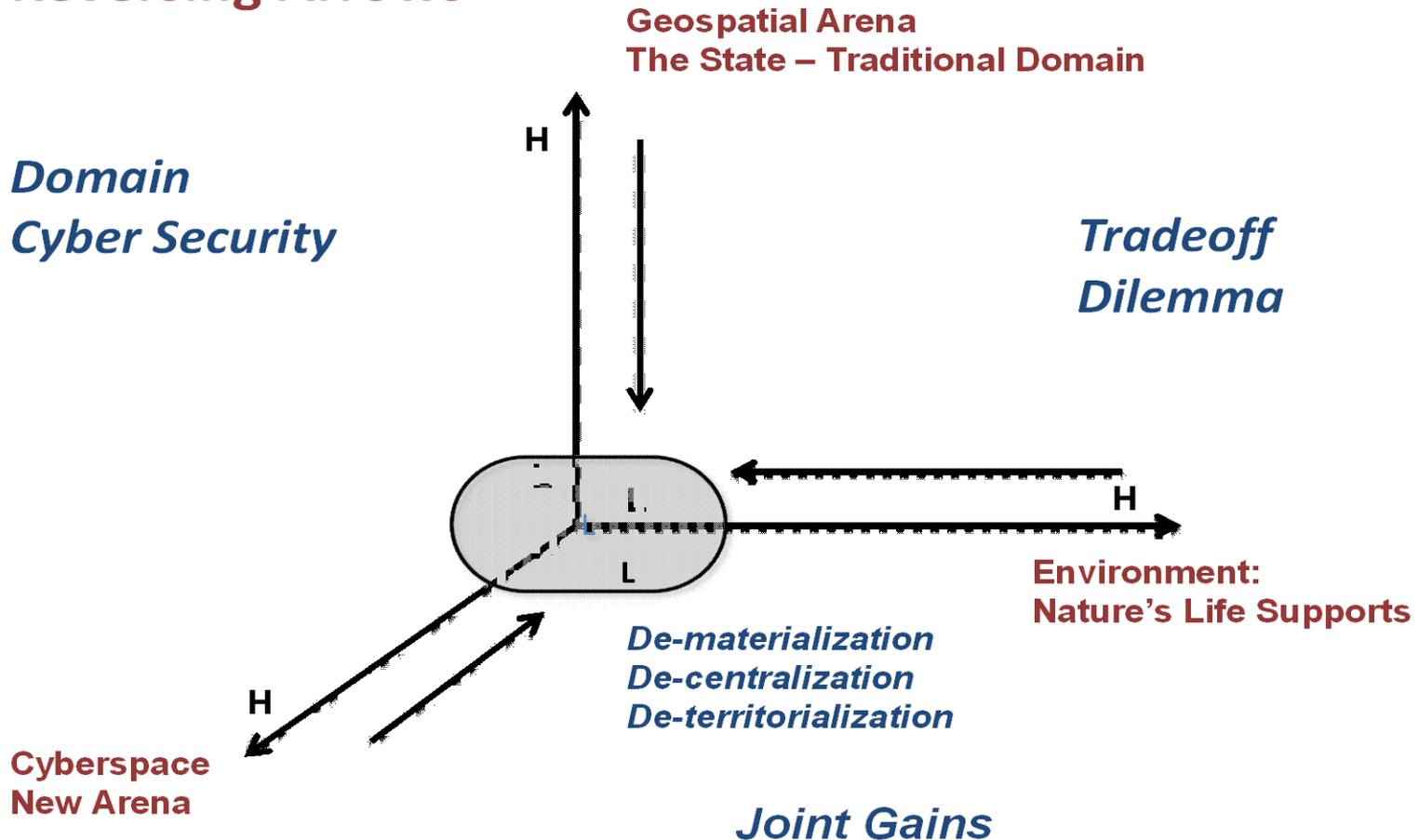
Human System
Natural System
Cyber System

Systems of Interaction



Systems of Interaction

Reversing Arrows



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Traditional IR Theories

- **Realism**
- **Institutionalism**
- **Constructivism**

To be continued

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Week 2 Outline

- 1. Cyberspace – Defined**
- 2. IR – Past & Present**
- 3. Theories of International Relations**
- 4. New Concepts & Theory**
- 5. Assumptions for 21st century IR**

Realism & Neo-Realism

- **The role of the state – The uses and limits of its instruments**
 - For Power, Security
 - For Wealth
- **How portable is the kinetic logic of power to the virtual realities of cyber venues**
- **Government is autonomous & centralized around security concerns**
- **How and where can influence or power be exerted in the ecosystem in the cyber domain**
- **The only relevant technological change relates to power and the military**
- **Other?**

Liberalism & Neo-Liberalism

- **Government** as a processor of inputs and outputs
- **Government policies** are results of effective access of interest groups
 - Self-interest and division of labor
 - Realists also on self interest- but realists do not address explicitly the division of labor
- **Politics** is competition among organized interests
- **Change** perceived as gradual and adaptive
 - Sources of change is not addressed, as a central issue
- **Logic of technological** development is integrative not divisive in society
- **The role of the hegemon** is essential to maintain international order and stability (and open markets etc.)
- Other?

Institutionalism & Neo-Institutionalism

- **“General pattern or categorization of activity or ... a particular human constructed arrangement, formally or informally organized.”**
 - Complex rules and norms; as well as practices
 - Specific institutions defined in terms of their specific rules
- **Rules that generate repeated behaviors (D. North)**
 - Frozen decisions or history encoded into rules (March & Olson)
 - Rules are viewed as summaries of past decisions (Rawles)
- **Institutions reflect the preferences and power of the units constituting them**
 - Causal position of political institutions
 - Institutions themselves shape those preferences and that power (Keohane; Krasner)

Constructivism

- **Causal position of ideas** – idea drive action & output
 - not power, security, institutions, or other
- **Focus** on cognition, preferences, interpretation of content,
- **Agency function** – changing and making society
- “Changes in international politics occur when beliefs and identities of domestic actors are altered thereby also altering the rule and norms”... of their behaviors. (Koslowski & Kratochwill, Cited in Hall, 1999:293)
- **Importance** of inter-subjective meaning

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1. **Cyberspace – Defined**
2. **IR – Past & Present**
3. **Theories of International Relations**
4. **New Concepts & Theory**
5. **Assumptions for 21st century IR**

New Concepts & Theories

- **Challenges to state power due to contemporary trends, e.g., globalization of economic processes, growth of cyberspace argue for non-traditional theories of international relations.**
 - Less state centric
 - Accommodating international organizations, regimes and networks
 - Understanding new dimensions of power
- **New Assumptions**
- **Different theories or frameworks for international relations focus on different potentials of cyberspace**

Concepts

Soft Power & Smart Power

- **States, non-state actors and international organizations will seek to increase influence on the global stage by appealing to public opinion**
 - Strategic communications that emphasize the actor's cultural, social or political values;
 - Non threatening/ attractive displays of military, economic or technological capabilities
- **Cyberspace -- international networks -- are well suitable for such communication and displays**
 - Relatively inexpensive
 - Global reach, yet capable of targeting specific groups
 - Communication does not depend on permission of targeted states
 - Dependence of users on proffered technologies
- **States are also vulnerable to other actors' soft power**
 - Response include filtering of incoming information
 - Radio jamming precedents
 - Efforts to establish borders in cyberspace
 - Contention over governance and protocols of international networks
 - Localization of control?
 - Hegemony or multiculturalism in protocols and other manifestations of the cyberspace technologies

Theory

Lateral Pressure

- **Extends traditional theory that sees states competing to increase their power, resources & influence to retain sovereignty**
 - State action motivated by new needs & expectations create by growth in population and technical capabilities
 - New economic spheres can be an area for expansion if the activity can meet the population's needs and expectations
- **Different assumptions from traditional theory**
- **Competition and conflict** are not inevitable outcomes if other venues are pursued
- **States are motivated by need to survive not necessarily to dominate**
- **Selective convergence with other theories .**

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