

CYBERPOLITICS AND POLICY: CHAPTER TWO

The Internet, Technology Studies and International Relations

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

- **Compare and contrast three positions regarding the sources of a tool's meaning: technological determinism; designer's intent and social construction of technology**
- **Define terms: dual use technology, export regime, affordances, net neutrality**
- **Describe the uniqueness debate and the three positions related to how norms and rules should be derived for the internet: the adoption of unique rules; grafting of old rules. and borrowing from other fields**

WHO DECIDES WHAT A TECHNOLOGY IS FOR?

- Technology
- Designer
- Users

I. TECHNOLOGICAL DETERMINISM

- Agency – or the ability to exercise choice – can be said to belong to the technology itself. Here, technology is said to be “driving the train” since it appears to be capable of shaping and reshaping societies.
- Suggests that humans themselves (including politicians) play only a limited role in steering the evolution of new technologies since control belongs to the technologies themselves
- “Information wants to be free”

IMPLICATIONS: INEVITABLE CREATION OF NEW THREATS

- Growth of surveillance and authoritarianism
- Expansion of 'threat surface'
- Militarization of internet
- Weaponization of social media

STOP AND DISCUSS

- What are some other ‘technological determinism’ narratives that you have encountered?
- Birth control makes people promiscuous.
- Television makes people stupid.
- Junk food makes people violent (Harvey Milk murder defense)
- Video games are addictive.
- Cars and public transportation are making people obese.
- Are these narratives ever correct? Why might people find them appealing?

2. THE ROLE OF THE DESIGNER

- A tool's inventor clearly knows how people should and should not use a technology.
- Societies, organizations and groups can determine objectively whether someone is misusing a technology – and restrict technology use. (I.E. Pharmaceuticals should not be used to administer the death penalty)
- “Internet Enemies List”

KEY TERMS

- **Affordances:** Particular facets of technology which are interwoven in technology, affecting how people use it. For example, many social media and communications technologies (like Twitter) are designed in such a way that users must use transparency in their communications – since they offer only limited faculties for communicating privately rather than publicly

AFFORDANCES OF INTERNET

- nonhierarchical, with information moving between nodes and hubs, rather than up and down to a central location at the top of a hierarchy.
- anyone could join the internet from anywhere.
- Internet was a **free good**, like air – which could not be individually owned and could not be shared out in such a way as to deprive some people of access while allowing it to others.

PROBLEMS WITH DESIGN PERSPECTIVE

- Posits that internet environment is **STATIC** and qualities of this environment are **FIXED**
- In reality, while anonymity was once a characteristic of the internet environment, nowadays that is no longer true
- Problem of **DUAL USE** technologies
- “design community” is not a monolith; multiple design communities with different visions for internet

SOCIAL CONSTRUCTION OF TECHNOLOGY

New technologies do not develop in a vacuum nor do they necessarily have only one set of values and norms attached to them automatically.

A technology's meaning technology is **negotiated** within a specific socioeconomic, political and economic context.

SCOT TERMS

- Function creep
- Technological closure

	Agency belongs to	Norms derive from	Threats	State Response
Technological Determinism	Technology	Technology itself (i.e. Information wants to be free)	Technology changes human behavior and values	Limit access to technology – censorship, registration, filtering
Role of Designer	Designer	Aims, values of designers (i.e. Designing for Security, Privacy)	Users abuse of technology Malignant designers who create bad code, destroy environment	Build in measures to preempt threats, punish those who violate ethos of technology
Social Construction of Technology	Users	User community, PREEXISTING RULES AND NORMS, (STATE)	Unanticipated uses	Surveillance, Rules governing use

Characteristic	Manifested in Real Space	Manifested in Digital Space
Speed	Interactions may be formalized, slow (i.e. treaties, alliances)	Interactions (including alliances) may be fleeting, temporary
Jurisdiction	Real borders in which states have sovereignty	Borderless space across which data and ideas migrate freely, unregulated
Private Property, including intellectual property	Recognized as existing on national and international levels, through treaties; Penalties exist for violating norms	Not always recognized Norms may favor sharing, open source solutions to problems
Anonymity	Actions are carried out by real people who can be disciplined by the state for violations	Actions cannot always be traced to an individual or group due to attribution problem
Weapons	<ul style="list-style-type: none"> • Tangible • Can be tracked and governed by international community • Understandings regarding use and tech specifications change slowly • Utility of weapons remains over the long-term 	<ul style="list-style-type: none"> • Cyberweapons are Intangible • Cheap • Difficult to track and govern • Strategies, tactics, doctrines and tech specifications change quickly • Utility of weapons decays quickly

HOW TO REGULATE THE INTERNET

- Create new, unique institutions
- Grafting of preexisting agreements ONTO cyberspace (i.e. Law of the Sea)
- EXPANSION of preexisting agreements to INCLUDE, INCORPORATE cyberspace (I.E. UN Charter on Human Rights to INCLUDE Digital Human Rights)