


# Do Artifacts Have Politics?

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# The Politics of Artifacts

- Langdon Winner's article 'Do Artifacts Have Politics' has been one of the most influential papers within STS.
  - Critics, such as Bernward Joerges, have stated that Winner's perspective has been indisputable and in need of critique.
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# Do Artifacts Have Politics?

(Winner, 1980)

# Winner's View of Artifacts & Politics



**Proposes:** Technology embodies social order & has political qualities

**Two ways technology has politics:**

1. Technological artifacts that are designed, created, and implemented to create a type of order or settle a dispute
2. Artifacts that are political through and through, that of necessity mesh with a particular type of political arrangement.

Robert Moses used to explain Winners Argument.



# Background - Robert Moses

- Involved with NYC government from late 1920's to around mid 1970's
- Very influential, implemented multiple government reforms in New York
- Perhaps most well known work was Long Island Parkways projects



# Winner's View of Jones Beach



Winner believes that Moses created the bridges as a way to divide social classes from accessing the Beach.

Used as an argument to support Winner's view that technologies can embody a political agenda.

Ultimately, applies to Winner's point of technology having politics.



# Assumptions Embedded in Technological Artifacts and Systems

Marx: Technology is distinctive feature of modernity

Winner: They are also distinctive themselves

1. Power should be centralized
2. The few are given voice and the rest should be silenced
3. There are structural constraints between social classes
4. The world is hierarchically ordered
5. Good things are unevenly allocated
6. Men and women have different abilities
7. One's life is always open to surveillance and scrutiny



# Discussion Questions

1. Should technology be treated with more or less importance when compared to political policy or law?
2. Does the idea of “Artifacts having politics”, really boil down to just a social issue?

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# Do Artefacts Have Ambivalence?

(Woolgar & Cooper, 1999)

# Woolgar and Cooper

- Took a more sceptical approach to analyzing Winner's bridges
- Disagree with Joerges in assuming...
  - A definitive story of the bridges exists
  - Moses' intentions can be known



# Hunt for Facts

- Bridges renovated?
- Busses changed?
- Fake documents?
- Inconsistent terminology in peoples' accounts?

"... the (supposedly) crucial piece of information is always just tantalizingly out of reach."

"... we propose that it is more productive to recognize that there are always further possible auxiliary theories that, if given sufficient investment, can undermine the emerging consensus"

Service To/From Central Mall Location and East and West Bathhouses

Expanded Transfer Program Continues!

Travel Information Center:

(516) 766-4722

Jones Beach State Park

Information: (516) 785-1606

Long Island Bus  
Going your way

# Jones Beach Bus Schedule 1997

## JB62

### FREEPORT-JONES BEACH

#### BUS SCHEDULE

DEPART FREEPORT LIRR STATION	ARRIVE JONES BEACH	DEPART JONES BEACH	ARRIVE FREEPORT LIRR STATION
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# Ambivalence

- RE: Joerges: “The more important task is to engage the essential ambivalence of artefacts in general”
  - Brings our experience of technologies to light
- Technology is...
  - Good AND bad
  - Enabling AND oppressive
  - Works AND does not
  - As a consequence, no politics
- Technological meaning to be found in **use**
  - May change over time!



# Relational Contexts of Moses' Bridges

1) Obsession with individuation in 20th century (one person having great power)

2) Contrast between appearance and reality & framing of community vs power-monger fuel paranoia

3) Technology involved is very simple, containing no "black boxes"

4) The story is an immutable mobile, about an immutable immobile


5) Succinctly connects intention with physical world

6) Offers a motif which stands for an entire thematic strand of STS studies

# Wolgar and Cooper's Proposal

The story of bridges can best be understood if viewed as an “urban legend”

Four part structure

1. Occurrence of boundary violation
  2. Reveals contamination, pollution, illness, guilt, or embarrassment which is contingent upon the boundary violation
  3. Articulates role of delayed realization in causing contamination
  4. Asserts that self-replication can occur before the condition is detected
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# Urban Legends

- Often focus on technology
  - New technologies raise questions about social relations
- Content may change, overall structure remains constant
- Have important functional properties
  - “Make tellable morally sanctioned properties of boundaries”
- Rise to prominence from their usage, not inherent qualities

Strength of the exemplar is achieved through **articulation**

Caused Winner's bridges to rise to prominence!

- “... the bridge connects and is connected to general arguments that are emblematic of STS”



# Discussion

- Do you agree with the idea that finding the “ground truth” isn’t required to interpret the bridges?
- Can you think of any present-day examples of technology being used in an urban legend?

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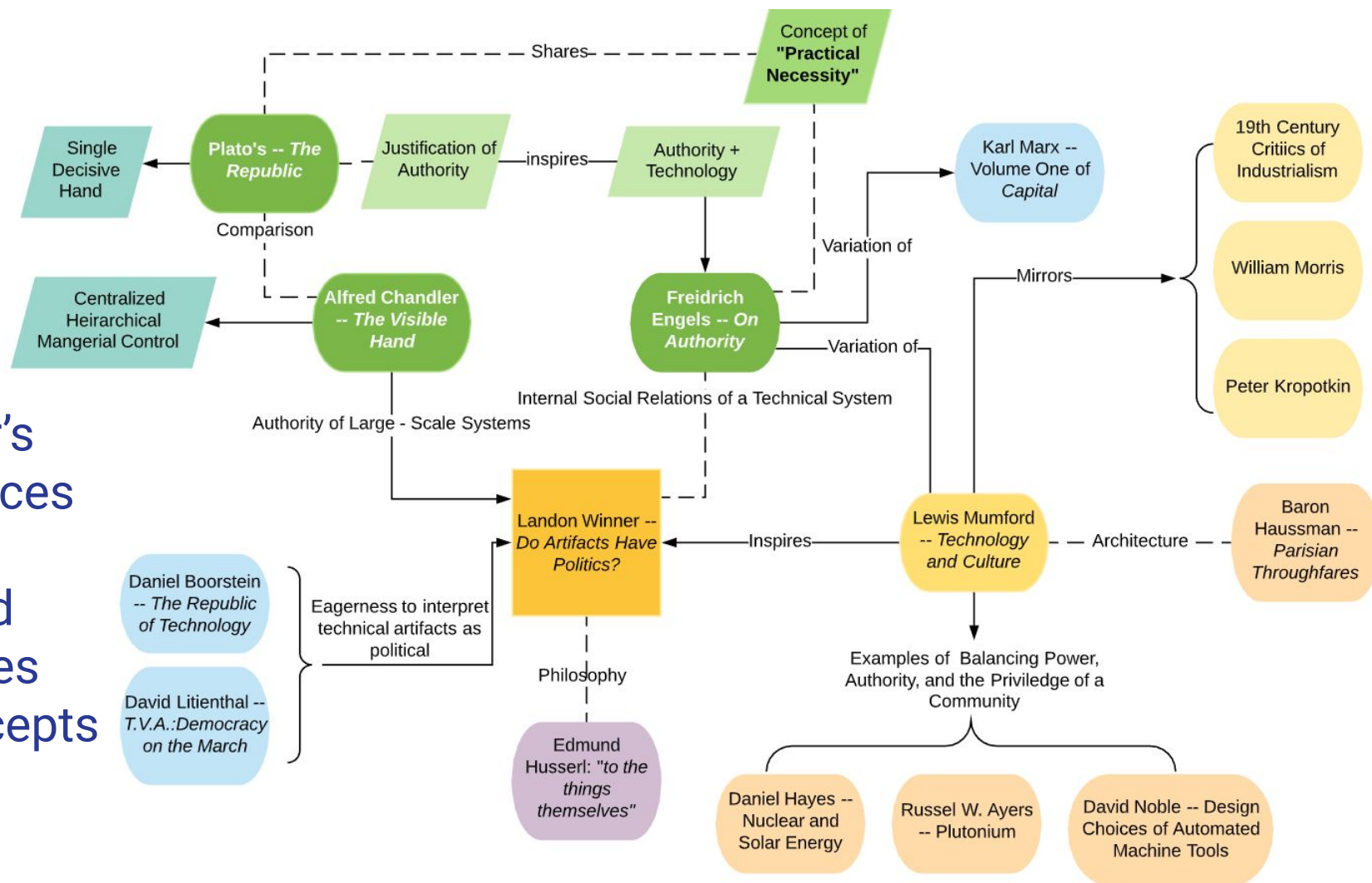
# Discussion Question

1. Does it matter what Moses's intention was when building the bridge?
  2. How important is intent when compared to the lasting impact and implications of his design?
  3. What do you believe was the true account, and does it matter that there are multiple conflicting perspectives of Moses and Jones Beach?
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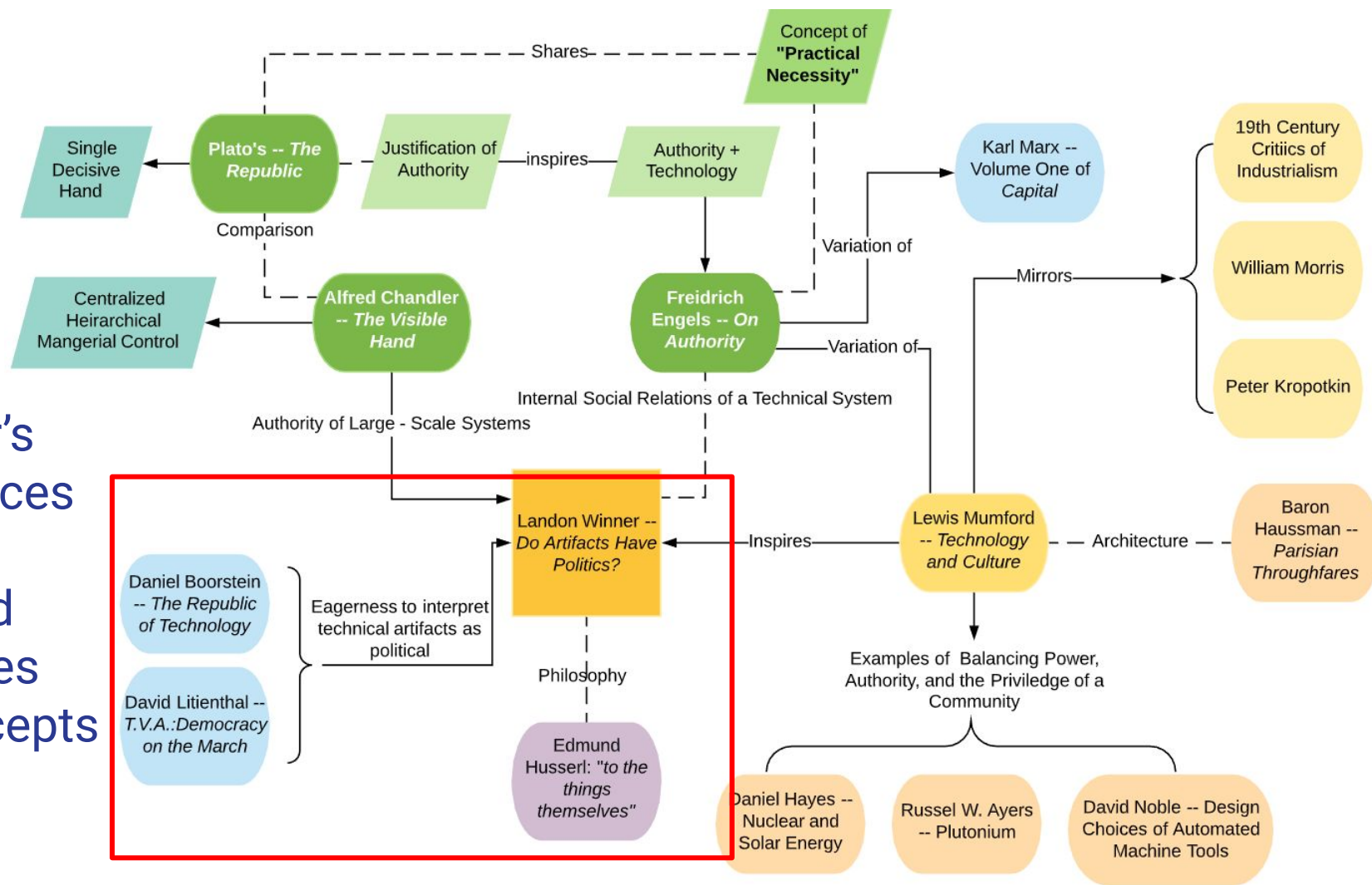


# Additional and Related Theories to the Politics of Artifacts

# Winner's Influences and Related Theories & Concepts



# Winner's Influences and Related Theories & Concepts

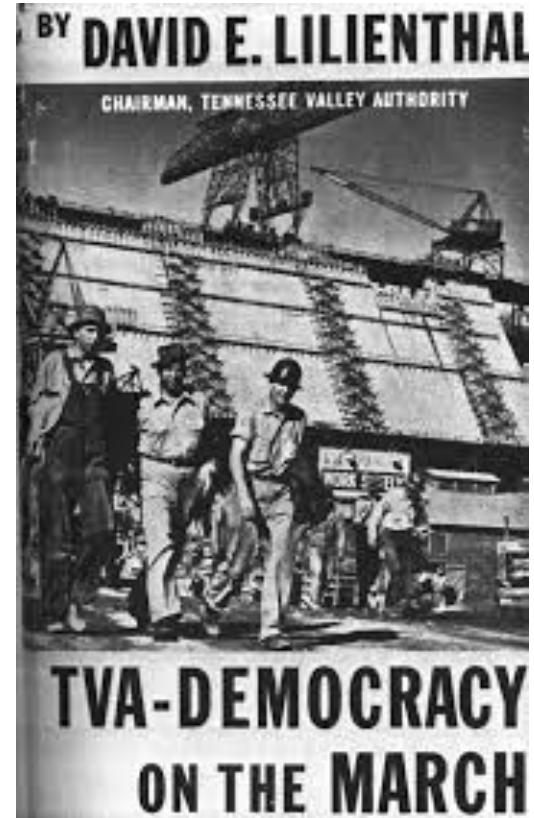


# Flaws of Technological Determinism

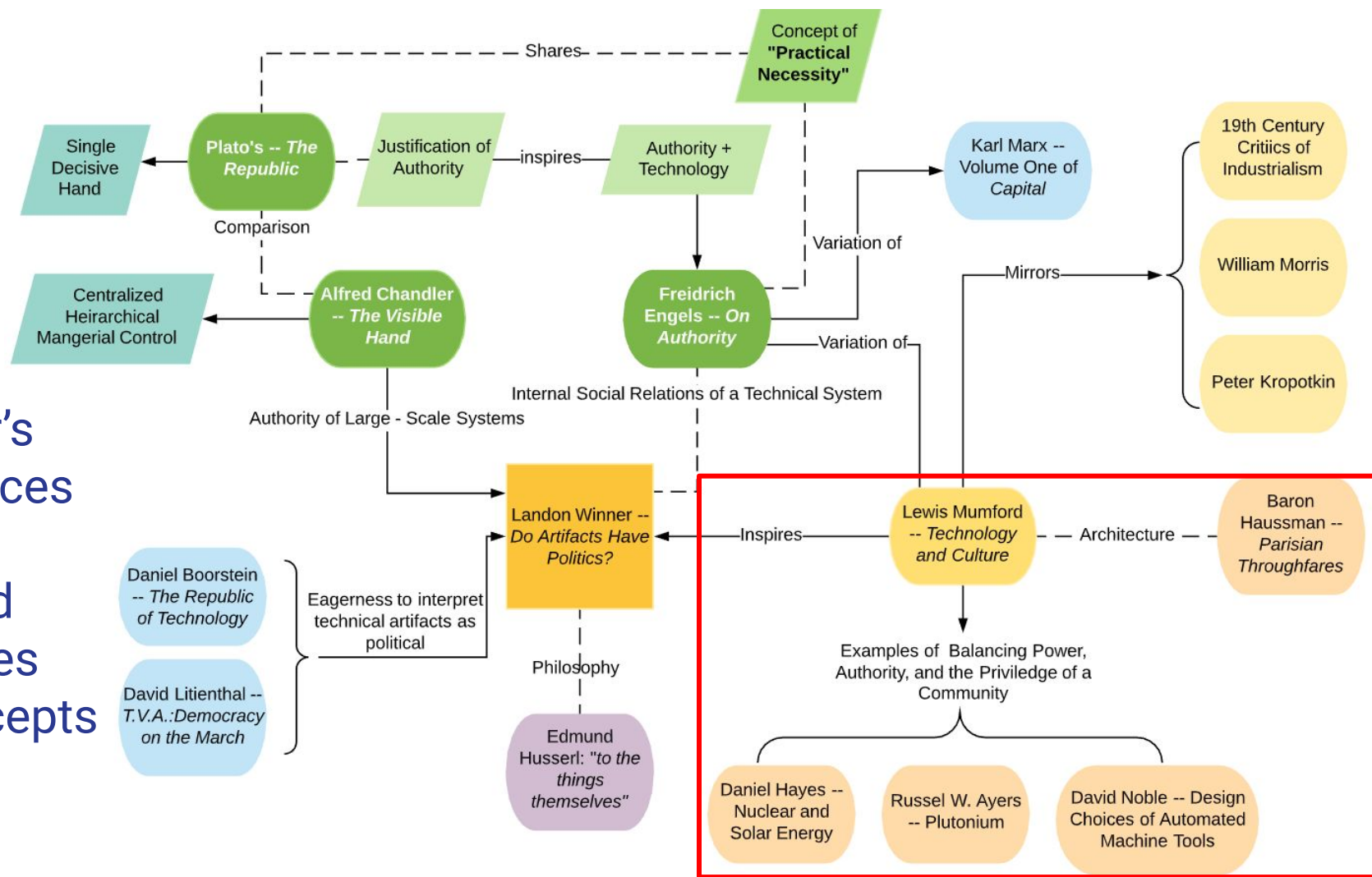
Eagerness to connect technologies of various scales with politics

- Daniel Boorstein - *The Flaws of Technology*
- David Lilienthal - *T.V.A.: Democracy on the March*

Technology does not develop in a vacuum and solely based on internal dynamics



# Winner's Influences and Related Theories & Concepts



# Lewis Mumford's Authoritarian and Democratic Technics (1964)

## Authoritarian Technics

- System Centered
- Powerful
- Unstable

From Mumford's  
perspective, why are  
authoritarian technics  
unstable?

## Democratic Technics

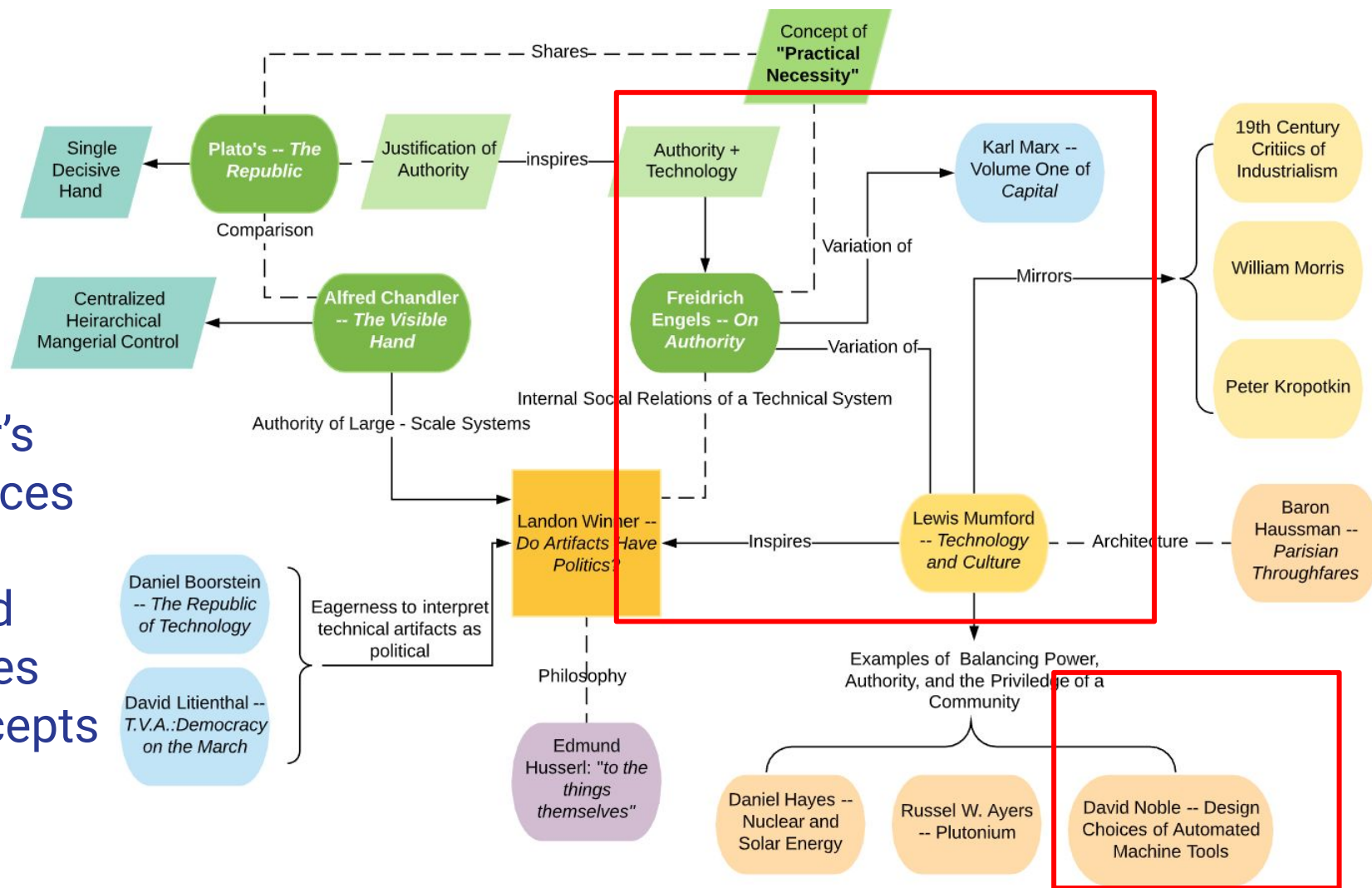
- Man-centered
- Weak
- Stable



Examples from: Daniel Hayes, Russell Ayers, David Noble, Baron Haussmann

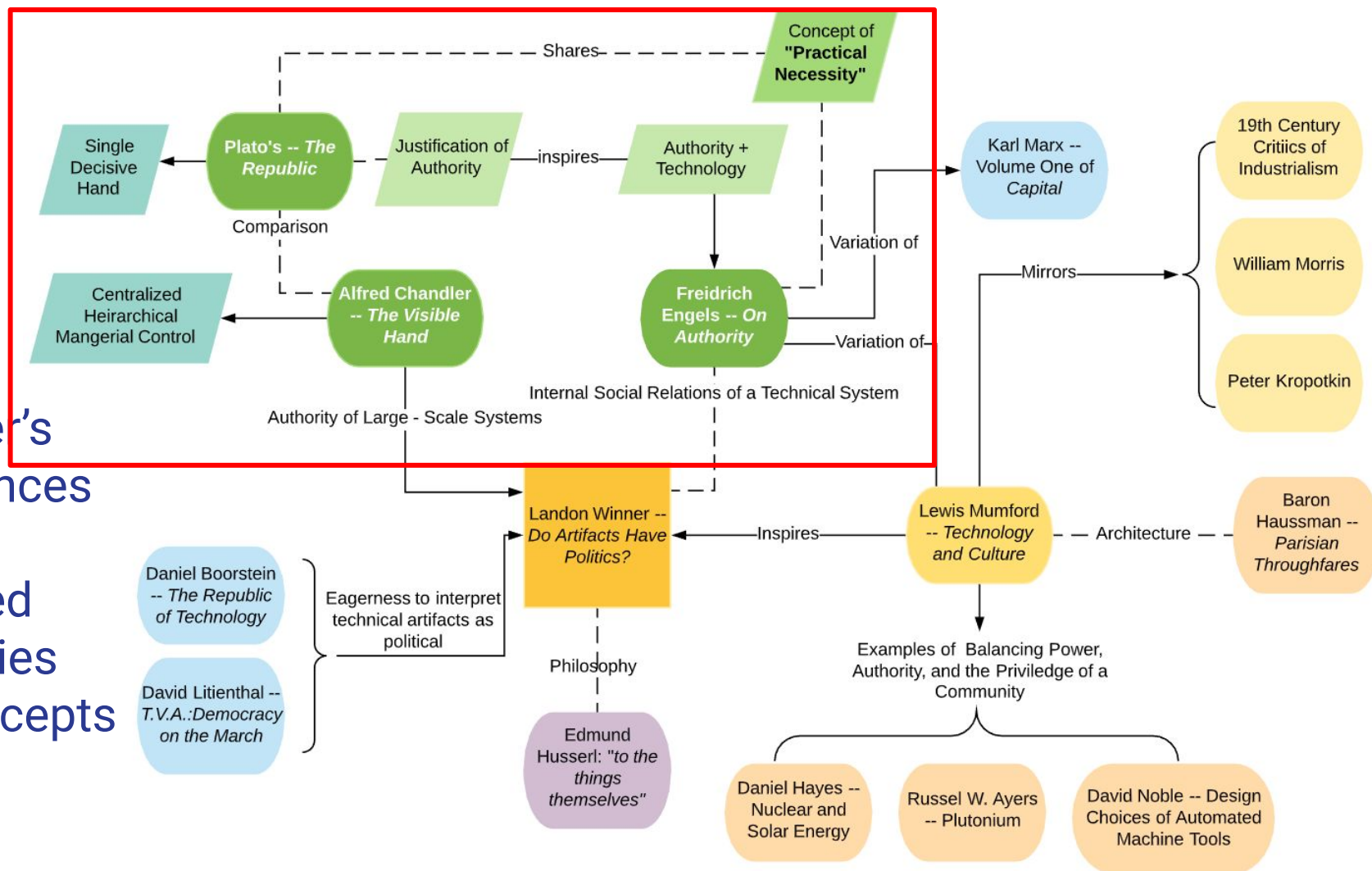


# Winner's Influences and Related Theories & Concepts





# Winner's Influences and Related Theories & Concepts

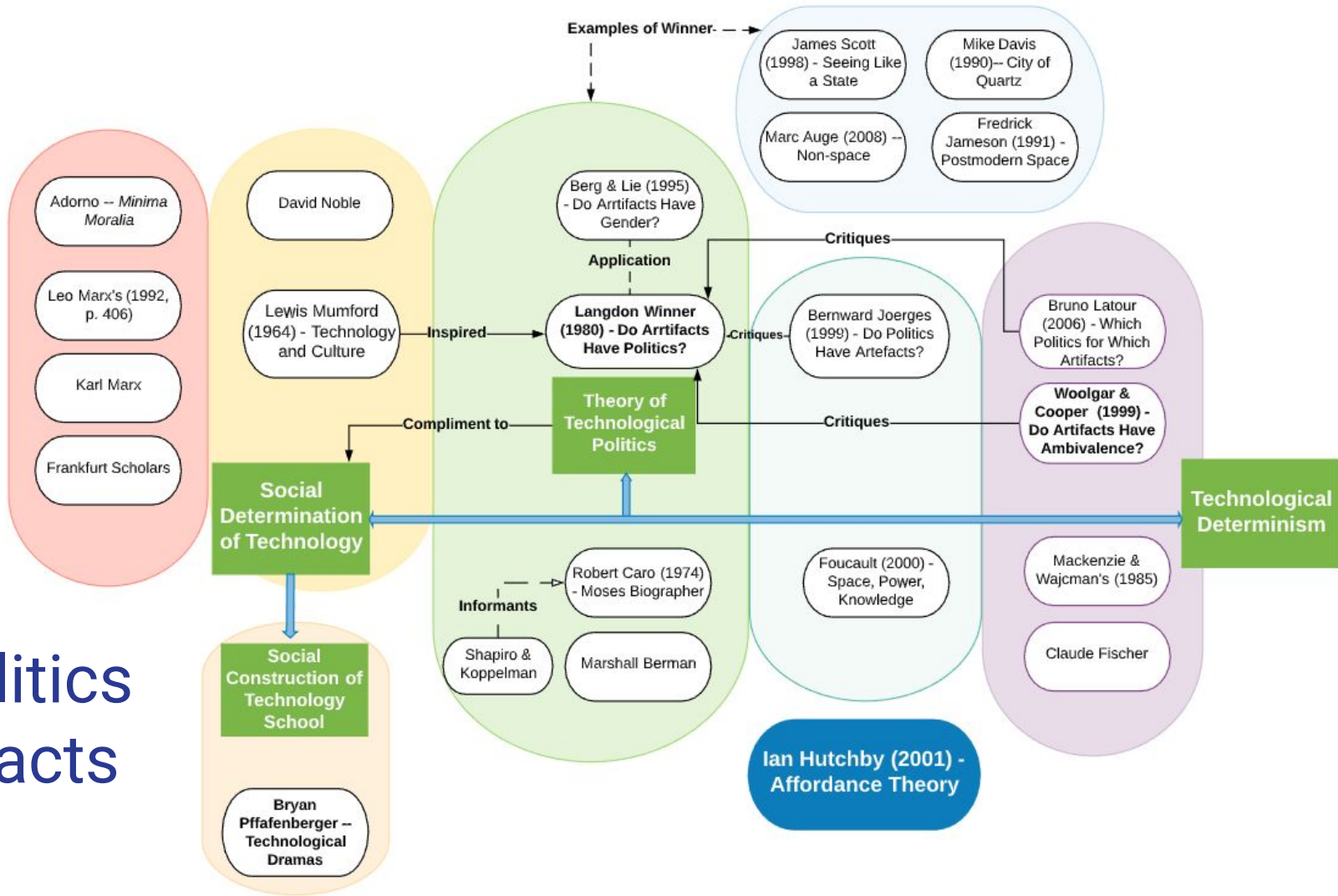


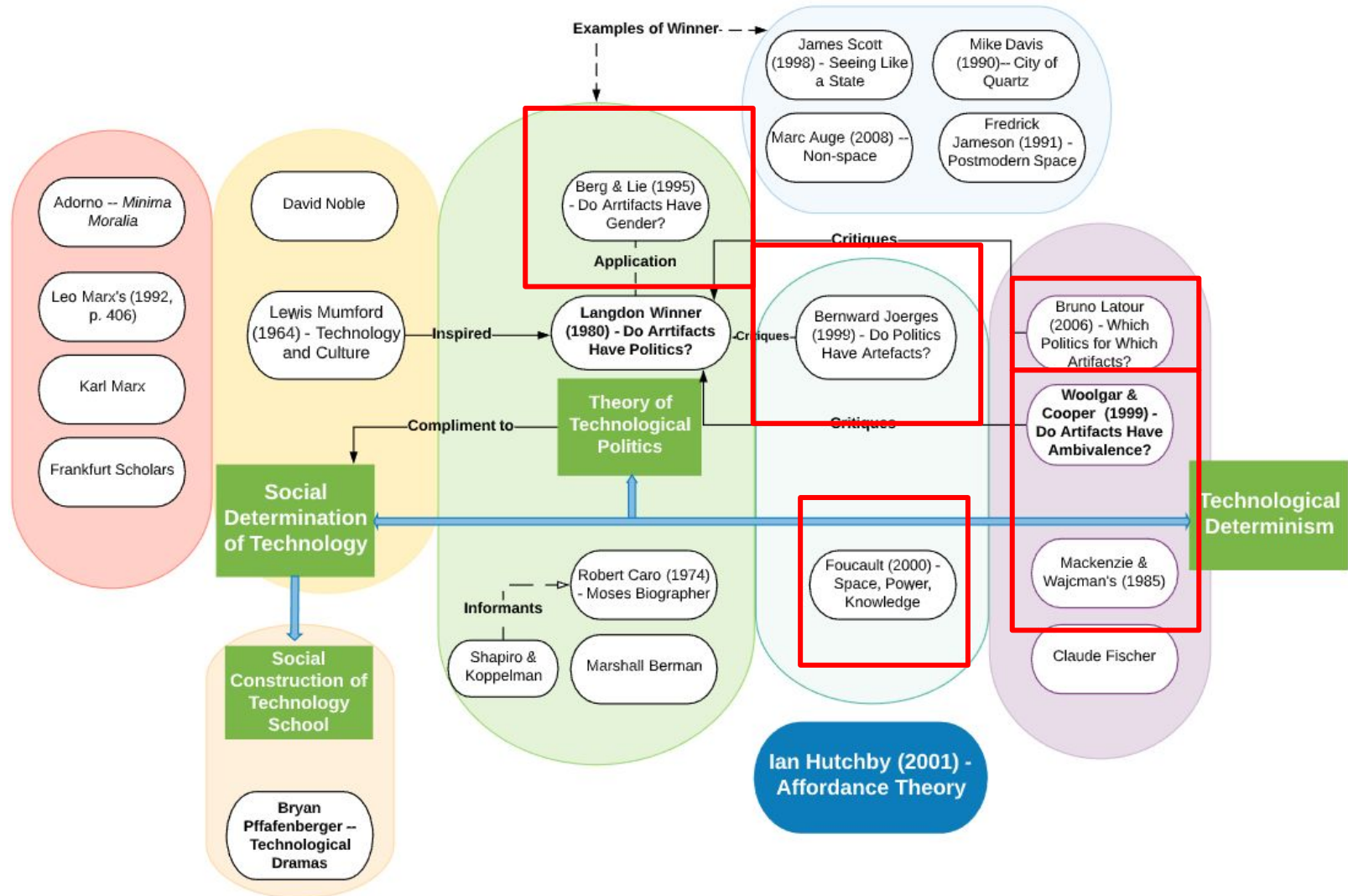
# Plato, Alfred Chandler, and Friedrich Engels

- Plato's Republic -
  - The Single Decisive Hand
  - Justified Authority
  - "Practical"
- Friedrich Engels
  - Justified Authority in a Technological Lens
  - "Practical" rather than logical
- Alfred Chandler
  - Centralized Hierarchical Managerial Control
  - Large Economies of Scale



# The Politics of Artifacts

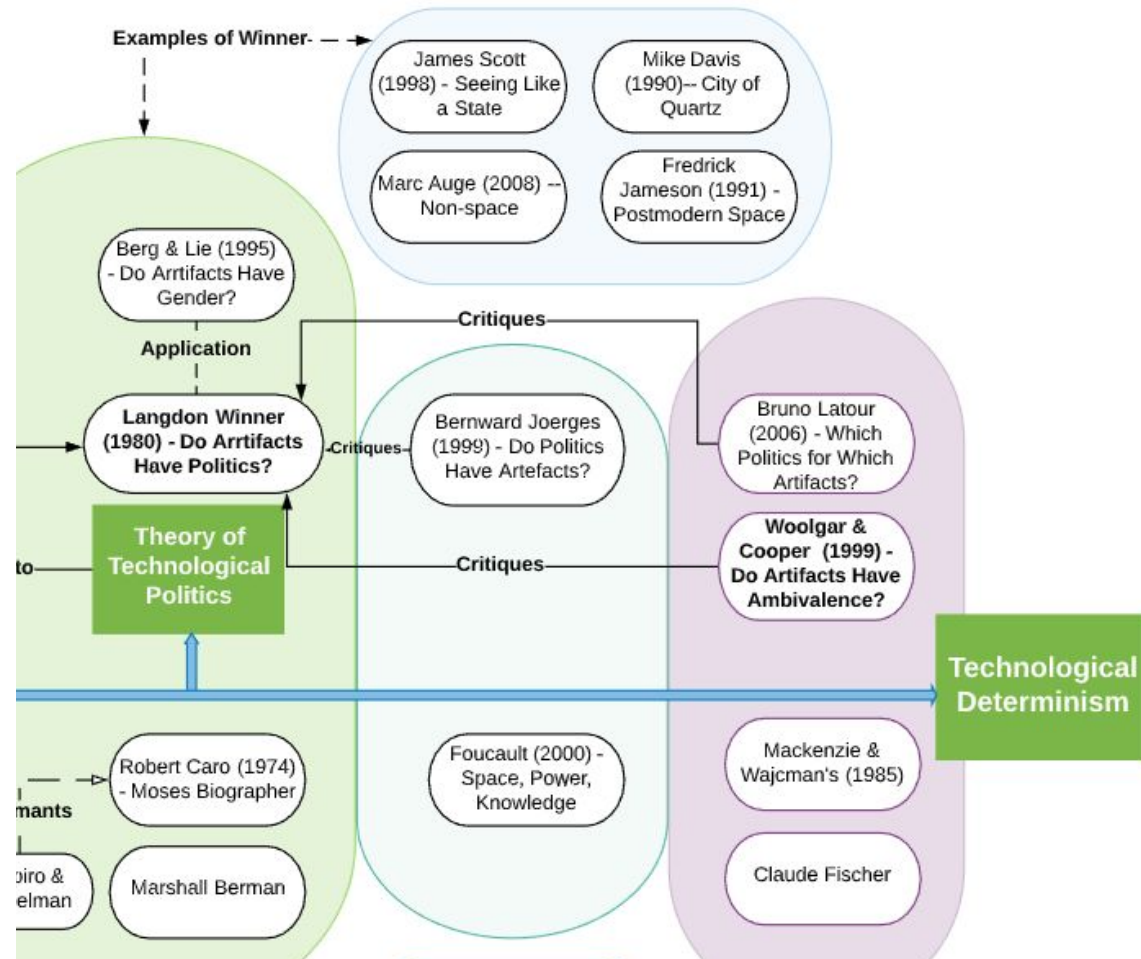






# Critique of Winner

- Technology has multiple effects and may not be adopted
- Technology is not in stasis
- Technology does not always discriminate



# Technology as Dynamic, Multiple Effects, Non-Discriminatory

- Woolgar & Cooper
  - Technology cannot be determined by design, but instead from its *use*.
- Norbert Elias
  - Technology as fluid (e.g., automobile's unintended consequences)
- Claude Fischer
  - Changing meaning of the telephone
- Mackenzie & Wajcman (1985)
  - Not all technologies are adopted and some are actively resisted.
- Mike Davis
  - Non-discriminatory (e.g., car bomb)



# Technological Arrangements in Relation to Social Behaviors and Shared Practicalities

- Bernward Jeorges
  - The built environment as *phenomena*; rather than a definitive impact.
  - Foucault in '*Space, Knowledge, Power*' - buildings alone cannot support power relationships due to resistance, unless architecture is realized in authority (government).
  - Nobert Elias - King Louis XIV
- David Noble
  - Considers technology as both legislative acts, while considering actual policies (e.g., *N/C*)



# Discussion

1. Where on the spectrum do you think you would be? Would you be closer to the *Theory of Technological Politics*, *Social Construction of Technology School*, *Social Determination*, or *Technological Determinism*?
  2. What do you think is currently the predominant school of thought or theory?
-





# Technological Dramas

# Three Types of Technological Activity

## Routinization

- Designers create, seize, alter production processes, technology, user activity or a system

Objective: embody political aims into technological features.

## Adjustment

- Affected groups offset the loss in power, esteem, or financial resources that the new technology has caused.

- Attack 'ambivalence' in the technology's frame of meaning

- Access technology to try and appropriate it

## Reconstruction

Disenfranchised seek to make meaning a new through:

- Rebranding (antesignification)

- Creation of counter-artifacts (e.g., computers)

# Pfaffenberger's Typology of Technology

Term	Definition	Manifestation
Exclusion	People of the wrong age, ethnic group, class, gender or skill set are denied access to the technology	Women being denied access to technology and technological knowledge
Deflection	Technologies can figure as deflections, diverting attention from the machinations of the powerful	Moses' bridges in Winner's view
Differential Incorporation	Different target groups may have different experiences of the same technology	Moses' bridges facilitated rapid transportation for one class, while limiting mobility of another
Compartmentalization	Access/use may appear democratic at face value, but can be constructed to keep some away	Jones Beach was public in principal, but patrons needed a car to get there
Segregation	Mechanisms that keep people away	High cost or overwhelming (unnecessary) complexity
Centralization	Despite the appearances, decisions over who will use the technology and how it will be used are centrally managed	Robert Moses making decisions unilaterally

# Pfaffenberger's Typology of Technology

Term	Definition	Manifestation
Standardization	Compliance costs can be so great that they overwhelm any prospect of autonomy or alternative cultures of use	To comply with parkway usage regulations, one would need to own a car, which was cost-prohibitive for many people
Polarization	Different iterations of the technology are produced to create social differentiations	Male and female versions of the same technology
Marginalization	Inferior technological models might be produced for audiences deemed inferior. Often of lower quality and less ergonomic	Difference in treatment of privileged vs poor districts
Delegation	Taken from ANT; used to denote the moral aspects of a technology. Morality delegated to devices in order to counter perceived moral failings in people	Speed bumps and hotel keys as discussed in relation to ANT
Disavowal	Artifacts that are created for people lower down in the social order or for those in poorly remunerated occupations	Public busses/transportation being avoided by individuals of high status



# Representation of the Politics of Artifacts

Mike Davis (1990) - *City of Quartz*

- Public space, security, and social division

## The Politics of Space

James Scott's (1998) - *Seeing Like A State*

- *La ville radieuse* in Paris by Le Corbusier; the "city of nowhere"



# Marc Auge (2008) - Non-Spaces Supermodernity and Technological Solidarity

- Built environments that have a social bond;  
*places that mean something*
- Frayed collective identity and organic collective life but a paradoxical increase of the *collective impress* (authority)
  - Excess of space, events, of individualization
- Supermodernity - anonymous non-places
  - Transitory and temporary
  - Luxury or poverty





# Fredrich Jameson (1991), The Postmodern Hyperspace - *The Space of Our Times*

- The postmodern condition: Disconnect between the body and the external 'built' world
- Inability as an individual to map the greater global and multinational and communication networks.
- New economic world dependent on technology
  - Global system of finance, global division of labor

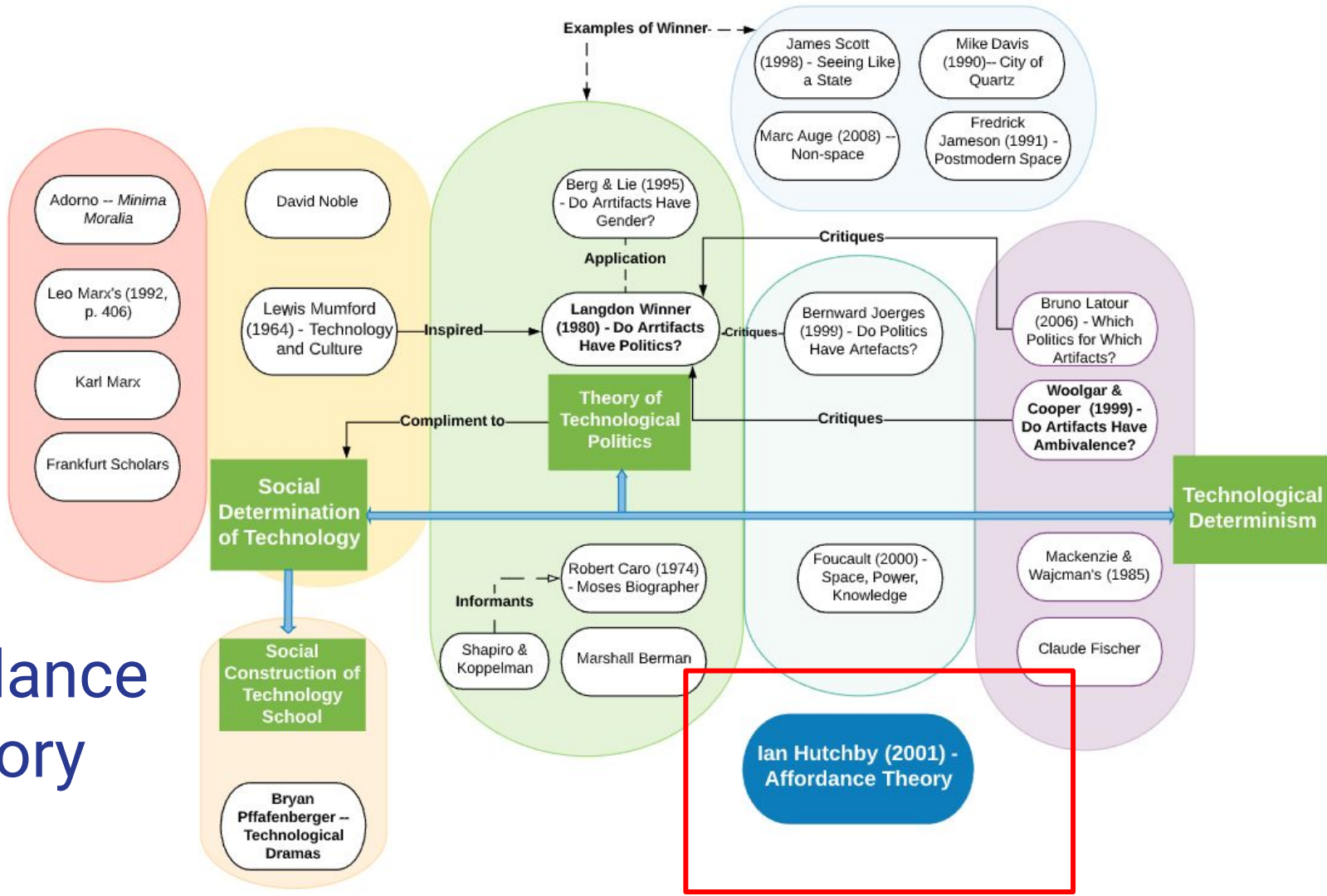


Westin Bonaventure Hotel - Spatialized culture based on postmodern values



# Proposed Theoretical Solution

# Affordance Theory



# Affordance Theory - Ian Hutchby (2001)

- Middle ground between social determination and technological determinism.
- Affordance:
  - What technology allows
  - The restrictions on meaning and use
  - Potential for action
- Affordance has functional and relational aspects:
  - Functional - empowering or disabling
  - Relational - constraints and opportunities vary between individuals
- Specific technologies do not solely determine the outcome but structure what is possible.



# Discussion

*“Scarcely a new invention comes along that someone does not proclaim it the salvation of a free society” - Winner (1980)*

1. What do you think is the modern-day equivalent of such an invention?
  2. Most of what this topic has been about ‘tangible’ technology -- the bridge, the harvester, what are some examples in the digital world?
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