

## Fifth Lecture

# Technology and Power

### Technology and capital accumulation

- Neoclassical: production function, inputs, utils, quantitative equivalence, marginal productivity
- Marxist: value equation, labour, abstract labour, quantitative equivalence, exploitation
- Veblen: hologramic production, no distinct factors, quality-to-quantity conversion, power

### John Kenneth Galbraith and *The New Industrial State*

- The context: large units, collectivist ideology, new theories of society
- The giant corporation: oligopoly/collusion, high and stable earnings, dispersed ownership
- The “managerial corporation”
- The state: large size, micro/macro intervention, planning, welfare/warfare
- The business-labour accord
- Has the “market” been compromised?
- Has conflict disappeared?

### Scarcity and power

- Land and feudalism giving way to colonialism
- Capital and capitalism giving way to modern technology
- “Organization” and the rise of the Technostructure

### The giant corporation

- Cost and economies of scale
- Price and monopoly power
- The dictatorship of profit maximization
- Modern technology: division of labour, complexity, integration, roundabout processes, certainty of demand
- Does technology exist for the corporation, or the corporation for technology?
- The end of profit maximization

### Who is in control?

- The conventional hierarchy: shareholders, board of directors, executives/managers, workers
- Technical experts, decision experts, and the collective imperative
- Dispersed ownership and the Principal/Agent problem
- Technostructure: the new principal-agent

### The purpose of control

- Passive profit maximization: the market rules
- Active planning: the Technostructure rules
- Autonomy: keeping shareholders and creditors at bay
- The survival of the Technostructure: from profit maximization to sales maximization
- Motivation: pecuniary, identification, adaptation

### Some questions

- Can a (techno)structure have power?
- Has capital declined?

**Lewis Mumford and *The Myth of the Machine***

- Technology: material versus symbolic
- Language: the magic of self control
- Language: the first prerequisite/model of technology
- Types of technology: democratic vs. authoritarian
- Ideal types of society: Neolithic vs. power civilization
- Acceptance of death, fear of death

**Neolithic society**

- Abundance: material and biological
- Limited division of labour, equality, lack of systemic violence
- Inventions: morality, self-discipline, systematic cooperation, order and foresight
- Limitations: closure to the outside, suspicion, pettiness, inevitable stagnation

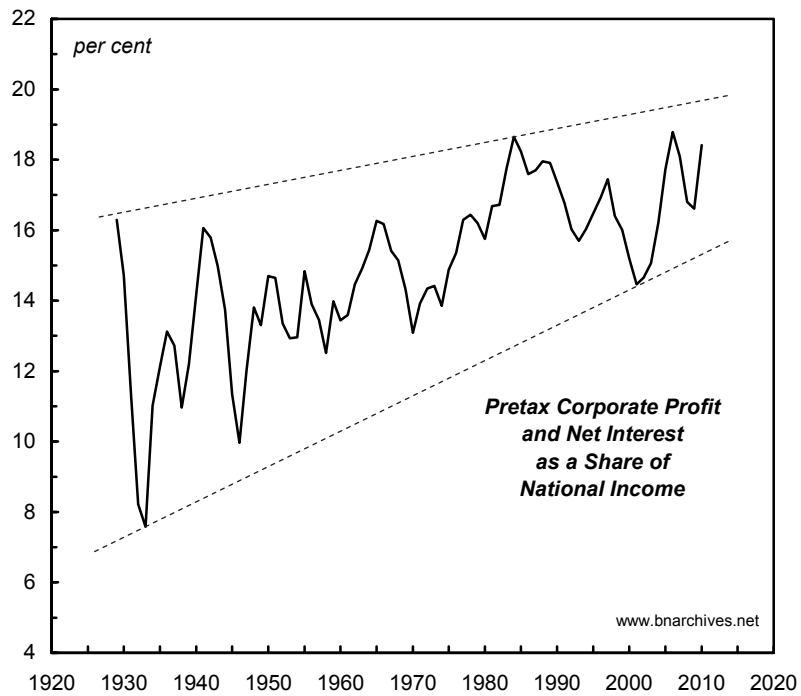
**Power civilization**

- Material fragility: complexity and the risk of total loss
- Hierarchical, absolute power
- Symbolic drives: the discovery of the cosmos
- Sun gods, astrology, mathematics, written language
- The threat of infinity: human mortality
- The promise of infinity: human capabilities
- The Mega-machine and the quest for immortality: imitating the cosmic order on earth

**The Mega-machine**

- Components: labour, army, bureaucracy
- Control: royalty and clergy
- Minute division of labour, rigid segmentation, strict discipline
- Reuleaux definition and the social machine
- Visible output vs. inner drive: power for the sake of power

### Capital Share of Income in the United States



\* Including capital consumption allowance and inventory valuation adjustment.

SOURCE: Updated from Nitzan, Jonathan. 1998. Differential Accumulation: Toward a New Political Economy of Capital. *Review of International Political Economy* 5 (2): 203 (<http://bnarchives.yorku.ca/9/>). Original data from U.S. Department of Commerce through Global Insight (series codes: ZBECON for pre-tax corporate profit; INTNETAMISC for net interest; YN for national income). Last data point: 2010.