

Does Technology Drive History?

The Dilemma of Technological Determinism

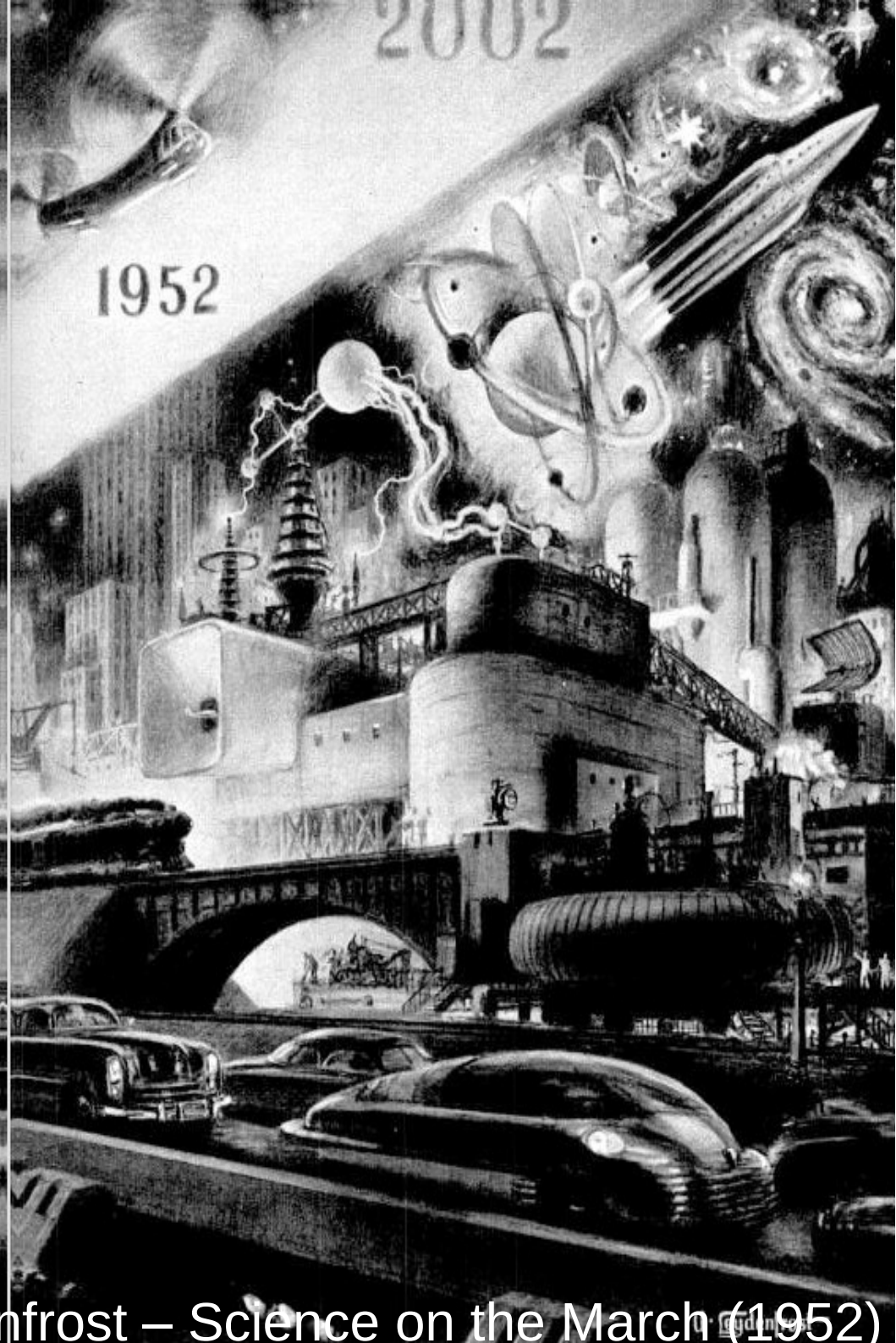


edited by Merritt Roe Smith and Leo Marx

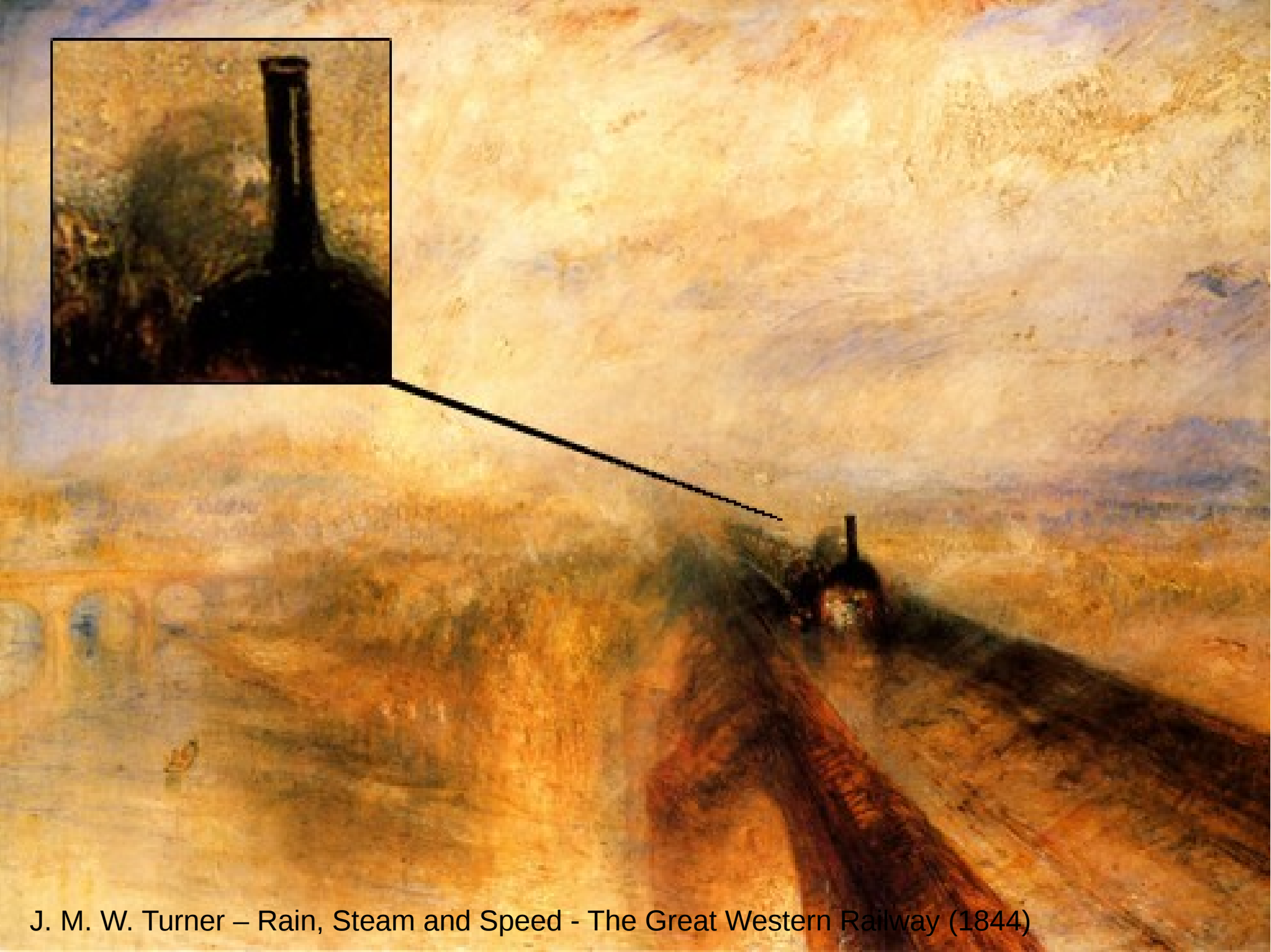
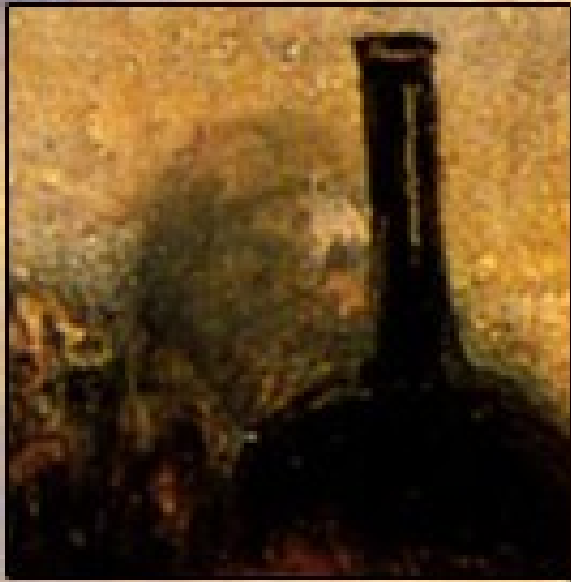
Technology & Agency

Spørgsmålet om
Determinisme

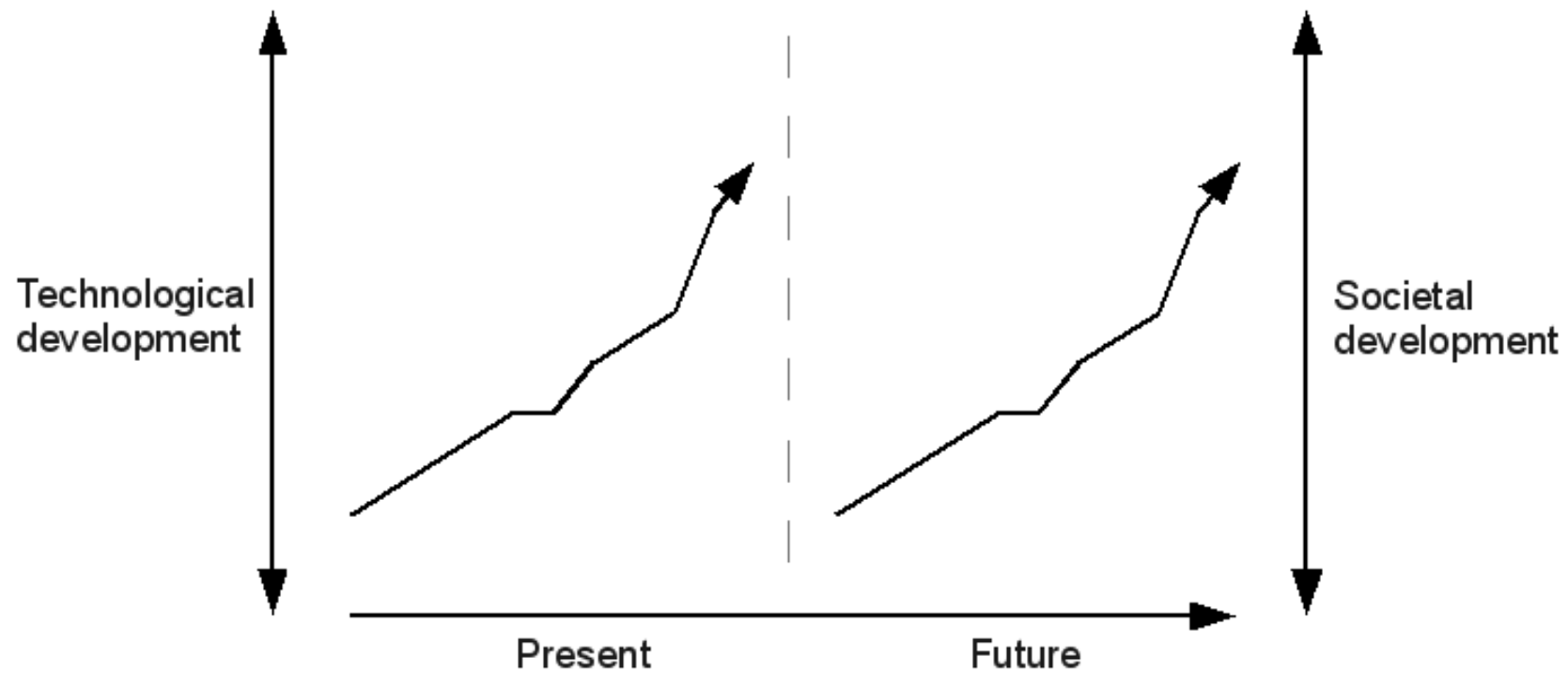
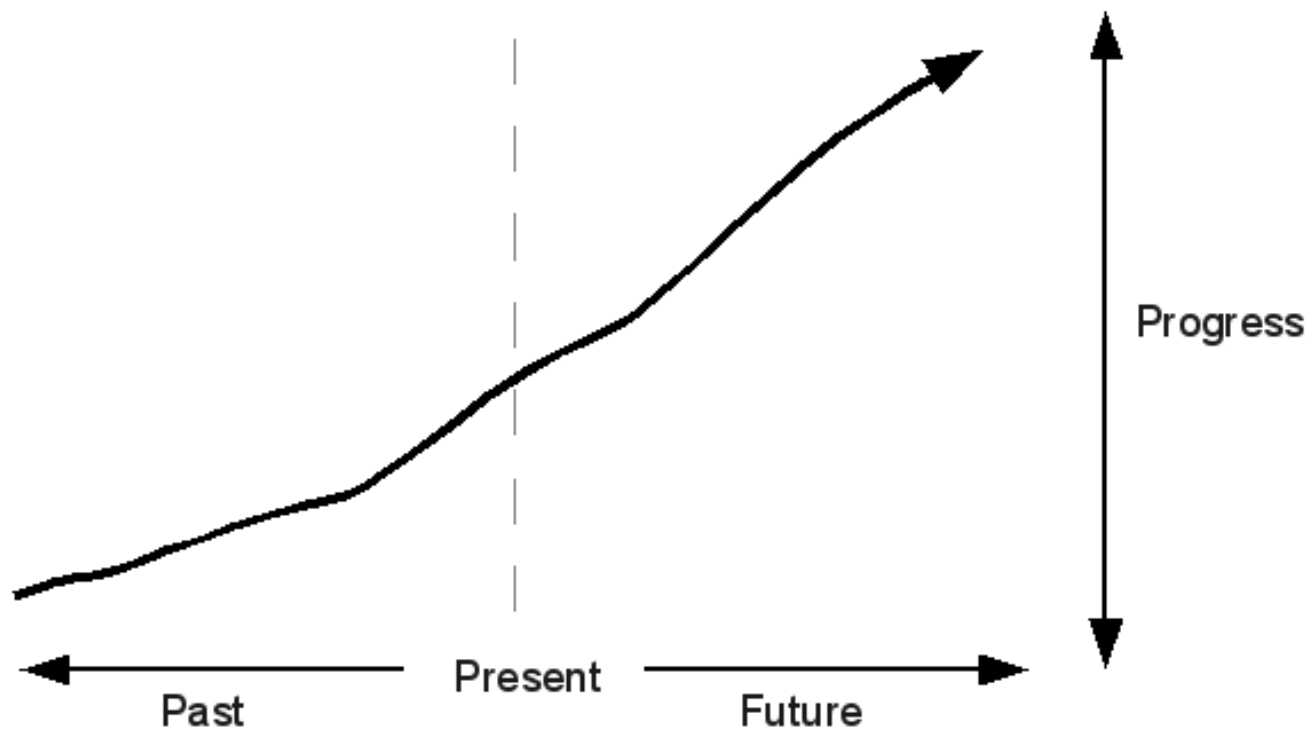
Samspeilet mellom teknologi og samfund



Leydenfrost – Science on the March (1952)



J. M. W. Turner – Rain, Steam and Speed - The Great Western Railway (1844)



Determinisme // Reduktionisme

- “The automobile created suburbia”
- “the pill produced a sexual revolution”
- ”The hand-mill gives you society with the feudal lord; the steam-mill, society with the industrial capitalist.”

...I call reductionism only when one language (guess whose?) must be enforced as the standard for all the translations and conversions.

(Haraway, 1988, p. 580)

Determinisme // Reduktionisme

- Determinisme bliver ofte beskrevet abstrakt og på makro niveau
 - F.eks. Heilbroner
- Findes dog også på et mere konkret mikro niveau
 - Magic Bullet Theory



- Spørgsmålet er: **hvilket agency trumfer?**
 - Teknologiens, kulturens, magtens gudernes, rationalitetens, økonomien, det sociales?
 - **ANT:** Agency er hybridt – sammenvævet i netværk

Første gang udgivet i 1967

Heilbroner

- What is the effect of technology on socio-economic order?
- **One grand avenue of advance**
 - No leapfrogs / tigerspring
 - Man kan ikke "springe over" e.g. fra landbrugs- til informationssamfund, man skal forbi industrisamfundet først
- Tigerspring findes ikke, forandring sker trinvis og evolutionært
 - Division of labor and specialisation of industry

What technology imposes on society!

- [Med hensyn til produktion]
 - we can indeed state that the technology of a society imposes a determinate pattern of social relations (Heilbroner: 59)
- Fordi teknologi er indvævet i arbejdets organisering
 - Marx: **Relations of production** <-> **Forces of production**
- "it would seem wise to be very cautious before relating political effects exclusively to functional economic causes"
 - *An independent "social" element unavoidably enters the scene* (Heilbroner: 61)

Mediating role of technology

- Co-construction
 - It was not only the steam-mill that gave us the industrial capitalist but the rising inventor-manufacturer who gave us the steam-mill

Ustyrlig teknologi

Technological determinism is thus peculiarly a problem of a certain historical epoch [...] in which the forces of technical change have been unleashed, but when the agencies for the control or guidance of technology are still rudimentary.

(Heilbroner: 65)

Magic Bullet Theory

These people describe IT as a magic bullet – and believe that they have built the gun [...] After all, magic bullets always hit the right targets. So the gun builders can focus on the performance characteristics and aesthetics of their craft...

(Markus & Benjamin, 1997, pp. 56–57)



Vota, W. (2008). An Implementation Miracle. OLPC News.

Retrieved December 11, 2012, from http://www.olpcnews.com/implementation/plan/implementation_miracle.html

(Note on presentation by Andrew Zucker)

Hvad gør vi med determinisme?

- Tilslutter os!
- Vi dekonstruerer gør vi!
- Lader dem beholde deres guder ligesom vi har vores
 - På betingelse af at de får samme status ([Link Latour om modernitet oplæg](#))

If, as analysts, we allow our own categories and interpretations into the account of our stories, we also need to allow actor's concepts and theories to inform our accounts...

(Wyatt, 2007, p. 171)

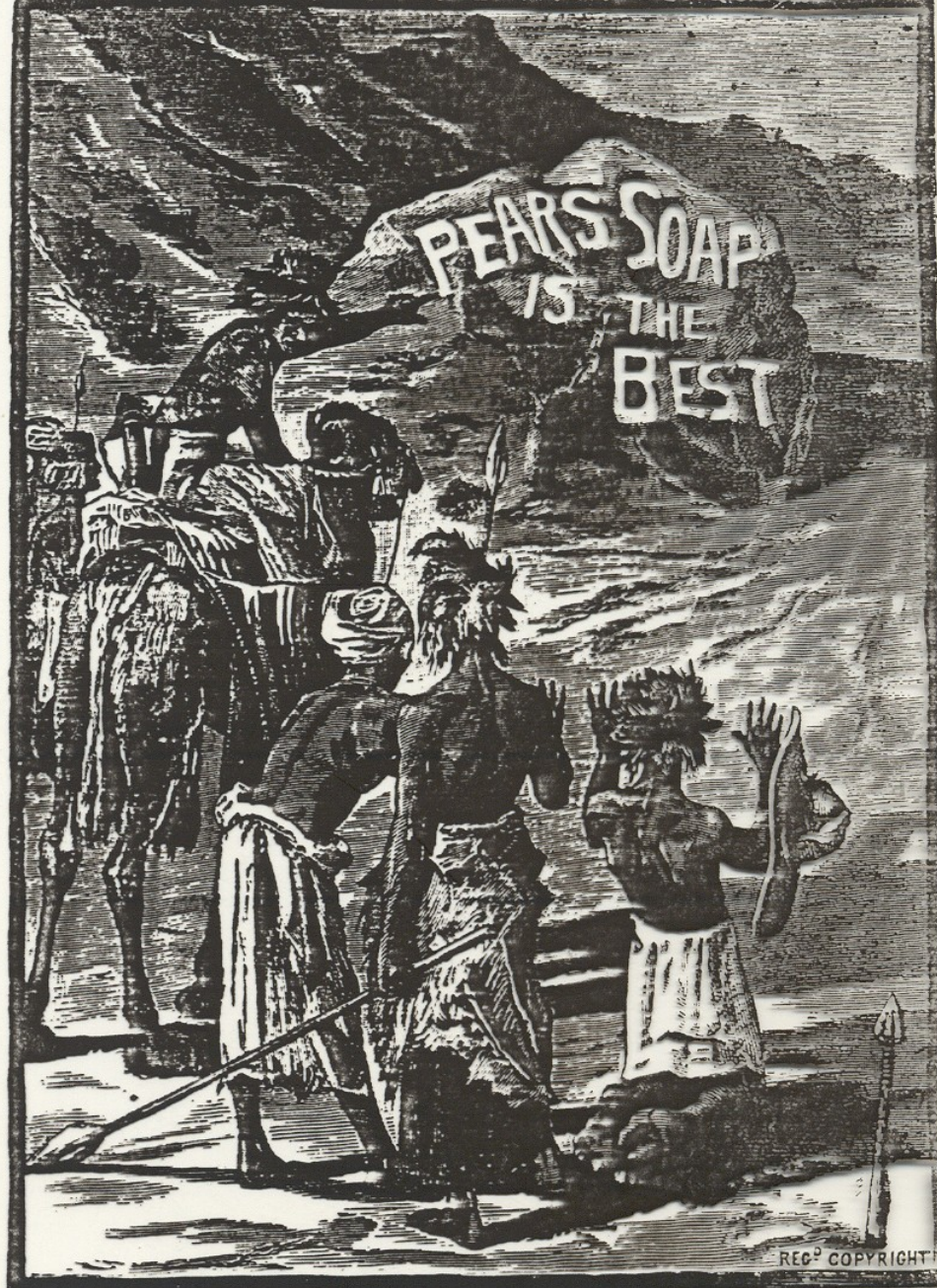
THE BIRTH OF CIVILIZATION — A MESSAGE FROM THE SEA



"THE CONSUMPTION OF SOAP IS A MEASURE OF THE WEALTH, CIVILISATION, HEALTH AND PURITY OF THE PEOPLE." 1890.

Specially drawn by S. MARKS, R.A. — the Proprietors of PEARS' SOAP.

THE FORMULA OF BRITISH CONQUEST



PEARS' SOAP IN THE SOUDAN.

"Even if our invasion of the Soudan has done nothing else it has at any rate left the Arab something to puzzle his fuzzy head over, for the legend

PEARS' SOAP IS THE BEST,
 inscribed in huge white characters on the rock which marks the farthest point of our advance towards Berber will tax all the wits of the Dervishes of the Desert to translate." — Phil Robinson, War Correspondent (in the Soudan) of the Daily Telegraph in London, 1884.

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