Oxford Symposium on Technology and Global Change
19-20 June 2023, Oxford, UK.

1998

2023

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Aims:

1. To exchange, learn, and discuss new research on technology and global change across different perspectives and topics.

2. To provide a forum for in-person interaction and debate among editors of, and contributors to, a focus issue of *Environmental Research Letters* on technology and global change.

3. To celebrate the scholarship and scientific contributions of Arnulf Grübler in the field of technology and global change research.
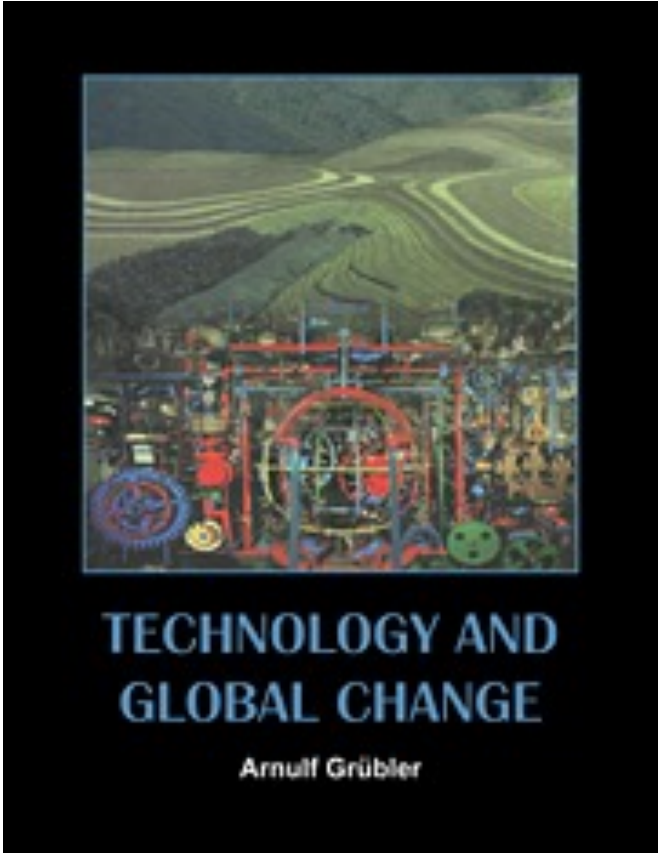
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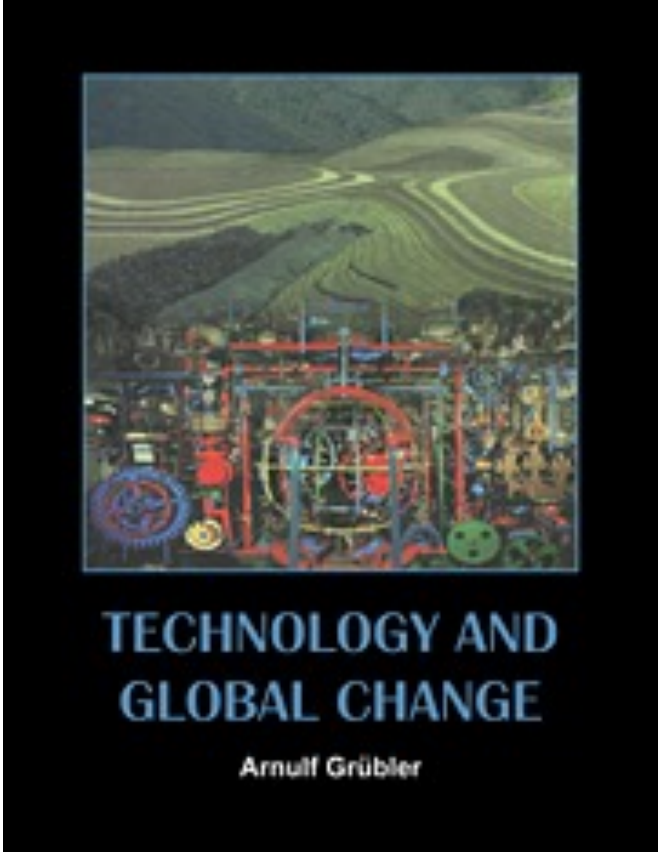## 19-20 June 2023, Oxford, UK.

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Transition

Table 4.1: Five important technology clusters, 1750–2000.

Dominant cluster	1980–	Emerging cluster	
E	Gas, electricity	E	Hydrogen(?)
T	Roads, air transport, multimedia comm.	T	Hypersonic aircraft(?), high-speed trains
M	Alloys, speciality materials	M	Recyclables & degradables
I	Environmental technologies, disassembly & recycling, consumer services	I	Services (software), biotechnology
C	Leisure & vacation, custom-made products	C	Integrated "packages" (products & services)

Abbreviations: E, Energy; T, Transport and communication; M, Materials; I, Industry; C, Consumer products;

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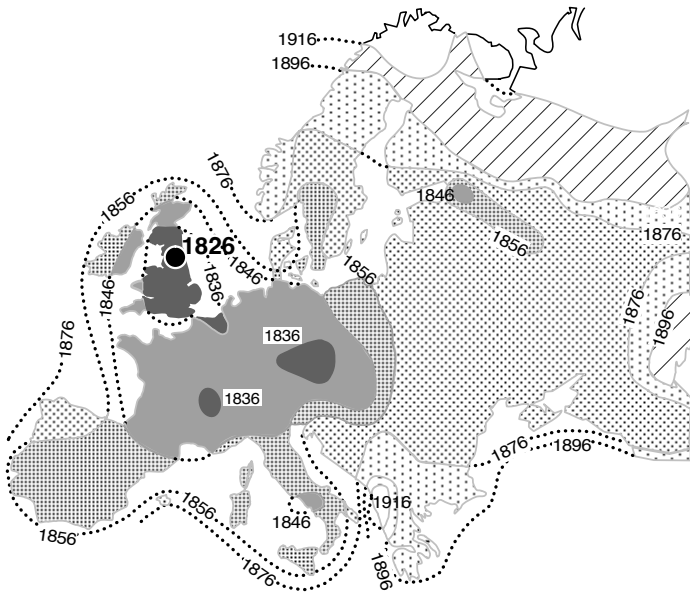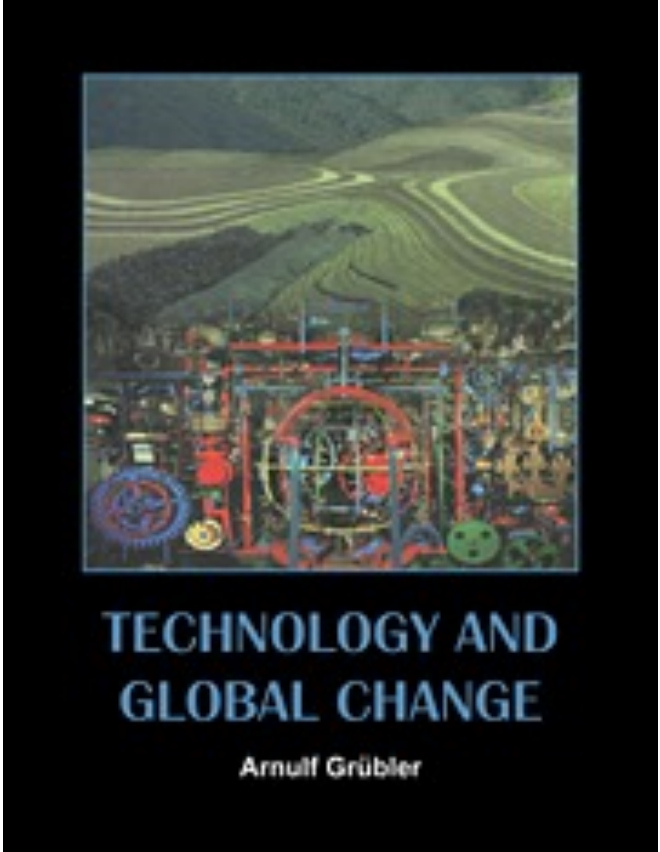
Acceleration

1998

Figure 2.13: Spatial diffusion of railways in Europe, in 10 year isolines of areas covered by railway networks. Source: adapted from Godlund (1952:34).
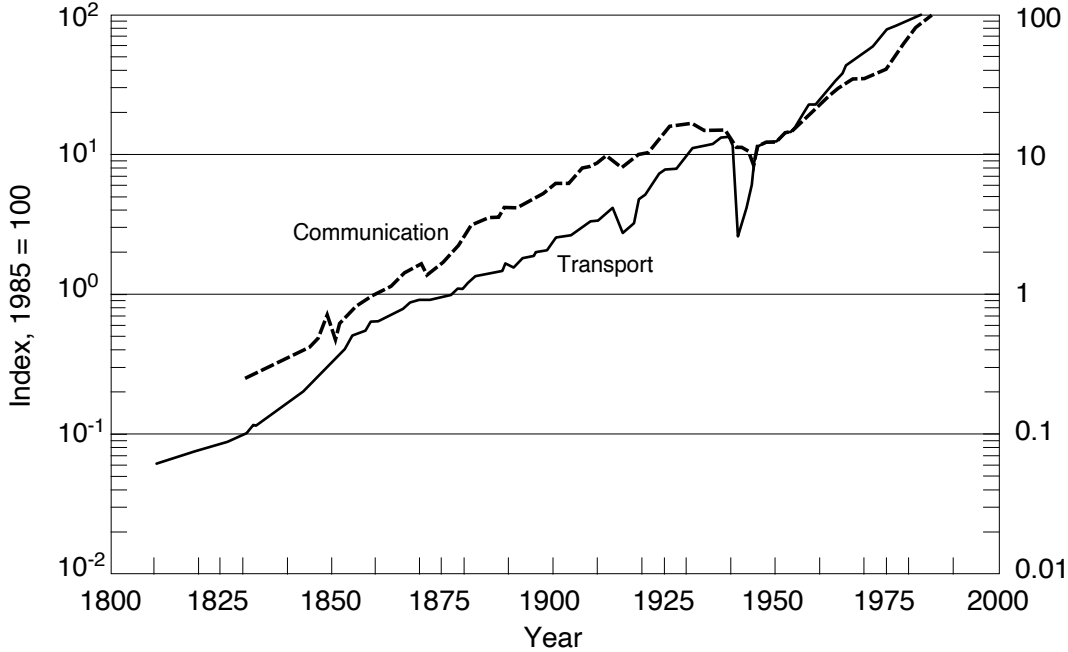
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Digitalisation

Box 7.2. Growth in total motorised mobility and total number of messages using communication technologies exchanged since 1800 in France, indexed to 100 in 1985.

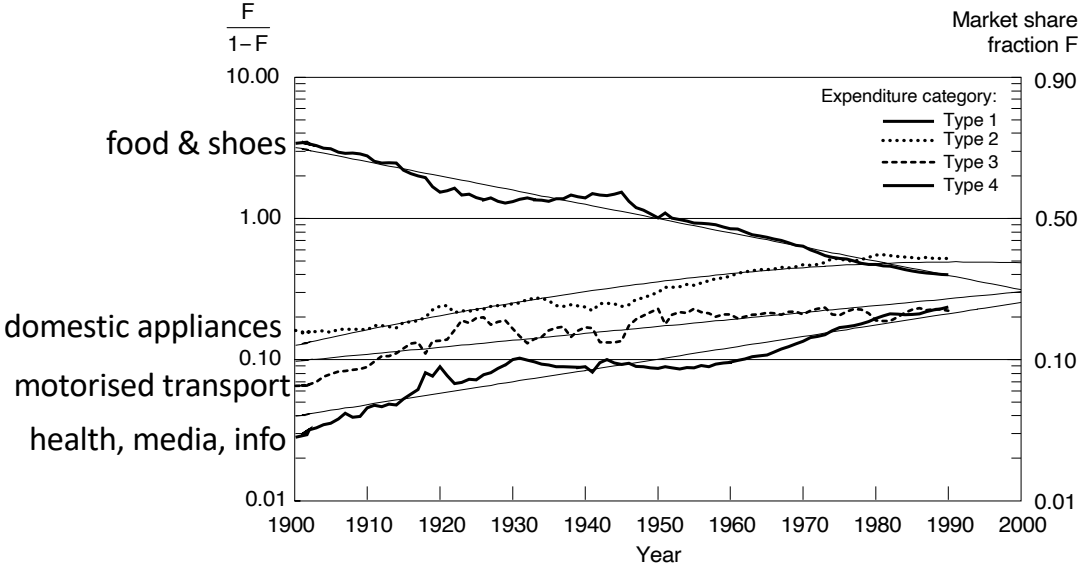# Oxford Symposium on Technology and Global Change
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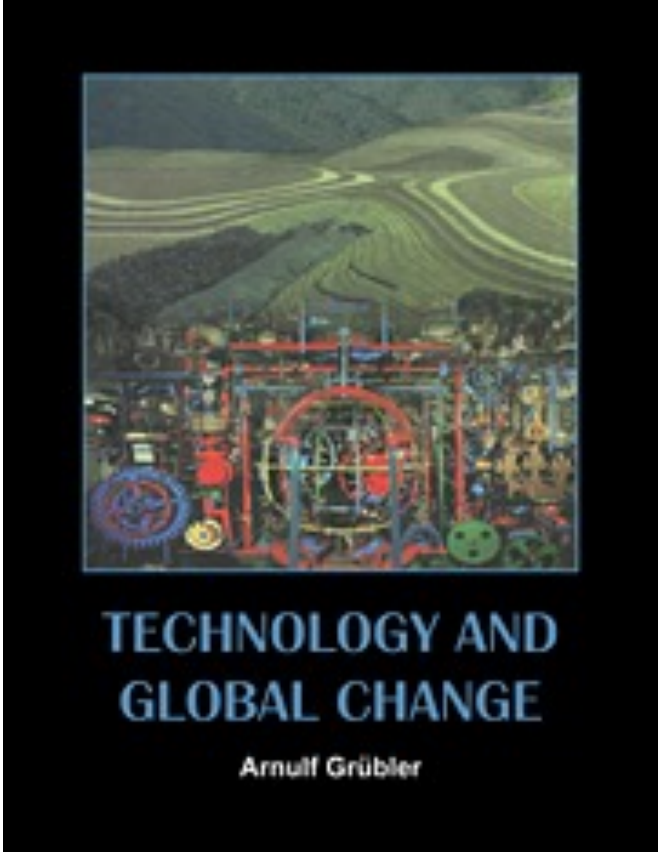

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Demand

Figure 7.6: Relative shares of four different classes of consumer expenditures aggregated from 66 consumption expenditures (USA, 1900–1990) based on their dynamic behavior. These four categories account for a stable share of 70% of total consumer expenditures. Jagged lines are historical data,

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Innovation
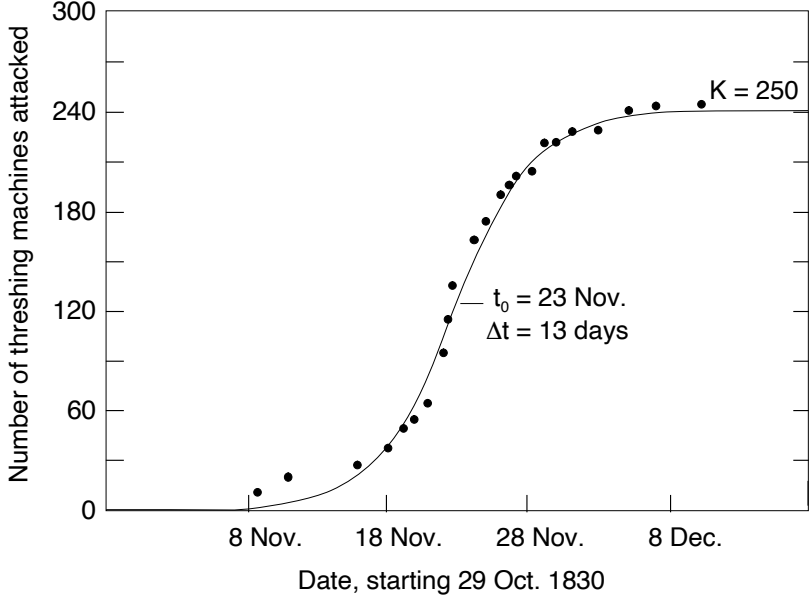
Figure 2.20: Resistance to technology as a diffusion process: number of threshing machines attacked during the Captain Swing movement in 1830. Data source: Hobsbawn and Rudé (1968:Appendix III:1–24).

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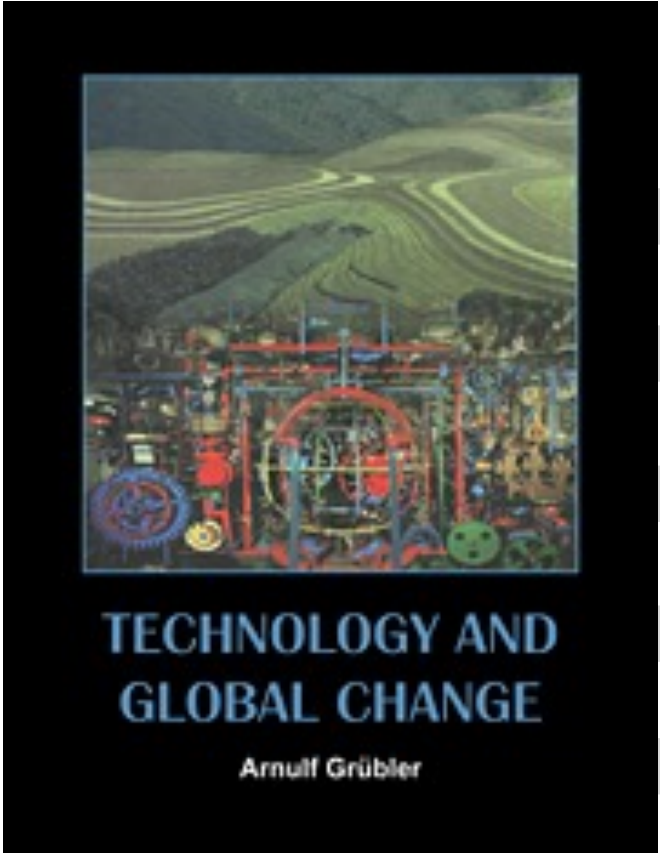

Symposium sessions:

transition

acceleration

digitalisation

demand

innovation

1998

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Participants:

ERL Focus Issue - guest editors
ERL Focus Issue - authors of new research

Plus ...
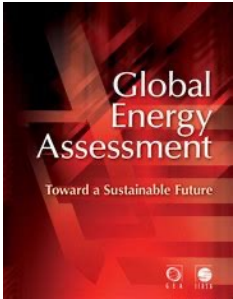
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MONDAY

13.00	(symposium opens)
13.15 - 14.45	**Session I. Transition**
15.10 - 16:35	**Session II. Acceleration**
16.40	(walk over to Ashmolean)
17.00 - 18.15	Public Lecture
18.15 -	Drinks, Museum Tour, Dinner

TUESDAY

09.00 - 10.30	**Session III. Digitalisation**
11.00 - 12.15	Framing & Synthesis Talk
13.15 - 14.45	**Session IV. Demand**
15.15 - 16.45	**Session V. Innovation**
17.00	(symposium closes)
18.00 -	Pub, Oriel College Tour, Dinner