

A Complete Mismatch

The Production of Knowledge in the Modern University

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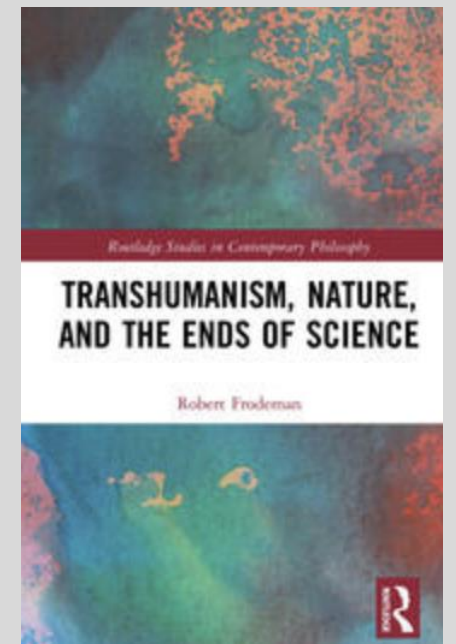
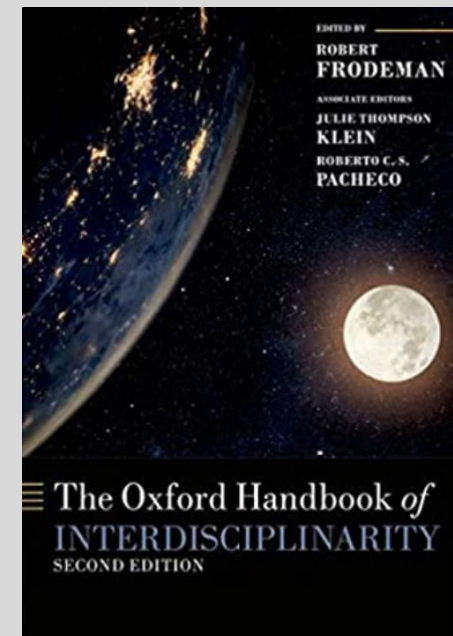
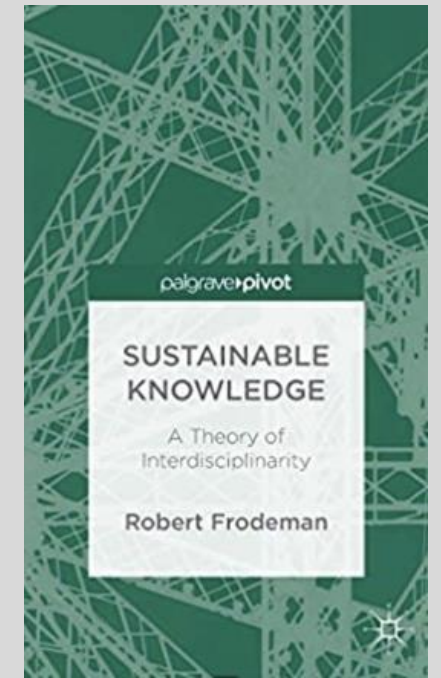
The journey from ID to the future of the university

Began at the Grand Canyon



Which led to

- Philosophy PhD in 1988; MS in geology 1996
- US Geological Survey 1993 - 2001
- Research into interdisciplinarity, leading to the *Oxford Handbook of Interdisciplinarity* (2010)
- By 2013 ID seemed flawed: internalist, ignored questions of supply and demand
- Voiced these concerns in second edition (2017)
- 2019: explored the more general need to limit knowledge production



The argument in one slide

The modern research university is the victim of its success. The result is a mismatch between university activities and the needs of contemporary society.

Universities have four roles: research, education, vetting, and certification. All are under stress.

- Research: universities were once the central site. But knowledge today is no longer location-specific, and the private sector dominates research.
- University education have been undercut by information & communication technologies (ICT): the Internet, social media, ChatGPT.
- Vetting: the university role as truth-teller has been undermined by a post-truth culture: Trump & Putin, bots & algorithms, & sheer information overload.
- Knowledge creation, treated as infinite, is now irrelevant and dangerous. Supply should match demand; knowledge should be hierarchical; and knowledge needs a governor – *sustainability*.

---> **A shift analogous to that from the medieval to the modern research university?**

The modern research university created a knowledge culture that has

- extended our lifespan and
- produced a rich consumer economy that's made life comfortable

So what's not to like?

That's the past. Today, universities are

- (1) increasingly marginal in society, while
- (2) unleashing forces that threaten our survival.



(Man of Science meets monster he created)

Our idea of the university is rooted in its past



When knowledge production today is dominated by corporations

The top 20 research budgets:

Amazon	Novartis
Alphabet	Toyota
Volkswagen	Johnson & Johnson
Samsung	Merck
Intel	Ford
Microsoft	Pfizer
Apple	Meta
Roche	Sanofi
Toyota	Honda
Diamler	General Motors



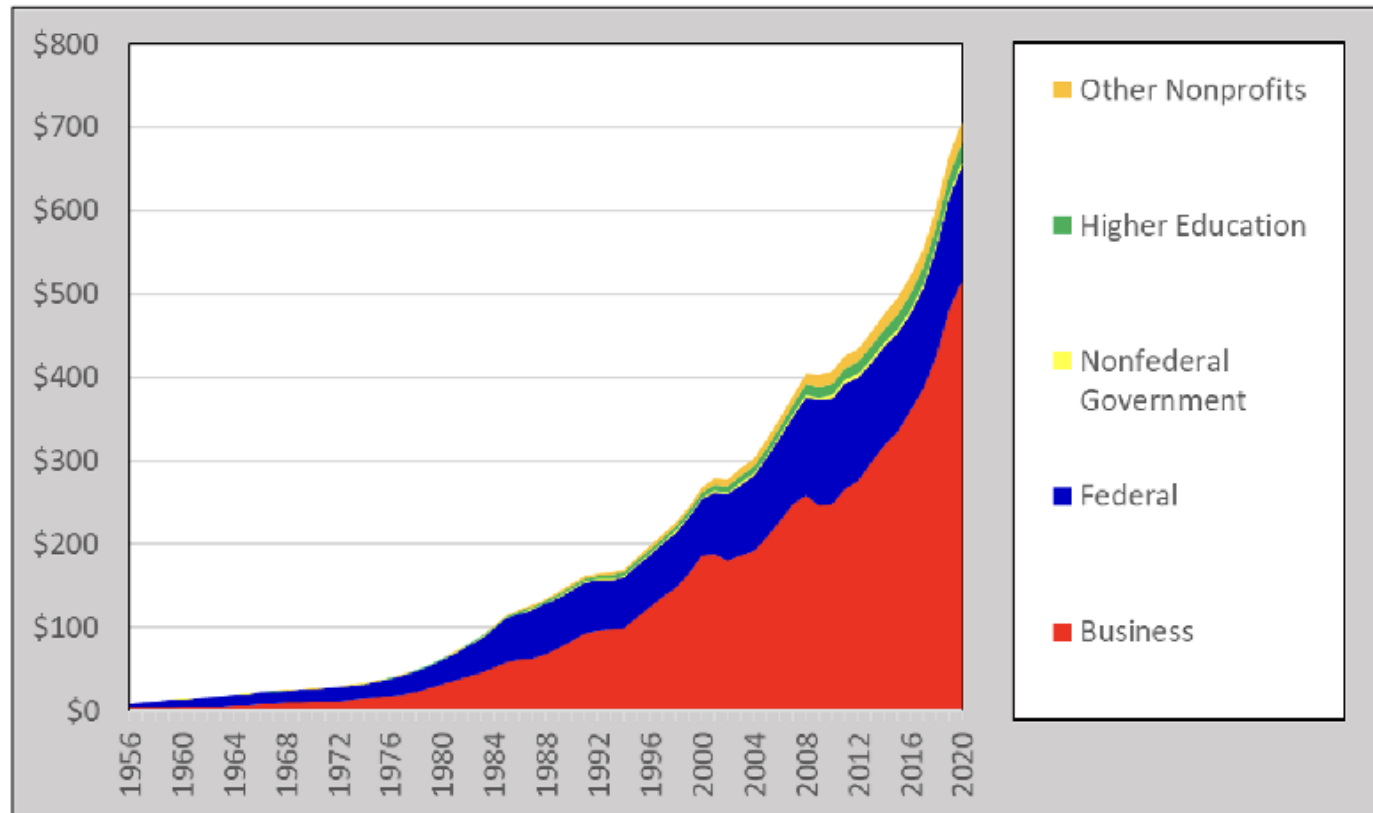
Apple Headquarters

-In 2021, totaled >\$200 billion

Knowledge production has moved off campus

Figure 1. U.S. R&D Expenditures by Source of Funding, 1956-2020

Current dollars, in billions



Source: CRS analysis of National Science Foundation, *National Patterns of R&D Resources: 2019–20 Data Update*, NSF 22-320, Table 6, February 22, 2022, <https://nces.nsf.gov/pubs/nsf22320>.

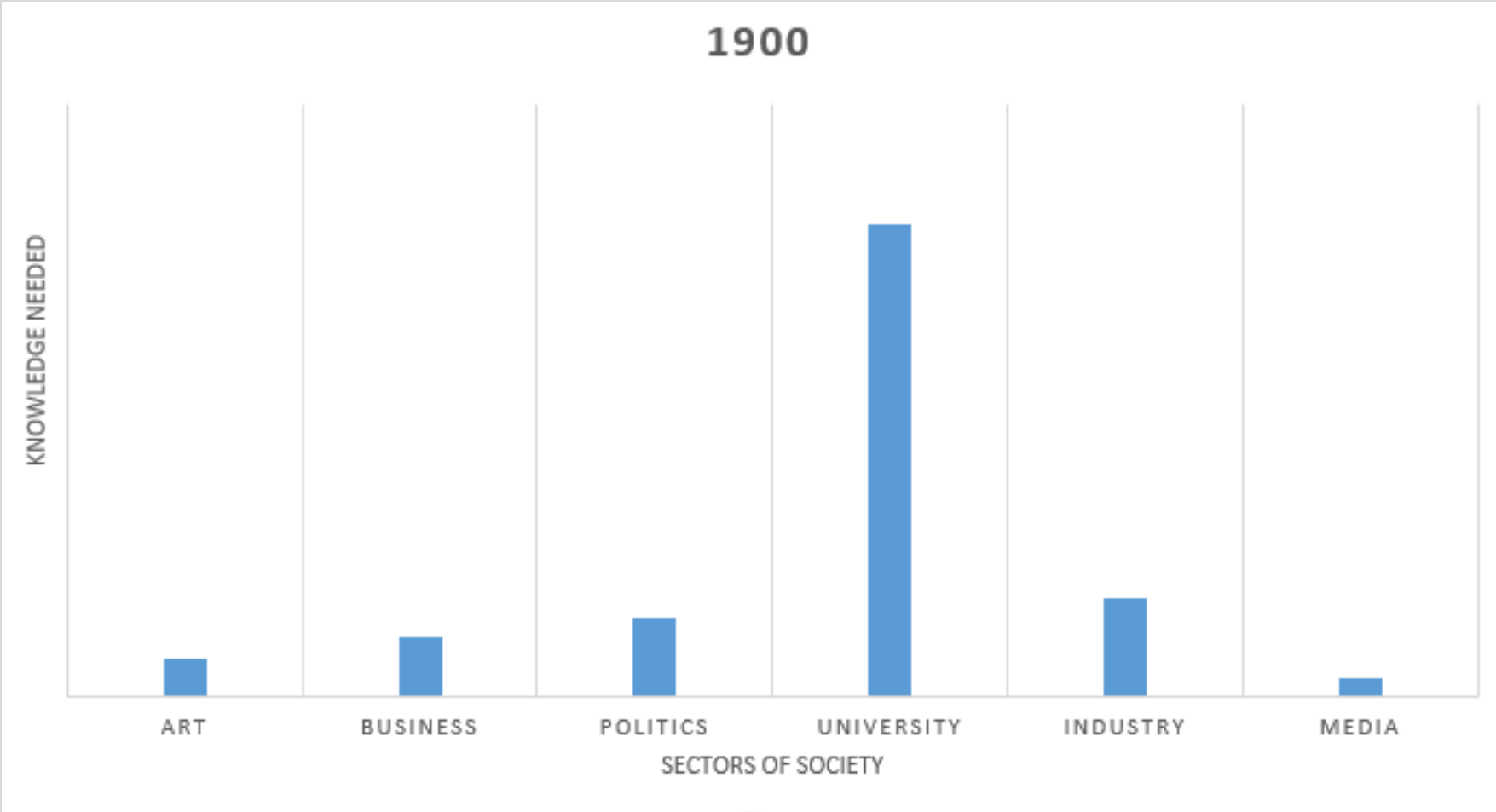
The second site of information: the internet & social media



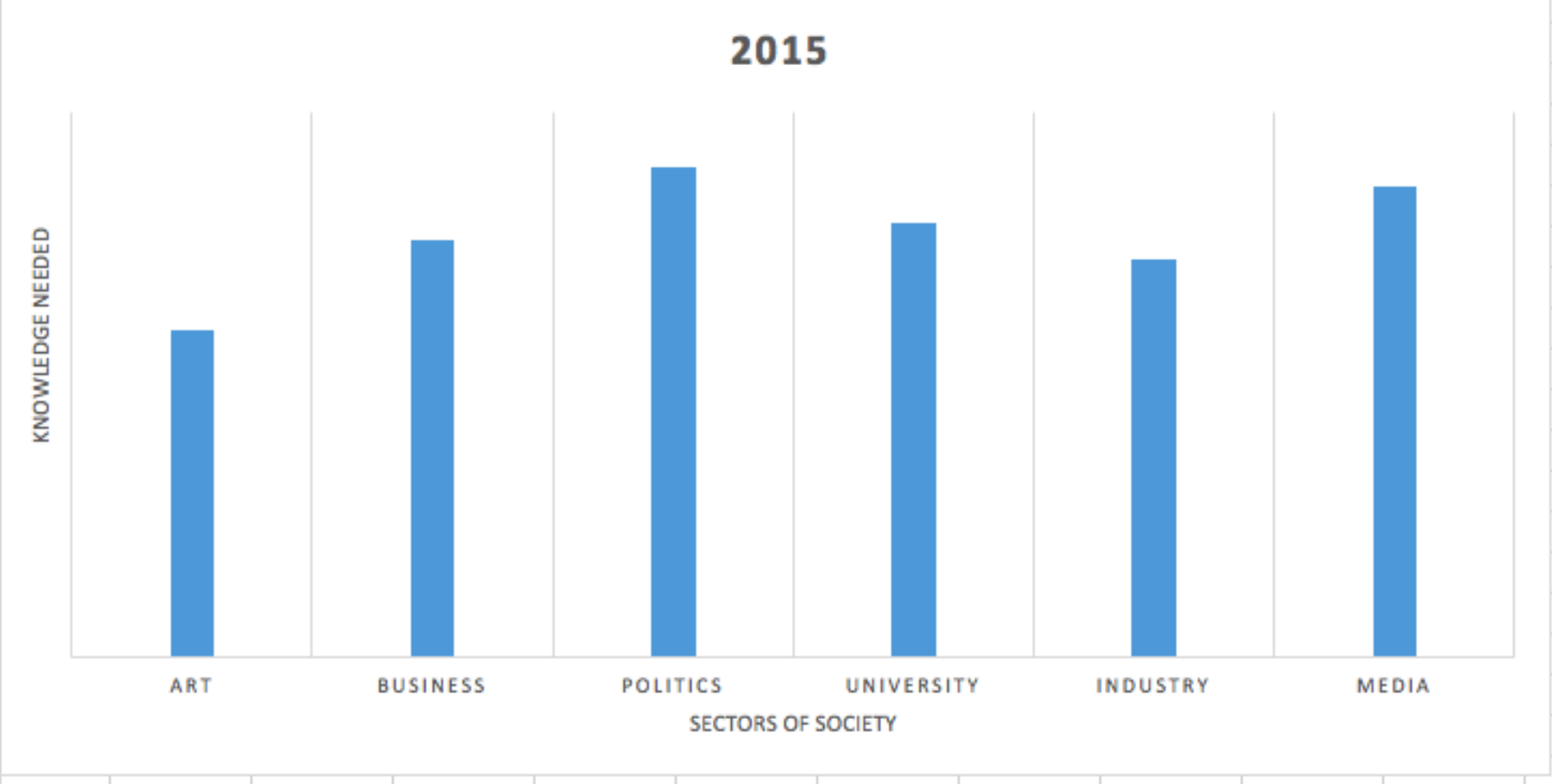
Creating a world of unvetted knowledge, challenging expertise
And effecting our politics

How has the university lost its preeminence?

US PhD production circa 1900: ~300 PhDs/year



US Today: 55,000 PhDs/yr



Growing powers of technoscience



The overproduction of knowledge?

Artificial Intelligence

In 2022, over 700 top academics and researchers were asked about future A.I. risk. Half of those surveyed stated that there was a 10 percent or greater chance of human extinction from future A.I. systems.”

-New York Times

Gain of Function Research

Wuhan Institute of Virology: 7 million covid deaths worldwide

Other concerns: nanotechnology, endocrine disruptors, surveillance technologies, genetic engineering, Deepfakes, cloning, identity theft...



The effects of laissez faire knowledge production

- science & technology dumped onto society (cf. Zuckerberg's 'Move fast and break things')
- the case of pornography

Four risks

- political instability, from cultural lag & populist revolts
- enabling totalitarian governments
- social and/or environmental disruption, either by accident or intentional actors
- Trivialization – Cf. Neil Postman



The response of leading technologists to these possibilities



-positions that run the gamut from A to C

Possibilities for the 21st century university

- Addressing fundamental ontology as well as regional ontologies
- Reconciling the supply and demand for knowledge; creating KBOs
- Reorganizing universities so that knowledge has a vertical dimension
- Sustainability as the overarching goal of university knowledge culture; subsidiary goals, but one overarching: sustainability
- Recentering the humanities within the university: as governor upon STEM
- Creating outward-oriented as well as inward humanities (i.e., field philosophy, TIES Fellows)