The Mental and the Material: Theorising digital capitalism, understanding its hegemony and imagining alternatives

DIMITRIS BOUCAS 6/12/2023

## Beginnings – the information society

The concept of the 'information society' has been deployed since the 1960s to denote:

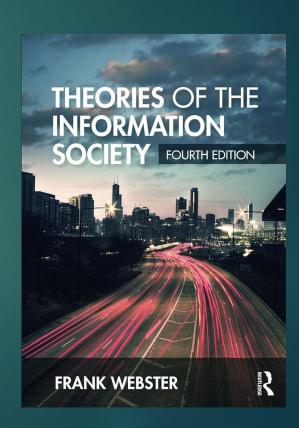
- a new techno-socio-economic paradigm
- with information and communication technologies (ICTs) at the centre,
- which entails significant economic/social transformations and
- bears implications for governance and potential for development/quality of life

Alternative concepts: knowledge economy, knowledge society, information economy

# Theories of the information society as a new type of society (summarised by Frank Webster)

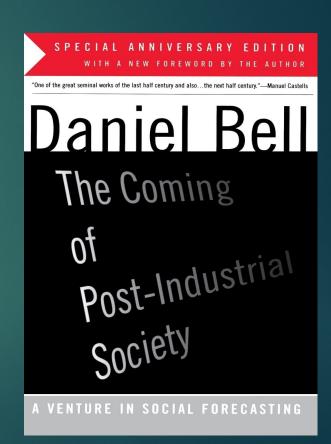
Frank Webster (2006) has undertaken a classification of the relevant theories:

- a) **technological**, where the emphasis is on the dramatic technological innovations and the development of ICTs, which appear to be leading to significant qualitative changes
- b) **economic**, which attempt to establish measures of the information society in economic terms (information sectors)
- c) **occupational**, which argue that an information society is increasing amount of information-related occupations
- d) **spatial,** which view the information society through the development of information networks bringing about dramatic implications for time and space
- e) **cultural**, which focus on the tremendous increase of the volume of information in contemporary society, the spread of advertising, the increasing presence and power of the media and the plethora of signs



# The post-industrial society (Daniel Bell)

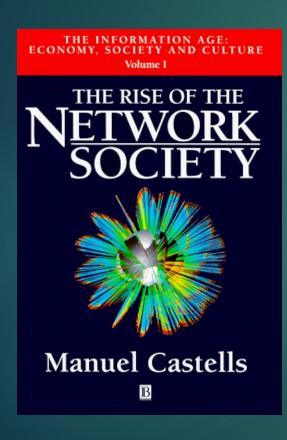
- ▶ In occupational theories, the argument is roughly that we have entered an information society since information work accounts for the majority of occupations. One of the most significant conceptualisation of the information society has been that of the American sociologist Daniel Bell (1973), who used the term 'post-industrial society'.
- ▶ Bell classifies societies according to the predominant mode of employment: in the pre-industrial society there was agricultural manual labour, in the industrial society there was labour in manufacturing processes, while in the post-industrial employment in services that assumes the central position.
- ► He traces a historical continuity from the pre-industrial to the industrial and post-industrial society by means of rationalisation, which brings greater efficiency and increased productivity within each stage and enables the passage to the next.

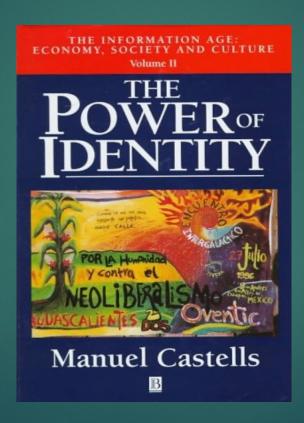


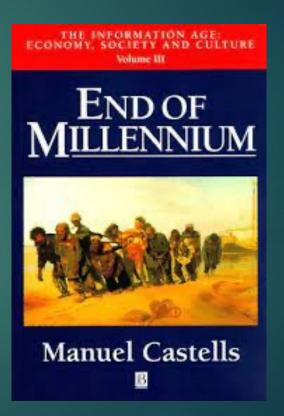
# Information society as continuity

- ▶ Vincent Mosco (1998) the Information Age should be seen within historical developments and analysed with existing constraints of social structures and power relations
- ▶ James Beniger (1986)— 'The Control Revolution' ICTs as part of interrelated processes of change in technological, economic and organisational arrangements (technical innovations, bureaucratic changes, formation of new firms and corporate organisations) from mid-19<sup>th</sup> century. He considers these developments part of a 'Control Revolution', which uses increased amounts of information for control and has an impact on all levels of society, both material and cultural.
- ▶ Herbert Schiller (1996) The information society reflects capitalist imperatives and information has become an essential ingredient of the capitalist system and the market economy, which prevail despite technological change. Information networks are in the hands of corporate media and computer giants who have the power to control content and set prices.

# Manuel Castells and the Information Age







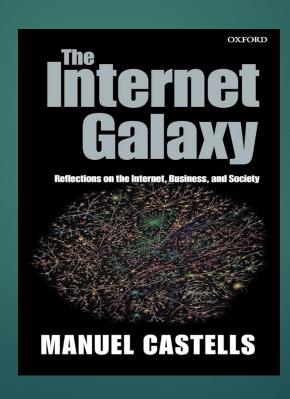
# Castells – The Network Society (1996)

- ► Castells traces historically a set of parallel processes starting more or less in the mid-1970s, namely the revolution in ICTs, the restructuring of capitalism, as well as the legitimation crisis of the nation-states and their orientation towards market forces, competitiveness and liberalisation. The combination of these recent tendencies has shaped processes of economic, political and cultural globalisation and the emergence of what he calls 'the networking organisation' and have eventually brought about a new economic and social paradigm, the 'network society', with informationalism at its heart.
- Informationalism as a new mode of development and a as new technological paradigm
- ▶ The characteristics of informationalism are: first, it comprises technologies that act on, modify and exchange information; second, it has profound pervasive effects across the entire economic and social landscape; third, it possesses a networking logic which serves increasingly complex interaction patterns and needs, while simultaneously creating new enhanced communicative patterns that would be inconceivable in the absence of ICTs; fourth, it provides an element of programmability and flexibility that permits reconfiguration of organisational processes, rearrangement and alterations of operating components according to user needs and changing circumstances; fifth, it facilitates convergence between the different technological subfields and integration into sophisticated interconnected information systems in order to take full advantage of the ICT potential, something which is also reflected in movements of ICT firms to form mergers, acquisitions, or strategic alliances with other industrial and business partners (Castells, 1996, pp.61-63).

#### The Internet

► Castells (2002) The Internet Galaxy







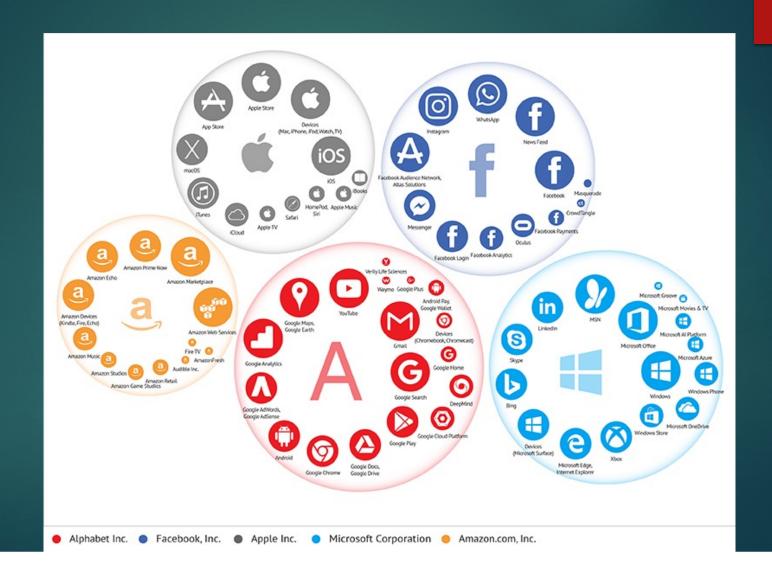
#### Contradictions of the Internet

- Originally built on principles of information sharing and communication enhancement, innovation, experimentation
- ▶ WWW interface generalised from the 1990s
- ▶ The promise of the Internet democratisation, education, freedom
- But appropriated by big corporations, commercialisation of knowledge, instrument for advertising and profit-making
- Ideology of neoliberalism free market no government intervention
- ► Foster and McChesney (2011) "Unholy Marriage of Internet to Capitalism" information paywalls etc.
- Internet becomes structural network of the digital economy and society

#### Consolidation of Internet architecture

- Web 2.0 technologies enable two-way communication social media
- Importance of search engine companies
- Development of platform companies
- Outcome: monopoly architecture and commercial character of the Internet as we know it today
- Still, contradictory dynamics persist

# Monopoly power



# Forbes Global 2000 ranking of largest companies

RANK A	NAME	COUNTRY	SALES	PROFIT	ASSETS	MARKET VALUE
1.	JPMorgan Chase	United States	\$179.93 B	\$41.8 B	\$3,744.3 B	\$399.59 B
2.	Saudi Arabian Oil Company (Saudi Aramco)	Saudi Arabia	\$589.47 B	\$156.36 B	\$660.99 B	\$2,055.22 B
3.	ICBC	China	\$216.77 B	\$52.47 B	\$6,116.82 B	\$203.01 B
4.	China Construction Bank	China	\$203.08 B	\$48.25 B	\$4,977.48 B	\$172.99 B
5.	Agricultural Bank of China	China	\$186.14 B	\$37.92 B	\$5,356.86 B	\$141.82 B
6.	Bank of America	United States	\$133.84 B	\$28.62 B	\$3,194.66 B	\$220.82 B
7.	Alphabet	United States	\$282.85 B	\$58.59 B	\$369.49 B	\$1,340.53 B
8.	ExxonMobil	United States	\$393.16 B	\$61.69 B	\$369.37 B	\$439.39 B
9.	Microsoft	United States	\$207.59 B	\$69.02 B	\$380.09 B	\$2,309.84 B
10.	Apple	United States	\$385.1 B	\$94.32 B	\$332.16 B	\$2,746.21 B
11.	Shell	United Kingdom	\$365.89 B	\$43.51 B	\$429.15 B	\$205.45 B
12.	Bank of China	China	\$158.23 B	\$33.23 B	\$4,421.76 B	\$122.67 B

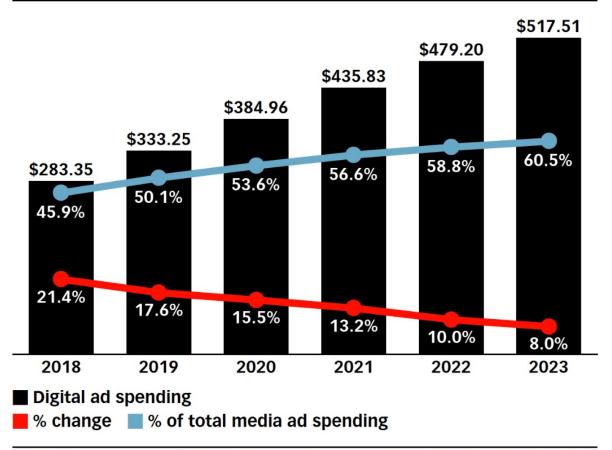
# Search engine shares

Google	71.98%		
Bing	18%		
Yandex	5.38%		
Baidu	1.92%		
Yahoo	1.88%		
DuckDuckGo	0.54%		
Ecosia	0.1%		

Google	92.58%		
Baidu	3.71%		
Yahoo	1.11%		
Bing	1.05%		
DuckDuckGo	0.84%		
Yandex	0.51%		
Naver	0.12%		

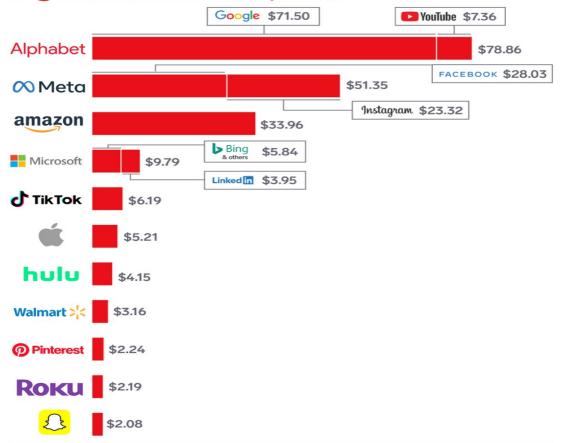
Share of online searches conducted on desktop computers and mobile devices in November 2023 (Data source: NetMarketShare: Market Share Statistics for Internet Technologies, <a href="http://www.netmarketshare.com">http://www.netmarketshare.com</a>, accessed on 3/12/2023)





Note: includes advertising that appears on desktop and laptop computers as well as mobile phones, tablets and other internet-connected devices, and includes all the various formats of advertising on those platforms; excludes SMS, MMS and P2P messaging-based advertising Source: eMarketer, February 2019

#### **Companies With Over \$2 Billion in US Net** Digital Ad Revenues, 2023

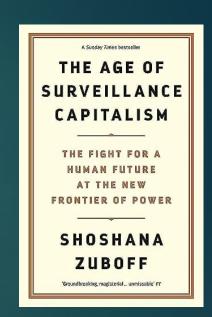


Note: includes advertising that appears on desktop and laptop computers as well as mobile phones, tablets, and other internet-connected devices, and includes all the various formats of advertising on those platforms; net ad revenues after companies pay traffic acquisition costs (TAC) to partner sites; excludes spending by marketers that goes toward developing or maintaining a platform presence Source: eMarketer, March 2023

# Theories of digital capitalism

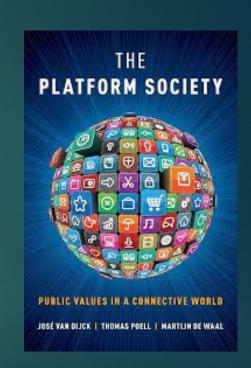
#### Shoshana Zuboff – Surveillance capitalism

- ► David Lyon *Surveillance Studies* (2007)
- ▶ Dataveillance: Online activity generates data, which are monitored, stored in large data centres, shared between corporations and state authorities, recombined and analysed through Al-based algorithms.
- ➤ Zuboff: 'A new economic order that claims human experience as free raw material for hidden commercial practices of extraction, prediction, and sales'
- 'expressed by large tech companies such as Google and Facebook, which capitalise on online activity and behaviour, thus creating "behavioural surplus" and generating "surveillance assets" which are translated into "surveillance capital' (2019, p.94).
- Technology and behavioural modification (also, Langdon Winner, 1980)



#### Van Dijk, Poell and De Waal (2018) – Platform society

- ▶ Platforms the big five: Google, Facebook, Amazon, Apple, Microsoft defining the compulsory infrastructure of our times
- States and other organisations dependent on these platforms for providing services.
- ► However algorithms, data flows and business models are non-transparent -law cannot be exercised easily
- Qualitative change from industrial society when essential infrastructures were public
- ► "Divided sovereignty" between states and the big five raises questions about data privacy, taxation, monopoly behaviour:
- Who is accountable for maintaining "public value" or the "common good"?
- Who is accountable for a fair and democratic society?
- Negotiating public value in the "platform society"



# Nancy Fraser (2022) Cannibal Capitalism-> Digital?

- Capitalism as an institutionalised social order based on four conditions:
- ► Imperialist expropriation confiscating human capacities and natural resources and conscripting them into the circuits of capital expansion

(**Digital** -> extraction of lithium in Bolivia, tin from Congo, water for data centres, environmental waste etc.)

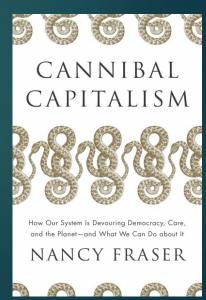
Unwaged and under-waged labour for social reproduction

(**Digital** -> digital labour: platform users, platform workers, digital industries workers, e.g. Facebook moderators, Foxconn workers)

Free or cheap natural resources

(**Digital** -> electromagnetic spectrum for mobile technology, sea and land for fibre optics, etc.)

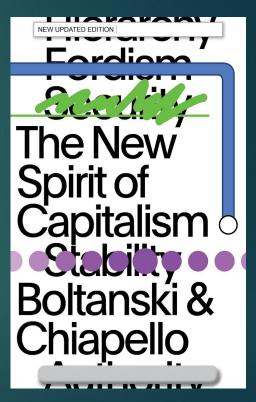
- State institutions and public goods
- (Digital -> state subsidies, digital skills, regulatory frameworks)



# Ideology

# Luc Boltanski and Eve Chiapello (2005, 2018) New spirit of capitalism

- Critique of bureaucratic organisation which has its roots in the cultural revolution of the 1960s
- Organisational/managerial culture based on networked collaboration and decentralised decision-making
- Capitalism adapting practices to provide more individual agency and flexibility



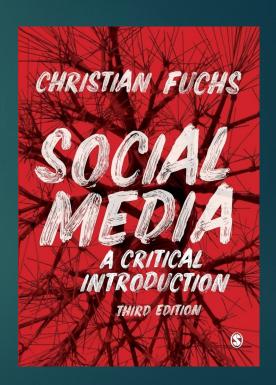
# Jeremy Gilbert and Alex Williams (2022) Hegemony of Big Tech

- ► Gilbert and Williams —class element of digital/mobile technologies and platforms addressing elite individuals
- Digital technologies enhanced values of networking, convenience, efficiency for the individual networker - imbuing the above values and integrating citizens, consumers in the digital technological system
- ► These values become consolidated and become hegemonic based on passive consent "collective behaviour of learned helplessness" (Seligman 1975)
- My argument: This "passive consent" (Gramsci), however, is only conditional



## Christian Fuchs (2021) Ideology of social media

- Contradictions of digital capitalism as expressed in social media
- Social media advance socialisation, communication and cooperation
- However, this happens within a framework of commodification of creativity and human relations
- Privacy terms and 'prosumer' exploitation
- Need to de-centre analysis from technology and focus on power structures in digital capitalism
- Need to consider alternative ways of organising social media to take full advantage of socialisation and communication potential of the technology



## The netCommons project

- netCommons: Network Infrastructure as Commons http://netcommons.eu
- EU Horizon 2020 project, 3-year project
- Study, support and further promote community-based networking and communication services that can offer a complement, or even an alternative, to the global Internet's current dominant model
- Partners: Uni of Trento (I), The Polytechnic University of Catalonia (E), the National Center for Scientific Research (FR), the University of Westminster (UK), the Athens University of Economics and Business (GR), and the non-profit organization Nethood (CH)

## Alternative Internet Survey

- 1000 respondents
- **Section A:** aims of the survey and consent form
- Section B: internet usage and digital skills
- **Section C:** concerns of Internet users, e.g.
  - surveillance, data protection and privacy
  - digital labour, advertising and consumer culture
  - digital monopolies
  - internet governance and electronic democracy
- Section D: two questions on the possibility of alternative internet, directly relevant with community networks
- Section E; demographics (age, education/background, profession, area, community participation)

Total Questions: 48 (10 open)

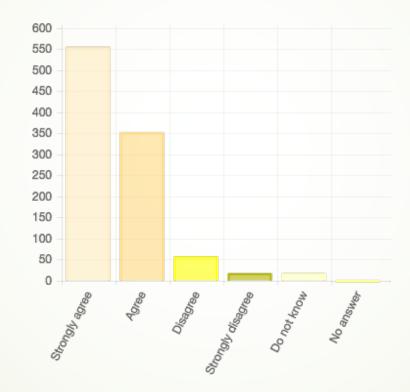
### 1000 respondents : occupational profile

- 81 Managers (e.g. Managing Director and Chief Executive; Sales, Marketing and Development Manager)
- 611 Academic/Research staff
- 98 IT professionals (e.g. Technician; Software and applications developer and analyst, database and network professional)
- 46 Administrative/ Clerical Staff
- 14 Services and Sales Workers
- 150 other (mostly students)

# 1000 respondents: country residence

- 282 UK
- 101 US
- 98 France
- 83 Germany
- 75 Italy
- 51 Greece
- 31 Canada
- 20 Spain
- 18 Switzerland
- >10 Australia, Argentina, Brazil, Austria, Slovenia, Sweden etc.
- <10 Thailand, Tanzania, Zimbabwe, Angola, Algeria etc.</p>

Please consider the following statement: Users do not have control over how <u>personal information</u> is collected and used by online companies.



Over 90% of the respondents strongly agree or agree with the statement

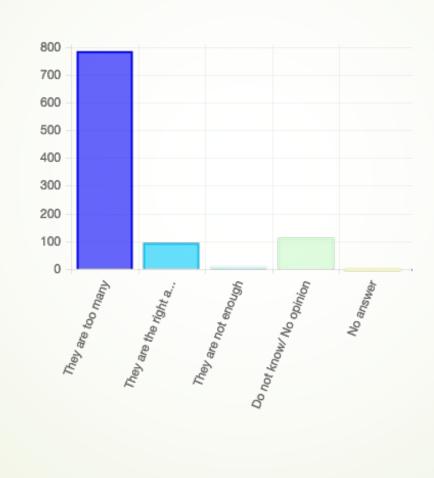
#### Privacy & data control

- Strong concerns about:
  - handful of commercial companies that rely on harvesting personal data using extensive tracking and profiling practices
  - use of data for commercial but also political benefit
  - lack of alternatives

(Over 60% respondents reported that they were very concerned or concerned, around 20% are somewhat concerned)

76% of respondents were of the opinion that laws and organizational practices to protect online privacy are inadequate

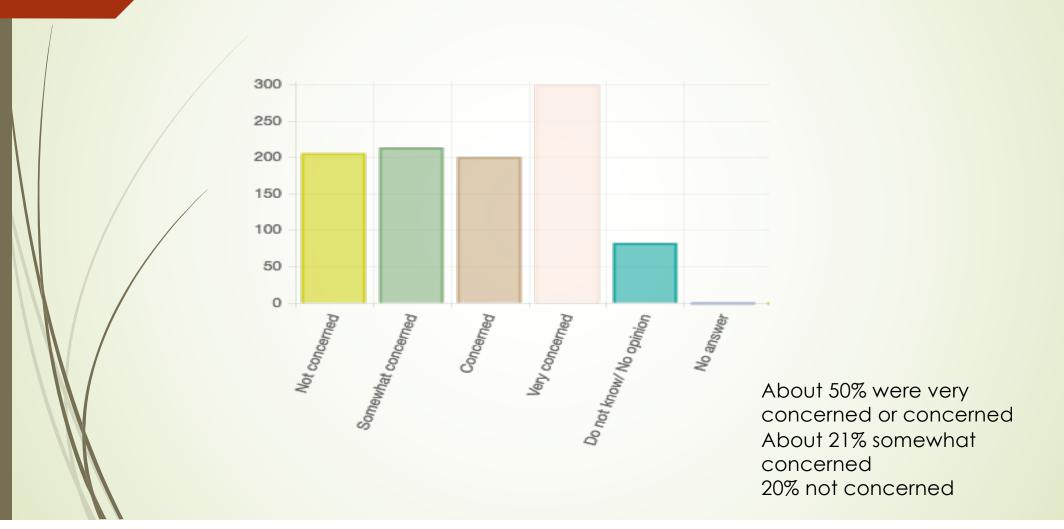
# How do you feel about the amount of advertisements on the Internet?



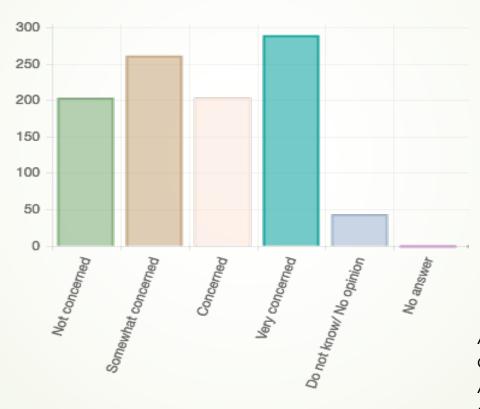
#### Monopolies of information provision

- Questions on Facebook and Google reveal concerns about:
  - ad-driven business model which relies on personal data
  - increasing market power and intrusiveness
  - potentially severe adverse effects for citizenship, democracy and the public sphere,
  - doubts about whether one can stop using these platforms totally (but some tension here – there are alternatives)

# How do you feel about the fact that Facebook is the social network site that most people use?



# How do you feel about the fact that Google is the only search engine that most people use?



About 50% were very concerned or concerned About 26% somewhat concerned 20% not concerned

## Facebook as privacy violator

- "exposing private information"
- "invading privacy"
- "intrusive"
- "non-transparent"

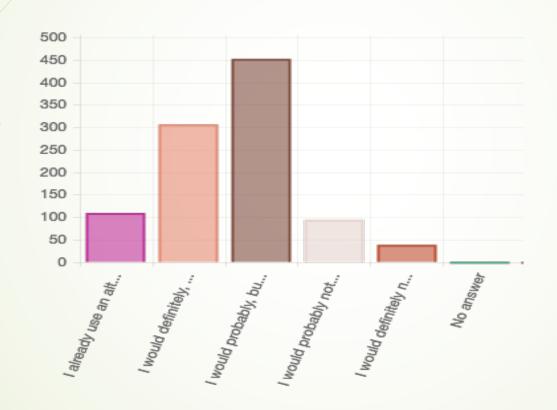
#### Facebook as information provider

- "single information source"
- "decision-maker of terms of access to information"
- "propaganda"
- "spreading toxic silicon valley ideology"
- "spreading fake news"
- "negative campaigning tool"
- "trivia information provider"
- "micro-targeting users with political messages"

### Facebook as monopoly (power)

- "monopoly company"
- "holding too much (data) power"
- "abusive of power"
- "danger to democracy"
- "political/social influence"
- "shaping/limiting expressive choices"
- "alienating"
- "global imperialism"

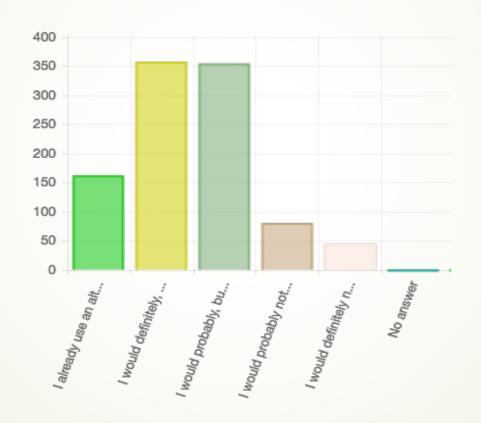
Would you consider using <u>alternative platforms</u> instead of Facebook, Twitter, YouTube, or Google, if this choice would mean receiving no advertisements



41% of the respondents already use or would definitely consider using an alternative platform;

45% of respondents would probably consider it but it would depend on what their friends would do.

# Would you consider using alternative platforms instead of Facebook, Twitter, YouTube, or Google to avoid monopoly effects?



52% already use or would definitely consider using an alternative platform;

35% would probably consider it but it would depend on what their friends would do

## These responses show ambivalence

- Many express their dislike vis-à-vis FB, but still consider it necessary for communication
- Many do not like the monopoly position of FB, but it is convenient to have all users on the same platform
- Many are prepared to sacrifice a certain amount of privacy for convenience, though they do not like this
- Other do not think that it is a big problem that personal information is bought and sold on FB.
- Many see it as a free tool or service which has to make money
- Many respondents confess that "there is little I can do but submit to it" (r201); "If most people use Facebook, what can I do?" (r63). Despite their concerns many users feel they cannot pull out of Facebook (r801, r807) and that they will accept the terms of service (r884). Not being on Facebook is equivalent with exclusion from the professional and social groups and their dynamics (r353). It becomes almost compulsory to use it and use nothing else (r431).

#### Alternative practices –steps taken

- changed the default privacy settings, though "Over-riding / altering existing settings is very frustrating." (63.6%)
- installed ad-block software (61.2%)
- paid more attention to the terms of use and privacy policies (43.6%)
- blocked certain applications on social media, e.g., Facebook birthday calendar (43.6%)
- reduced the frequency of usage of online services they have concerns about (30.4%)
- stopped using the online service(s) they have concerns about (27.2%)
- used a service that anonymises or encrypts online data or identity (26.3%)
- stopped using open Wi-Fi (19.3%)
- reduced their use of the Internet to the minimum (4.8%)

# Alternatives

#### Benkler (2006) - The Commons

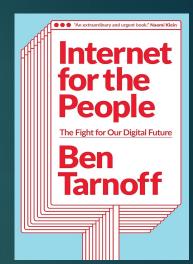
- ▶ Information as non-rivalrous and non-exclusionary good
- Information and knowledge means of production/consumption are distributed in society
- ▶ Information and knowledge production naturally sits with social production, rather than market production (Benkler 2006)
- Cooperative peer production
- Bauwens, Kostakis and Pazaitis (2019) Commons Manifesto
- Production arrangements and social relations in networks where participants have maximum freedom to connect, communicate, organise and engage in shared value creation

#### Morozov (2019) – Public infrastructure

- ► Morozov (2019) outlines his prerequisites for a possible "digital socialism".
- ▶ Free and available for all Internet infrastructure
- ▶ Deployment of Internet infrastructure in ways that enhance solidarity, non-market relations, as well as decentralised planning.
- ▶ Public ownership of "the feedback infrastructure", namely the data collected by big corporations (Internet service providers, search engines, social media) through countless traces of online activity – or what is commonly termed "big data"

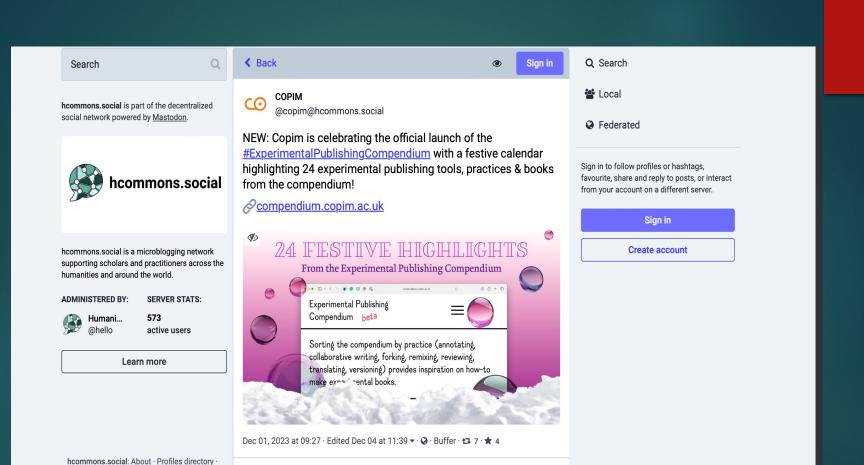
#### Tarnoff (2022) Internet for the People

- Regulation to avoid discrimination and prioritisation of content on Google and Facebook
- Anti-trust regulation to break up tech monopolies (e.g. Facebook to be separated from WhatsApp and Instagram) – increase competition
- ▶ Still, market competition is this desirable?
- More radical: an alternative Internet does not work with the logic of profitmaking
- However, social media and search engines are needed -> need to build alternative architectures
- Zuckerman (not Zuckerberg): Decentralised architecture with a large number of online communities with their own culture and rules
- Communicating with each other through common protocols that are open
- Mastodon –decentralised social network resembling Twitter and based on a number of servers which are independently run but interconnect through open protocols
- Connecting to a number of non-Mastodon platforms modelled after YouTube, Facebook, Instagram
- Possibility of integrating offline spaces such as public libraries to generate information that is more reliable



### Example: Mastodon





Privacy policy

Hometown: About · View source code · v4.0.10+hometown-1.1.1

Mastodon: About · Get the app · Keyboard shortcuts · View source code

### Tarnoff (2022) Internet for the People

- Data storage (alternative cloud infrastructure)
- Platform cooperativism (e.g. cleaner, driver, service apps that are owned by workers)
- Data ownership and governance: users determining under what conditions a company could have access to their data
- Role of public funding in the above
- Problem: how to build network effects? Resistance from users?
- Answer: interoperability (connecting with the dominant platforms)
- Co-design processes to develop alternative online services

#### Conclusions

- ▶ Digital capitalism is a new stage of capitalism with its own ways of profit-making and commercialisation using digital technologies
- ► Can be analysed drawing on the political economy and power relations that characterise its material infrastructure...
- but also explained using the lens of ideology and hegemonic values
- ▶ It should be seen in the perspective of historical continuity of processes of technological development and capitalist restructuring
- ▶ As premised on structures and agency an be by definition unstable
- Alternatives can be imagined and the role of different actors (states, civil society, individuals) are important in this processes
- Alternatives pre-suppose an alternative infrastructure and a set of alternative values

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