

3. Aims, methods and literature [DRAFT]

"That's not the way the world really works anymore," he continued. "We're an empire now, and when we act, we create our own reality. And while you're studying that reality -- judiciously, as you will -- we'll act again, creating other new realities, which you can study too, and that's how things will sort out. We're history's actors... and you, all of you, will be left to just study what we do."¹

3.1 Aims of the study

This project develops and applies a replicable methodology to evaluate whether and how the operations of Very Large Online Platforms (VLOPs) and Very Large Online Search Engines (VLOSEs) have had measurable effects on democratic functions and practices across the Nordic countries since their emergence around the turn of the century. These communication-technology giants have collectively gained unparalleled access and influence in most people's lives, holding socio-economic power and capabilities that now tower over most nation-states.²

While critique of ICT corporations is increasingly sharp, it tends to be advanced through normative theorizing, backed up with a collection of case-based critiques. What yet remains underdeveloped in this growing body of literature, is an *empirical, systematic framework* to test and substantiate critical claims of causal impacts on democratic functions and practices. Rather than offering a primarily theoretical or normative critique of this shift in global power, theoretical claims are here examined through an empirically testable diagnostics tool which maps techno-economic mechanisms (infrastructure, platform governance, data extraction) onto an emerging framework of democratic functions and practices.

By combining normative benchmarks with multi-level empirical evidence, the approach enables critical claims of systemic democratic degradation to be corroborated, qualified, or falsified. Tested are claims made by political theorists such as Shoshana Zuboff, Mark

¹ (R. Susskind 2004) The quoted anonymous source and senior White House aide was Karl Rove.

² (Mendonca et al. 2023; J. Susskind 2022; Zuboff 2019b; Haugen 2023; York 2021; Botero and Griffin 2023)

Coeckelbergh, Dan McQuillan and Carissa Véliz, *on systemic risks* posed by ICT corporations to democracy and human rights.

These authors contribute to a growing body of critical socio-technological literature which has developed a range of conceptual terms to describe said ICT corporations and their operations, including Big tech³, Big Data⁴, Techno-feudalism⁵, Digital Colonialism⁶, Platform Capitalism⁷, Big Other⁸, Surveillance Capitalism⁹, digital capitalism¹⁰ and Technocapitalism¹¹.

For simplification of diverse and often inexact terminology in the literature, this thesis uses the term *Technocapitalism* and *platform-capitalism* interchangeably and narrowly, referring to **infrastructure, algorithmic- and data-driven operations of content-driven providers that fall under the EU’s legal definitions of Very Large Online Platforms (VLOPs) and Very Large Online Search Engines (VLOSEs), as defined under the EU’s Digital Services Act of 2022.**¹²

For its analysis, the study tests and advances Mark Warren’s emerging functional-democratic theory as methodology for analysis of democratic functions and practices, as discussed in chapter 2 [on democracy].¹³ It advances Warren’s 3×7 matrix as a *normative-functional scaffold* by adopting it into a diagnostic and operational framework. Warren’s framework bridges a gap between methodology and theory by developing Warren’s structured diagnostic framework capable of normatively and empirically assessing

³ (Rikap and Lundvall 2022)

⁴ (Richards and King 2013; Aradau and Blanke 2022)

⁵ (Varoufakis 2023)

⁶ (Ulises Ali Mejias and Couldry 2024)

⁷ (Srnicek 2019)

⁸ (Zuboff 2015)

⁹ (Bellamy-Foster and McChesney 2014; Zuboff 2015)

¹⁰ (Fuchs 2021)

¹¹ (Coeckelbergh 2022, 2024b; Napoleoni 2024)

¹² (Digital Services Act 2022)

¹³ NOTE: This is chapter 3, Democratic theory and Warren’s model has been/will be explained in chapter 2 on democracy. Criteria for assessing democratic robustness/weakness will be covered in ch. 2 and issues with that assessment here under 3.7.

democratic robustness under the influence of technological disruptions. It measures democracy in successful outcomes rather than specific processes or frameworks.

The project is intended as both a *critical estimation of specific claims* and a *methodological contribution* to an emerging framework for political analysis. It translates democratic theory into specific actions and empirical diagnostics based on measurables, while applying the framework to investigate the impact of Technocapitalism, defined here as the entities defined by the EU's Digital Services Act as Very Large Online Platforms (VLOPS) and Very Large Online Search Engines (VLOSE).¹⁴ It avoids wider ideological critique and focuses instead on material and institutional effects that are traceable through legal frameworks and democratic indicators from a wide variety of sources.

The research is a part of a wider effort to *develop new methodologies that fit this fresh field of study at the intersection of political science, democracy and technology*. It answers calls from the EU and national level initiatives in defense of democracy and joins organized efforts by institutions and research forums in the development of new interdisciplinary methods to assess the various effects of ICT.¹⁵ Central to this approach is the belief that the *datafication* of society provides opportunities in democratic research and practice. “Civic participation, political polarization, public misinformation, and public accountability all have a digital element to them”, these elements leave data which this thesis examines and classifies as part of its analysis.¹⁶

While the term Technocapitalism anchors broad the critique under a single heading, the analysis refrains from broad ideological claims or critique of Capitalism, Neoliberalism or other aspects of Technocapitalism such as financial systems. Here, the focus is on *legally defined large systems as socially embedded infrastructures* such as VLOPS' influence on the digital public sphere. The study uses interdisciplinary theoretical and empirical sources for the analysis that identifies patterns of democratic weaknesses or resilience

¹⁴ (Digital Services Act 2022; European Commission 2025)

¹⁵ (Mendonca et al. 2023; Internet Policy Review 2024; Council of Europe 2022; European Union 2020) See also calls by the IGF's GigaNET academic forum, autumn of 2024.

¹⁶ (Karpf 2019, 1; Ulises A. Mejias and Couldry 2019)

across functions and practices. The result is a methodological toolkit grounded in theory, regulation, and observable effects that is adaptable for future political analysis.

A key objective is to render critical democratic theory onto a methodologically sound analytical framework. This can build a foundation for future reviews of EU digital governance and technocapitalist accountability. It has potential for longevity as part of ‘a judicious study of discernible reality’ applying a type of ‘*datafication*’ in what has potential to become a database-turned-website or Wiki-matrix that develops Warren’s methodology.

This project contributes to a *replicable analytic framework for evaluating democratic robustness under digitally mediated condition*, supplementing Warren’s framework with Craig Parsons *logics of causal explanation*, backed up with triangulated evidence from law, policy, civil society, and monitoring institutions. Parsons’ four causal logics of explanation (structural, institutional, ideational, psychological) approach complements Warren’s democratic framework, provide tools to reveal patterns that substantiate –or falsify – critical claims of *systemic threats* to democracies. Of particular interest here are three types of disruptions to democracy: *privatization of public functions, algorithmic and institutional opacity, and infrastructural and normative capture*.

The analytical process aims to reveal whether Zuboff and other critical scholars are correct in their theorizing on the structural effects of digital empires.

3.2 Defining the scope

This chapter details the methodological approach employed to investigate this thesis' central research question:

How do content-oriented, large-scale technocapitalist platforms, defined and governed by the EU as Very Large Online Platforms (VLOPs) and Very Large Online Search Engines (VLOSEs), affect democratic functions and practices in the Nordic countries?

Sub-questions are:

1. How are democratic functions governed, outsourced or privatized through platform infrastructures, and what normative or institutional responses have emerged?
2. What forms of institutional erosion or displacement can be empirically documented across the Nordic countries? Can causes or relationships be detected?
3. How well is Warren's matrix approach suited to analyze the performance and development of democratic norms, institutions, functions and practices in relation to Technocapitalism?

The subject is growing in urgency and importance with growing political unrest and extremism linked to content management strategies and concentration of power on the hands of techno-empires. Critics claim this development poses momentous challenges to citizen participation, inclusive representation, and the overall integrity of democratic processes. This influence poses pressing questions of how such power is defined, wielded and regulated within democratic systems, a concern explicitly recognized in EU/EEA law which frames the 'normative order of the Internet' in the Nordics.¹⁷ These concerns are

¹⁷ (Kettemann 2020)

addressed as part of the EU's Digital Decade initiative and the recent European Democracy Action Plan (EDAP), aimed in defense of democracy.¹⁸

PARAGRAPH ABOUT WHY THE NORDICS – REWORD ALL OF THOSE POINTS

The Nordic countries, Denmark, Finland, Norway, Sweden and Iceland, are ideally suited for democratic research as developed democracies with mature institutions and strong democratic traditions. The Nordics combine exceptionally high baseline levels of democratic performance, institutional transparency, and digital maturity, which together create a baseline for functioning democracies, making deviations easier to detect than in more varied samples. The Nordics digitized fast and early, currently ranking amongst the most digitized societies on the planet. ICT is an integral part of Nordic democracy and statecraft, with the countries leading worldwide in the development of digital democratic solutions and the use of public data to improve public administration.¹⁹ They offer a uniquely strong empirical foundation in public data and advanced academic research, backed by strong traditions for transparency and freedom of information.

While Iceland and Norway are not members of the EU like Denmark, Finland and Sweden, they are a part of the European Economic Area which means ratification through national parliaments following EU's legal framework such as the Digital Services Act and Digital Markets Act. The Nordics are home to 27.8 million inhabitants; Denmark 6m, Finland 5.6m, Iceland 400k, Norway 5.5m and Sweden 10.5m. The public is well educated with universal literacy, strong education systems with around half of the population holding advanced degrees. Over 95% of the Nordic public has access to the Internet with strong government backup for universal connectivity and robust tech sectors.²⁰ Nordic publics are furthermore active users of social media for news consumption and political discourse with 70 - 80% of adults using social media several times a week.²¹

¹⁸ (European Union 2020; European Commission. Directorate General for Communications Networks, Content and Technology. 2024; Muller and Kettemann 2024)

¹⁹ (Danish Government 2021)

²⁰ (The Nordic Council and the Nordic Council of Ministers 2025)

²¹ (Bucht 2025)

Stated in Article 33 of the DSA, VLOPs and VLOSEs are defined as platform companies having over 45 million active monthly users in the EU and are considered significantly important to public discussion and democratic processes. Their power as arbiters of public discourse, and thus history-writers, is recognized in the DSA which places legal obligations on them to perform risk assessments, implement mitigation strategies for disinformation and manipulation, and ensure advertising and algorithmic transparency while also granting data access to vetted researchers and EU regulators.²²

As of May 2025, the EU defines eighteen entities as Very Large Online Platforms and two as Very Large Online Search Engines. This thesis focuses on a subset of those services, two search engines and 6-7 platforms that serve as core infrastructures for content dissemination and public discourse.

These are **Alphabet's Google Search** with 364 million monthly users and **YouTube** (417 m.m.u.); **Meta's Facebook** (260 m.m.u.) and **Instagram** (259 m.m.u.); **ByteDance's TikTok** (136 m.m.u.); **Microsoft's Bing** search engine (119 m.m.u.); **Snap's Snapchat** (102 m.m.u.); **LinkedIn** (133m.m.u and 45m. members); **X** (formerly Twitter w. 116 m.m.u.); and to a lesser degree the seventh VLOP **Wikipedia**, for its unique position as the only non-profit platform with 151 million monthly users. Although Meta's Messenger and WhatsApp have significantly large user bases, they are not designated VLOPs under the current DSA but are still intertwined in Meta's other business practices akin to Google's product synergy with -Play, -Maps and -Shopping.²³

Although these eight VLOPs and two VLOSE platforms are not equal in size, practices and power, they are selected for their power with a clear definition in EU law and *their role as digital empires, as history's actors and history's writers, for their ability to shape attention, discourse, and visibility within democratic systems.*²⁴

While broadly technocapitalist in nature, VLOPS excluded from this study include services whose core functions are transactional, service-based, or fall outside the domain

²² (European Centre for Algorithmic Transparency 2023)

²³ (EPRS - European Parliamentary Research Service 2025)

²⁴ (European Commission 2025; Digital Services Act 2022)

of public-facing content governance, platforms such as AliExpress, Amazon, Apple's App store and Temu. Finally, due to lack of topic relevance Pinterest, as a specialized crafts- and design-oriented platform, and the four adult-content platforms currently classified as VLOPS are not included in this analysis. This research is thus focused on technocapitalist platforms that influence public discourse and among other things mediate political participation, discourse, representation, and will-formation.²⁵

The work's goal is to reveal *accumulative large-scale effects* of Technocapitalism as the previously defined VLOPS & VLOSEs, and while examples will be taken to demonstrate trends, the thesis will not dig into analysis of country or corporate specifics. The thesis also avoids a related but much broader ideological critique of Neoliberalism, Techno solutionism or Capitalism's effect on democracy.

Instead, the project focuses on specific, *legally defined mass-influence techno-corporate infrastructures* that materially affect democratic functions, particularly inclusion, representation, and will-formation. This facilitates a methodologically bound analysis that links theory, policy, and data.

Within this design, *Technocapitalism* (as defined above) functions as *the independent variable*, operationalized through the activities and governance structures of VLOPs & VLOSEs.

Democracy, assessed through its core functions and practices, is *the dependent variable*, measured according to established theory and benchmarks that distinguish between robust and weak European democracies.²⁶ In other words, democracy is the *object* of this study, what we want to protect, and Techno-capitalism the *subject*, the agent that shapes, distorts or enables democratic outcomes.

The remainder of this chapter is structured as follows: Section 3.3 justifies the selection of Warren's normative-functional framework as the primary analytical scaffold. Section 3.4

²⁵ VLOPS excluded are include Amazon, Apple's App Store, Microsoft's enterprise software and Azure services, AliExpress, Google Shopping, -Maps and -Play, Uber, Airbnb, Pinterest and Temu, in addition to four porn platforms.(European Commission 2025)

²⁶ (Ansell et al. 2024; Sørensen and Warren 2024)

outlines the epistemological stance and general methodological orientation of the research. Section 3.5 presents the research design and matrix population strategy along with an example of matrix elements in Table 2. This section shows methods for data assessment and outlines how Parsons' four explanation logics are used as interpretive tools for deductive reasoning. Section 3.6 is dedicated to the work's extensive literature, theory, claims, empirical data and source selection. Finally concluding section 3.7 discusses the challenges of data access, analysis, and ethical considerations.

3.3 Selection of a methodological framework

This study adopts Mark E. Warren’s problem-based democratic framework as its scientific method for its conceptual clarity and normative grounding, which make it particularly well suited to operationalize and test claims that Technocapitalism generates systemic threats to democratic functions. It serves here as *Grand Social Theory* that makes sense of systemic changes in democracy, political power, and technological infrastructures. While also applicable to specifics, using the framework with a narrower risk overlooking causal patterns that are only visible at scale or in context with each other. A wide lens is *essential* to trace explanatory logics across structural, institutional, ideational, and psychological levels, as outlined by Parsons to substantiate or nullify claims about the systemic problems of Technocapitalism.²⁷

Warren’s framework has several theoretical advantages for democratic analysis for both its flexible view on *democracy as a peaceful problem-solving method* but crucially includes theoretic backing for *exit* as a core democratic practice, one that has become a central issue in contemporary online rights discussions, such as the right to be forgotten.²⁸

In addition to its theoretical substantiation, the framework offers a pliable, normatively based method to structure thinking to examine how democracy functions – or fails – in complex, rapidly evolving conditions. There is a known overlap of norms, institutions and intricate connections between functions and practices in the framework. This overlap makes democracy often difficult to define and explain, that is where the framework helps simplify complex phenomena and offer several advantages as a diagnostic tool, particularly within fast-evolving and intricate field of ICT and society:

Adaptability: Its structured methodological approach enables analysis of the interplay between ICT and society to reveal how digital technologies and technocapitalist practices influence core democratic principles and operations. The approach is tractable despite the complexity of democratic political systems and scalable in its ability to conceptualize

²⁷ (Parsons 2010)

²⁸ (Blakeley 2024; Polanyi et al. 2010; Warren 2011; Zuboff 2022)

democracy as a holistic system, for an analysis of parts of the whole as in this application in relation to Technocapitalism, applied to functions analysis only, examination of practice(s) across functions or as a tool to dig deeper into specific function-practice intersections.

Holistic assessment: It evaluates democratic performance by focusing on functional performance and legitimacy, how well the system solves shared problems, especially when confronted with challenges. It is a systemic, normatively grounded appraisal that supports a nuanced understanding of both observed (dis-)functions and normative realization of democratic ideals, without reducing it to institutions or procedures.

Empirical-normative connection: The framework is ripe for systemic mapping of diverse empirical data while grounding it through a connection to democratic principles, rooting institutional diversity and real-life practices in democratic norms. It integrates benchmarked data and research from vetted sources to substantiate claims about systemic democratic developments, thus laying a solid foundation for further analysis. This work's empirical scaffolding has potential beyond specific cases; it bolsters its conceptual strength and encourages adaptation for wider use.

In practice the approach simplifies the relationship between normative democratic theory and comparative democracy assessment.

Demonstrated validity: Growing number of successful applications have proven the validity of the framework in research context, particularly relating to political challenges and change. Developing innovative methodology is academically challenging but critical for political analysis where democracy and governance are in flux. Since its debut in 2017 the framework has been successfully adapted several times in political research; by Tenove et al. where it has proven its validity in the diagnosis of normative vulnerabilities in digital information systems and will-formation, by Lacelle-Webster to assess hope-based political agency, by this author in prior research of Cyberthreats to democratic functions, and most recently by Warren & Sørensen to assess systemic democratic robustness.²⁹

²⁹ (McKay and Tenove 2021; Tenove 2020; Tenove, Chris et al. 2018; Sørensen and Warren 2024; Agustsdottir 2019)

Visual and analytical utility: By organizing empirical data while structuring core components of democracy into a visually accessible format, the framework enhances conceptual clarity and makes complex democratic dynamics easier to grasp, especially for visual thinkers. It transforms abstract normative ideas and dispersed empirical evidence into a coherent structure, improving both academic theorizing and broader understanding of democracy and dysfunctions relating to Technocapitalism.

Each function-practice pair in the 3×7 framework serves as a distinct evaluative unit to examine specific aspects of democratic health, such as inclusion, political accountability and freedom of speech, as well as Technocapitalist dysfunctions such as algorithmic opacity, technical exclusions and privatization of public functions. Together the framework's function-practice intersections (cells) of democratic functions (columns) and practices (rows) form more than a practical research scaffold, they provide a visual and conceptual map that renders complex causal relationships evident. See Table 2.

The choice of Warren's model is thus an intentional methodological endeavor that supports both diagnostic precision and normative inquiry into the robustness of democracy under conditions of disruption caused by Technocapitalism.

3.4 Epistemic and methodological orientation

The research adopts a **post-positivist, constructivist, and scientific realist** epistemology. That is, it assumes that *multiple forms of knowledge can coexist and usefully contribute to scientific validity*, that observation is theory-laden, and that *norms and structures shape both agency and data production*.³⁰ It furthermore adheres to the view that in a complex world indicators based in many types of empirical evidence from varied research angles is not an empirical weakness, *but a strength* for well-rounded theory-building and top-level perspective on shifting situations.³¹ The research also adheres to **ontological constructivism**, which views relationships as mutually influential

³⁰ (Suleyman and Bhaskar 2023; Karpf 2019; Schmidt 2008)

³¹ (Lyotard and Bennington 2010; Karpf 2019)

and that *agency* as rooted in the *perception of interests*.³² Agency requires conscious decisions and views held over time, what Kahneman called *thinking slow*, and not in ‘fast-thinking’ reactions to stimulus, heuristics and instinctual behavior.³³ This view on agency has theoretical weight for its relation to freedom of thought and rights to protection.

The work views ideas and systems at scale, echoing **English School** theorizing in international relations, it acknowledges the structural anarchy of both the global system and ICT governance, while emphasizing the moderating role of sovereignty, international norms, and institutional arrangements.³⁴ These theoretical foundations frame global ICT governance and democracy as a normatively governed domain, constantly shaped by institutional, ideational, and structural interactions.³⁵

The study uses:

- **Meta-analysis** of peer-reviewed academic and institutional reports.
- **Mixed methods**, combining qualitative interpretation of norms with quantitative indicators of democratic functions and practices.
- **Iterative theory testing**, using Warren’s framework as a heuristic scaffold that is populated, tested, and refined through evidence.

3.5 Research design, data collection and analytical procedures

3.5.1 Matrix population

Each of the 21 intersections in Warren’s 3×7 matrix (see Table 2. below) is populated with information that reflects the performance of specific democratic functions and practices under technocapitalist conditions. This is done through a systematic process of curating, triangulating, and evaluating secondary source material. The goal is to build a practical diagnostic tool that maps aspects of democratic health across functions, practices and intersections, drawing on validated evidence and institutional sources.

³² (Carstensen and Schmidt 2016; Hay 2010)

³³ (Kahneman 2013; Lyotard and Bennington 2010; Carstensen and Schmidt 2016)

³⁴ (Kettemann 2020; Béland and Cox 2010; Wendt 1992; Dunne et al. 2013; Radu et al. 2014)

³⁵ (Parsons 2010; Lyotard and Bennington 2010; Warren 2017; Carstensen and Schmidt 2016)

Each matrix function × practice pair is populated using four key evaluative dimensions:

- **Democratic norms** in play and at stake.
- **Democratic (dis-)functions and practices** and changes over time. Three types of disruptions to democratic functions are in specific focus:
 - Privatization of public functions,
 - Algorithmic and institutional opacity, and
 - Infrastructural and normative capture.
- **Technocapitalist mechanisms of disruption** to existing or emerging practices.
- **Institutional responses** or the absence thereof.

To support this evaluation, the matrix draws on several categories of input:

- Theoretical definitions and normative criteria for the function-practice pair.
- Institutional forms and real-life democratic practices.
- Technocapitalist mechanisms and digital innovations.
- Documented dysfunctions and deviations from democratic norms.
- Quantitative and qualitative indicators from monitoring institutions.
- Legislative and regulatory instruments (e.g., DSA, GDPR, AI Act, etc.).
- Policy responses and actions by global, EU-level or national institutions.

These criteria are mapped into the framework according to their elements, in an *approximation* that demonstrates both uniqueness of functions × practices as well as similarities and overlap between practical functions that hit on more than one norm, more than one function or one or more practice. The democratic process of holding a referendum to determine policy and select leaders for execution (like to leave the EU) hits on multiple democratic practices to fulfil all three democratic functions as part of common problem-solving. Similarly, access to VLOPs that host public debate touches on several democratic functions and practices in different ways, where the application of Warren’s framework helps weed out different norms and practicalities in play.

Table 2. Democratic functions and possible effects of Technocapitalism – sample of working hypothesis w. diverse examples.

Function → ↓ Activity ↓	Empowered inclusion	Collective agenda & will-formation	Collective decision-making
Recognizing	<p>Rights of inclusion and participation in digital society, the right to Internet and to participation.</p> <p>Threats: Barriers & exclusion through technical & systemic hindrances, exclusion of minorities.</p>	<p>Enabling participation in digital public spheres, having the right to a voice. Recognizing the <i>meaning</i> of communication for democratic legitimation. Threat: Systemic silencing of certain groups, denying ppl a voice. Recognition tampering.</p>	<p>Turning talk into collective actions, selection of forum: at what level decisions are made & stakeholders recognized. Delegitimization of democratic power & authority. Threat: Skewed input of certain opinions and people.</p>
Resisting	<p>Facilitating multiple viewpoints and varied inputs. Ensuring the right to resist, nationally and in privatized spaces. Right to privacy and privacy of thought. Threat: The privatized marketplace of ideas could bring censorship or a state of exclusion.</p>	<p>Embracing multiple viewpoints and varied inputs Ensuring a free press and journalism. Protecting the role of media in will-formation and in-depth coverage. Content moderation policies reflect societal values. Threat: Privatization of the public sphere, legitimization of non-democratic decision-making/power over will-formation.</p>	<p>Protection and access of dissident voices in policymaking and their digital & physical security. Formalizing & securing freedom of the press, editorial boards, journalists. Threat: State centric Global Digital Compact, corporate veto powers over multi-stakeholderism. Avoiding tyranny of the majority.</p>
Deliberating	<p>Empowering citizens to express, challenge, and shape ideas. Personal development of ideas, cognitive freedom. Protection of rights to access digital public spheres. Foster environment for political participation and collective understanding. Educating citizens on critical media use. Threat: Populism, propaganda, misinformation.</p>	<p>Function and process of will-formation through discourse in public & private spaces > creating options. Protection of digital public spheres as forums, esp. from privatization of the Marketplace of Ideas. Balanced & transparent content moderation policies, no viewpoint is invalid/censored (hate excl.) Threat: Manipulation of discourse.</p>	<p>Formulated options selected and turned into actionable proposals in the right forums. Ensuring actionability of decisions. Issues of legitimacy, knowledge-inequalities, stakeholder imbalance. Guarding against manipulation of discourse and information. Threat: Legislative voids, ToS above the law</p>

Function → ↓ Activity ↓	Empowered inclusion	Collective agenda & will-formation	Collective decision-making
Representing	<p>Enabling people to be and become representatives. Protection and rights of representatives. Minority voices are included, representation encouraged. Private legitimacy.</p> <p>Threat: Digital exclusion, systemic exclusions and prejudiced systems.</p>	<p>Wide-perspective representation of issues and people, aggregated will-formation for public good collective agendas. Gaining legitimacy. Threat: Manipulation of content and content management. Influencing representatives & information to skew will-formation.</p>	<p>Turning discourse into binding decisions – making sure they get executed. State as a responsive system. Multistakeholderism. Threat: Skewed representation, legitimacy issues. elite rule. Weak accountability, oversight, non-democratic takeover of democratic functions.</p>
Voting	<p>Foster public education that enables voters to evaluate options, digital literacy. Encourage participation in the social contract.</p> <p>Threat: barriers (e.g. on access) that affect people's interest to vote or delegate their power.</p>	<p>Discourse turned into will-formation through the aggregation of viewpoints. Talk turned into choices. Threat: Will-formation thwarted. Behavioral modification through targeted content to serve certain interests.</p>	<p>Governing, at what level does rep. selection take place and how? Who votes, what issues, what choices? Who enforces? Who monitors? Accountability, oversight, outsourcing & self-regulation. Threat: Legitimacy issues, private takeover of democratic functions. Hacked elections, ICT interferences.</p>
Joining	<p>The right to organize and excite others. Personal aspect of collective action. Threat: Behavioral modification to make joining undesirable, uninteresting or shameful. Organizations targeted amplified or muted. Targeting volunteers & organizations, hacking, leaks, "burning" volunteers</p>	<p>Discourse turned into collective action, must lead to choices between options for will-formation. Public aspect of collective action. Threat: Silencing of viewpoints, misinformation, control of information. Lack of citizen/user-input in platform governance.</p>	<p>Organized governance, esp. global-issue politics. Strengthens/weakens democracy at different levels. Privatized governance and Instrumentarian Power. ICT can make joining/organizing easy/difficult/dangerous. Threat: Accountability, oversight, non-democratic takeover of democratic functions (outsourcing governance).</p>
Exiting	<p>Limited power to ensure accountability, weak practice that sends a weak message. Relies on competition and 'exitability'. Privacy and rights issues like the right to process-transparency and to be forgotten. Right to get and understand own data. Threat: Forced exit from justice via ToS. Blocked exits through noncompliance, no real oversight.</p>	<p>Relies on 'exitability' to send a weak, low information message to the platform. Boycotts or platform exits limited and difficult option to make a political point. Needs collective action. Threat: No 'listening skills' or lack of will to respond, monopoly situations. Data sold without oversight, no exit from it influencing targeted ads/content.</p>	<p>Institutionalizing 'exitability', rights like data portability or to be forgotten. Instrumentarian (bio-) powers at work, no real options or escape from surveillance. Threat: Power transfer from democracy to state & corporations. No true oversight or accountability. No possibility of exit and message. 'Ungovernable exitability' / forced exits or forced inclusion.</p>

A full structured population of information into the matrix according to the methodology outlined above is designed to reveal both trends and glitches, helping to synthesize whether each function–practice pair is being supported, distorted, or co-opted under prevailing techno-capitalist conditions.

Where data is ambiguous or cross-cutting, classification follows the most substantively impactful mechanism present in the intersection, while recognizing the cross-cutting aspects. Each populated intersection thus contributes to an evolving picture of systemic democratic degradation or resilience across the European Economic Area.

The matrix is not just a theoretical classification tool but a *diagnostic instrument*; by populating it with triangulated evidence from credible sources, the research creates a basis for interpretive analysis. Consistent with its post-positivist orientation, the research follows a primarily deductive logic. It begins by backing the democratic framework with theory in chapter 2 where the thesis established theoretical democratic benchmarks. Then it populates the matrix with the criteria above along with empirical data and benchmarks defined by institutions and theorists.³⁶

It is expected that there will be a difference in available material on different practices in Warren’s framework. Such scarcity reveals gaps in knowledge and helps test how well the methodology structures academic thought, knowledge and analysis.³⁷

Once the norms and data have been established Parsons’ fourfold explanatory typology: structural, institutional, ideational, and psychological, is then applied to each intersection as a secondary deductive lens to help uncover dominant causal logic behind patterns observed in the matrix.³⁸

³⁶ (The Danish Institute for Human Rights 2020; Organisation for Economic Co-operation and Development 2008; European Commission 2023b)

³⁷ (Dunne et al. 2013; Parsons 2010)

³⁸ (Parsons 2010)

3.5.2 Deductive reasoning: Parson's four logics of explanation

Keeping the research questions in mind, this thesis selects Craig Parsons' 2010 typology of causal explanation of political action as a deductive tool applied in the final stage of the analysis of each matrix intersection of function and practices. While Warren's matrix and democratic theorists provide the *functional* and *normative* structure for assessing democratic health, Parsons' framework enables a second layer of interpretation: identifying what kind of *causal forces* best explain the patterns of democratic dysfunction or resilience observed in each function-practice intersection.³⁹

Parsons' classification emerges from the recognition that social science explanations are not monolithic and, in his opinion, too often classified in political science as general instead of particular with "general [causes] stipulating regular consequences that follow in deterministic or probabilistic ways from given conditions, or they can be particular, engaging causal force after leaping over a range of contingency."⁴⁰

He theorizes that "[e]xplanations in political science hinge on what kind of causes we think drive political outcomes, whether material, institutional, ideational, or psychological."⁴¹ Political outcomes, especially in complex democratic systems, can be shaped by material conditions, institutional constraints, shared ideas, or psychological influences. In line with the thesis's epistemological pluralism and systemic scope, Parsons' four logics of explanation offer a rigorous yet flexible way to map causality across intersections of democratic erosion.

Parsons defines four logics of explanatory causes:⁴²

- **Structural:** External constraints and systemic asymmetries, including infrastructure dominance, technological monopolies, geography and unequal resource distribution.
- **Institutional:** External man-made structures such as legal frameworks, regulatory design, and path-dependent governance patterns that embed or enable dysfunction.

³⁹ (Parsons 2010)

⁴⁰ (Parsons 2010, 37)

⁴¹ *ibid*

⁴² (Parsons 2010, 12)

- **Ideational:** Internalized structures of thought such as norms, identities, values, belief systems, and shifting public sentiments that shape legitimacy and participation.
- **Psychological:** Internal cognitive and emotional patterns, including behavioral priming, fear, disillusionment, or manipulation that distort citizen agency.

Parsons defines structural and institutional claims as *logics of position*, and ideational and psychological claims as *logics of interpretation*.⁴³

Applied to Warren's matrix, Parson's explanatory logic is used to clarify the causal forces at play in each democratic function-practices intersection. For example, where public resistance is algorithmically muted or misrepresented the explanation may be *structural* (platform design that's programmed to mute dissent), *ideational* (platform design based in corporate leadership ideology or 'brand protection'), *institutional* (absence of rules that guarantee equal weight of civic discourse) or *psychological* (emotional fatigue or fear).

Parsons' classification of explanations serves as the final analytical layer of this thesis, enabling the evaluation of *whether* and *how* Technocapitalism drives democratic erosion.

Once each matrix intersection has been populated with empirical data, including democratic norms, observed practices, dysfunctions, and institutional responses, this material is evaluated against democratic benchmarks established by Warren, Sørensen, European Union guidelines, and monitoring institutions. These benchmarks ground the determination of whether the functions and practices are being upheld, distorted, or hollowed out.

Following this step, Parsons' four explanatory logics are applied to interpret the dominant causal forces shaping apparent trends. This process enables the matrix to function as more than a theoretical framework, but as an operational diagnostic instrument capable of distinguishing between sources of democratic disruption. In doing so, the analysis moves from classification to causal explanation

⁴³ (Parsons 2010, 13)

The integration of Parsons' typology supports the thesis's broader commitment to democratic norms, methodological precision and epistemic pluralism, offering a systematic way to infer causality across complex sociotechnical dynamics. It allows the thesis to engage critically with claims made by Zuboff, McQuillan, Coeckelbergh, Véliz, and others by testing those claims against a structured diagnostic model.⁴⁴

This work is conducted under the hypothesis that the methodology can systemically theorize with the empirical backup a critical claim like this central claim of Zuboff:

“Instead of claiming work (or land, or wealth) for the market dynamic as industrial capitalism once did, surveillance capitalism audaciously lays claim to private experience for translation into fungible commodities that are rapidly swept up into the exhilarating life of the market.”⁴⁵

Ultimately, integrating Parsons' explanatory logics into Warren's framework adds both theoretical depth and practical utility, especially for visual or systems-oriented thinkers, by clarifying how technocapitalist pressures materialize across distinct democratic functions and practice. This approach outlines a method and process to structure thought and data with the intent to make complicated phenomenon easier to understand and discuss.

3.6 Literature and criteria for source selection

Building on the structured matrix population process described in 4.1, this section details the types of sources selected for this work and their conceptual and empirical contributions. Rather than treating data collection as a purely instrumental task, the literature selected for this research reflects deeper theoretical contributions and normative commitments that shape the way democratic functions are interpreted, measured, and evaluated.⁴⁶

⁴⁴ (Zuboff 2022, 2019a, 2019b; McQuillan 2022; Coeckelbergh 2024b, 2024a; Véliz 2021, 2024; Napoleoni 2024; Ulises Ali Mejias and Couldry 2024)

⁴⁵ (Zuboff 2019a)

⁴⁶ (Suleyman and Bhaskar 2023; Parsons 2010; Williams and Warren 2014)

The sources are organized into four interdependent bodies of literature: (1) foundational democratic theory and grand social frameworks; (2) legal and institutional literature on EU ICT governance; (3) critical analyses of Technocapitalism and its democratic consequences; and (4) aggregated monitoring reports and democracy assessments.

Together, these sources provide the theoretical principles, empirical indicators, institutional context, and critical diagnoses used to populate Warren’s matrix and evaluate the quality of democracy across its 21 intersections.

3.6.1 Democratic foundations and Grand Social perspectives

The first literature category substantiates Warren’s democratic theory and framework as a theoretically sound and methodologically realistic approach to democratic theory. For this Mark E. Warren is the work’s democratic foundational theorist, with backup from democratic theorists such as, Eva Sørensen for democratic innovation and democratic robustness, Jurgen Habermas for his work on the public sphere, Jane Mansbridge for democratic theory-development, and Vivien Schmidt on legitimacy and the construction of democratic systems.⁴⁷ This work is grounded in classic political theory through the theorizing of Hannah Arendt for her work on how totalitarianism takes over, Robert Dahl for his view on democracy in complex multi-mass-societies, Friedrich Hayek for his liberal input on free will and a functioning ‘marketplace of ideas’ and Karl Polanyi for his examination of modern political-economy.⁴⁸

This research adheres to Warren’s normative-functional model which falls under Grand Social Theory, attempting to detect patterns in a substantial piece of society and global interactions. It aligns with theorists who frame democracy as a problem-solving system within dynamic institutional and ideological structures. The matrix’s initial empirical use has been put theoretically to the test by Tenove et al., used as a tool by Lacelle-Webster,

⁴⁷ (Sørensen 2017; Habermas et al. 2001; Habermas 2022; Mansbridge et al. 2012; Mansbridge 2020; Dryzek et al. 2019; Schmidt 2013, 2010)

⁴⁸ (Arendt 2017; Dahl and Shapiro 2021; Dahl 2007; Hayek 2006; Polanyi et al. 2010)

and further theorized by Warren & Sørensen.⁴⁹ This author is familiar with the framework having used it in prior academic work on Cyberthreats to democracies. This literature provides theoretical foundations and criteria to normatively assess democratic robustness and dysfunctions. Normative benchmarks and evaluative criteria for determining democratic robustness or weakness, as applied throughout this thesis, were established in the preceding chapter on democratic theory. These are grounded in Warren’s problem-based framework and expanded by scholars such as Sørensen and Tenove, providing the conceptual foundation on which this methodology builds, as established in chapter 2.⁵⁰

3.6.2 Europe, ICT governance and institutional frameworks

The second category of literature includes books, legislative materials and reports on EU/EEA and ICT governance, including multistakeholder governance models, legal regimes such as the DSA and GDPR, Terms of Service enforcement, and the role of supranational institutions like the EU in defining and protecting democratic infrastructure. Included in this body of work is support material for recent legislative action in the EU to curb the influence of foreign platform conglomerates as well as international conventions and treaties, reports by respected institutions and research organizations.⁵¹

This material contains legal-regulatory texts and empirical information and indicators legitimizing EU legislative action in line with the European Democracy Action Plan (EDAP) and helps substantiate the regulatory rationale behind key EU frameworks.⁵² Authors include specialists in European studies such as Anu Bradford for her work on the Brussel

⁴⁹ (Tenove 2020; Tenove, Chris et al. 2018; McKay and Tenove 2021; Lacelle-Webster and Warren 2023; Lacelle-Webste 2023; Sørensen and Warren 2024; Agustsdottir 2019)

⁵⁰ Needed again? Probably not

⁵¹ (European Commission 2023a; European Commission et al. 2023; European Commission. Directorate General for Communications Networks, Content and Technology. 2024; European Commission. European Group on Ethics in Science and New Technologies. et al. 2023; European Commission for Democracy through Law 2020; Férdeline 2022; Forestal 2021; Organisation for Economic Co-operation and Development 2020, 2022; UN Department of Economic and Social Affairs (DESA) 2024)

⁵² (European Commission. European Group on Ethics in Science and New Technologies. et al. 2023; European Union 2020)

Effect and the EU as a global regulatory leader, Tom Theuns for his work on democracy in Europe, and Matthias Kettemann for his substantial work on ICT governance and law.⁵³

This section is further enriched by critical scholarship by authors such as Julie Cohen for her view of the legal framework of the Internet and the rise of platform economy, Laura DeNardis on the politics of ICT governance and Roxana Radu for her insights into power struggles in global ICT governance.⁵⁴

Together, this literature provides a holistic view on the institutional structure and regulatory ecosystem within which EU democracy, institutions, and ICT governance interact, while also offering a rich empirical basis for assessing public policy developments and platform accountability mechanisms.

The first two types of literature establish, first, the democratic functions and methodological framework used for the subsequent political analysis, and secondly, theoretical foundations and institutional framework for which the norms and structures of governance that global techno-capitalist corporations operate within.

3.6.3 Critical analysis on Technocapitalism and democratic disruptions

The third category consists of critical literature on Technocapitalism by many names that examines how its operations effect democratic values, institutions, and social cohesion. Central to this category is Shoshana Zuboff's theorization of surveillance capitalism, which analyzes how data extraction and behavioral prediction commodify citizens and undermine autonomy. In her work, Zuboff maintains that as user-information turned into personalized services and *monetizable knowledge power*, techno-capitalist companies created so-called *economies of certainty* where predictions of human behavior are commodified, creating monetary incentives to control people's behavior through algorithmic means to ensure that predictions become reality.

⁵³ (Bradford 2020; Theuns 2024; Kettemann 2020)

⁵⁴ (Cohen 2023; Cohen et al. 2024; DeNardis et al. 2020; Weber 2020; Radu et al. 2014, 2021)

This literature points to systemic imperatives that contribute to reality-creation and history-writing, like claims outlining the influence of AI on digital surveillance and knowledge-tech driven behavioral modifications. Those represent *system failures* as part of the privatization of the digital public sphere, failures that can exasperate power-imbances and further undermine democracy.⁵⁵

Critical contributions in the field include Mejias and Couldry's concept of *data colonialism*, which frames digital extraction as an extension of imperial economic logics, Dan McQuillan's critique of algorithmic governance as inherently authoritarian and Carissa Véliz' work on data and the importance of privacy. Jamie Susskind contributes a democratic legalist response in *The Digital Republic*, advocating for the restoration of citizen power through enforceable digital rights. Mark Coeckelbergh complements this with a European philosophical perspective on AI, ethics, and the erosion of democratic agency under technological systems.⁵⁶

This literature underpins subsequent analyses of literature and empirical evidence, offering both macro-structural critiques and grounded case studies, illuminating how technocapitalist dynamics bypass or distort core democratic practices, such as inclusion, transparency, representation, and participation.

This material brings testable claims and empirical evidence to Warren's framework, using the methodology outlined here to populate the matrix as a tool to evaluate democratic performance across functions, practices and intersections.

3.6.4 Institutional monitoring and democratic benchmarks

The fourth category of sources includes aggregated monitoring reports and empirical scorecards produced by institutions, think tanks, and international organizations that evaluate the state of democracy. Reports such as Freedom House's *Freedom in the World*, the OECD's *Building Trust and Reinforcing Democracy*, the Forum on Information and

⁵⁵ (Zuboff 2015, 2019b, 2019a, 2019c, 2022)

⁵⁶ (Ulises Ali Mejias and Couldry 2024; Couldry and Mejias 2020; McQuillan 2022; J. Susskind 2022; Coeckelbergh 2024b, 2024a; Véliz 2024, 2021)

Democracy's 2025 global assessment, and the European Commission's *Opinion on Democracy in the Digital Age* provide indicators on trust, press freedom, representation, corruption, electoral conditions, and institutional performance. Additionally, the V-Dem Institute's comprehensive democracy indexes and the Observatory on Information and Democracy's thematic evaluations contribute vital expert-based assessments that track global democratic trends.⁵⁷

While these reports do not offer raw data, these sources aggregate expert evaluation and public data to assess democratic performance across different contexts. As such, they serve as ready-made indicators and benchmarks of democratic robustness that are applied directly in the population of Warren's matrix.

Together, these four categories of literature form a comprehensive and methodologically diverse foundation for this research. Categories two through four are especially rich in empirical content, delivering documented cases, institutional metrics, and policy-relevant indicators that ground the analysis in verifiable trends. The resulting research base is both rigorous and pluralistic, ensuring methodological robustness and analytical relevance across the matrix.

This curated body of literature provides the conceptual, normative, institutional, and empirical foundations required to populate Warren's matrix. It delivers theoretical contexts that define democratic functions and practices, it outlines the regulatory and institutional realities that they operate within, brings forward critical perspectives on how technocapitalist infrastructures create distortions, and contributes the empirical indicators needed to evaluate democratic performance.

By synthesizing insights and empirical evidence from the literature the research establishes a robust base for assessing patterns of degradation or resilience across democratic functions in the digitally mediated European public sphere.

⁵⁷ (European Commission 2023a; European Commission for Democracy through Law 2020; Muller and Kettmann 2024; Organisation for Economic Co-operation and Development 2024; Parvu 2022; Pirannejad and Ingrams 2023; Zygmuntowski et al. 2021)

3.7 Limits and ethical considerations

3.7.1 Structural and epistemic limitations

In its judicious study of reality, using empirical evidence to support falsifiable claims, this research faces significant ontological and epistemic hurdles in the form of *data scarcity*. This is an oxymoron in the times of extreme *datafication* of human behavior and pervasive private data harvesting, but access to publicly available data and particularly platform-generated data is selectively limited. “Every participatory act may leave a digital imprint, but that imprint is only visible to a select set of companies. It is heavily guarded, thinly regulated, and protected with the force of law.”⁵⁸

Restricted access to tech corporations’ proprietary systems and operations is a great obstruction to knowledge production in social sciences, forcing scientists to generate data based on outcomes to detect or infer to inner workings of systems. This methodological challenge is an acknowledged impediment that represents a *structural power asymmetry*, which this thesis aims to address.⁵⁹

This constraint is not unique to this research but a global problem that the EU has attempted to rectify with regulatory provisions. The EEA is one of world’s most information-rich environments, enabling research that would not be possible in more restricted environments. Yet only recently scientists have been granted formal tools to access platform data through Article 40 of the European Digital Services Act (DSA), a provision that allows “vetted researchers” to access data from large online platforms or search engines for studies contributing to detecting, identifying, and understanding system risks, as well as assessing risk mitigation practices.⁶⁰ This provision has however, not yet yielded results due to EU’s institutional inertia and technical resistance placed by dominant platform providers.⁶¹

⁵⁸ (Karpf 2019, 7; Mansell et al. 2025)

⁵⁹ (Karpf 2019; Whyte 2018; Zuboff 2019a; Mansell et al. 2025)

⁶⁰ (Digital Services Act 2022; Mansell et al. 2025)

⁶¹ Friends of the DSA report, HIIG

Despite the abundance of behavioral data held by private corporations, independent researchers face systemic barriers to access, reinforcing democratic opacity and hindering public accountability. In response to this asymmetry, the research applies triangulation across a range of institutional, civic, and academic sources to reduce bias and correct for partial visibility. It is however an acknowledged systemic barrier that studies are bound to (infer from) the outcomes of ‘black box’ corporate operations that lack democratic oversight and transparency. This represents another form of information asymmetry in power.

Using secondary empirical indicators, the research maintains critical distance from the practices it examines. It should be noted that there may be self-censoring and ethical challenges inherent in the study of powerful, opaque institutions whose influence is exerted through the very infrastructures that obstruct transparency. The very infrastructures that have full access to most people’s privacy through personal gadgets.

While data access remains a structural challenge, there is nonetheless an abundance of empirical material on democratic performance and techno-social dynamics that can be strategically applied to Warren’s matrix. This is not a thesis that produces new raw data. Rather, it relies deliberately on established indicators and evaluative frameworks developed by reputable institutions, scholars, and democratic monitors. This methodological choice lends credibility to the analysis by anchoring it in peer-reviewed and institutionally validated material.

Cyber-studies suffer, as Whyte puts it, from “ontological problems, namely that sources and providers of relevant information suffer from a broad range of measurement and reliability problems.”⁶² Similarly Karpf states that “in the areas of civic and political behavior, the gap between proprietary and public data is immense and practically unbridgeable. Social scientists at Facebook, Google, and the major political campaigns have access to information that the broader research community can never analyze.”⁶³

⁶² (Whyte 2018)

⁶³ (Karpf 2019, 9)

These concerns point to a broader epistemic dilemma faced by researchers in the digital era: Making ontological choices, selecting material that is likely to produce the best state of knowledge in the field to avoid the ‘drunkard searching under the street-light’ dilemma where one searches only for keys and insights where data is available, missing important aspects that fall outside of the information available to us.⁶⁴

This study will suffer from gaps in available knowledge, but detecting a gap in information is still valuable information on information-asymmetry as they present academic opportunities as well as problems. Karpf points to a second problem central to digital-social studies which is the slow pace of academic research and publishing, that it takes years to develop research, secure institutional approval, apply for grants and secure funding, acquire and analyze data in addition to undergo multiple time-consuming rounds of rigorous peer review to produce publishable results.⁶⁵

This thesis takes deliberate optimistic risk by addressing contemporary developments in a rapidly evolving legal and technological environment. By nature, the study of new phenomena and development of new methodologies falls outside of academic safety.

Changes further complicate the subject, for while the DSA and other legislative tools under the European Democracy Action Plan and Digital Decade strategies have been adopted, their implementation is ongoing with many provisions still being ratified across EU member states with their practical effects still largely unobservable. This thesis does not attempt to evaluate action or outcomes that have not yet materialized. Instead, it identifies regulatory action and systematically presents the structural and democratic deficiencies they aim to address.

The framework developed here is thus intended not only as a diagnostic tool for current dysfunctions, but also as a forward-looking model that may be used in future empirical evaluations of post-ratification effects. This decision reflects a deliberate commitment to

⁶⁴ (Ulises Ali Mejias and Couldry 2024; Whyte 2018; Karpf 2019)

⁶⁵ (Karpf 2019)

bold, top-level analysis at a moment when European democracy is undergoing systemic recalibration in the face of technocapitalist power.⁶⁶

3.7.2 Tools and use of Artificial Intelligence

The tools used to conduct the research are primarily **Microsoft Word** for writing and editing, **Zotero** for bibliographic management, source analysis and indexing, **Trello** is used for structuring and populating Warren's matrix. The Internet: platforms, **search engines** and **AI tools** are used in accordance with the University of Iceland's guidelines on the use of Artificial Intelligence in academic work.⁶⁷

Use of tools that employ Artificial Intelligence fall predominantly under tier 1; the topic, research questions, approach, methodology, framework, main literature, arguments and conclusions are conducted 'old-school' by the researcher.

This project is driven, structured and conducted by the researcher and no parts of the research are written by Artificial Intelligence, nor did AI help refine the subject or formulate any theorizing as is evident in AI's inability to apply theory and analysis in the manner demonstrated throughout this thesis. This may be a 'judicious study' of manufactured political realities and historical events, but history's actors are not the sole history-writers in the digital age. Those who produce verified knowledge and know how to get it indexed online also contribute to history-writing.

Selection of literature and its application is determined by the researcher alone and the researcher affirms that all critical analysis, theoretical development, and interpretive arguments are original and independently produced, albeit discursively developed in conversations. AI tools are partially used in *data collection* (tier 2) to scan the internet, the author's libraries and documents for related material and give short summaries of articles or data to indicate to the researcher whether the material is relevant or not worth reading.

⁶⁶ Known issues still to be addressed: difficulties in measuring democracy (this will be developed when I analyze the data) and using the term Technocapitalism for these specific VLOPS and VLOSE (a single term is needed, I may swap out Technocapitalism for platform-capitalism)

⁶⁷ (University of Iceland 2024)

When the tool shows that material might be relevant the researcher reviews the material and determines methodological use that includes manual indexing and connecting to literature and analytical tools, such as Warren's framework and Parsons causal analysis.

This use is fully consistent with Tier 1 and limited Tier 2 use as defined in the University of Iceland's policy on AI in academic research - boundaries that the work judiciously follows.

3.7.3 Ethical considerations

The researcher abides by the University of Iceland's ethical guidelines and affirms *no conflicts of interest or ethical concerns pertaining to the research*. The research follows the University of Iceland's guidelines on the use of sources and academic rigor.⁶⁸

The researcher conducts this research based on intellectual interest in matters of ICT and Cyberspace, and concern for the future of global democracy. The researcher's motivation is to further knowledge and contribute to efforts to safeguard democracy as a flawed, but still the best available form of self-governance available to man.

The research is self-funded, which is a strength to the project that supplements its academic quest. Its approach and results belong in the public domain, in line with its main goal: to further knowledge in protection of democracy.

This chapter has outlined information asymmetries and epistemic dilemmas that limit this thesis, as well as ethical standards that lead the work and substantiate the academic integrity of this study. These restrictions are systemic, which has an impact on the study, but does not diminish its methodology or value, rather these challenges reinforce the work's commitment to scientific rigor and critical thinking.

⁶⁸ Heimildir: <https://ritver.hi.is/is/ritgerdaskrif/heimildir> and department guidelines on PhD research [enter into Zotero?]

Resources

- Agustsdottir, Thorlaug. 2019. *Cyberthreats to Democracies, Constructed Threats to Democratic Functions*.
- Ansell, Christopher, Eva Sørensen, Jacob Torfing, and Jarle Trondal. 2024. *Robust Governance in Turbulent Times*. 1st ed. Cambridge University Press. <https://doi.org/10.1017/9781009433006>.
- Aradau, Claudia, and Tobias Blanke. 2022. *Algorithmic Reason: The New Government of Self and Other*. 1st ed. Oxford University Press. <https://doi.org/10.1093/oso/9780192859624.001.0001>.
- Arendt, Hannah. 2017. *The Origins of Totalitarianism*. Penguin Classics.
- Béland, Daniel, and Robert Henry Cox, eds. 2010. *Ideas and Politics in Social Science Research*. Oxford University Press. <https://doi.org/10.1093/acprof:oso/9780199736430.001.0001>.
- Bellamy-Foster, John, and Robert McChesney. 2014. "Surveillance Capitalism - Monopoly-Finance Capital, the Military-Industrial Complex, and the Digital Age." *Monthly Review, An Independent Socialist Magazine* Vol. 66 (3). <https://monthlyreview.org/2014/07/01/surveillance-capitalism/>.
- Blakeley, Grace. 2024. *Vulture Capitalism: Corporate Crimes, Backdoor Bailouts, and the Death of Freedom*. Atria Books.
- Botero, Beatriz Arcila, and Rachel Griffin. 2023. *Social Media Platforms and Challenges for Democracy, Rule of Law and Fundamental Rights*. PE 743.40. European Union. [https://www.europarl.europa.eu/thinktank/en/document/IPOL_STU\(2023\)743400](https://www.europarl.europa.eu/thinktank/en/document/IPOL_STU(2023)743400).
- Bradford, Anu. 2020. *The Brussels Effect: How the European Union Rules the World*. Oxford University press.
- Bucht, Catharina. 2025. "Nordic Media Literacy Survey." NordPub - Nordic Co-Operation, Nordic Council of Ministers, September. <https://doi.org/10.6027/temanord2025-572>.
- Carstensen, Martin B., and Vivien A. Schmidt. 2016. "Power through, over and in Ideas: Conceptualizing Ideational Power in Discursive Institutionalism." *Journal of European Public Policy* 23 (3): 318–37. <https://doi.org/10.1080/13501763.2015.1115534>.
- Coeckelbergh, Mark. 2022. *The Political Philosophy of AI: An Introduction*. Polity.
- Coeckelbergh, Mark. 2024a. "Democracy as Communication: Towards a Normative Framework for Evaluating Digital Technologies." *Contemporary Pragmatism* 21 (2): 217–35. <https://doi.org/10.1163/18758185-bja10088>.
- Coeckelbergh, Mark. 2024b. *Why AI Undermines Democracy and What to Do about It*. Polity Press.
- Cohen, Julie E. 2023. "Informational Capitalism as Phase Shift: Challenges for Digital Constitutionalism." *Oxford Handbook of Digital Constitutionalism (Oxford University Press, Forthcoming 2024)*.
- Cohen, Julie E., Paul Ohm, Meg Jones, Brenda Dvoskin, Smitha Krishna Prasad, and Nina-Simone Edwards. 2024. "Provisioning Digital Tools and Systems for Government Use." Preprint, SSRN. <https://doi.org/10.2139/ssrn.4958214>.

- Couldry, Nick, and Ulises A. Mejias. 2020. *The Costs of Connection: How Data Is Colonizing Human Life and Appropriating It for Capitalism*. Stanford University Press. <https://doi.org/10.1515/9781503609754>.
- Council of Europe. 2022. *EU Digital Diplomacy: Council Conclusions, Foreign Affairs Council*,. Outcome of Proceedings No. 11259/22. Brussel. <https://data.consilium.europa.eu/doc/document/ST-11406-2022-INIT/en/pdf>.
- Dahl, Robert Alan. 2007. *Polyarchy: Participation and Opposition*. Repr. Yale Univ. Press.
- Dahl, Robert Alan, and Ian Shapiro. 2021. *On Democracy*. [Second edition], Veritas paperback edition. A Veritas Paperback. Yale University Press. <https://doi.org/10.12987/9780300257991>.
- Danish Government. 2021. *Towards a Better Social Contract with Big Tech*. White Paper. Copenhagen. <https://techamb.um.dk/impact/white-paper>.
- DeNardis, Laura, Derrick L. Cogburn, Nanette S. Levinson, and Francesca Musiani, eds. 2020. *Researching Internet Governance: Methods, Frameworks, Futures*. The MIT Press.
- Dryzek, John S., André Bächtiger, Simone Chambers, et al. 2019. “The Crisis of Democracy and the Science of Deliberation.” *Science* 363 (6432): 1144–46. <https://doi.org/10.1126/science.aaw2694>.
- Dunne, Timothy, Milja Kurki, and Steve Smith, eds. 2013. *International Relations Theories: Discipline and Diversity*. 3. ed. Oxford Univ. Press.
- EPRS - European Parliamentary Research Service. 2025. *Academic Freedom Monitor 2024 Overview of de Jure Academic Freedom Protection*. Study PE 762.887 –. EPRS | European Parliamentary Research Service. [https://www.europarl.europa.eu/thinktank/en/document/EPRS_STU\(2025\)762887](https://www.europarl.europa.eu/thinktank/en/document/EPRS_STU(2025)762887).
- European Centre for Algorithmic Transparency. 2023. “FAQs: DSA Data Access for Researchers.” European Centre for Algorithmic Transparency, December 13. https://algorithmic-transparency.ec.europa.eu/news/faqs-dsa-data-access-researchers-2023-12-13_en.
- European Commission. 2023a. “eGovernment Benchmark 2023.” European Commission. <https://digital-strategy.ec.europa.eu/en/library/egovernment-benchmark-2023>.
- European Commission. 2023b. “EU Better Regulation: Guidelines and Toolbox.” European Commission. https://commission.europa.eu/law/law-making-process/better-regulation/better-regulation-guidelines-and-toolbox_en.
- European Commission. 2025. “Supervision of the Designated Very Large Online Platforms and Search Engines under DSA.” May 15. <https://digital-strategy.ec.europa.eu/en/policies/list-designated-vlops-and-vloses>.
- European Commission, Capgemini, Sogeti, IDC, and Politecnico di Milano, eds. 2023. *eGovernment Benchmark 2023: Connecting Digital Governments: Insight Report*. 1st edition. Publications Office. <https://doi.org/10.2759/474056>.
- European Commission. Directorate General for Communications Networks, Content and Technology. 2024. *2030 Digital Decade: Report on the State of the Digital Decade 2024*. Publications Office. <https://data.europa.eu/doi/10.2759/922>.
- European Commission. European Group on Ethics in Science and New Technologies., Directorate-General for Research and Innovation, N. Biller-Andorno, Fruzsina Molnar-Gabor, M. Céu Patrão Neves, and M. Laukyte. 2023. *Democracy in the Digital Age*.

- European Commission. Directorate General for Research and Innovation, European Commission. European Group on Ethics in Science and New Technologies. <https://data.europa.eu/doi/10.2777/078780>.
- European Commission for Democracy through Law. 2020. *Principles for a Fundamental Rights-Compliant Use of Digital Technologies in Electoral Processes - Study*. Conference Paper CDL-AD(2020)037-E. European Commission for Democracy through Law (Venice Commission). <https://www.venice.coe.int/webforms/documents/?pdf=CDL-AD%282020%29037-e>.
 - European Union. 2020. *The European Democracy Action Plan*. European Union. <https://www.ecpmf.eu/the-european-democracy-action-plan/>.
 - Férdeline, Ayden. 2022. *Influencing the Internet - Democratizing the Politics That Shape Internet Governance Norms and Standard*. Research Report. National Democratic Institute. https://www.ndi.org/sites/default/files/NDI%20Norms%20White%20Paper%20May%202022_1.pdf.
 - Forestal, Jennifer. 2021. “Constructing Digital Democracies: Facebook, Arendt, and the Politics of Design.” *Political Studies* 69 (1): 26–44. <https://doi.org/10.1177/0032321719890807>.
 - Fuchs, Christian. 2021. “The Digital Commons and the Digital Public Sphere How to Advance Digital Democracy Today.” *Westminster Papers in Communication and Culture* 16 (1). <https://doi.org/10.16997/wpcc.917>.
 - Habermas, Jürgen. 2022. “Reflections and Hypotheses on a Further Structural Transformation of the Political Public Sphere.” *Theory, Culture & Society* 39 (4): 145–71. <https://doi.org/10.1177/02632764221112341>.
 - Habermas, Jürgen, William Rehg, and Jürgen Habermas. 2001. *Between Facts and Norms: Contributions to a Discourse Theory of Law and Democracy*. 1 MIT Press paperback ed., 4. printing. Studies in Contemporary German Social Thought. MIT Press.
 - Haugen, Frances. 2023. *The Power of One: How I Found the Strength to Tell the Truth and Why I Blew the Whistle on Facebook*. First edition. Little, Brown and Company.
 - Hay, Colin. 2010. “Ideas and the Construction of Interests.” In *Ideas and Politics in Social Science Research*, edited by Daniel Béland and Robert Henry Cox. Oxford University Press. <https://doi.org/10.1093/acprof:oso/9780199736430.003.0004>.
 - Hayek, Friedrich A. von. 2006. *The Road to Serfdom*. Repr. Routledge Classics. Routledge.
 - Internet Policy Review. 2024. “Call for Papers: The Craft of Interdisciplinary Research and Methods in Public Interest Cybersecurity, Privacy, and Digital Rights Governance.” Internet Policy Review, November. <https://policyreview.info/node/1792>.
 - Kahneman, Daniel. 2013. *Thinking, Fast and Slow*. First paperback edition. Psychology/Economics. Farrar, Straus and Giroux.
 - Karpf, David. 2019. *The Internet and Engaged Citizenship*. American academy of arts & sciences. https://www.amacad.org/sites/default/files/publication/downloads/Democratic-Citizenship_The-Internet-and-Engaged-Citizenship.pdf.

- Kettemann, Matthias C. 2020. *The Normative Order of the Internet*. Oxford University Press. <https://nbn-resolving.org/urn:nbn:de:0168-ssoar-69191-7>.
- Lacelle-Webste, Antonin. 2023. "A Democratic Theory of Hope: Collective Agency in Uncertain Times." PhD Thesis, The University of British Columbia. <https://open.library.ubc.ca/media/stream/pdf/24/1.0438280/3>.
- Lacelle-Webster, Antonin, and Mark E. Warren. 2023. "A Problem-Based Approach to Citizens' Assemblies." In *De Gruyter Handbook of Citizens' Assemblies*, edited by Min Reuchamps, Julien Vrydagh, and Yanina Welp. De Gruyter. <https://doi.org/10.1515/9783110758269-010>.
- Lyotard, Jean-François, and Geoff Bennington. 2010. *The Postmodern Condition: A Report on Knowledge*. Reprint. Theory and History of Literature 10. Univ. of Minnesota Press.
- Mansbridge, Jane. 2020. "A Citizen-Centered Theory." *Journal of Deliberative Democracy* 16 (2). <https://doi.org/10.16997/jdd.411>.
- Mansbridge, Jane, James Bohman, Simone Chambers, et al. 2012. "A Systemic Approach to Deliberative Democracy." In *Deliberative Systems*, 1st ed., edited by John Parkinson and Jane Mansbridge. Cambridge University Press. <https://doi.org/10.1017/CBO9781139178914.002>.
- Mansell, Robin, Flavia Durach, Matthias Kettemann, et al. 2025. *Information Ecosystem and Troubled Democracy - A Global Synthesis of the State of Knowledge on News Media, AI and Data Governance*. Observatory on Information and Democracy. <https://observatory.informationdemocracy.org/report/information-ecosystem-and-troubled-democracy/>.
- McKay, Spencer, and Chris Tenove. 2021. "Disinformation as a Threat to Deliberative Democracy." *Political Research Quarterly* 74 (3): 703–17. <https://doi.org/10.1177/1065912920938143>.
- McQuillan, Dan. 2022. *Resisting AI: An Anti-Fascist Approach to Artificial Intelligence*. Bristol University Press.
- Mejias, Ulises A., and Nick Couldry. 2019. "Datafication." *Internet Policy Review* 8 (4). <https://doi.org/10.14763/2019.4.1428>.
- Mejias, Ulises Ali, and Nick Couldry. 2024. *Data Grab: The New Colonialism of Big Tech and How to Fight Back*. WH Allen.
- Mendonca, Ricardo Fabrino, Virgilio Almeida, and Fernando Filgueiras. 2023. *Algorithmic Institutionalism: The Changing Rules of Social and Political Life*. 1st ed. Oxford University Press. <https://doi.org/10.1093/oso/9780192870070.001.0001>.
- Muller, Martin, and Matthias Kettemann. 2024. "European Approaches to the Regulation of Digital Technologies." In *Introduction to Digital Humanism*. Springer Nature Switzerland : Imprint: Springer. <https://www.hiig.de/en/publication/european-approaches-to-the-regulation-of-digital-technologies/>.
- Napoleoni, Loretta. 2024. *Technocapitalism: The Rise of the New Robber Barons and the Fight for the Common Good*. Seven Stories Press.
- Organisation for Economic Co-operation and Development, ed. 2008. *OECD Guiding Principles for Regulatory Quality and Performance*. OECD Publishing. <https://doi.org/10.1787/9789264056381-en>.

- Organisation for Economic Co-operation and Development. 2020. *Innovative Citizen Participation and New Democratic Institutions: Catching the Deliberative Wave*. OECD Publishing. <https://doi.org/10.1787/339306da-en>.
- Organisation for Economic Co-operation and Development. 2022. “OECD Reinforcing Democracy Initiative.” Reinforcing democracy initiative. OECD Reinforcing Democracy Initiative. <https://www.oecd.org/governance/reinforcing-democracy/>.
- Organisation for Economic Co-operation and Development. 2024. *Breaking New Ground for the Future of Democracy: Dignity – Security – Trust*. Key Issues Paper. Organisation for Economic Co-operation and Development. <https://www.oecd-events.org/global-forum-on-democracy/en>.
- Parsons, Craig. 2010. *How to Map Arguments in Political Science*. Repr. Oxford University Press.
- Parvu, Septimius. 2022. *Technology in Elections – Best Practices in Using Digital Tools and Platforms in the Community of Democracies*. Community of Democracies’ Working Group on Democracy and Technology. <https://community-democracies.org/docs/report-technology-in-elections/>.
- Pirannejad, Ali, and Alex Ingrams. 2023. “Open Government Maturity Models: A Global Comparison.” *Social Science Computer Review* 41 (4): 1140–65. <https://doi.org/10.1177/08944393211063107>.
- Polanyi, Karl, Joseph E. Stiglitz, and Fred L. Block. 2010. *The Great Transformation: The Political and Economic Origins of Our Time*. 2. Beacon paperback ed., [Reprinted]. Beacon Press.
- Radu, Roxana, Jean-Marie Chenou, and Rolf H. Weber, eds. 2014. *The Evolution of Global Internet Governance: Principles and Policies in the Making*. Springer Berlin Heidelberg. <https://doi.org/10.1007/978-3-642-45299-4>.
- Radu, Roxana, Matthias C. Kettemann, Trisha Meyer, and Jamal Shahin. 2021. “Normfare: Norm Entrepreneurship in Internet Governance.” *Telecommunications Policy* 45 (6): 102148. <https://doi.org/10.1016/j.telpol.2021.102148>.
- Regulation [DSA] (EU) 2022/2065 of the European Parliament and of the Council of 19 October 2022 on a Single Market For Digital Services and Amending Directive 2000/31/EC (Digital Services Act), Pub. L. No. (EU) 2022/2065, PE/30/2022/REV/1 (2022). <https://eur-lex.europa.eu/eli/reg/2022/2065/oj>.
- Richards, Neil, and Jonathan King. 2013. “Three Paradoxes of Big Data.” *66 Stanford Law Review Online* 41. https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2325537.
- Rikap, Cecilia, and Bengt-Åke Lundvall. 2022. “Big Tech, Knowledge Predation and the Implications for Development.” *Innovation and Development* 12 (3): 389–416. <https://doi.org/10.1080/2157930X.2020.1855825>.
- Schmidt, Vivien A. 2008. “Discursive Institutionalism: The Explanatory Power of Ideas and Discourse.” *Annual Review of Political Science* 11 (1): 303–26. <https://doi.org/10.1146/annurev.polisci.11.060606.135342>.
- Schmidt, Vivien A. 2010. “Reconciling Ideas and Institutions through Discursive Institutionalism.” In *Ideas and Politics in Social Science Research*, edited by Daniel Béland and Robert Henry Cox. Oxford University Press. <https://doi.org/10.1093/acprof:oso/9780199736430.003.0003>.

- Schmidt, Vivien A. 2013. “Democracy and Legitimacy in the European Union Revisited: Input, Output and ‘Throughput.’” *Political Studies* 61 (1): 2–22. <https://doi.org/10.1111/j.1467-9248.2012.00962.x>.
- Sørensen, Eva. 2017. “Political Innovations: Innovations in Political Institutions, Processes and Outputs.” *Public Management Review* 19 (1): 1–19. <https://doi.org/10.1080/14719037.2016.1200661>.
- Sørensen, Eva, and Mark E. Warren. 2024. “Developing a Theory of Robust Democracy.” *Policy & Politics*, September 4, 1–20. <https://doi.org/10.1332/03055736Y2024D000000050>.
- Srnicek, Nick. 2019. *Platform Capitalism*. Reprinted. Theory Redux. Polity.
- Suleyman, Mustafa, and Michael Bhaskar. 2023. *The Coming Wave: Technology, Power, and the Twenty-First Century’s Greatest Dilemma*. Crown.
- Susskind, Jamie. 2022. *The Digital Republic: On Freedom and Democracy in the 21st Century*. First Pegasus Books cloth edition. Pegasus Books.
- Susskind, Ron. 2004. “Faith, Certainty and the Presidency of George W. Bush.” *New Yorker Magazine*, October 17. <https://www.nytimes.com/2004/10/17/magazine/faith-certainty-and-the-presidency-of-george-w-bush.html>.
- Tenove, Chris. 2020. “Protecting Democracy from Disinformation: Normative Threats and Policy Responses.” *The International Journal of Press/Politics* 25 (3): 517–37. <https://doi.org/10.1177/1940161220918740>.
- Tenove, Chris, Buffie, Jordan, McKay, Spencer, and Moscrop, David. 2018. *Digital Threats to Democratic Elections: How Foreign Actors Use Digital Techniques to Undermine Democracy*. Centre for the Study of Democratic Institutions, UBC. <https://democracy.ubc.ca/publications/digital-threats-to-democratic-elections-how-foreign-actors-use-digital-techniques-to-undermine-democracy/>.
- The Danish Institute for Human Rights. 2020. “Guidance on Human Rights Impact Assessment of Digital Activities (HRIA).” HumanRights.Dk. <https://www.humanrights.dk/publications/key-principles-human-rights-impact-assessment-digital-business-activities>.
- The Nordic Council and the Nordic Council of Ministers. 2025. “Nordic Co-Operation - Nordic Statistics.” The Nordic Council and the Nordic Council of Ministers, February 9. <https://pxweb.nordicstatistics.org/pxweb/en/Nordic%20Statistics/>.
- Theuns, Tom. 2024. *Protecting Democracy in Europe - Pluralism, Autocracy and the Future of the EU*. 1st ed. Hurst & Co.
- UN Department of Economic and Social Affairs (DESA). 2024. *World Social Report 2024 - Social Development in Times of Converging Crisis: A Call for Global Action*. ST/ESA/380. UN Department of Economic and Social Affairs. https://www.un.org/development/desa/dpad/wp-content/uploads/sites/45/DESA-World-Social-Report_2024_FINAL_WEB.pdf.
- University of Iceland. 2024. “University of Iceland: Guidelines for the Use of Artificial Intelligence.” Gervigreind.Hi.Is. <https://gervigreind.hi.is>.
- Varoufakis, Yanis. 2023. *Technofeudalism: What Killed Capitalism*. The Bodley Head.
- Véliz, Carissa. 2021. *Privacy Is Power: Why and How You Should Take Back Control of Your Data*. Melville House.

- Véliz, Carissa. 2024. *The Ethics of Privacy and Surveillance*. 1st ed. Oxford University Press. <https://doi.org/10.1093/oso/9780198870173.001.0001>.
- Warren, Mark E. 2011. "Voting with Your Feet: Exit-Based Empowerment in Democratic Theory." *American Political Science Review* 105 (4): 683–701. <https://doi.org/10.1017/S0003055411000323>.
- Warren, Mark E. 2017. "A Problem-Based Approach to Democratic Theory." *American Political Science Review* 111 (1): 39–53. <https://doi.org/10.1017/S0003055416000605>.
- Weber, Rolf H. 2020. "A Legal Lens into Internet Governance." In *Researching Internet Governance*, edited by Laura DeNardis, Derrick Cogburn, Nanette S. Levinson, and Francesca Musiani. The MIT Press. <https://doi.org/10.7551/mitpress/12400.003.0006>.
- Wendt, Alexander. 1992. "Anarchy Is What States Make of It: The Social Construction of Power Politics." *International Organization* 46 (2): 391–425. <https://doi.org/10.1017/S0020818300027764>.
- Whyte, Christopher. 2018. "Crossing the Digital Divide: Monism, Dualism and the Reason Collective Action Is Critical for Cyber Theory Production." *Politics and Governance* 6 (2): 73–82. <https://doi.org/10.17645/pag.v6i2.1338>.
- Williams, Melissa S., and Mark E. Warren. 2014. "A Democratic Case for Comparative Political Theory." *Political Theory* 42 (1): 26–57. <https://doi.org/10.1177/0090591713507934>.
- York, Jillian C. 2021. *Silicon Values: The Future of Free Speech under Surveillance Capitalism*. Verso.
- Zuboff, Shoshana. 2015. "Big Other: Surveillance Capitalism and the Prospects of an Information Civilization." *Journal of Information Technology* 30 (1): 75–89. <https://doi.org/10.1057/jit.2015.5>.
- Zuboff, Shoshana. 2019a. "Surveillance Capitalism and the Challenge of Collective Action." *New Labor Forum* 28 (1): 10–29. <https://doi.org/10.1177/1095796018819461>.
- Zuboff, Shoshana. 2019b. *The Age of Surveillance Capitalism: The Fight for a Human Future at the New Frontier of Power*. Profile books.
- Zuboff, Shoshana. 2019c. "'We Make Them Dance': Surveillance Capitalism, the Rise of Instrumentarian Power, and the Threat to Human Rights." In *Human Rights in the Age of Platforms*, edited by Rikke Frank Jørgensen. The MIT Press. <https://doi.org/10.7551/mitpress/11304.003.0006>.
- Zuboff, Shoshana. 2022. "Surveillance Capitalism or Democracy? The Death Match of Institutional Orders and the Politics of Knowledge in Our Information Civilization." *Organization Theory* 3 (3): 263178772211292. <https://doi.org/10.1177/26317877221129290>.
- Zygmuntowski, Jan J., Laura Zoboli, and Paul F. Nemitz. 2021. "Embedding European Values in Data Governance: A Case for Public Data Commons." *Internet Policy Review* 10 (3). <https://doi.org/10.14763/2021.3.1572>.
-

