

**From Network to Platform to Protocol:
Mastodon's Ethos and the Sociotechnical Imaginary of the Fediverse**

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Abstract

The sociotechnical imaginary of the Fediverse, a network of alternative social media (ASM), is one wherein technology empowers the marginalized, fosters community participation, and challenges the monopolistic tendencies of corporate social media (CSM), ultimately advocating for a more equitable and democratic Internet landscape. This master thesis examines how the sociotechnical imaginary constructed by the Fediverse, focusing on the ethos of Mastodon, is engaged in counter-hegemonic struggle against CSM to reshape the vision of social networks as open-source networks instead of proprietary platforms. By combining media genealogy with critical discourse analysis, this research found (i) Mastodon as an ASM is committed to open participation, decentralization, and community-oriented social media, based on Free/Libre Open-Source Software (FLOSS) ideology. This (ii) ethos contains traces of earlier networks like Usenet, embodying democratic values and anarcho-syndicalist principles. Finally, (iii) that the open-source protocol ActivityPub is key to realizing the sociotechnical imaginary of a democratic Internet. The open-source protocol perspective reveals how Mastodon supersedes the existing dichotomous understanding of ASM as it creates a network that is open while consciously limiting the ability to network, to expand its ability to connect.

Keywords: Sociotechnical imaginary, Fediverse, alternative social media, corporate social media, Mastodon, media genealogy, critical discourse analysis, open participation, decentralization, Usenet, anarcho-syndicalist principles, ActivityPub, FLOSS

Introduction

The utopian dimension of new technology lies not before use, but rather behind us, in the dreams and ideals of the past.

- Alexander Roesler ¹

Since the World Wide Web (WWW) launched thirty years ago, the ‘*network*’ and later the ‘*platform*’ have become crucial infrastructure and defining metaphors for society.² Networks and platforms rely on *protocols*, software that enables computers to form a network. The protocol can be proprietary or open-source, largely shaping the openness or closedness of a network. Popular corporate social media (CSM) like Instagram, Twitter/X, or YouTube operate with closed networks because it enables them to profit from global connectivity through data monetization.³ However, the combination of economic dynamics and global connectivity have led to societal externalities like polarization, loss of privacy, and growing (global) inequality etc.⁴ Furthermore, their dominance has established a sociotechnical imaginary of social media networks as proprietary and algorithmic even though the WWW itself is based on *Free/Libre Open-Source Software* (FLOSS) ideology.

From this background, Mastodon has entered the limelight as a modern-day FLOSS-based decentralized *alternative social media* (ASM) to Twitter/X. As an alternative Mastodon needs to distinguish itself and contest the CSM-dominated sociotechnical imaginary defined by Sheila Jasanoff as “collectively held and performed visions of desirable

¹ Alexander Roesler as qtd. By Clemens Apprich, *Technotopia: A Media Genealogy of Net Cultures* (London: Rowman Littlefield International, 2017), 1.

² Jean-Christophe Plantin, Carl Lagoze, Paul N Edwards, and Christian Sandvig, “Infrastructure Studies Meet Platform Studies in the Age of Google and Facebook,” *New Media & Society* 20, no. 1 (January 2018): 304-5, <https://doi.org/10.1177/1461444816661553>.

³ José Van Dijck, “Seeing the Forest for the Trees: Visualizing Platformization and Its Governance,” *New Media & Society* 23, no. 9 (September 1, 2021): 2816, <https://doi.org/10.1177/1461444820940293>.

⁴ Martin Lister, Jon Dovey, Seth Giddings, Iain Grant, and Kieran Kelly, *New Media: A Critical Introduction* (London: Routledge, 2008), 10-11.

futures (or of resistance against the undesirable).”⁵ This vision of the future is not built in a day but, as the opening quote suggests, draws upon the ideals of the past. Specifically, to the ‘*network society*’ defined by Jan van Dijk⁶ and later developed by Manuel Castells⁷, the network society was fuelled by techno-optimism which combined with the existing political sentiment of libertarian individualism culminated in the ‘Californian Ideology’.⁸ In the 1990’s, based on this ideology, society collectively imagined a future wherein digital (social) networks would spur on grassroots social movements and promote democracy around the globe, while also making room for fundamental innovations and value-creation in markets.⁹

There was tension between open and closed networks with *ARPANET*, the predecessor of the Internet, initially operating as a closed network for research institutions funded by the United States military. Universities could connect to ARPANET for a sizeable annual fee of \$100.000.¹⁰ This exorbitant sum excluded most universities, motivating students to create an *alternative open network*, retrospectively known as *Usenet*, and at the time colloquially referred to as *poor man’s ARPANET*. Unlike ARPANET, Usenet was a peer-to-peer network based on an open-source protocol, designed to be accessible. Consequently, it was used for sharing and communicating on a diverse range of topics, making it one of the first social networks. While ARPANET provided the structural components, Usenet’s grassroots origins and open-source values led to widespread adoption and social innovation.¹¹ Ultimately, inspired by ARPANET and Usenet Tim Berners-Lee

⁵ Sheila Jasanoff, “Future Imperfect: Science, Technology, and the Imaginations of Modernity,” in *Dreamscapes of Modernity: Sociotechnical Imaginaries and the Fabrication of Power*, ed. Sheila Jasanoff and Sang-Hyun Kim (University of Chicago Press, 2015), 28.

⁶ Jan van Dijk, *The Network Society*, (California: SAGE Publications, 2020), 42.

⁷ Manuel Castells, “Toward a Sociology of the Network Society,” *Contemporary Sociology* 29, no. 5 (2000): 693, <https://doi.org/10.2307/2655234>.

⁸ Apprich, *Technotopia*, 35.

⁹ Michael Hauben and Ronda Hauben, *Netizens: On the History and Impact of Usenet and the Internet* (Los Alamitos, California: IEEE Computer Society Press, 1997), 3.

¹⁰ Bryan Pfaffenberger, “A Standing Wave in the Web of Our Communications’: Usenet and the Socio-Technical Construction of Cyberspace Values,” in *From Usenet to CoWebs* eds. Christopher Lueg and Danyel Fisher (London: Springer-Verlag, 2003), 24.

¹¹ Hauben, *Netizens*, 141-142; Apprich, *Technotopia*, 41-47.

invented the open-source World Wide Web (WWW) which kickstarted the modern version of the Internet culminating in the network society.

WWW was enabled by the open-source protocol Hypertext Transfer Protocol (HTTP) which envisioned web browsers and URLs as the foundations of the modern Web. Subsequent commercialization and innovation were possible because HTTP was not proprietary but open-source. For example, Google search is possible because of HTTP being open-source as it indexes URLs to make the Internet searchable. Berners-lee designed the Web to resist centralized control, ensuring sufficient checks and balances to maintain the promise of networks as both a democracy-fueller and market maker. However, following the dot com bubble in the twenty-first century, companies started to develop proprietary software and commercial businesses on top of the open-source Web. This period, retrospectively defined as ‘Web 2.0’,¹² saw the spawning of social networking, blogs, and wikis like Facebook, Youtube, Medium and Wikipedia and others.¹³ These services capitalized on the growing network, increased participation, and user-generated content.¹⁴

In the following two decades the Web has become dominated by a handful of companies like Meta, Google, Amazon, Apple, and Microsoft – known as big tech – who commercialized the formerly decentralized Web with proprietary platforms.¹⁵ At the same time, digital networks have become key infrastructures for modern society leading to an “infrastructuralisation” of platforms or the “platformization” of infrastructure.¹⁶ To underscore the domination and reliance on proprietary platforms, various scholars have proclaimed that we now live in *the platform society*.¹⁷ There are several issues with the

¹² Susan Herring, "Discourse in Web 2.0: Familiar, Reconfigured, and Emergent," in *Discourse 2.0 Language and New Media*, eds. Deborah Tannen and Anna Marie Trester (Washington: Georgetown University Press, 2013), 1; Web 2.0 is a contested term as there is no architectural differentiating factor in the underlying technology.

¹³ Lister et al., *New Media*, 206.

¹⁴ Herring, "Discourse in Web 2.0: Familiar, Reconfigured, and Emergent," 1-2.

¹⁵ Plantin, Lagoze, Edwards, and Sandvig, "Infrastructure Studies Meet Platform Studies in the Age of Google and Facebook," 304-5.

¹⁶ Plantin, Lagoze, Edwards, and Sandvig, "Infrastructure Studies Meet Platform Studies in the Age of Google and Facebook," 304-5.

¹⁷ José van Dijck, Thomas Poell and Martijn de Waal, *The Platform Society*, (Oxford University Press, 2018), 30-31.

platform society that warrant critical investigation from a media perspective, especially the dominant position of CSM platforms.

Privacy scandals such as the Snowden files, Cambridge Analytica, alongside a general worry about rising polarization and populism through CSM have led to a surge in criticism.¹⁸ As such Ethan Zuckerman and Chand Rajendra-Nicolucci speak of CSM's "crisis of legitimacy" wherein their role and power in society is being questioned, and alternatives considered.¹⁹ When the billionaire Elon Musk acquired Twitter in 2022 indignation over proprietary structure of social media boiled over. Sparking a migration of Twitter users to Mastodon, a decentralized open-source alternative to Twitter.²⁰ Moreover, Mastodon is part of the Fediverse, a 'network of networks'²¹ that allows interoperable content sharing through the ActivityPub protocol, enabling social networks to operate more like e-mail enabling users to switch providers.

This research focuses on Mastodon as a research object because it is part of a larger trend within society towards *decentralized social technologies* featuring diverse technologies from blockchain to ActivityPub.²² Mastodon is also the largest network in the Fediverse which in academic literature has been investigated as an ASM detailing its user experience differences.²³ That makes it part of a wider trend within social media as CSM are responding to the crisis of legitimacy, Meta announced its new Twitter competitor Threads which will

¹⁸ Pablo Barberá, "Social Media, Echo Chambers, and Political Polarization," in *Social Media and Democracy: The State of the Field, Prospects for Reform*, eds. Nathaniel Persily, Joshua A. Tucker, and Joshua Aaron Tucker (Cambridge University Press, 2020), 34.

¹⁹ Ethan Zuckerman and Chand Rajendra-Nicolucci, "From Community Governance to Customer Service and Back Again: Re-Examining Pre-Web Models of Online Governance to Address Platforms' Crisis of Legitimacy," *Social Media + Society* 9, no. 3 (July 1, 2023): 6, <https://doi.org/10.1177/20563051231196864>.

²⁰ Björn Brembs et al., "Mastodon over Mammon: Towards Publicly Owned Scholarly Knowledge," *Royal Society Open Science* 10, no. 7 (July 19, 2023): 1, <https://doi.org/10.1098/rsos.230207>.

²¹ Jacopo Anderlini and Carlo Milani, "Emerging Forms of Sociotechnical Organisation: The Case of the Fediverse," in *Digital Platforms and Algorithmic Subjectivities*, eds. E. Armano, M. Briziarelli, and E. Risi, 169 (London: University of Westminster Press, 2022), DOI: <https://doi.org/10.16997/book54.m>.

²² Danielle Allen et al., "Ethics of Decentralized Social Technologies: Lessons from Web3, the Fediverse, and Beyond," in *Justice Health Democracy Impact Initiative* (Harvard University, 2023), 4-6.

²³ Robert W. Gehl, "The Case for Alternative Social Media," *Social Media + Society* 1, no. 2 (2015), 2-3. <https://doi.org.proxy.library.uu.nl/10.1177/2056305115604338>; Diana Zulli, Miao Liu, and Robert Gehl, "Rethinking the 'Social' in 'Social Media': Insights into Topology, Abstraction, and Scale on the Mastodon Social Network," *New Media & Society* 22, no. 7 (July 1, 2020): 1188–1205, <https://doi.org/10.1177/1461444820912533>.

(partly) incorporate the ActivityPub protocol, joining the Fediverse. These developments have put the Fediverse, and Mastodon as its largest node, in the spotlight warranting further research from a media perspective.

The role of Usenet is relevant for Mastodon because “the future is born of the past, it is equally true that the past is continuously shaped by the future.”²⁴ To that end, this research incorporates a media genealogical aspect, by drawing parallel from Mastodon and Meta to the open-source versus proprietary network struggle of Usenet and ARPANET.²⁵ This perspective considers emerging decentralized social technologies like Mastodon not just as platforms for communication but also as sites of discursive struggle for future visions of networking technology. The perception of social media, and associated future visions, are currently dominated by CSM, their dominance has resulted in a hegemony, defining what is normal.

As shown by research on Mastodon as an ASM,²⁶ it operates with an ethos to distinguish itself as an alternative network to CSM while also constructing a collective conceptualization of future networking through its participation in the Fediverse. Which according to Mastodon is “the decentralized social network formed by Mastodon, Pleroma, Misskey and others using the ActivityPub standard.” These services act as a window or entrance point to the Fediverse, since they “(per)form” the Fediverse. Thus, the Fediverse can be defined as a network ‘performed’ by social media that use the ActivityPub standard. Mastodon constructs its identity as a resistance movement against the

²⁴ Alberto Melucci (1996, p. 12) as qtd in Sheila Jasanoff, “Future Imperfect: Science, Technology, and the Imaginations of Modernity,” in *Dreamscapes of Modernity: Sociotechnical Imaginaries and the Fabrication of Power*, ed. Sheila Jasanoff and Sang-Hyun Kim (University of Chicago Press, 2015), 21.

²⁵ Not for nothing has Tim Berners-lee called for a re-decentralizing of the web. The suspicion is that the new era of networking is not so much new but rather operate in loops.

²⁶ Zulli, Liu, and Gehl, “Rethinking the ‘Social’ in ‘Social Media’,” 1188; Gehl, “The Case for Alternative Social Media,” 5-9.

‘infrastructuralization’²⁷ of communication platforms which is underscored by its commitment to decentralization, *interoperability*, and FLOSS principles.

Combining these considerations this research puts forth the following questions:

How does the ethos demonstrated by Mastodon reflect historical precedents and contribute to the counter-hegemonic struggle of the Fediverse to construct a sociotechnical imaginary of alternative social media?

The subquestions that elucidate the main question are:

1. What are the defining elements of Mastodon’s ethos, and how do they trace back to earlier experiments in decentralized communication and networking, such as Usenet?
2. How does the Fediverse construct a sociotechnical imaginary of alternative social media?
3. How does the sociotechnical imaginary of alternative social media contest the hegemony of corporate social media?

²⁷ Plantin, Lagoze, Edwards, and Sandvig, “Infrastructure Studies Meet Platform Studies in the Age of Google and Facebook,” 304-5.

Theoretical Framework

Thus far Mastodon and the Fediverse have extensively been studied by Robert Gehl,²⁸ and Diana Zulli, Miao Liu, and Gehl²⁹ as an alternative to CSM while others have used Mastodon to think about structural changes across society like Björn Brembs.³⁰ However, as pointed out by Lucio La Cava and Andrea Tagarelli existing research has been limited to select aspects instead of an overarching network perspective.³¹ This research fills this gap by researching Mastodon and the Fediverse from an ideological and historical perspective, carefully considering the sociotechnical imaginary in which they emerged and contest.³² At the time of writing the sociotechnical imaginary has only been applied to the Fediverse by Jacopo Anderlini and Carlo Milani whose ethnographic genealogical approach expressly moves beyond the polarisation of technology implied by the ASM and CSM distinction.³³

Building on their work, this research combines a critical discourse analysis with media genealogy. This research perspective has also made steps to consider Mastodon from a new perspective as a critical net culture inspired by Clemens Apprich's work in *Technotopia: a media genealogy of net cultures*.³⁴ Media archaeological research into various forgotten critical net cultures shows how such 'forgotten' networks make unforeseen comebacks in modern discourse about Internet and CSM.³⁵ Such a media genealogical lens has thus far not been applied to Mastodon or the Fediverse even though it can be seen as a critical net culture in the platform society.

²⁸ Gehl, "The Case for Alternative Social Media," 9.

²⁹ Zulli, Liu, and Gehl, "Rethinking the 'Social' in 'Social Media'," 1190-1192.

³⁰ Brembs et al., "Mastodon over Mammon: Towards Publicly Owned Scholarly Knowledge," 3.

³¹ Lucio La Cava, and Andrea Tagarelli, "Information Consumption and Boundary Spanning in Decentralized Online Social Networks: The Case of Mastodon Users," *Online Social Networks and Media* 30 (July 1, 2022): 3, <https://doi.org/10.1016/j.osnem.2022.100220>.

³² Jasanoff "Future Imperfect," 3-4.

³³ Anderlini and Milani, "Emerging Forms of Sociotechnical Organisation," 167.

³⁴ Apprich, *Technotopia*, 1-6.

³⁵ Apprich, Clemens, Daphne Dragona, Geert Lovink, and Florian Wüst, "What Was The Network?" in *The Eternal Network*, eds. Kristoffer Gansing and Inga Luchs (Amsterdam: Institute of Network Cultures, 2020), 19-20.

The structure for this discussion is as follows. First, I introduce the main way that scholarly work has characterised the network society, discuss the rise, struggle, and impact of Usenet as an alternative network to ARPANET. Followed by a discussion of the rise of HTTP and the WWW which set the stage for the network society. Second, I introduce the rise of the platform society, the key analytical concepts, and the rise of surveillance.³⁶ Finally, I discuss Mastodon, and the Fediverse from existing theory. To indicate Mastodon's deliberate divergence from the former 'societies' I use a new label: 'the protocol society'. In figure 1 I added a timeline to create an overview of the various actors and which era they relate to.

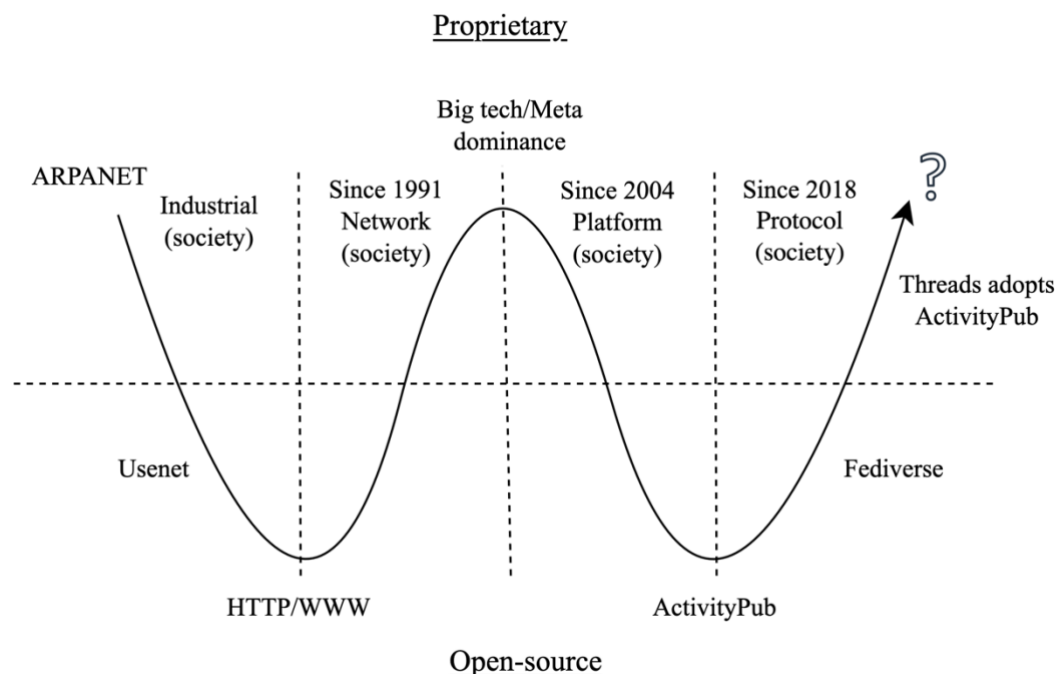


Figure 1. From ARPANET to Threads. A diagram of various societies over time on the x-axis and on the y-axis the degree of open-source versus closed/proprietary.

The Network Society

In the past innovations like the printing press changed the media landscape and (gradually) led to a change in world order.³⁷ In other words, technological innovations upset balances of

³⁶ Note. these 'societies' are not mutually exclusive, when Castells and van Dijk wrote about the network society it is not that the industrial society was suddenly gone, rather that a new more urgent imaginary had been established on top of it. Similarly, the term platform society by José van Dijck, Thomas Poell and Martijn de Waal does not mean that networks have been replaced instead it adds another dimension.

³⁷ Elizabeth L. Eisenstein, *The Printing Press as an Agent of Change*, (Cambridge University Press, 1980), 3-4.

power because in part they enabled more people to participate through media. The same expectation developed in the late 1990's when the Internet became widely accessible through the World Wide Web (WWW) project.³⁸ The WWW uses the open-source HypertextTransferProtocol (HTTP) and was initially spread through Usenet newsgroups.³⁹ WWW was exciting because for the first time non-technical people could engage with networking technology contributing to the network society.⁴⁰ The open-source HTTP protocol kickstarted much of the fascination with networks.

In this 'new' society individuals instead of groups or masses were the primary drivers in the organization of society with communication was no longer monopolized by centralized 'traditional' media like newspapers, television, and radio.⁴¹ Previously, social identity was defined by local communities, in the network society communities were dispersed, and participation was no longer local but global leading to individualization in the west.⁴²

Networking innovations shifted the paradigm, on the back of hypertext the world globalized further, dominant culture entered cyberspace, and nation-state democracies were challenged.⁴³ In brief, Castells and Van Dijk describe a society driven by networks whose digital structures would function as the *social structures* of society. Social structures are "the organizational arrangements of humans in relationships of production/consumption, experience, and power, as expressed in meaningful interaction framed by culture."⁴⁴ A culture that arose from previous networks like the dominant ARPA and its alternative Usenet

³⁸ James A. Dewar, "The Information Age and the Printing Press: Looking Backward to See Ahead," *RAND*, (1998): 2-3, <https://www.rand.org/content/dam/rand/pubs/papers/2005/P8014.pdf>.

³⁹ Tim Berners-Lee, "Qualifiers on Hypertext links..." Usenet (archived), August, 1991, <https://www.w3.org/People/Berners-Lee/1991/08/art-6484.txt>.

⁴⁰ Castells, "Toward a Sociology of the Network Society," 693.

⁴¹ Van Dijk, *The Network Society*, 42.

⁴² Van Dijk, *The Network Society*, 45.

⁴³ Castells, "Toward a Sociology of the Network Society," 694.

⁴⁴ Castells, "Toward a Sociology of the Network Society," 695.

who were pushing the ‘electronic frontier’ and redeveloping concepts like participation, community, and citizenship.⁴⁵

The battle over the conception of ‘normal’ networks has become the battle over ‘normal’ culture, and technologies a way through which political and ideological struggles were resolved. At the time such critical net cultures on the electronic frontier were keen on promoting an “alternative vision of the Internet and to foster bottom-up approaches within the networked space”⁴⁶ This vision was dominant on Usenet and informed the creation of HTTP in spite of the fact that the dominant ARPANET was developed as a military endeavour, and later as a technological innovation that would reshape society based “on the techno-libertarian spirit of Silicon Valley.”⁴⁷ In the west this digital revolution through networks gradually became more defined by global capitalism than the alternative sociotechnical imaginaries they were based on. To understand this, I turn to the history of ARPANET and Usenet.

ARPANET and Usenet

The previously introduced ARPANET was developed by the Advanced Research Projects Agency (ARPA) with an explicit military research purpose.⁴⁸ Nevertheless the director of ARPA developed a vision of technology's role in problem-solving, research, and facilitating human communication.⁴⁹ Accessibility, simplicity, and adaptability were central tenets of this vision to promote human-computer symbiosis and network interconnectivity.⁵⁰ Despite this principled orientation ARPANET remained a closed centralized network built on proprietary technology owned by the US military.

⁴⁵ Apprich, *Technotopia*, 60.

⁴⁶ Ibid.

⁴⁷ Apprich, *Technotopia*, 61.

⁴⁸ Hauben, *Netizens*, 41-42.

⁴⁹ Hauben, *Netizens*, 84.

⁵⁰ Hauben, *Netizens*, 91.

Usenet, in contrast, was an open-source decentralized network that used autodial modems originally designed for telephone calls through the open-source technology unix-to-unix copy program (UUCP). This protocol “called” up computers to copy files (that were changed), resulting in a distributed peer-to-peer network.⁵¹ Michael and Ronda Hauben put forth that Usenet flourished because its open network enabled anyone running UUCP to contribute content, create and distribute news or other conversations.⁵² Meaning that it grew much faster than ARPANET and became a dominant force in shaping the following network society. For the first time users were no longer reliant on big publishers or news organizations to communicate on a large scale.

The network is often represented as completely anarchist, but Usenet had grassroots rules called "Netiquette."⁵³ This culture meant that technical and moderation problems were collectively solved through volunteer work which have been essential for networks.⁵⁴ The distributed nature of the network created collective aspiration, open communication, and widespread innovation. Unlike ARPANET where the proprietary nature meant that a higher power like the US military reserved the right to exclude from the network, effectively monitoring and censoring. As a result, an anti-commercial ethos and culture developed on Usenet, this culture embodied the values associated with a decentralized network hailed by Hauben as one of the formative achievements of the twentieth century.⁵⁵

When Usenet and ARPANET merged, Netiquette became integral to Internet culture, portraying it as democratic.⁵⁶ Usenet is likely the first social network because it enabled communication outside of “established” channels, functioning as a source for

⁵¹ Hauben, *Netizens*, 39-40.

⁵² Hauben, *Netizens*, 48.

⁵³ Hauben, *Netizens*, 63.

⁵⁴ J. Nathan Matias, “The Civic Labor of Volunteer Moderators Online,” *Social Media + Society* 5, no. 2 (April 1, 2019): 11, <https://doi.org/10.1177/2056305119836778>.

⁵⁵ Hauben, *Netizens*, 64.

⁵⁶ Hauben, *Netizens*, 52.

“independent information” which was “helpful in search for the truth.”⁵⁷ Usenet's resistance to profit-driven exploitation laid the groundwork for the decentralized design of subsequent innovations like the WWW.⁵⁸ As the Internet flourished, it promised a "new democratic world," with positive effects rooted in anonymity and accessibility, contingent on avoiding commercial control to retain its power for ordinary users.⁵⁹ Usenet foreshadowed globalisation, the rise of an information economy, and institutional shifts.⁶⁰ However, disconnection from the network in the network society meant isolation, vulnerability, and invisibility, highlighting networking as a fundamental right crucial for future open-source endeavours.⁶¹

Californian Ideology

As the Internet became widely accessible it also became dominated by the ‘Californian Ideology’, a combination of technological determinism and libertarian individualism.⁶² This rising ideology, first identified by Richard Barbrook and Andy Cameron in 1996, frames technology as a source of personal freedom and righteous resistance to state interference.⁶³ According to Elisabetta Ferrari the three foundational beliefs of this ideology are that (i) digital tech is deterministically free, democratic, and conducive to personal autonomy, (ii) as such technology is suitable to solve social problems, and (iii) it is framed as revolutionary even though it affirms the current neo-liberal capitalist system.⁶⁴ Especially the latter

⁵⁷ Hauben, *Netizens*, 56.

⁵⁸ Hauben, *Netizens*, 55.

⁵⁹ Hauben, *Netizens*, 3.

⁶⁰ Lister et al., *New Media*, 11.

⁶¹ Hauben, *Netizens*, 65.

⁶² Apprich, *Technotopia*, 35.

⁶³ Richard Barbrook and Andy Cameron, "The Californian Ideology," *Science as Culture* 6, no. 1 (1996): 44-45, DOI: 10.1080/09505439609526455.

⁶⁴ Elisabetta Ferrari, "Technocracy Meets Populism: The Dominant Technological Imaginary of Silicon Valley," *Communication, Culture and Critique* 13, no. 1 (April 29, 2020): 121-22, <https://doi.org/10.1093/ccc/tcz051>.

principle has been adopted by tech companies in Silicon valley whose leaders publicly aligned with counter-culture, portraying their networks as disruptors of the status quo.⁶⁵

Tech companies piggy-backed on the positive connotation of networks created by open-source networks like Usenet and the WWW while diverging from their founding principles. In response to this co-optation, Apprich notes the emergence of critical net cultures challenging the dominant Californian Ideology and envisioning alternative sociotechnical imaginaries for the Internet.⁶⁶ These cultures, rooted in open-source networks like Usenet, embraced principles such as decentralization, anonymity, and free exchange of ideas to scrutinize the emerging neoliberal capitalist system.⁶⁷

According to Tim de Winkel, these *critical net cultures* embody FLOSS (*free/libre and open-source software*) principles, historically championed by "fringe" platforms like Usenet and Mastodon.⁶⁸ The network has effectively functioned as the defining metaphor of the past thirty years. The open-source ideology of the Internet as a "technology of freedom"⁶⁹ accepted the myth that networking automatically leads to social collectivity and social changes has been used by Silicon Valley start-ups power and wealth.⁷⁰ The proprietary technologies often in the form of platforms were built on top of the open-source HTTP and have all but obscured it. Consequently, scholars have shifted focus from the 'network society' to the 'platform society', marking a transition in the Internet's defining metaphor.

⁶⁵ Joachim Haupt, "Facebook Futures: Mark Zuckerberg's Discursive Construction of a Better World," *New Media & Society* 23, no. 2 (February 1, 2021): 245, <https://doi.org/10.1177/1461444820929315>.

⁶⁶ Apprich, *Technotopia*, 37.

⁶⁷ Apprich, *Technotopia*, 45.

⁶⁸ Tim de Winkel, "Fringe Platforms: An Analysis of Contesting Alternatives to the Mainstream Social Media Platforms in a Platformized Public Sphere," (PhD diss., Universiteit Utrecht, 2023), 116, <https://doi.org/10.13140/RG.2.2.10881.84321>.

⁶⁹ Paolo Bory, *The Internet Myth: From the Internet Imaginary to Network Ideologies* (London: University of Westminster Press, 2020), 121, <https://doi-org.proxy.library.uu.nl/10.2307/j.ctv12fw7sn>.

⁷⁰ Hasmet M. Uluorta and Lawrence Quill, "The Californian Ideology Revisited," in *Digital Platforms and Algorithmic Subjectivities*, ed. Emiliana Armano, Marco Briziarelli, and Elisabetta Risi (University of Westminster Press, 2022), 28, <https://www.jstor.org/stable/j.ctv319wpvm.5>.

The Platform Society

The term platform society was introduced by van Dijck, Poell, and de Waal to capture the phenomenon that platforms have begun to overtake or merge with the activities that constitute the foundations of democratic societies.⁷¹ Online platforms have subsumed many economic and social processes traditionally performed by offline businesses or institutions, and in the process have become a place where society is shaped, increasingly in control of corporate entities.⁷² Platforms are “programmable digital architecture designed to organize interactions between users” of various types.⁷³

Platforms have become ubiquitous: apps, sites, businesses, anything can be described as a platform nowadays. The platform society discourse critically responds to Web 2.0 discourse.⁷⁴ Similar to the way networks were the principal metaphor in the network society, platforms symbolize the implicit logic of major processes in our society. Google, Meta, Microsoft, Apple, and Amazon dominate society through various degrees of platforms. As Van Dijck shows the extent of corporate control is deeper and wider than their narrow institutional counterparts.⁷⁵

In the network society critical net cultures have been considered by Apprich as responses to closed-off networks.⁷⁶ Similarly, in the platform society proprietary closed platforms have been characterised by Gehl and Zulli as corporate social media (CSM) while media that contest their hegemony is labelled as alternative social media (ASM).⁷⁷

Alternative media is based on the theoretical concept of media power by Nick Couldry and

⁷¹ Van Dijck, Poell and de Waal, *The Platform Society*, 2.

⁷² Van Dijck, Poell and de Waal, *The Platform Society*, 4.

⁷³ Ibid.

⁷⁴ Ibid.

⁷⁵ Van Dijck, “Seeing the Forest for the Trees: Visualizing Platformization and Its Governance,” 2802.

⁷⁶ Apprich, *Technotopia*, 36-38.

⁷⁷ Zulli, Liu, and Gehl, “Rethinking the ‘Social’ in ‘Social Media’,” 1190.

James Curran.⁷⁸ However, as Anderlini and Milani point out this dichotomous framing mistakes CSM implementation with the social network.⁷⁹

This study fills a gap in existing research by integrating perspectives from both alternative social media (ASM) and media genealogy approaches, particularly those outlined by Apprich. It aims to explore the unique ethos of Mastodon by on one hand approaching Mastodon as a remediation of net culture in the network society while on the other considering it as an ASM to CSM dominance in the platform society.

Corporate Social Media

In the platform society, the differentiating factor for CSM is the ability to enable economies of scale through digital platform structures. For financiers large investments are warranted as the marginal benefit (the amount of profit that can be gained from each next user) does not decrease like traditional market makers. As such CSM is often free to scale as much as possible. When the platform is sufficiently large, a user base can be monetized through the systematic *datafication of user interaction*.⁸⁰ For CSM data serve two primary purposes, one it personalizes the user experience which keeps users engaged for longer and increases accessibility and discoverability. Two, it enables *data commodification* meaning that data can be used to create targeted advertising.⁸¹ The combination of datafication and its subsequent commodification in a business model means that services are often offered for free in exchange for data.⁸²

⁷⁸ Nick Couldry and James Curran, "The Paradox of Media Power," in *Contesting Media Power: Alternative Media in a Networked World*, ed. Nick Couldry and James Curran (Oxford: Rowman Littlefield Publishers, 2003), 7.

⁷⁹ Anderlini and Milani, "Emerging Forms of Sociotechnical Organisation," 177.

⁸⁰ Nick Srnicek, "The Challenges of Platform Capitalism: Understanding the Logic of a New Business Model," *Juncture* 23, no. 4 (2017): 255, <https://doi.org/10.1111/newe.12023>; Van Dijck, Poell and de Waal, "Platform Society: as a Contested Concept," 38; Ulises A. Mejias and Nick Couldry, "Datafication," *Internet Policy Review* 8, no. 4 (November 29, 2019), 7, <https://doi.org/10.14763/2019.4.1428>.

⁸¹ Ibid.

⁸² Lock-in mechanisms ensure that users cannot leave the platform without losing the network effects that the platform offers. For instance, one cannot leave Facebook and take their connections to another platform.

As a result, there is an incentive to make the platforms as engaging as possible because time spent equates to advertisements served, and money earned. However, these platforms have become so big and their communication so essential to the functioning of Western societies that they now fulfil an infrastructural role according to Jean-Christophe Plantin et al.⁸³ According to various scholars like Christian Fuchs⁸⁴, Michael Kwet⁸⁵ and José van Dijck⁸⁶ these platforms enable and/or profit from surveillance. Scandals like Edward Snowden's revelations, Facebook's Cambridge Analytica, or the negligence of Meta's trust and safety contributing to children committing suicide are all convincing examples that the centralized media power is a systemic risk. The trust and safety models of CSM are world's most powerful editors and according to Tarleton Gillespie it is their principal value proposition.⁸⁷

Ideologically CSM have normalized exchanging personal data for access, and commercially are rewarded for the algorithms that capitalize upon it.⁸⁸ One which both corporates and state institutions intend to defend as "social media ... provide the raw materials of data for both corporations and, as Snowden has shown us, police and intelligence agencies."⁸⁹ Finally, Zygmunt Bauman et al.⁹⁰ and Fuchs⁹¹ contend that platforms enable mass self-surveillance because it are the "users themselves who hegemonically produce and reproduce surveillance by providing user-generated (self-produced) content." From this

⁸³ Plantin, Lagoze, Edwards, and Sandvig, "Infrastructure Studies Meet Platform Studies in the Age of Google and Facebook," 304-5.

⁸⁴ Christian Fuchs, "New Media, Web 2.0 and Surveillance," *Sociology Compass* 5, no. 2 (2011): 138, <https://doi.org/10.1111/j.1751-9020.2010.00354.x>.

⁸⁵ Michael Kwet, "Fixing Social Media: Toward a Digital Democratic Commons," *Markets, Globalization & Development Review* 5, No. 1 (Autumn 2020): 4, <https://DOI.org/10.23860/MGDR-2020-05-01-04>.

⁸⁶ José van Dijck, "Datafication, Dataism and Dataveillance: Big Data between Scientific Paradigm and Ideology," *Surveillance & Society* 12, no. 2 (May 9, 2014): 206, <https://doi.org/10.24908/ss.v12i2.4776>.

⁸⁷ Tarleton Gillespie, *Custodians of the Internet: Platforms, Content Moderation, and the Hidden Decisions That Shape Social Media* (New Haven: Yale University Press, 2018), 13; Zuckerman and Rajendra-Nicolucci, "From Community Governance to Customer Service and Back Again," 10.

⁸⁸ Van Dijck, "Datafication, Dataism and Dataveillance," 201.

⁸⁹ Zygmunt Bauman et al., "After Snowden: Rethinking the Impact of Surveillance," *International Political Sociology* 8, no. 2 (June 1, 2014): 123, <https://doi.org/10.1111/ips.12048>.

⁹⁰ Bauman et al., "After Snowden," 142.

⁹¹ Fuchs, "New Media, Web 2.0 and Surveillance," 138.

hegemonic background Mastodon must define its ethos, and through the Fediverse construct an alternative sociotechnical imaginary. The metaphors of the network and the platform are challenged by Mastodon which puts the protocol at the centre.

The Protocol Society

To capture Mastodon's construction of a sociotechnical imaginary based on the protocol I have labelled this section *the protocol society*.

Mastodon

In the landscape of self-surveillance platforms, Mastodon has emerged as a notable disruptor since its inception in 2016. Originally conceived as a Twitter alternative by Eugene Rochko, with the conviction that “instant global communications were too crucial for modern society to belong to a single commercial company.”⁹² In 2018 it adopted the ActivityPub protocol and became part of a larger federated universe known as the Fediverse. Remaining relatively unknown until Elon Musk took over Twitter and sparked a migration of users to Mastodon.⁹³ This attention was compounded when Meta which announced a CSM Twitter clone called *Threads* which would embrace the ActivityPub protocol.⁹⁴

In current academic literature Mastodon is primarily understood through the aforementioned ASM theory based on Nick Couldry and James Curran's definition as “media production that challenges at least implicitly, actual concentrations of media power.”⁹⁵ Couldry and Curran also define media power as “*an emergent form of social power in complex societies whose basic infrastructure depends increasingly on fast circulation of*

⁹² “Our story,” Mastodon, accessed January 11, 2024, <https://joinmastodon.org/about>.

⁹³ Brems et al., “Mastodon over Mammon: Towards Publicly Owned Scholarly Knowledge,” 1,

⁹⁴ ActivityPub is a protocol developed by the World Wide Web Consortium (WC3), this allows social networks to federate with each other, making them interoperable.

⁹⁵ Couldry and Curran, “The Paradox of Media Power,” 7.

information and images.”⁹⁶ Manifesting through so-called “hard” and “soft” decision power over narrative and content.⁹⁷ This definition of ASM distinguishes it from CSM and has provided scholars with “a normative” lens through which the subversion of dominant modes of interaction created by CSM.⁹⁸

Although ASM theory is useful to understand Mastodon’s struggle against CSM dominance, it is also limiting because it submits to a David versus Goliath narrative. Specifically, the framing of technologies as ‘alternatives’ to the mainstream implicitly submits to this dominant narrative.⁹⁹ According to Anderlini and Milani technologies like social media are commonly attributed dichotomous and ethical labels based on the dominant implementation.¹⁰⁰ As such the design and technical aspects of CSM social media platforms are considered ‘normal’ or culturally representative for the wider public.¹⁰¹

Zulli, Liu, and Gehl delve into how Mastodon redefines the essence of the "social" in social media, exploring emergent theoretical dimensions of topology, abstraction, and scale.¹⁰² Their research uses a grounded theory approach and generates important insights as the large number of small, decentralized servers enable a different social organization (topology in the research). Resulting in a lower abstraction compared to CSM, meaning that users can see under the hood of the software and understand how it works. Lower abstraction leads to a clearer display of media power, while the smaller scale redefines social interactions. Zuckerman and Rajendra-Nicolucci highlight Mastodon's alternative approach to the social in as crucial to its vision, operational model, and governance, and a crucial experiment for exploring diverse forms of online interaction.¹⁰³

⁹⁶ Couldry and Curran, “The Paradox of Media Power,” 4.

⁹⁷ Couldry and Curran, “The Paradox of Media Power,” 4.

⁹⁸ Gehl, "The Case for Alternative Social Media," 8.

⁹⁹ Erkki Huhtamo and Jussi Parikka, *Media Archaeology: Approaches, Applications, and Implications* (Berkeley: University of California Press, 2011): 3.

¹⁰⁰ Anderlini and Milani, "Emerging Forms of Sociotechnical Organisation," 167-178.

¹⁰¹ Gehl, "The Case for Alternative Social Media," 9.

¹⁰² Zulli, Liu, and Gehl, “Rethinking the “social” in “social media”,” 1192.

¹⁰³ Zuckerman and Rajendra-Nicolucci, ““From Community Governance to Customer Service and Back Again,”” 8-10.

The origins of Mastodon were principally inspired by an activist social imaginary namely that corporations should not have too much media power. Linking this to Couldry and Ulises Meijas whose later work asserted that media power resulted in “datafication”, the process of extracting value from data, and this is principally rooted in technical structures but fundamentally accepted through narratives and discourse.¹⁰⁴ The activism and anti-hierarchy of Mastodon appears to resemble a type of anarchism, however fact that it is decentralized and not distributed point to syndicalism. According to Lucien van der Walt, Anarcho-syndicalism is a sub-philosophy of anarchism with a focus on self-organization and owning the means of production, it critical of hierarchy but accepts it when justified.¹⁰⁵

From the above we clearly see that previous research has documented how Mastodon’s design resists CSM’s datafication practices. However, an analysis of Mastodon which connects these practices and their demonstrated ethos to contest the wider ideological acceptance of datafication as defined by Couldry and Meijas is still missing.

The Fediverse

Mastodon is the largest node within the broader ecosystem of the Fediverse which features distinct cultures complete with diverse niches, languages, and conceptualizations of social interactions.¹⁰⁶ Overall, the Fediverse embrace the idea of an Internet which is not sectioned off into privately owned walled gardens but interoperable, public, and as a result more democratic, symbolizing a return from the platform society to Usenet. According to Kristoffer Gansing the development and promotion of networks “seems rather to proceed in parallel loops in which the past continuously makes comebacks.”¹⁰⁷ These notions of déjà vu

¹⁰⁴ Meijas and Couldry, “Datafication,” 7.

¹⁰⁵ Van der Walt, Lucien, “Global Anarchism and Syndicalism: Theory, History, Resistance,” *Anarchist Studies* 24, no. 1 (2016): 85-106.

¹⁰⁶ Zulli, Liu, and Gehl, “Rethinking the ‘Social’ in ‘Social Media’,” 1198.

¹⁰⁷ Kristoffer Gansing, "Introduction: Network Means and Ends," in *The Eternal Network*, eds. Kristoffer Gansing and Inga Luchs (Amsterdam: Institute of Network Cultures, 2020), 12.

seem present in Mastodon and the sociotechnical imaginary of the Fediverse because they aspire to values like decentralization, interoperability, diversity of platforms, user agency and community governance.

Mastodon's identity stems from resistance movements opposing CSM underscored by its commitment to decentralization, *interoperability*, and FLOSS. These values challenge ideological norms of the role of global communication technologies in the platform society. In other words, Mastodon as a performance of the Fediverse contests the dominant view of how the public perceives social media, making social media a site of discursive struggle for the future of society. This struggle permeates the discourse surrounding Mastodon, evident in promotional materials and analytical discussions alike, to operationalize this I use the concept of the sociotechnical imaginary, further discussed below.

Sociotechnical Imaginary

Sheila Jasanoff posits that technological innovations follow science fiction.¹⁰⁸ Science fiction are works of the imagination that play with technology to reconfigure a vision of society and can be dystopic or utopic. Similarly, technology fascinates us because of its potential for a different future. Simultaneously Jasanoff notes that for all the imaginative social aspects that technology draws on its discussion in science and technology studies often lacks “social thickness and complexity.”¹⁰⁹ Coherent with media archaeology Jasanoff constructs a framework to understand how ideas of science and technology are dialectically constructed by social discursive elements like social practices, identities, cultural norms etc.¹¹⁰ To that end, the concept of the sociotechnical imaginary offers a lens through which to investigate

¹⁰⁸ Jasanoff “Future Imperfect,” 1.

¹⁰⁹ Jasanoff “Future Imperfect,” 2.

¹¹⁰ Jasanoff “Future Imperfect,” 3-4.

Mastodon's narratives, and probe the underlying societal visions and aspirations of the Fediverse's evolution and reception.

Sociotechnical imaginaries are defined as “collectively held, institutionally stabilized, and publicly performed visions of desirable futures” while also being “animated by shared understandings of forms of social life and social order attainable through, and supportive of, advances in science and technology.”¹¹¹ The analytical concept of sociotechnical imaginaries combines the materiality of technology and science with the performative of social reality, making it uniquely positioned to supersede the agency-structure dichotomy.¹¹² Sociotechnical imaginaries are discursive sites where the process of negotiation and domination occurs from which a society's broadly accepted definition of meaning arises (hegemony).¹¹³

Protocols and Decentralization

From the above it becomes clear that decentralization and protocols were key aspects of Usenet which are still important features of the Fediverse. To finalize this theoretical framework I discuss protocols, and how they are perceived in networks based on work by Alexander Galloway. His insights are brought into dialogue with Nathan Schneider's work on decentralization in decentralized social technologies and the centralization and decentralization in Usenet by Hangwoo Lee.

The consensus is that there are three types of networks, also shown in figure 2: the centralized, the decentralized, and the distributed.¹¹⁴ With nodes and links between the nodes. If there is one central node it is centralized, if there are various nodes with some having more links it can be seen as decentralized. When a network requires each node can be connected to

¹¹¹ Jasanoff “Future Imperfect,” 13.

¹¹² Jasanoff “Future Imperfect,” 19 & 24.

¹¹³ Fairclough, *Critical Discourse Analysis: The Critical Study of Language*, 92.

¹¹⁴ “Why does decentralization matter?” Mastodon, published December 30, 2018, blog.joinmastodon.org/2018/12/why-does-decentralization-matter/.

other nodes it is distributed. Protocols are political decisions embodied in material code which do not decide on who to connect but rather who to disconnect.¹¹⁵ In other words,

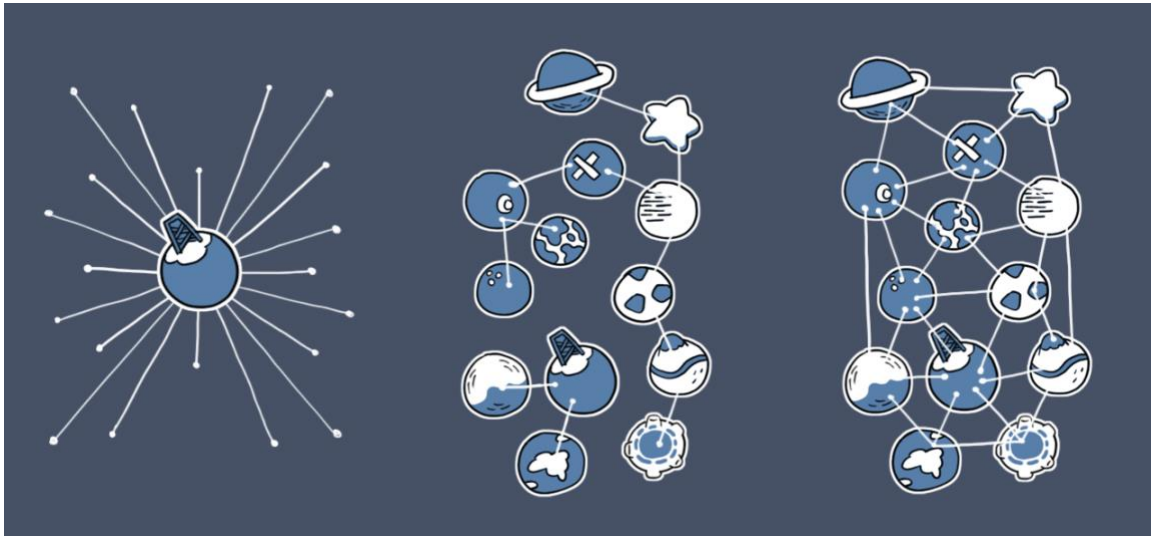


Figure 2. *The three types of networks: centralized, decentralized and distributed (Mastodon, 2018).*

protocols decide whether nodes can connect to one central node, a couple of nodes, or all nodes. This means the role of the protocol is more exclusionary than inclusionary as it imposes a hierarchy, simultaneously a decentralized or distributed network is often perceived as anarchical.

According to Galloway understanding the network metaphor means resolving the paradoxical dichotomy of hierarchy and anarchy in protocols.¹¹⁶ Simply put networks are not either centralized or distributed, they exist on a spectrum with some elements being hierarchical as a network requires rules and anarchical because these rules can be broken. The protocol Galloway contends is dialectically hierarchical and anarchical. From this follows that more networking does not equate to more connection.¹¹⁷ Plus, the type of connectivity is not always inclusive despite the Californian Ideological insistence on the kumbaya effect of networking, it is not inherently conducive to democratic participation.

¹¹⁵ Alexander R. Galloway, *Protocol: How Control Exists after Decentralization* (Cambridge, MIT Press, 2006), XVI.

¹¹⁶ Galloway, *Protocol*, XV.

¹¹⁷ Van Dijck, Poell and de Waal, *The Platform Society*, 25.

To understand the way in which protocols as technology shape the sociotechnical imaginary, I now compare Usenet's protocol to Mastodon's. The UUCP protocol, a peer-to-peer based networking solution, was created because the Internet as we know it today did not exist yet. Instead, newsgroups host Usenet locally and store and forward messages to other local newsgroups creating a so-called *distributed* network. Mastodon on the other hand operates through the ActivityPub protocol which primarily provides a client/server API known as the "social API" to alter content. This is standard for CSM what makes Mastodon different is the second closely related "Federation Protocol" which distributes the actions from one server to all others while keeping the social graph, a key distinction as it enables user agency.¹¹⁸

Beyond technical interoperability federation-based networks requires social calibration something shown by Lee who examines centralization on Usenet.¹¹⁹ Despite Usenet's anarchic decentralized design, it came under control of a 'backbone cabal' a group of system administrators (volunteers) who made sure the network functioned.¹²⁰ This afforded them considerable influence over the network despite lacking an institution, as a decentralized system it organized its own hierarchy.¹²¹ To be truly decentralized a platform needs to have sufficient checks and balances in the protocol (top-down) but also from the community (bottom-up).

In conclusion, as Schneider points out decentralization has become an empty signifier term, filled with contradictory rhetoric.¹²² In the platform society decentralization has become the latest ideological counternarrative which like the Californian Ideology positions itself as

¹¹⁸ World Wide Web Consortium, "ActivityPub," accessed February 20, 2024, <https://www.w3.org/TR/activitypub/>.

¹¹⁹ Hangwoo Lee, "'No Artificial Death, Only Natural Death': The Dynamics of Centralization and Decentralization of Usenet Newsgroups," *The Information Society* 18, no. 5 (2002): 365, <https://doi.org/10.1080/01972240290108177>.

¹²⁰ Lee, "'No Artificial Death, Only Natural Death," 363.

¹²¹ For example, Bitcoin which in 2015 organized a conference where seven miners showed up who collectively owned more than 50% of the mining nodes in the network, making the decentralized token quite centralized (Schneider, 2017, p. 279.).

¹²² Nathan Schneider, "Decentralization: An Incomplete Ambition," *Journal of Cultural Economy* 12, no. 4 (July 4, 2019): 280-281, <https://doi.org/10.1080/17530350.2019.1589553>.

counter/critical culture defined as “winning the battle of ideas among large numbers of people.”¹²³ However, in practice decentralization is an agnostic term as both capitalists and communists can support the same decentralization project for very different reasons.¹²⁴

Despite decentralization in technology there is a trend towards recentralization.¹²⁵ For a truly decentralized system there should be a degree of hierarchy from the top-down to enabling freedom from the bottom-up.¹²⁶

¹²³ Lucien, “Global Anarchism and Syndicalism: Theory, History, Resistance,” 105.

¹²⁴ Schneider, “Decentralization: An Incomplete Ambition,” 280.

¹²⁵ Schneider, “Decentralization: An Incomplete Ambition,” 277.

¹²⁶ The network has to be able to effectively coordinate to protect itself from centralizing forces.

Methodology

In the methodology section I first discuss media archaeology as a theory which provided a critical lens through which ‘new’ and ‘old’ are constructed, then I discuss how this is operationalized and offer key analytical concepts. Finally, I substantiate the corpus on which these concepts are applied to answer the formulated research questions.

Media Archaeology

Every ‘old’ technology was once ‘new’, its conception as new reveals not only about the object in question but also about the thing that is now old. Furthermore, it always serves an ideological purpose. According to Imar de Vries, the myth that every media and technological innovation is part of an uninterrupted line of succession endures, capitalized on by commercial companies who use such narratives to create hype for their ‘new’ innovation.¹²⁷ According to Erkki Huhtamo and Jussi Parikka the latest ‘new’ is a canonized narratives construction revealing ideological positions.¹²⁸ To critically examine these narratives media archaeologists, realize that “dead ends, losers, and inventions that never made it into material product have important stories to tell.”¹²⁹

Media archaeology uses a configuration of diverse methods to challenge dominant narrative about past-to-present developments. Principally inspired by the work of Michel Foucault whose archaeological examination of the relationship between science and knowledge have shown how ‘science’ and ‘knowledge’ are ideological and *discursive formations* which change over time.¹³⁰ De Vries defines technology as the way to move towards wholeness and completeness, relying on déjà vu: the repetition of deeply ingrained

¹²⁷ Imar O. de Vries, *Tantalisingly Close: An Archaeology of Communication Desires in Discourses of Mobile Wireless Media* (Amsterdam: Amsterdam University Press, 2012), 20, <https://doi.org/10.1515/9789048514915>.

¹²⁸ Huhtamo and Parikka, *Media Archaeology*, 3.

¹²⁹ Huhtamo and Parikka, *Media Archaeology*, 3.

¹³⁰ Michel Foucault, *The Archaeology of Knowledge* (New York: Pantheon Books, 1972), 185.

ways in which we think, talk, and write about new image and communicational technologies.¹³¹ In this research social media is critically examined with the goal to question its ubiquity and expose how it constructs how we think about the future, both in terms of dystopia and utopia.

Media Genealogy

Therein a *media genealogy* approach is taken which “focuses not so much on how such a media historical discourse *is* established, but rather on how it *became* established or *becomes* established.”¹³² This approach extends beyond the technical as it investigates the social cultural dimension of media which are in a state of flux.¹³³ Furthermore, the use of discourse to describe media technology from this perspective works well because it enables an investigation of the “ideas, practices and networks that together form a strategic power field for the emergence of technologies and media.”¹³⁴ In short, the discursive construction of media technologies can be better understood by reading against the grain of the common history of media (technologies) to give researcher insight into digital cultures and the socio-political state of media assemblages.

Critical Discourse Analysis

To operationalize the media genealogical approach, I use the Critical Discourse Analysis (CDA). Although this method of analysis has many variants, most reflect on the use of language and the way we use it to construct our social reality.¹³⁵ This means that such an approach adheres to a social constructivist view of reality wherein ‘power’ and ‘ideology’

¹³¹ De Vries, *Tantalisingly Close: An Archaeology of Communication Desires in Discourses of Mobile Wireless Media*, 19-20.

¹³² Apprich, *Technotopia*, 6, italics in original.

¹³³ Apprich, *Technotopia*, 7.

¹³⁴ Apprich, *Technotopia*, 7.

¹³⁵ Marianne W. Jorgensen and Louise Phillips, *Discourse Analysis As Theory and Method* (London, United Kingdom: SAGE Publications, Limited, 2002), 1, <http://ebookcentral.proquest.com/lib/uun1/detail.action?docID=343958>.

play key roles.¹³⁶ Discourse theory dismisses positivist and sweeping universalizing theories of reality, rather it adopts a local and nuanced approach which analyses how language is used and what it reveals about how power works. Social context plays a crucial role in shaping communication and its interpretation. Language as a meaning-making device can offer insight into processes of power and knowledge and teach us something about ourselves, because it is rooted in contextual (social) practices which reveal culture and ideology.

In this research Norman Fairclough's CDA is adopted. In this method "discourse is in a dialectical relationship with other social dimensions"¹³⁷ Discourse is simultaneously constituted and constitutive of identities, relations, knowledge and meaning. Fairclough developed a three-dimensional model to capture the way in which a text (written or spoken) is constituted and constitutive of discursive practice (expected modes of communication genre etc.) and how this dialectically constituted a wider social practice. This model, shown in figure 3, shows how language consists of a layered meaning with a core of (i) *text*, spoken or written, situated in (ii) the *discourse practice* which shows how it is interpreted, and this creates/created by the wider (iii) *sociocultural practice*.¹³⁸ The dialectical nature of language and meaning is brought to the fore in this model and is heavily influenced by ideology.

¹³⁶ Jorgensen and Phillips, *Discourse Analysis As Theory and Method*, 4-5.

¹³⁷ Jorgensen and Phillips, *Discourse Analysis As Theory and Method*, 79.

¹³⁸ Fairclough, *Critical Discourse Analysis: The Critical Study of Language*, 132.

Ideology is defined as the “constructions of meaning that contribute to the production, reproduction and transformation of relations of domination.”¹³⁹ This understanding can be used to gain insight into how power works in society through the concept of “hegemony” which is the process of negotiation and domination from which a society’s broadly accepted definition of meaning arises.¹⁴⁰ Discursive struggles resemble the changing or reproducing of social reality influenced by power.¹⁴¹ Not all discourses are equal, for example anti-immigrant discourse is more widely supported than a “no border network” discourse, but both intersect through interdiscursivity resulting in hegemony.¹⁴² Hegemony simply means one discourse enjoys more power than the other, and works to reproduce or change (social) reality i.e. by electing politicians whose rhetoric caters to it.

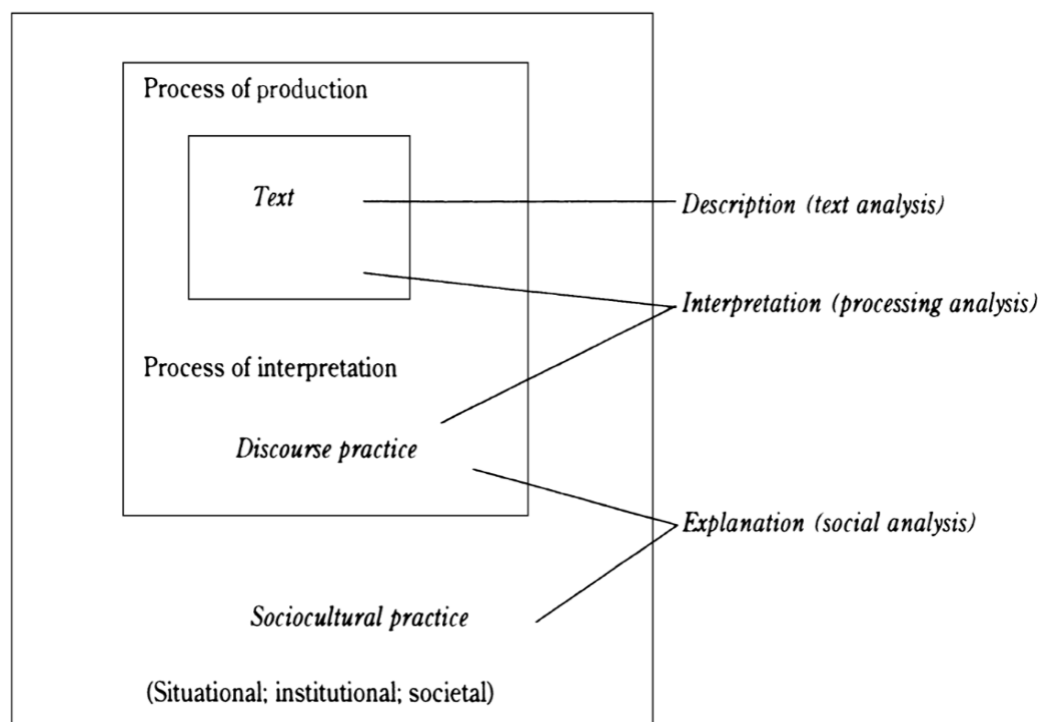


Figure 3. Norman Fairclough’s three-dimensional model.

¹³⁹ Jorgensen and Phillips, *Discourse Analysis As Theory and Method*, 90.

¹⁴⁰ Jorgensen and Phillips, *Discourse Analysis As Theory and Method*, 92.

¹⁴¹ Jorgensen and Phillips, *Discourse Analysis As Theory and Method*, 11.

¹⁴² Fairclough, *Critical Discourse Analysis: The Critical Study of Language*, 94-96.

Corpus

The corpus has been gathered based on Fairclough's three-dimensional model with the goal to capture the way in which Mastodon demonstrates its ethos, keeping an eye on historical precedent, and how the Fediverse's sociotechnical imaginary of alternative social media is constructed. To achieve this the corpus consists of three parts which correspond to the three levels of Fairclough's model. This is explained below and shown in table 1, the analysis follows this same structure.

First, from the Mastodon website JoinMastodon.org, the homepage and server covenant are analysed followed by eight blogs. This captures the ethos demonstrated by Mastodon and pertains to Fairclough's *text* and *discourse practice*. Second, in analyses of Usenet *Wired* was commonly cited as illustrating the Californian ideology of the time.¹⁴³ To mirror this for the contemporary a selection of key articles from *Wired* and *The Verge* have been analysed to illustrate the contemporary discursive struggle in the creation of the sociotechnical imaginary of the Fediverse. These elements refer to the *discourse* and *sociocultural practice* by Fairclough.

Third, institutional, ideological, and media genealogical sources have been collected to answer how Mastodon's ethos and the Fediverse's sociotechnical imaginary are constructed. These sources like the declaration of cyberspace for, the W3C institute which 'recommends' protocols, and one article on Usenet illustrating how it is 'dead', provide key context to interpret and analyse the *sociocultural practice* of contemporary social media, and round out the analysis with media genealogical insights.

¹⁴³ Bory, *The Internet Myth: From the Internet Imaginary to Network Ideologies*, 17; Gillespie, *Custodians of the Internet*, 21.

Title	Author	Date
Mastodon's Ethos		
Homepage Mastodon	Mastodon	
Mastodon server covenant	Mastodon	
<i>Blogs</i>		
This Isn't About Social Media. This is About Control.	Mastodon - Tremaine Fiske	February 19, 2018
Why ActivityPub is the future	Mastodon - Eugene Rochko	June 27, 2018
Cage the Mastodon	Mastodon - Eugene Rochko	July 6, 2018
Why does decentralization matter?	Mastodon - Eugene Rochko	December 30, 2018
Introducing the Mastodon Server Covenant	Mastodon - Eugene Rochko	May 16, 2019
Gab switches to Mastodon's code	Mastodon - Eugene Rochko	July 4, 2019
Trump's new social media platform found using Mastodon code	Mastodon - Eugene Rochko	October 29, 2021
What to know about Threads	Mastodon - Eugene Rochko	July 5, 2023
The Sociotechnical Imaginary of the Fediverse		
<i>Wired</i>		
How to Get Started on Mastodon	Wired - Justin Pot	November 16, 2022
The Hidden Dangers of the Decentralized Web	Wired - Jessica Maddox	May 19, 2023
<i>The Verge</i>		
2023 in social media: the case for the fediverse	The Verge - David Pierce	December 19, 2023
Can ActivityPub save the internet?	The Verge - David Pierce	April 20, 2023
Key Ideological, Institutional and Archaeological Elements		
<i>W3C Institution</i>		
Keynote address by Tim Berners-Lee	Tim Berners-Lee	June 8, 2016
Vision for W3C	W3C	October 26, 2023
<i>Usenet</i>		
R.I.P Usenet: 1980-2008.	PCMAG - Sacha Segan	July 31, 2008
<i>Declaration of cyberspace</i>		
A declaration of independence of cyberspace	John Perry Barlow	February 8, 1996
20 years since cyberspace	Wired - Andy Greenberg	February 8, 2016

Table 1. *Corpus, full table in appendix.*

Analysis

In this analysis I answer the research question: How does the ethos demonstrated by Mastodon reflect historical precedents and contribute to the counter-hegemonic struggle of the Fediverse to construct a sociotechnical imaginary of alternative social media? Broken down into three subquestions which are answered in distinct sections. First, I analyse Mastodon's ethos, followed by an analysis of the two leading media technology outlets who have reported on Mastodon to outline the sociotechnical imaginary constructed by the Fediverse. Finally, I analyse ideological and institutional sources in this sociotechnical imaginary to reflect on the media genealogical element.

Mastodon's Ethos

This section examines the corpus material directly sourced from Mastodon to answer the first subquestion: What are the defining elements of Mastodon's ethos, and how do they trace back to earlier experiments in decentralized communication and networking, such as Usenet?

JoinMastodon.org

Initially, Mastodon distinguishes its services through comparison with CSM. Attested to by the fact that the first claim one sees on the webpage, joinmastodon.org, is: "Social networking that's not for sale."¹⁴⁴ Since Twitter's takeover, Mastodon has been getting more attention from mainstream audiences. As such Mastodon's ethos needs to be carefully introduced as the mainstream audience has a contextual understanding of social media that stems primarily from free but commercial, data extractionist platforms.¹⁴⁵ However, this omission is noticed through friction because ASM is not as seamless as CSM.¹⁴⁶ Its principal

¹⁴⁴ Mastodon, accessed March 10, 2024, <https://joinmastodon.org/>.

¹⁴⁵ Srnicek, "The Challenges of Platform Capitalism: Understanding the Logic of a New Business Model," 255.

¹⁴⁶ Zulli, Liu, and Gehl, "Rethinking the 'Social' in 'Social Media,'" 1195.

distinguishing features are that it is open source and decentralized which can only be presented when users have a more drawn in, and on this page scroll down, leading to the broader sociotechnical imaginary of the Fediverse for a decentralized Internet.

Key difference with CSM is that the Mastodon organization only provides the code for the social media which any organization or individual can run on their own server. Currently it also offers an easy entry point to the federated servers by hosting its own Mastodon server and maintaining a list of approved servers which users can join. Furthermore, the fact that there is no centralized server means that moderation is easier and for instance allows targeted hate to be limited. This in part has to do with the moderation being local instead of global. The moderation for a social network is extremely important because the moderation policy determines the platform experience.¹⁴⁷ From Mastodon's self-presenting ethos it appears the alternative platform design fosters a different social environment, concurring with Zulli, Liu, and Gehl.¹⁴⁸

The different social environment aligns with the FLOSS ideology, and its initial core audience of primarily left-leaning progressives. Mastodon's features have differentiated from the liberal CSM and primarily offered extra moderation protection features for marginalized groups such as LGBTQ+. From this we can also see that Mastodon resists the Californian Ideology's belief in the purifying effects of technology, the fact that different groups have 'equal' access to a network does not remove the pre-existing inequalities in societies. This resonates with the assertion by Castells and van Dijk that digital structures have begun to operate as the social structures of society.¹⁴⁹ According to Zulli, Liu, and Gehl CSM cannot provide a fair and equal plane to connect, the marginalized can only exist on equal footing outside of the commercial.¹⁵⁰

¹⁴⁷ Gillespie, *Custodians of the Internet*, 21.

¹⁴⁸ Zulli, Liu, and Gehl, "Rethinking the 'Social' in 'Social Media'," 1200.

¹⁴⁹ Castells, "Toward a Sociology of the Network Society," 695.

¹⁵⁰ Zulli, Liu, and Gehl, "Rethinking the 'Social' in 'Social Media'," 1199.

However, this relationship is not one-directional because changing network topology does not directly change social structures. Corresponding to the different sentiments documented across time, Mastodon seems to remedy the techno-optimism of the network society with the platform scepticism of the platform society.¹⁵¹ Paradoxically, the struggle to maintain the ability to close the network is strongly present in open-source applications. In Mastodon's philosophy, 'people' can decide to close their network, keeping unwanted individuals and corporations out. A practice that cannot be done, for example, in a private group on Facebook where data collection and advertisements remain. A closed open-source network reflects sentiments of the early network society's quest for "established" channels, functioning as a source for "independent information" which was "helpful in search for the truth."¹⁵²

Centralized CSM model has an established hegemony on social networking, mainstream audiences have a hard time imaging alternatives.¹⁵³ Mastodon contests this through its decentralized design and non-profit structure. The fact that it produces open-source software means that anyone can create, add, or alter Mastodon's software, even those who do not share the same values as Mastodon. For example, the alt-right group *Gab* and the social network *Truth Social* by Former United States president Donald Trump used Mastodon's software. This has been challenging for Mastodon because its core audience consists primarily of marginalized groups resulting in tension which has forced it to nuance its activistic ethos, these tensions will be discussed in more detail in the blog section.

Blogs

¹⁵¹ Van Dijck, Poell and de Waal, *The Platform Society*, 25-26.

¹⁵² Hauben, *Netizens*, 56.

¹⁵³ Anderlini and Milani, "Emerging Forms of Sociotechnical Organisation," 170-171.

The blogs released by Mastodon, primarily written by the founder Eugene Rochko, provide further insight into the distinguishing guiding beliefs (ethos) of Mastodon as an ASM to CSM.

This Isn't About Social Media. This is About Control.

This blog illustrates the role that social media should play in our society is that of oral storytelling but digitalized. Representing “a living discourse of our personal histories as it happened.”¹⁵⁴ Because social media is ephemeral, we can tell stories and create our own narrative and identity.¹⁵⁵ Traditionally this happened in a small community, but on CSM this narrative is increasingly shaped by elements decided on by a global corporate entity. Resulting in a gradual loss of agency and autonomous digital storytelling which replaced the promise of participatory media “with a structured, gamified facsimile.”

Algorithms blend personal with corporate content, like ads, until they are indistinguishable. The linear timeline has been replaced with an algorithmic one where instead of seeing, and engaging, with content you select “you’re talking around the sources of content you’re being told to see, read, and like.” Mastodon distinguishes itself by enabling users to create their own social media experience lowering abstraction and increasing friction.¹⁵⁶ Ultimately, to fully regain agency on social networks, like Mastodon intends, a decentralization from top-to-bottom is required; a new sociotechnical imaginary: the Fediverse enabled by ActivityPub.

Why ActivityPub is the Future

¹⁵⁴ “This Isn’t About Social Media. This is About Control.” Mastodon published February 19, 2018, <https://blog.joinmastodon.org/2018/02/this-isnt-about-social-media.-this-is-about-control/>.

¹⁵⁵ José van Dijck, “‘You Have One Identity’: Performing the Self on Facebook and LinkedIn,” *Media, Culture & Society* 35, no. 2 (March 1, 2013): 212, <https://doi.org/10.1177/0163443712468605>.

¹⁵⁶ Zulli, Liu, and Gehl, “Rethinking the ‘Social’ in ‘Social Media,’” 1199.

ActivityPub is the protocol that Mastodon servers use to communicate, and “the basis of the ‘federation’” or the Fediverse which is “the future.”¹⁵⁷ Through this protocol social media can work like e-mail. Specifically, ActivityPub decouples social media from the social graph, users choose a server that hosts their social graph but can switch to another with their connections. On CSM the social graph is the crucial piece of information that enables a lock-in effect. Furthermore, this decentralization enables diverse platforms to be accessed through a central interface. Like HTTP which structured information on the Internet, ActivityPub makes social graphs accessible/interoperable with diverse social media. The Fediverse ecosystem of federated applications like Peertube, Pleroma, and now even Meta is the first step towards a sociotechnical imaginary of social media based on interoperability instead of lock-in.

Cage the Mastodon

In many ways Mastodon creates a social media experience that is more basic and returns to traditional storytelling before CSM. The moderation experience is decentralized as every server running Mastodon is free to have their own moderation team leading to a higher ratio of ‘moderator’ per users compared to CSM. Mastodon has removed several normal features like “arbitrary search” which results in “People and brands ... to self-insert into conversations they were not invited to.” Another deliberate lack of feature compared to CSM is quote messages, one wherein a user indirectly responds to a message which means “conversations become performative power plays.” Creating a social network experience reminiscent of a campfire conversation instead of a public debate hall.

The decision for a decentralized instead of a distributed model of peer-to-peer design was made because users can form blocks through servers and decide who to network with.

¹⁵⁷ “Why ActivityPub is the future,” Mastodon published June 27, 2017, blog.joinmastodon.org/2018/06/why-activitypub-is-the-future/.

Distributed means “everyone would have to fend for themselves, without the pooled resources.”¹⁵⁸ Mastodon has four granular options for privacy/visibility on the network compared to CSM’s binary public/private. These key design decisions protect users across the federation from scrutiny and impersonal attacks common on CSM’s global platforms.

Why Does Decentralization Matter?

“Decentralization is biodiversity of the digital world,” one which enables a vibrant digital culture and offers resistance and a balance of power. The first and foremost priority of CSM is to generate profit and work with established powers rather than against.¹⁵⁹ Rochko states:

There is a reason why Facebook executives rejected the \$1 per year business model of WhatsApp after its acquisition: It is sustainable and fair, but it does not provide the same unpredictable, potentially unbounded return of investment that makes stock prices go up.

Decentralization implies a fairer and transparent business model compared to CSM indirect data gathering and monetization. Furthermore, decentralization distributes power and limits the potential for surveillance because global actors struggle to monitor several smaller campfires. Ultimately, decentralization from top to bottom is crucial because it means a network or community can determine their own direction similar to Usenet’s self-organization.

Introducing the Mastodon Server Covenant

However, Mastodon is still a project primarily being developed by its foundation and to create a safe and decentralized experience, two values often at odds with each other, to

¹⁵⁸ “Cage the Mastodon,” Mastodon published July 6, 2018, <https://blog.joinmastodon.org/2018/07/cage-the-mastodon/>.

¹⁵⁹ Edward S. Herman and Noam Chomsky, *Manufacturing Consent: The Political Economy of the Mass Media* (New York: Pantheon Books, 1988), 2.

resolve tension the server covenant was introduced. On the website servers are listed which have committed to “actively moderating against racism, sexism, homophobia and transphobia.” It does not limit others because “Mastodon is released as free software” but that is where “obligations of neutrality end.”

Gab switches to Mastodon's Code

In early 2019 this neutrality was further tested as Gab, an alt-right radical social media platform, after having been deplatformed several times, took its refuge on Mastodon.¹⁶⁰

Rochko has dismay for Gab, but relented that the AGPLv3 software license “allows anyone to use it as they see fit as long as they keep the same license and make their modifications public.”¹⁶¹ Interestingly the blog post mentions that “as a truly decentralized network, each Mastodon server operator has to make the call on their own.” According to de Winkel, servers quickly self-organized to block Gab en masse.¹⁶² All in all, the decentralized design of Mastodon means they must rely on collective aspiration to coordinate against ideological opponents.

Trump's new Social Media Platform Found Using Mastodon Code

Mastodon’s source code was used for Donald Trump’s *Truth Social*. The AGPLv3 license “which requires any over-the-network service using it to make its source code and any modifications to it publicly accessible.”¹⁶³ Truth Social had used the code without publicizing it showing how Mastodon’s code was used by “people so antithetical to our values.”

¹⁶⁰ De Winkel, “Fringe Platforms,” 11.

¹⁶¹ “Gab switches to Mastodon's code,” Mastodon, published July 4, 2019, <https://blog.joinmastodon.org/2019/07/statement-on-gabs-fork-of-mastodon/>.

¹⁶² De Winkel, “Fringe Platforms,” 125-126.

¹⁶³ “Trump's new social media platform found using Mastodon code,” Mastodon, published October 29, 2021, <https://blog.joinmastodon.org/2021/10/trumps-new-social-media-platform-found-using-mastodon-code/>

What to know About Threads

When Meta launched its competitor to Musk's X and announced that it will integrate ActivityPub, FLOSS communities were quite divided. Many initially joined Mastodon to leave CSM owned by billionaires. Debates arose around the ability of Meta to overwhelm smaller Fediverse servers, and whether Meta will apply the tactic of "embrace-extend-extinguish" which described by The Verge is:

Step one: start an app on an open protocol, grow quickly because it's easy to adopt.

Step two: add new, platform-specific features, usually while complaining that the open protocol isn't powerful enough to keep up. Step three: bail on the open protocol altogether, saying it simply didn't serve your users' needs anymore. Microsoft did it with the early Internet; Google Talk did it to the open XMPP messaging standard.¹⁶⁴

However, this time will be different because "ActivityPub enjoys the support and brand recognition of Mastodon." Because Mastodon and ActivityPub support one another they can resist large global corporations. Meta's entry into the federation is like a large server joining, users are free to determine whether their server federates with Meta. Ultimately, interoperability between Meta and Mastodon through ActivityPub is a "validation of the movement towards decentralized social media" and "a clear victory for our cause, hopefully one of many to come."

Social Media Anarcho-Syndicalism

The decentralized model was deliberately chosen over a distributed one because it enables groups to band together, reflecting a philosophy and ideology of social media anarcho-

¹⁶⁴ David Pierce, "Can ActivityPub save the internet?" The Verge, April 20, 2023, www.theverge.com/2023/4/20/23689570/activitypub-protocol-standard-social-network.

syndicalism. Decentralization and interoperability are key to Mastodon's model and sociotechnical imaginary for ASM, but it only works when users can download, manage, and transfer their social graph which requires cooperation across the Fediverse. This self-organization shapes the imaginary and allows poaching from Mastodon's code without subscribing to the FLOSS values.¹⁶⁵ In a distributed anarcho-model users are isolated and vulnerable to corporations whereas the decentralized anarcho-syndicalism federation ensures a social economy based on democratic values while offering more protection against corporations.

Mastodon's ethos affirms these through design decisions such as a lack of arbitrary search to avoid performative power play. The ethos blends anarcho-syndicalism with FLOSS values such as inclusion, to offer safe online spaces for vulnerable communities. Further reflected in the chosen business model which specifically avoided interested angel investors, and instead distributed server overhead costs across the community. This decentralization also alleviates the pressure of governance rules on Mastodon because they do not control all user data. This also means that Mastodon does not present itself as neutral or objective, identified by Chomsky and Edwards as (indirect) elitist control.¹⁶⁶

Taking the perspective of Galloway that protocols are a set of agreed-upon languages it becomes clear that the way a protocol is incorporated into software is subject to the same discursive power struggles as language itself.¹⁶⁷ The fact that Donald's Trump Truth Social has used Mastodon's code despite the anti-elitist orientation of Mastodon reveals a vulnerability to ideological appropriation. ActivityPub seems similarly vulnerable to the embrace-extend-extinguish method. The ideological and discursive friction the sociotechnical

¹⁶⁵ De Winkel, "Fringe Platforms," 126.

¹⁶⁶ Herman and Chomsky, *Manufacturing Consent: The Political Economy of the Mass Media*, 303.

¹⁶⁷ Galloway, *Protocol: How Control Exists after Decentralization* XVI; Jorgensen and Phillips, *Discourse Analysis As Theory and Method*, 77.

imaginary is also playing out at the level of coding where the code which is more successful will be able to exert more influence.¹⁶⁸

Finally, Brembs wrote that such infrastructure could also revolutionize other areas like academic publishing which has become plagued with for profit companies.¹⁶⁹ However, many critiqued Mastodon for being hard-to-use as well. In response Mastodon sacrificed some of its decentralization by making its own server Mastodon.social the default, showing a change in ideological conviction. A painful move for a social medium whose ethos is decentralization in another blog Rochko explained:

You may be asking, how a default server option furthers decentralization. We believe it's important for Mastodon to be good as a product on its own merits, and not just because of its ideology.¹⁷⁰

The engagement in the counter-hegemonic discursive struggle meant that the purist conception of decentralized social media was sacrificed in favour of a more streamlined user experience.

The Sociotechnical Imaginary of the Fediverse

Now that a thorough overview of Mastodon's ethos has been made, the analysis proceeds to the subquestion: How does the Fediverse construct a sociotechnical imaginary of alternative social media? Answered by analysing the wider discourse of dichotomous reporting between Wired and The Verge.

Wired

¹⁶⁸ Jorgensen and Phillips, *Discourse Analysis As Theory and Method*, 6.

¹⁶⁹ Brembs et al., "Mastodon over Mammon: Towards Publicly Owned Scholarly Knowledge," 3.

¹⁷⁰ "A New Onboarding Experience," Mastodon, published May 1st, 2023, <https://blog.joinmastodon.org/2023/05/a-new-onboarding-experience-on-mastodon/>.

The Media company Wired has in the past engaged in techno-optimist rhetoric fuelling the Internet libertarian frenzy and Californian ideology.¹⁷¹

How to Get Started on Mastodon

Mastodon and ActivityPub are coded, designed, and populated by marginalized communities to overcome the flaws of CSM and use it for real connection. Framed as a liberation from CSM they are “not a company at all. It’s a community.” Mastodon shares the strenuous accessibility of crypto as well as the orientation of technology as democratic, and of course the microblogging of Twitter. However, beyond the surface level the constructed sociotechnical imaginary is different from Twitter because on Mastodon “you’re a person, here to connect with people.” On Mastodon you are not a ‘user’ but a ‘person’ it constructs a different more personal imaginary of ASM through the rejection of a narrative established by CSM.¹⁷²

This imaginary goes beyond semantics as part of its core idea to decentralize the servers, and data, from the developers leading to a big hurdle in the onboarding process. Mastodon is not easy or straightforward; instead, it reintroduces a personal element that has been eradicated by automated platforms.¹⁷³ Managing your own data is a responsibility and a struggle and perhaps it is something that the mainstream public will never fully embrace but it is through data discomfort that Mastodon constructs the imaginary understanding of the power users give to CSM. Connecting to Bauman et al.¹⁷⁴ and Fuchs,¹⁷⁵ it appears that Mastodon is doing the public work to create awareness of the reproduction of self-surveillance. The decentralization of servers reintroduces an element of conscious trust into the social media to person relationship.

¹⁷¹ Apprich, *Technotopia*, 35.

¹⁷² Mejjias and Couldry, “Datafication,” 7.

¹⁷³ Van Dijck, Poell and de Waal, *The Platform Society*, 4.

¹⁷⁴ Bauman et al., “After Snowden,” 142.

¹⁷⁵ Fuchs, “New Media, Web 2.0 and Surveillance,” 138.

This analysis is confirmed by the reference to the historical precedent as it “was never supposed to be like it is now, a service we use to log in to a handful of social networks.” Before this the Internet was a decentralized mess, “but there was an authenticity to it.” Gansing found how networks constantly remediate the old in the new,¹⁷⁶ drawing on a déjà vu feeling.¹⁷⁷ A time where tinkerers created their own RSS readers, blogs, and participated in numerous small communities instead of engaging with a small number of “dopamine-optimized apps that make most of us depressed, anxious, and angry while a few Silicon Valley types get very, very rich.” The media power of these apps has normalized surveillance capitalism and made it in effect invisible, Mastodon makes it visible again, through ethos and design.¹⁷⁸

The Hidden Dangers of the Decentralized Web

While decentralization is seen as a solution to surveillance capitalism this narrative also frames platforms which have taken over key tasks in society as “questionable established institutions.”¹⁷⁹ Decentralized alternatives profit from getting people to distrust institutions which also feeds conspiracy, meaning users on decentralized platforms bring a “distrust-qua-conspiracy.” Citing professor David Golumbia who mapped how many beliefs of “die-hard proponents of bitcoin depend on far-right thinking.” ASM’s sociotechnical imaginary for taking back control is also appealing not only for FLOSS ideology but can also be “coded as ‘Jewish control,’ playing into long-standing anti-Semitic tropes” according to Wired. De Winkel finds that open-source technology can be appropriated by those not aligned with the coder’s values.¹⁸⁰

¹⁷⁶ Gansing, "Introduction: Network Means and Ends," 9.

¹⁷⁷ De Vries, *Tantalisingly Close: An Archaeology of Communication Desires in Discourses of Mobile Wireless Media*, 19-36.

¹⁷⁸ Couldry and Curran, “The Paradox of Media Power,” 7.

¹⁷⁹ Van Dijck, “Datafication, Dataism and Dataveillance,” 206.

¹⁸⁰ De Winkel, “Fringe Platforms,” 126.

As such decentralization can also lead to more siloed conspiracy thinking instead of less. The self-organizing capabilities of decentralized social media means that servers can decide to block other servers, “but it can also be used to hide things you disagree with or don’t want to see.” Citing an article by *the Desk* where 200 servers reportedly blocked another server named *journahost* because they reportedly featured “journalist who engage in self-promotion or so called ‘surveillance capitalism’”¹⁸¹ This as well as the fact that CSM are “are certainly not without issue, it is hard to deny the convenience of their established existence.”

We can, and should, always strive to build better, more accessible, and more inclusive technology. But decentralizing the web into walled-off silos seems unlikely to accomplish this goal.

Overall, Wired has a critical view which questions Mastodon as the solution to the challenges of CSM because it has also led to “a rise in conspiratorial thinking.”

The Verge

2023 in Social Media: The Case for the Fediverse

Whereas Wired doubts decentralization as another version of creation siloes, The Verge takes the perspective that “we’ll be better off with a hundred different apps for Snapchat or Instagram or X instead of just one.” By unbundling social media, we can create a platform “built for humans and not advertisers” bigger than any CSM but not controlled by any company: the Fediverse. This unbundling results in a lower abstraction¹⁸² and a clearer

¹⁸¹ Matthew Keys, "Groups blocking journalists on Mastodon reaches 200," *The Desk*, March 26, 2023, <https://thedesk.net/2023/03/mastodon-server-journahost-200-blocked/>.

¹⁸² Zulli, Liu, and Gehl, “Rethinking the ‘Social’ in ‘Social Media’,” 1193.

visibility of media power.¹⁸³ In this we clearly see the construction of sociotechnical imaginary, a world wherein humans instead of advertisers profit from social media.

In this imaginary, decentralization does not have to be anti-capitalist like Mastodon, and instead can be a “truly free market approach to social networking” giving way for the next trillion-dollar company to be built in the Fediverse. This keeps the capitalist orientation but improves it for users and society since it would negate all the negative effects associated with lock-in, resolving the inefficiencies of proprietary CSM. In the platform society paradigm closed network innovation requires software to be constantly developed from scratch because it infringes on copyright. According to Galloway there is tremendous economic and societal potential hidden within the protocol.¹⁸⁴ Unlocking this hidden potential is at the heart of the sociotechnical imaginary the Fediverse constructs, with a focus on spreading the costs and the benefits of social networks.

Can ActivityPub save the Internet?

There is a new frenzy to join the Fediverse by Companies like Tumblr, Flipboard, Medium, Mozilla, and of course Meta, however these companies know that “the future isn’t Mastodon but what it represents: a scaled ActivityPub-based social platform.” ActivityPub enables diverse social networks to network, leading to the Fediverse making it more than the sum of its parts, resulting in “a network of networks.”¹⁸⁵ Decentralized social media creates a utopian sociotechnical imaginary of network that is even larger than CSM, making connection even more hyperconnected than it already was. This is “a new-old” narrative which draws back to the “monumentality of ActivityPub [which] is as big a deal as HTML was back then” while implying that the ‘new’ network will be bigger and better.

¹⁸³ Couldry and Curran, “The Paradox of Media Power,” 4.

¹⁸⁴ Galloway, *Protocol*, XVI.

¹⁸⁵ Anderlini and Milani, “Emerging Forms of Sociotechnical Organisation,” 169.

Perhaps the trigger of Musk acquiring Twitter was the wakeup call that will “have saved the idea of an open social Internet.” The social media landscape has been dominated for the last 15 years with a trend towards the algorithmic which was not truly innovative as it has quickly become the norm.

To decentralize social networking is to completely separate the user interface from the underlying data. Any time you sign up for a new social app, you won’t have to rebuild your audience or re-find all your friends; your whole following and followers list come with you. Those things should be part of the *Internet*, not part of an *app*.

Companies have the option to develop their own software to federate with ActivityPub, creating a new way to connect and communicate to stakeholders. Those betting on the Fediverse think it is “foolish to give your audience and content to a platform that could simply disappear”. Ultimately, the primary reason to be on the Fediverse if it works is to have your own domain, your own “identity” one which can be used for everything digital and cannot be owned by one company.

The Verge argues that the Fediverse is the ultimate open market, meaning that a ton of companies can earn money, despite it being antithetical to Mastodon’s values. In this market incumbent CSM have little incentive to “play nice.” Despite these threats it appears that “after nearly two decades of fighting for this vision of the Internet” the Fediverse is winning. However, “the change they imagine still requires a lot of user education ... but the fundamental shift, from *platforms to protocols*, appears to have momentum in way it never has before.”

Wired rhetorically frames platforms as an institution like banks. Who fulfil a nuts-and-bolts service for society. This framing does not quite work for big tech, as their platforms

are *businesses* who have quietly taken over roles belonging to democratic institutions.¹⁸⁶

Wired argues that decentralizing the web results in more siloes, making the Web less accessible, this concurs with mainstream liberal ideology wherein convenience and accessibility are key values.¹⁸⁷

The Verge establishes a positive view of decentralized ASM, framing it as something that is more efficient and offers a fair market dynamic instead of the monopolistic innovation from big tech. In that sense it adheres to the sociotechnical imaginary of decentralization as key to a diverse and healthy ecosystem. The metaphor of the decentralized Web as biodiversity invokes parallels to climate activism framing the Web as nature that needs to be protected. The emphasis that man-made technology carries some natural right is present in both ideologies.

The main contrast between Wired is that it does not believe there is money to be made in the Fediverse while The Verge does. It shows that Mastodon is more libertarian-socialist instead of liberal like both the media outlets. Both focus more on the protocol than on Mastodon itself because the sociotechnical appeal of the Fediverse is very strong. On the one hand, Wired understands the appeal but dismisses its premise while on the other hand The Verge portrays a déjà vu or “new-old” vision of the Fediverse.¹⁸⁸ Mastodon constructs a sociotechnical imaginary wherein your digital identity is more rudimentary, a DIY social media, one wherein the focus has shifted from platforms to protocols, whether this protocol society becomes a reality remains to be seen.

¹⁸⁶ Van Dijck, Poell and de Waal, *The Platform Society*, 2.

¹⁸⁷ As an example, they use the phenomenon where journalist was blocked by a server because they disagreed. Although the same happens on CSM but then when people get blocked, they have little to no possibility to appeal or find another space on the platform.

¹⁸⁸ De Vries, *Tantalisingly Close: An Archaeology of Communication Desires in Discourses of Mobile Wireless Media*, 17-20.

The Ideological Struggle of Alternative Social Media

Finally, this section answers the subquestion: How does the sociotechnical imaginary of alternative social media contest the hegemony of corporate social media? This is done by taking a critical look at the ideological, institutional and media genealogical aspects of Mastodon.

Ideological, Institutional, and Archaeological Elements

When Mastodon launched in 2016 it presented itself as an alternative to CSM, one which was ‘new’ compared to the dominant Californian Ideology of tech/social media companies. Originally it ran on the open protocol *Ostatus* but switched to the open-source protocol *ActivityPub* in 2018 when W3C released it. According to Tim de Winkel, Mastodon’s early success came from its ability to rally diverse FLOSS communities to its cause.¹⁸⁹ The FLOSS ideology remained relatively unknown until Mastodon because communities supporting it mainly concentrated on niche technical protocols.¹⁹⁰ It appears that Mastodon’s initial success came from combination of a protocol developed by the authoritative W3C institution with a clear ideological alternative to CSM. Current reporting on it is mostly drawn to the Fediverse which it performs and creates an alternative sociotechnical imaginary of social media.

The W3C institution was founded by inventor of the WWW, Tim Berners-Lee, and develops open-source protocols that support their mission. According to their vision document: “W3C leads the community in defining a World Wide Web that puts users first, by developing technical standards and guidelines to empower an equitable, informed, and

¹⁸⁹ De Winkel, “Fringe Platforms,” 116.

¹⁹⁰ Aymeric Mansoux and Roel Roscam Abbing, "Seven theses on the Fediverse and the becoming of FLOSS," in *The Eternal Network*, eds. Kristoffer Gansing and Inga Luchs (Amsterdam: Institute of Network Cultures, 2020), 124-140.

interconnected society.”¹⁹¹ In this document, W3C reflect on the Web as the first protocol/platform built on top of the Internet to make sharing information easier. However, unintended consequences have “divided societies and incited hate” because “technology is not neutral; new technologies enable new actions and new possibilities”. In a keynote address, Berners-Lee recalls the time when the Web was ‘new’, and it was seen as a principally different space: *cyberspace*.¹⁹²

This is a reference to the (in)famous *declaration of cyberspace* by John Perry Barlow wherein he addresses the “Governments of the Industrial World, you weary giants of flesh and steel, I come from Cyberspace, the new home of Mind.”¹⁹³ This manifesto can be seen as the testament to the Californian ideology. The anti-state combined with the capitalist, the framing of future versus past, the elevation of personal liberty which is “naturally independent of the tyrannies you seek to impose on us.” At the time of writing, 1996, this created the idea that the accessible Web would create a ‘new’ world, one which could be separate from the old; one “where we can do everything right.”¹⁹⁴ This digital libertarian Internet manifesto made waves at the time and was decidedly influential in shaping the dominant ideology of the Internet. For Barlow the World Wide Web was owned by the community who can protect themselves:

Cyberspace does not lie within your borders. Do not think that you can build it, as though it were a public construction project. You cannot. It is an act of nature and it grows itself through our collective actions.¹⁹⁵

¹⁹¹ “Vision for W3C,” W3C, 26 October, 2023 <https://www.w3.org/TR/w3c-vision/>.

¹⁹² Tim Berners-Lee, "Keynote Address: Tim Berners-Lee – Re-decentralizing the web - some strategic questions," keynote speech, June 8, 2016, https://archive.org/details/DWebSummit2016_Keynote_Tim_Berners_Lee.

¹⁹³ John Perry Barlow, “A Declaration of the Independence of Cyberspace,” Electronic Frontier Foundation, January 20, 2016, <https://www.eff.org/cyberspace-independence>.

¹⁹⁴ Berners-Lee, "Keynote Address: Tim Berners-Lee – Re-decentralizing the web - some strategic questions."

¹⁹⁵ Barlow, “A Declaration of the Independence of Cyberspace.”

The mythological language paints the picture that the Internet was an inevitability, one which would always come to be so long as individuals had the freedom to experiment. Furthermore, it shows the Californian Ideology underlying the network society; the assumption and hope that the Internet/technology would liberate similar to the printing press.¹⁹⁶ The techno-utopianism that the Web would be “naturally independent of tyrannies” proved to be incorrect as capitalist corporations soon discovered that without state interference they could platformize the Internet into walled-off siloes, and utilize participation for profit instead of democracy.¹⁹⁷ Participation in closed online environments serves as the basis for the current system of surveillance capitalism.

In his 2016 keynote, Berners-Lee acknowledges that the Web has become platformized, or siloed into separate walled gardens and that we need to “*re-decentralize*” the Web.¹⁹⁸ Both Barlows and Berners-Lee believe in the power of technology to bring about social change and are critical of corporations that exploit cyberspace. The key difference is that Barlow remains anti-state while the W3C emphasises collaboration with governments to make the web more equitable and diverse. To that end, W3C outlines 11 operational principles: user-first, multi-stakeholder, diversity, consistent review, consensus, free to implement, *open participation*, *interoperability*, incubation, *avoid centralization*, and collaboration.¹⁹⁹ Terms like decentralization, open participation or interoperability are sufficiently vague that they can be superficially resolve (or obfuscate) ideological tensions.²⁰⁰ Similarly, Mastodon’s understanding of decentralization, interoperability, and FLOSS to construct a sociotechnical imaginary of social media is modelled after the nostalgic idea of the Internet as democratic.

¹⁹⁶ Hauben, *Netizens*, 297-299.

¹⁹⁷ Uluorta and Quill, "The Californian Ideology Revisited," 27.

¹⁹⁸ Berners-Lee, "Keynote Address: Tim Berners-Lee – Re-decentralizing the web - some strategic questions."

¹⁹⁹ W3C, “Vision for W3C.”

²⁰⁰ Schneider, “Decentralization: An Incomplete Ambition,” 280-281.

Finally, in the article R.I.P. Usenet, Sascha Segan recounts his personal experience of using Usenet as a 'Net Kid'. Emblematic for the current state of the Internet he writes "inconceivable in today's Web-fragmented marketplace, Usenet was where you went to talk."²⁰¹ At that time the Internet was more an idea than a reality, it could be anything; but it was not primarily a vehicle for business. As such Usenet was a free-for-all which worked and is "what the Web is missing nowadays: a genuinely public space, with unclear ownership." Usenet became outpaced by "glitz and glamour of MySpace" and diffuse with spam and illegal content and is mourned as "a Net that had one place to go, that everybody knew about, but nobody owned." Mastodon answers through its ethos and through the Fediverse's sociotechnical imaginary.

Berners-Lee and Barlow seek to rectify past mistakes, challenging the ambivalent neutrality of media power with a renewed optimism for a Web free from silos. Initiatives like the W3C have internalized Edward and Chomsky's critique of media companies as profit-driven entities perpetuating dominant ideologies, highlighting the non-neutrality of technology.²⁰² Further aligning with anarcho-syndicalism which contests the status-quo as oppressive.²⁰³ In essence, the evolution from Usenet to Mastodon reflects a broader societal shift, emphasizing the need for technology to empower the marginalized rather than control, and for media to serve the public over the private.

²⁰¹ Sascha Segan, "R.I.P Usenet: 1980-2008," *PCMag*, July 31, 2008, <https://www.pcmag.com/archive/rip-usenet-1980-2008-230383>.

²⁰² Herman and Chomsky, *Manufacturing Consent: The Political Economy of the Mass Media*, 300.

²⁰³ Lucien, "Global Anarchism and Syndicalism: Theory, History, Resistance," 104-105.

Conclusion

As this research has argued, to analyse an object like Mastodon requires a broader scope than just the present, because the ethos of Mastodon, and the sociotechnical are rooted in historical precedents and informed by ideological, institutional, and media genealogical elements. To that end, this conclusion discusses the key insights related the main question:

How does the ethos demonstrated by Mastodon reflect historical precedents and contribute to the counter-hegemonic struggle of the Fediverse to construct a sociotechnical imaginary of alternative social media?

While Mastodon will never be the “Twitter killer”²⁰⁴ the Fediverse might be. Mastodon’s ethos and those who believe it, share a vision for the future beyond commercial platforms ‘owning’ people’s data. Through the Fediverse a sociotechnical imaginary is constructed wherein technology²⁰⁵ empowers the marginalized, fosters community participation, and challenges the monopolistic tendencies of mainstream platforms, ultimately advocating for a more equitable and democratic Internet landscape. Overall, the sociotechnical imaginary of the Fediverse represents a nuanced response to the hegemony of CSM, wherein the ethos embodied by Mastodon reflects a historical lineage of decentralized communication and networking, evident in its commitment to FLOSS principles and top-down to bottom-up decentralization.

Top-down, because Mastodon organizes itself to be as inclusive and democratic as it can while recognizing that networks trend towards recentralization.²⁰⁶ To counter this, it has created a governance structure that ensures decentralization by publishing the code as open-source meaning that anyone who disagrees can fork it and start to improve it. This prevents a lock-in, making Mastodon vulnerable because it ensures the community can walk away.

²⁰⁴ Zulli, Liu, and Gehl, “Rethinking the ‘Social’ in ‘Social Media’,” 1198.

²⁰⁵ Jasanoff “Future Imperfect,” 20-22.

²⁰⁶ Schneider, “Decentralization: An Incomplete Ambition,” 277-278.

Ultimately, the governance structure shows a “benevolent dictator” style which is directly inspired by Netiquette²⁰⁷ culture from Usenet.²⁰⁸

Bottom-up, Mastodon decentralizes by basing itself on the ActivityPub protocol and releasing the code for open-source use. This protocol enables divergent services from across the Fediverse to network, ensuring that users can always find another home for their social network. Beyond decentralization it also frames social networking as a digital version of oral storytelling which reflects a historical sentiment, further deepened by encouraging users and organizations to host their own server.

Ideologically, Mastodon rejects the libertarian techno-optimism of the Californian Ideology²⁰⁹ by limiting the ability to network, it expands the depth of the connection. Arguably this is the strongest contrast to CSM: Meta’s purpose is to scale connectivity to network the globe.²¹⁰ In contrast, Mastodon's deliberate design choices, such as decentralized moderation, granular privacy settings and simplified features, foster a more intimate and community-oriented social media experience mimicking a campfire setting. By lowering abstraction, friction increases making hidden processes visible.²¹¹ Mastodon’s design echoes Usenet which ran on a decentralized self-organizing social economy rooted in democratic values; revealing its ideological orientation anarcho-syndicalism.²¹²

There are still differences and lessons that Mastodon has learned from Usenet despite sharing the anarcho-syndicalist orientation. Such as its approach to networks, whereas Usenet was distributed, Mastodon deliberately chooses for decentralization distributing media power to users.²¹³ Furthermore, the involvement of institutions like the World Wide Web

²⁰⁷ Hauben, *Netizens*, 63.

²⁰⁸ Lee, “No Artificial Death, Only Natural Death,” 365.

²⁰⁹ Uluorta and Quill, “The Californian Ideology Revisited,” 26-28; Van Dijck, Poell and de Waal, *The Platform Society*, 163-164.

²¹⁰ Ferrari, “Technocracy Meets Populism: The Dominant Technological Imaginary of Silicon Valley,” 122.

²¹¹ Zulli, Liu, and Gehl, “Rethinking the ‘Social’ in ‘Social Media,’” 1193-1194.

²¹² Lucien, “Global Anarchism and Syndicalism: Theory, History, Resistance,” 105.

²¹³ Herman and Chomsky, *Manufacturing Consent: The Political Economy of the Mass Media*, 61.

Consortium (W3C) underscores the ideological struggle inherent in ASM. While Mastodon aligns with the FLOSS ideology and anarcho-syndicalist principles, the involvement of authoritative institutions like W3C introduces a layer of institutional legitimacy to the Fediverse's sociotechnical imaginary. This tension between grassroots activism and institutional support shows how in shaping social relations and power dynamics institutions generate legitimacy for technology despite apparent activism.

The different dimensions of topology, scale and abstraction in ASM compared to CSM provide insight into the which “offer a unique ontological lens for considering sociality in online space.”²¹⁴ Mastodon’s ethos of open participation and decentralization for societal improvement are an actualization of the criticisms by scholars critical of the platform society like van Dijck, Poell and de Waal,²¹⁵ Plantin et al.,²¹⁶ and Gillespie.²¹⁷ At the same time it takes up scholars Bauman et al.²¹⁸ and Fuchs²¹⁹ and is the sociological experiment of social media not based on the self-reproduction of surveillance. As such an experiment it connects to Apprich²²⁰ and exposes déjà vu network elements of Gansing.²²¹ Specifically, the anarcho-syndicalism ethos of Mastodon bears similarity to Hauben’s characterisation of Usenet as a technological pursuit of truth.²²² Today, algorithmic CSM consciously obfuscate boundaries between the personal and the corporate with the aim to influence: shape truth rather than enable truth seeking. Mastodon aims to put social media agency and truth seeking through technology back in the hands of people by clearly separating the corporate from the personal through friction in design.

²¹⁴ Zulli, Liu, and Gehl, “Rethinking the ‘Social’ in ‘Social Media’,” 1199.

²¹⁵ Van Dijck, Poell and de Waal, *The Platform Society*, 162.

²¹⁶ Plantin, Lagoze, Edwards, and Sandvig, “Infrastructure Studies Meet Platform Studies in the Age of Google and Facebook,” 304-5.

²¹⁷ Gillespie, *Custodians of the Internet*, 197-200.

²¹⁸ Bauman et al., “After Snowden,” 142.

²¹⁹ Fuchs, “New Media, Web 2.0 and Surveillance,” 138.

²²⁰ Apprich, *Technotopia*, 3.

²²¹ Kristoffer Gansing, “Introduction: Network Means and Ends,” in *The Eternal Network*, eds. Kristoffer Gansing and Inga Luchs (Amsterdam: Institute of Network Cultures, 2020), 12.

²²² Hauben, *Netizens*, 56.

This research is not without limitations, although the focus has been on Mastodon as an ASM to CSM, this study has focused on the rhetoric around this object and relied on research of others like Zulli, Liu, and Gehl and Anderlini and Milani for the dynamics within Mastodon.²²³ Additionally, the critical discourse analysis in combination with media genealogy meant that a general history of Mastodon was made. However, the history of the early Internet and even Mastodon cannot be captured by one research project and requires clear choices which will always leave something out. Therein time and word constrained the analysis further requiring deliberate choices. This was somewhat circumvented by using the work by Hauben on Usenet.²²⁴ Similarly, the sociotechnical imaginary of the Fediverse relies on heuristic understanding of the FLOSS ideology for which I mainly drew on de Winkel's work.²²⁵ This study only focused on the largest node in the Fediverse which consists of many more nodes.

Future research could take up these challenges by conducting a comparative analysis of applications within the Fediverse like Pleroma or Peertube. In the same trend, a critical analysis of Meta's implementation of the ActivityPub protocol would also be valuable for future research, as well as the critical orientation. Additionally, a qualitative analysis of public organizations and individuals like politicians into the primary considerations for using social media. For example, some governmental organizations have already transitioned to Mastodon for their public communication while others have not. Similarly, some politicians seem set on remaining on Twitter/X despite its dubious owner. This current study has built upon existing research on Mastodon, considered it from a new media genealogical perspective, and made the first steps to understand the ASM sociotechnical imaginary constructed through the Fediverse.

²²³ Zulli, Liu, and Gehl, "Rethinking the 'Social' in 'Social Media'," 1188-1205; Anderlini and Milani, "Emerging Forms of Sociotechnical Organisation," 167-181.

²²⁴ Hauben, *Netizens*, 1-201.

²²⁵ De Winkel, "Fringe Platforms," 91-161.

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<https://doi.org/10.1177/1461444820912533>.

Appendix

Title	Author	Date	Link
Mastodon's Ethos			
Homepage Mastodon	Mastodon		joinmastodon.org
Mastodon server covenant	Mastodon		joinmastodon.org/covenant
<i>Blogs</i>			
This Isn't About Social Media. This is About Control.	Mastodon - Tremaine Fiske	February 19, 2018	blog.joinmastodon.org/2018/02/this-isnt-about-social-media.-this-is-about-control./
Why ActivityPub is the future	Mastodon - Eugene Rochko	June 27, 2018	blog.joinmastodon.org/2018/06/why-activitypub-is-the-future/
Cage the Mastodon	Mastodon - Eugene Rochko	July 6, 2018	blog.joinmastodon.org/2018/07/cage-the-mastodon/
Why does decentralization matter?	Mastodon - Eugene Rochko	December 30, 2018	blog.joinmastodon.org/2018/12/why-does-decentralization-matter/
Introducing the Mastodon Server Covenant	Mastodon - Eugene Rochko	May 16, 2019	blog.joinmastodon.org/2019/05/introducing-the-mastodon-server-covenant/
Gab switches to Mastodon's code	Mastodon - Eugene Rochko	July 4, 2019	blog.joinmastodon.org/2019/07/statement-on-gabs-fork-of-mastodon/
Trump's new social media platform found using Mastodon code	Mastodon - Eugene Rochko	October 29, 2021	blog.joinmastodon.org/2021/10/trumps-new-social-media-platform-found-using-mastodon-code/
What to know about Threads	Mastodon - Eugene Rochko	July 5, 2023	blog.joinmastodon.org/2023/07/what-to-know-about-threads/
The Sociotechnical Imaginary of the Fediverse			
<i>Wired</i>			
How to Get Started on Mastodon	Wired - Justin Pot	November 16, 2022	www.wired.com/story/how-to-get-started-use-mastodon/
The Hidden Dangers of the Decentralized Web	Wired - Jessica Maddox	May 19, 2023	www.wired.com/story/the-hidden-dangers-of-the-decentralized-web/
<i>The Verge</i>			
2023 in social media: the case for the fediverse	The Verge - David Pierce	December 19, 2023	www.theverge.com/23990974/social-media-2023-fediverse-mastodon-threads-activitypub
Can ActivityPub save the internet?	The Verge - David Pierce	April 20, 2023	www.theverge.com/2023/4/20/23689570/activitypub-protocol-standard-social-network
Key Ideological, Institutional and Archaeological Elements			
<i>W3C Institution</i>			
Keynote address by Tim Berners-Lee	Tim Berners-Lee	June 8, 2016	archive.org/details/DWebSummit2016_Keynote_Tim_Berners_Lee
Vision for W3C	W3C	October 26, 2023	www.w3.org/TR/w3c-vision/
<i>Usenet</i>			
R.I.P Usenet: 1980-2008.	PCMAG - Sacha Segan	July 31, 2008	PCMAG. "R.I.P Usenet: 1980-2008." Accessed February 19, 2024. https://www.pcmag.com/archive/rip-usenet-1980-2008-230383 .
<i>Declaration of cyberspace</i>			
A declaration of independence of cyberspace	John Perry Barlow	February 8, 1996	Barlow, John Perry. "A Declaration of the Independence of Cyberspace." Electronic Frontier Foundation, January 20, 2016. https://www.eff.org/cyberspace-independence.
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Table 2. Full Corpus with links.