



Selected Papers of #AoIR2023:
The 24th Annual Conference of the
Association of Internet Researchers
Philadelphia, PA, USA / 18-21 Oct 2023

INFRASTRUCTURES OF MANIPULATION

Andrew Iliadis
Temple University

Francesca Tripodi
University of North Carolina at Chapel Hill

Aashka Dave
University of North Carolina at Chapel Hill

Leslie Kay Jones
Rutgers University

Amelia Acker
University of Texas at Austin

Heather Ford
University of Technology Sydney

This panel presents research on web and information infrastructures used for manipulative purposes. In contrast to platform manipulation (Woolley & Howard, 2018; Benkler et al., 2018), where users such as bad actors seek to gamify and exploit the weaknesses of online social media platforms like Twitter and TikTok, the papers in the present panel describe studies where web or information infrastructures such as those involved in search and information retrieval are manipulated to alter or produce facts (rather than social commentary on facts). For example, studies have shown how infrastructures like Google Search are manipulated by conservative elites (Tripodi, 2022), how anonymous editors use Wikidata to revise the distribution of information related to political protest movements (Ford, 2022), and how administrators harness information schemas to improve the findability of their advertising content (Iliadis, 2022). In these areas and more, web and digital infrastructures are being manipulated to serve the interests of politically motivated actors (Acker, 2018; Acker & Donovan, 2019).

Infrastructures typically refer to shared public services like sewers, telephone poles, and electricity. According to Bowker et al. (2010, p. 98), information infrastructure refers to

Iliadis, A., Tripodi, F., Dave, A., Jones, L. K., Acker, A., & Ford, H. (2023, October). *Infrastructures of manipulation*. Panel presented at AoIR2023: The 24th Annual Conference of the Association of Internet Researchers. Philadelphia, PA, USA: AoIR. Retrieved from <http://spir.aoir.org>.

“digital facilities and services usually associated with the internet.” Information infrastructures are thus enabling resources, in network form, whose key role is that of a distributor, but rather than goods or services, information infrastructures distribute “knowledge, culture, and practice” (Bowker et al., 2010, p. 114). Such structures do this through their development of ontologies or classification schemes that enable dividing the world into categories or, through their application to large data sets, by offering an enormous, open store of data that can be used by others for a variety of purposes, such as retrieving facts and sharing information. Recently, several scholars have elaborated on the political nature of such infrastructural processes of digitization and datafication, including in the domains of archiving and preservation (Thylstrup, 2018, 2022), governance and management (Flyverbom & Murray, 2018), metrics and sorting (Alaimo & Kallinikos, 2021), and the creation of global ontologies for things like web search (Iliadis et al., 2023) and surveillance services (Iliadis & Acker, 2022).

Manipulation of social media content and messaging is likewise a major research area over the last several years owing to the prevalence of online misinformation and disinformation campaigns (Reagle, 2016; Paris, 2021; Culloty & Suiter, 2021), particularly those associated with electoral politics (Tucker & Persily, 2020) and health misinformation (Keselman et al., 2022). Yet, online manipulation is not a new phenomenon and has long been discussed as a feature of the web in the context of the history of trolling, abuse, and hate (Phillips, 2015, 2019). Manipulation is thus a multivalent concept and is found in several domains that share the notion that manipulation is related to altering, editing, treating, controlling, and influencing content and messages for misleading individuals. Historically, though, less attention has focused on manipulation as it has been mobilized infrastructurally, particularly concerning the information infrastructures that transmit content and messages. Infrastructures should be understood here broadly as undergirding the communication structures that transmit messages and content. Such infrastructures can be found in computer science, news and journalism, government, policy, and other areas where messaging is organized using some form of schema, whether technical, linguistic, financial, or otherwise.

The first paper uses interviews to highlight the “importance of abortion-related web search and whether or not that system has been manipulated by actors trying to prevent abortion access.” The paper “examines how people (users) search for information about abortion, how organizations (content providers) utilize search engine optimization to reach potential users, and how advertisers try to attract visitors.” The second paper uses autoethnography and process tracing with respect to “the AP African American Studies debacle in order to elucidate digitally mediated disinformation as a strategy for stoking moral panic and thereby gaining widespread public buy-in to the establishment of educational censorship infrastructure.” The third paper analyzes Palantir as a surveillance platform that shapes and is shaped by infrastructures of manipulation. The paper “provides a method for researching companies like Palantir and its surveillance infrastructures” through digital media archiving of “over 600+ documents which have been stored, cleaned, annotated, and uploaded into an online digital archive that will be publicly available for media researchers to study.” The fourth and final paper is “an ethnographic study of a single Wikipedia article and how it evolved over the course of a decade” in the context of political revolutions. The paper describes “a framework for

understanding new methods of controlling facts in the context of automated knowledge products” and “the importance of semantic infrastructure to new methods of control and influence on Wikipedia and the wider knowledge infrastructures that are increasingly dependent on it.”

References

- Acker, A. (2018). Data craft: The manipulation of social media metadata. *Data & Society*. <https://datasociety.net/library/data-craft/>
- Acker, A., & Donovan, J. (2019). Data craft: A theory/methods package for critical internet studies. *Information, Communication & Society*, 22(11), 1590-1609. <https://doi.org/10.1080/1369118X.2019.1645194>
- Alaimo, C., & Kallinikos, J. (2021). Managing by data: Algorithmic categories and organizing. *Organization Studies*, 42(9), 1385–1407. <https://doi.org/10.1177/0170840620934062>
- Benkler, Y., Faris, R., & Roberts, H. (2018). *Network propaganda: Manipulation, disinformation, and radicalization in American politics*. Oxford University Press.
- Bowker, G. C., Baker, K., Millerand, F., & Ribes, D. (2010). Toward information infrastructure studies: Ways of knowing in a networked environment. In: J. Hunsinger, L. Klastrup, & M. Allen (Eds.), *International handbook of internet research*. Springer. https://doi.org/10.1007/978-1-4020-9789-8_5
- Culloty, E., & Suiter, J. (2021). *Disinformation and manipulation in digital media: Information pathologies*. Routledge.
- Flyverbom, M., & Murray, J. (2018). Datastructuring—Organizing and curating digital traces into action. *Big Data & Society*, 5(2). <https://doi.org/10.1177/2053951718799114>
- Ford, H. (2022). *Writing the revolution: Wikipedia and the survival of facts in the digital age*. MIT Press.
- Iliadis, I. (2022). *Semantic media: Mapping meaning on the internet*. Polity.
- Iliadis, A., & Acker, A. (2022) The seer and the seen: Surveying Palantir’s surveillance platform. *The Information Society*, 38(5), 334-363. <https://doi.org/10.1080/01972243.2022.2100851>
- Iliadis, A., Acker, A., Stevens, W., & Kavakli, B. (2023). One schema to rule them all: How Schema.org models the world of search. *Journal of the Association for Information Science and Technology*. 1-64. <https://doi.org/10.1002/asi.24744>
- Keselman, A., Smith, C. A., & Wilson, A. J. (Eds.). (2022). *Combating Online Health Misinformation: A Professional's Guide to Helping the Public*. Rowman & Littlefield.

Paris, B. (2021). Configuring Fakes: Digitized Bodies, the Politics of Evidence, and Agency. *Social Media + Society*, 7(4). <https://doi.org/10.1177/20563051211062919>

Phillips, W. (2015). *This is why we can't have nice things: Mapping the relationship between online trolling and mainstream culture*. MIT Press.

Phillips, W. (2019). It Wasn't Just the Trolls: Early Internet Culture, "Fun," and the Fires of Exclusionary Laughter. *Social Media + Society*, 5(3). <https://doi.org/10.1177/2056305119849493>

Reagle, J. (2016). *Reading the Comments: Likers, Haters, and Manipulators at the Bottom of the Web*. MIT Press.

Thylstrup, N. B. (2019). *The politics of mass digitization*. MIT Press.

Thylstrup, N. B. (2022). The ethics and politics of data sets in the age of machine learning: Deleting traces and encountering remains. *Media, Culture & Society*, 44(4), 655-671. <https://doi.org/10.1177/016344372111060>

Tripodi, F. B. (2022). *The propagandists' playbook: How conservative elites manipulate search and threaten democracy*. Yale University Press.

Tucker, J. A., & Persily, N. (2020). *Social Media and Democracy: The State of the Field, Prospects for Reform*. Cambridge University Press.

Woolley, S. C., & Howard, P. (Eds.) (2018). *Computational propaganda: Political parties, politicians, and political manipulation on social media*. Oxford University Press.

ABORTION NEAR ME? HOW ADVERTISING THWARTS ACCESS TO HEALTH CARE

Francesca Tripodi
University of North Carolina at Chapel Hill

Aashka Dave
University of North Carolina at Chapel Hill

Access to an abortion is a crucial component of overall maternal care. Since abortion care is time-sensitive, and many states are trying to reduce the gestational limits for abortion, early access to effective abortion services is a critical information need. Nonetheless, information access to abortion services is complicated by the presence of Crisis Pregnancy Centers (CPCs). CPCs are organizations, typically religiously affiliated, that provide free or affordable non-clinical services to pregnant people. Most are not licensed medical facilities and are primarily staffed by volunteers who do not adhere to U.S. medical guidelines (Baggett, 2022). Journalistic accounts document how CPCs rely on search engine optimization, targeted advertising, and websites to make their centers look like health clinics (Cott et al., 2022).

Building on the assumption that audiences are inclined to go to sites like Google to find information about abortion care, our research seeks to consider how misinformation, as a sociotechnical vulnerability, intersects with web searches. Sociotechnical researchers try to understand why and how mis- and disinformation is believed by highlighting the role epistemology plays in how people validate information (Anderson, 2021; Marwick, 2018; Yin et al., 2018). These studies find that tactics for spreading disinformation often exploit the human desire to fact-check information and encourage audiences to engage in participatory practices to create alternative facts (Marwick & Partin, 2022; Lee et al., 2021; Starbird et al., 2019; Tripodi, 2021). By providing a tangible do-it-yourself quality to the *process* of information seeking, this “IKEA Effect of misinformation” empowers audiences with a faux autonomy, making them feel like they are drawing their own conclusions (Tripodi, 2022). Understanding the important role search engines play in seeking out information about abortion is critical, yet limited attention has been paid to the importance of abortion-related web search and whether or not that system has been manipulated by actors trying to prevent abortion access.

This paper examines how people (users) search for information about abortion, how organizations (content providers) utilize search engine optimization to reach potential users, and how advertisers try to attract visitors. Drawing on analysis of interviews and search tasks with 42 individuals in four locations across the state of North Carolina, we argue that user ability to find accurate information about how to terminate a pregnancy is primarily driven by user position on abortion (i.e., whether they support terminating a pregnancy), since their initial search determines their search results. However, our findings also indicate that search engine optimization and advertising make finding accurate information more challenging because CPCs dominate search results regardless of user intent.

Methods

From July - November 2022, our team conducted interviews and search tasks with 42 participants at four different public libraries throughout North Carolina. Library locations were chosen based on political variation to ensure a mix of responses from both conservative and progressive patrons.

Following the work of prominent internet scholars, researchers utilized interviews combined with participant observation; a researcher would sit one-on-one with each participant and perform a series of search tasks (Hargittai & Young, 2012). During tasks, researchers prompted participants to “think aloud,” to analyze participant information retrieval processes as they occur (Jaspers et al. 2004).

After conducting a practice prompt, participants were read a series of four scenarios on politically divisive topics: abortion, gun control, the outcome of the 2020 U.S. presidential election, and voting rights. This paper focuses exclusively on the first prompt, which read: *“A close friend of yours recently found out that they are unexpectedly pregnant and are considering terminating the pregnancy. Do you have an opinion on what they should do?”*

After stating their opinion, participants were asked to take ten minutes to search for more information about the topic and find information that would be useful to their friend. Search tasks were conducted on a loaner laptop utilizing the library wifi network. To record their responses, the researchers used Open Broadcaster Software (OBS), a video recording software that captures audio and screen recordings of what participants were doing on the loaner laptop to control for personalization.

By discussing each topic in turn and then recording participants' search processes in reaction to individual prompts, researchers could make inferences about how user presuppositions inform search queries and document how they determined what constituted trustworthy information. Analysis of the think aloud interviews was guided by the principles of grounded theory, with an emphasis on constructing thematic conceptions (Charmaz, 2006). Interview recordings were used to analyze participants' positions on abortion, the words they used to form their searches, which returns they received, and which information they clicked on or identified as reliable.

Findings/Conclusion

In all the interviews, the person's intention influenced their choice of keywords, which subsequently influenced the information returned to them. Those who supported their friend's decision used phrases that would help their friend find a place that could terminate their pregnancy (e.g., "planned parenthood" or "abortion services + location"). Those who did not support their friend's desire to terminate the pregnancy used language that led to resources that may have changed their friend's mind (e.g., "alternatives for abortion" or "adoption services").

Regardless of the seeker's intent, CPCs dominated search results. Advertised CPCs were returned for *every query that included the phrase abortion*. Even when the person was looking for information about how and where their friend could terminate a pregnancy. Failing to differentiate between a query like "abortion near me" versus "alternatives for abortion" suggests Google's advertising structure connects and classifies CPCs to the phrase "abortion" regardless of the perceived intent, suggesting that placement of advertised CPCs is not accidental and a purposeful strategy to dominate search returns.

By conducting an exploratory project on how people's opinions shape their keywords, this research provides a starting point to better understand how content providers and advertisers anticipate searches regarding abortion and the way information systems can be manipulated by political actors. While forty-two people does not serve as a representative sample of all information-seeking practices concerning abortion, the data does reveal important insights into "the query, the contents, and the architecture of the system" (Rieder & Sire, 2014, p.198). Given the overwhelming preference respondents had for Google, both for their browser and their search engine, this paper serves as an important case study on how the tech giant orders information concerning reproductive health across the state of North Carolina and the role CPCs play in complicating access to effective abortion care.

References

Anderson, C. W. (2021). Fake News is Not a Virus: On Platforms and Their Effects. *Communication Theory*, 31(1), 42–61. <https://doi.org/10.1093/ct/qtaa008>

Baggett, L. (2022, April 7). New data reveals CPCs are spreading, casting wider net to attract non-pregnant clients. University of Georgia College of Public Health. <https://publichealth.uga.edu/new-data-reveals-cpcs-are-spreading/>

Charmaz, K. (2006). *Constructing grounded theory*. Sage Publications.

Cott, E., Tabrizy, N., Aufrichtig, A., Lieberman, R., & Morgan, N. (2022, June 23). They Searched Online for Abortion Clinics. They Found Anti-Abortion Centers. *The New York Times*.

Hargittai, E., & Young, H. (2012). Searching for a “Plan B”: Young Adults’ Strategies for Finding Information about Emergency Contraception Online. *Policy & Internet*, 4(2), 1–23. <https://doi.org/10.1515/1944-2866.1176>

Jaspers, M. W., Steen, T., van den Bos, C., & Geenen, M. (2004). The think aloud method: a guide to user interface design. *International journal of medical informatics*, 73(11-12), 781–795.

Lee, C., Yang, T., Inchoco, G. D., Jones, G. M., & Satyanarayan, A. (2021). Viral Visualizations: How Coronavirus Skeptics Use Orthodox Data Practices to Promote Unorthodox Science Online. *Proceedings of the 2021 CHI Conference on Human Factors in Computing Systems*, 1–18. <https://doi.org/10.1145/3411764.3445211>

Marwick, A. E. (2018). Why do people share fake news? A sociotechnical model of media effects. *Georgetown Law Technology Review*, 2(2), 474–512.

Marwick, A. E., & Partin, W. C. (2022). Constructing alternative facts: Populist expertise and the QAnon conspiracy. *New Media & Society*, 14614448221090200. <https://doi.org/10.1177/14614448221090201>

Rieder, B., & Sire, G. (2014). Conflicts of interest and incentives to bias: A microeconomic critique of Google’s tangled position on the Web. *New Media & Society*, 16(2), 195–211. <https://doi.org/10.1177/1461444813481195>

Starbird, K., Arif, A., & Wilson, T. (2019). Disinformation as Collaborative Work: Surfacing the Participatory Nature of Strategic Information Operations. *Proceedings of the ACM on Human-Computer Interaction*, 3(CSCW), 1–26. <https://doi.org/10.1145/3359229>

Tripodi, F. B. (2021). ReOpen demands as public health threat: A sociotechnical framework for understanding the stickiness of misinformation. *Computational and Mathematical Organization Theory*. <https://doi.org/10.1007/s10588-021-09339-8>

Tripodi, F. B. (2022). *The propagandists' playbook: How conservative elites manipulate search and threaten democracy*. Yale University Press.

Yin, L., Roscher, F., Bonneau, R., Nagler, J., & Tucker, J. A. (2018). *Your Friendly Neighborhood Troll: The Internet Research Agency's Use of Local and Fake News in the 2016 U.S. Presidential Campaign [Data Report]*. NYU Center for Social Media and Politics.

DIGITALLY MEDIATED DISINFORMATION: THE CASE OF AP AFRICAN AMERICAN STUDIES

Leslie Kay Jones
Rutgers University

On January 21, 2023 Republican Senator Manny Diaz, Jr. tweeted an infographic created by the Florida Department of Education delineating a number of “issues” found with the pilot curriculum proposed for US classrooms by the AP College Board for a new AP African American Studies course. The infographic consisted of a two-column table, with the left side identifying subject areas, and the right side containing quotations, names of scholars, and brief definitions of the offending fields. The content of the infographic was designed to convince readers that the AP African American Studies curriculum was a vehicle for ideological indoctrination of high school students, and that the smuggled ideologies were age inappropriate, immoral, and threatening to civility and social cohesion. The infographic included contested interpretations of ideological positions, misrepresentations of research and theory, and false statements about included course content. The Florida DoE threatened to ban the course from the state if its concerns were not adequately addressed by the College Board. I argue that the framing of the AAS curriculum and subsequent coercion to censor its content constitute what Reddi, Kuo, and Kreiss call “identity propaganda,” defined as “strategic narratives that target and exploit identity-based differences to maintain existing hegemonic social orders and/or undermine challenges to extant political power” (Reddi, Kuo, & Kreiss 2021, p. 2).

The current paper applies autoethnography (Berger 2014) and process tracing (Collier 2011) to the AP African American Studies debacle in order to elucidate digitally mediated disinformation as a strategy for stoking moral panic and thereby gaining widespread public buy-in to the establishment of educational censorship infrastructure. I ground this case study in two concerns expressed by Michael L. Miller and Cristian Vaccari: 1) “the risk that research overemphasizes direct and short-term implications of digital threats on individuals and specific groups at the expense of indirect and medium-term effects on collective norms and expectations of behavior” (Miller & Vaccari 2020) and 2) “that perhaps the most significant threat to democracy around the world is the fact that flows of information, and the democratic quality of such flows, vary significantly by political and social context” (Miller & Vaccari 2020). I anticipate that the involvement of racial politics may itself significantly influence flows of information and the propagation of identity propaganda frames via segregated digital discussion of news objects (McIlwain 2017).

The case is particularly demonstrative of the first concern because censorship proponents leverage the specter of censorship itself, framed as “wokeness” (see “political correctness” in earlier historic periods) to establish a sense of imminent threat to unarticulated shared civic values in a complex, long-term strategy that eludes the scope accountability journalism. The threat is proactively defined in socially contentious terms, while the targets of the threat (people, ideas, ideals, institutions) are left to individual audience members’ imagination. The mechanism of digital mediation is significant because, following the second concern, it illustrates the challenges of addressing rapidly disseminated false information when the targets of the disinformation have themselves been successfully framed as purveyors of disinformation. By announcing its objections to the AP African American Studies via Twitter, the Florida DOE was able to promote its framing directly to a national public and circumvent fact-checking protocols followed by journalistic organizations. These fact-checking protocols created additional delays as reporting journalists sought authoritative commentary on emerging counter-frames. This inquiry focuses on “the way scholars and the public conceptualize problematic information” (Freelon & Wells 2020, p. 152).

In the aftermath of the infographic’s release, many of the scholars named as problematic curricular inclusions themselves became the subject of public and media inquiry, even though they were not involved with the development of the curriculum. Many of these scholars’ names and works would not be assigned as student reading or recommended as references to students, but rather were included in marketing materials developed to demonstrate the quality of the curriculum to generalist consultant during the curriculum’s early drafting stage. Where scholars were assigned as reading, their ideas were grievously misrepresented, a tactic common to the conservative anti-CRT movement’s orchestrated attack on the institution of public education (Goldberg, pg. 360). Nevertheless, the Florida Department of Education successfully prompted widespread public concern about the “indoctrination” of ideas and intellectual frameworks like intersectionality, critical race theory, queer theory, Black feminist literary thought, and reparations. In performing journalistic due diligence to inform the public of the developing controversy, media outlets were forced to repeat the original claims and justifications for censorship made by the Florida DoE, even in attempts to have them debunked by scholarly experts.

In less than two weeks after the infographic prompted widespread media attention (BBC, NPR, Associated Press, CNN, NY Times), the AP College Board produced a new final draft of the curriculum that removed references to intersectionality, critical race theory, Black feminist literary thought, and reparations. The AP College Board denied that the changes were made in response to the Florida DeSantis administration, asserting that all changes had been made before the Florida DOE voiced its objections to the curriculum. This was followed by considerable debate on social media about the truthfulness and trustworthiness of the College Board, news media (chiefly the NY Times), and the Florida governor. The College Board was accused of obfuscating the extent to which political and marketing pressures influenced the redrafting of the curriculum. News media, particularly the NY Times, were accused of making unverifiable assertions about the College Board’s motivations in service of a political bias. Ron DeSantis, finally, was accused of drumming up a media spectacle ahead of a

run for US President. Later reporting revealed significant contact between the College Board and the Florida DOE over the course of several months before the original pilot curriculum was publicly impugned by the DOE and leaked in American conservative digital-first media. Timelines of communications between the Florida DOE and the College Board spread rapidly via Twitter, where clusters of readers developed discrete interpretations of the available evidence and conflicting reportage. Rather than providing a basis for public consensus about the quality and necessity of the final AP African American Studies curriculum, the ongoing discovery facilitated widespread, cross-ideological mistrust of information curation and dissemination practices of previously accepted sources.

The AP African American Studies controversy presents the opportunity for a case study of political disinformation within a modern media ecosystem where news agendas and framing are set through social media as often as through legacy media, and culturally accepted media “of record” must react to news stories at the pace of digital public squares. At the same time, social media users may perceive direct-to-social-media government propaganda as trustworthy primary sources when it is framed as an intervention to pressing social problems in an era where there is declining public trust in journalistic capacity to identify and address such problems. Insofar as political actors have also become aware of this pattern, media researchers might productively seek to understand how this system can be strategically leveraged in service of political propaganda. In the case of Florida, the February 2023 introduction of House Bill 999 just a month after censoring AP African American Studies underpins the stakes of curating and framing political controversies in the new media ecosystem.

References

Berger, R. J. (2014). Academic Freedom and Its Discontents: An Autoethnography. *International Review of Qualitative Research*, 7(2), 258-273.

Collier, D. (2011). Understanding process tracing. *PS: political science & politics*, 44(4), 823-830.

Freelon, D., & Wells, C. (2020). Disinformation as political communication. *Political communication*, 37(2), 145-156.

Goldberg, D. T. (2023). 357 The War on Critical Race Theory: Turning a blind eye to the realities of racial injustice, the highly orchestrated right-wing attacks cast a body of scholarship about race in the law as a great threat to American society. In *Foundations of Critical Race Theory in Education* (pp. 357-361). Routledge.

McIlwain, C. (2017). Racial formation, inequality and the political economy of web traffic. *Information, Communication & Society*, 20(7), 1073-1089.

Miller, M. L., & Vaccari, C. (2020). Digital threats to democracy: comparative lessons and possible remedies. *The International Journal of Press/Politics*, 25(3), 333-356.

Reddi, M., Kuo, R., & Kreiss, D. (2021). Identity propaganda: Racial narratives and disinformation. *New Media & Society*, 14614448211029293

THE PALANTIR FILES: ARCHIVES FOR INVESTIGATIVE RESEARCH OF SURVEILLANCE COMPANIES

Andrew Iliadis
Temple University

Amelia Acker
University of Texas at Austin

This paper describes a method for building documentary evidence to research surveillance companies. We build on work in critical data and internet studies (Acker & Donovan, 2019; Iliadis & Russo, 2016) and empirical investigative research of IT organizations (Carter, et al., 2021; Iliadis et al., 2023), and proceed by assembling an archive of distributed documents concerning the surveillance company Palantir. Palantir is a data integration company that offers software to its customers who seek to surveil and collate sensitive data from heterogeneous sources for manipulation and control (Brayne, 2017, 2020; Ferguson, 2017; Knight & Gekker, 2020; Munn, 2017; Iliadis & Acker, 2022). Our paper provides a method for researching companies like Palantir and its surveillance infrastructures (we define this method as ‘dragnet counter surveillance’) and describes several outcomes from this project relating to uncovering documents concerning privacy, civil liberties, and human rights abuses. As such, this paper proposes infrastructural manipulation as a double articulation whereby researchers build investigative document caches/archives to examine infrastructures of surveillance.

While Palantir supplies infrastructure to its customers for surveillance, it simultaneously attempts to mitigate privacy and civil liberties concerns through product design, public relations, and social engagement via its Privacy & Civil Liberties Engineering (PCL) team. We provide critical analysis of projects in which PCL is engaged, including in policing, philanthropy, and policy via the amassing of documents and construction of a digital archive to investigate Palantir. These Palantir-related materials reviewed include privacy impact assessments (PIA), court documents, and materials obtained through Freedom of Information Act (FOIA) requests. We provide a presentation of an archive of these Palantir materials using a customized metadata schema and end by theorizing an apparent contraction in Palantir’s business dealings, between a self-described PCL mandate of ‘corporate social responsibility’ (Matten & Moon, 2004; Lindgreen & Swaen, 2010) towards not collecting data (Palantir, 2023) and the company’s aim of achieving widespread data integration for its clients across information infrastructures, including those where human rights abuses remain an issue (Bell & Kleinman, 2020). We suggest that Palantir be studied as a surveillance infrastructure and recommend several steps toward future empirical investigative research of surveillance companies.

The Dragnet Surveillance Method

Our dragnet surveillance method is proposed as a way of facilitating empirical investigative research of IT organizations like surveillance companies. Dragnet surveillance is a method whereby researchers attempt to collect evidentiary data concerning the activities of surveillance platforms by scraping publicly available databases containing information about legal information, PIAs, FOIA requests, press releases, contracts, patents, and government documents. While our method encourages the widespread collection of case materials, we suggest that researchers develop a guiding question to which the data collection is meant to respond. In our case, we specifically sought to address the following claim made by Palantir's PCL team: "As a company, we do not collect data, sell data, or facilitate unauthorized sharing of data among customers or any other parties" (Palantir, 2023). To evaluate this claim, we began looking for materials concerning descriptions of Palantir's data-collecting capabilities, particularly materials provided in contexts where Palantir's approaches to privacy are adjudicated externally from the organization, such as in court filings, software patents, and PIAs underwritten by Palantir customers. We began by scraping material related to Palantir from several sources, including court documents from Justia (a commercial legal information database), PIAs from Palantir customers, documents obtained via FOIA requests, press releases from Business Wire (a web source for disseminating such releases), government documents from a variety of domains (.gov, etc.), and third-party organization policy reports (such as those in the nonprofit sector). As of this writing, we collected over 600+ documents, which have been stored, cleaned, annotated, and uploaded into an online digital archive that will be publicly available for media researchers to study and are added to over 5,000 documents collected during prior Palantir research (Iliadis & Acker, 2022). The documents are tagged using a customized metadata schema indicating their source, purpose, content, and connection to Palantir-related activities.

Findings and Conclusion

Preliminary findings from our study indicate that Palantir indeed expends considerable resources countering claims and accusations related to deceptive business practices or the alleged data-collecting activities their software facilitates. For example, class action lawsuits have been initiated concerning Palantir's business dealings, including those relating to alleged deceptive stock practices concerning Palantir's use of special-purpose acquisition companies (SPAC); one source describes "a highly unorthodox investment program in which Palantir invested in early-stage companies in exchange for these companies agreeing to enter into contracts for Palantir's products and services (the "SPAC Investment Strategy")" (Sanchez, 2022). Second, our sources show that "Palantir initially claimed that it worked only with Homeland Security Investigations, not with Enforcement and Removal Operations," yet documents obtained via FOIA found that US Immigration and Customs Enforcement (ICE) "did use Palantir software to target relatives of unaccompanied minors" (Evers, 2019). The government accountability group American Oversight has issued further FOIA requests that ICE produce records "sufficient to identify the number of administrative arrests during which ICE personnel used any software or hardware contracted from Palantir Technologies" (ibid). Lastly, PIAs obtained from the US Department of Justice (DOJ) indicate that data maintained in the Palantir Relational Information Management Application "may be accessed by authorized Civil Division employees, other federal employees and

contractors” (Stanton, 2018). PIAs like those provided by the DOJ describe how non-client individuals may have access to sensitive data amassed via Palantir’s technologies, such as contractors. These and other findings provide evidence against some of Palantir’s public claims regarding sound stock market practices, non-involvement in deporting immigrants, and safety concerning data accessibility. The archive of documents thus presents a proof-of-concept document archive for internet researchers akin to The Zuckerberg Files and the Snowden Digital Surveillance Archive.

References

- Acker, A., & Donovan, J. (2019). Data craft: A theory/methods package for critical internet studies. *Information, Communication & Society*, 22(11), 1590-1609. <https://doi.org/10.1080/1369118X.2019.1645194>
- Bell, D., & Kleinman, M. (2020). As Palantir goes public, consider its troubling human rights record. *Fortune*, September 30. Accessed July 25, 2021. <https://fortune.com/2020/09/30/palantir-direct-listing-human-rights/>
- Brayne, S. 2017. Big data surveillance: The case of policing. *American Sociological Review* 82 (5):977–1008. doi: 10.1177/0003122417725865.
- Brayne, S. 2020. Predict and surveil: Data, discretion, and the future of policing. Oxford, UK: Oxford University Press.
- Carter, D., A. Acker, and D. Sholler. 2021. Investigative approaches to researching information technology companies. *Journal of the Association for Information Science and Technology* 72 (6):655–66. doi: 10.1002/asi.24446.
- Evers, A. R. (2019). FOIA to ICE regarding assessments of Palantir products. *American Oversight*. <https://www.americanoversight.org/document/foia-to-ice-regarding-assessments-of-palantir-products>
- Ferguson, A. G. 2017. The rise of big data policing: Surveillance, race, and the future of law enforcement. New York: New York University Press.
- Iliadis, A., & Acker, A. (2022) The seer and the seen: Surveying Palantir’s surveillance platform. *The Information Society*, 38(5), 334-363. <https://doi.org/10.1080/01972243.2022.2100851>
- Iliadis, A., Acker, A., Stevens, W., & Kavakli, B. (2023). One schema to rule them all: How Schema.org models the world of search. *Journal of the Association for Information Science and Technology*. 1-64. <https://doi.org/10.1002/asi.24744>
- Iliadis, A., & Russo, F. (2016). Critical data studies: An introduction. *Big Data & Society*, 3(2). <https://doi.org/10.1177/2053951716674238>

Knight, E, and A. Gekker. 2020. Mapping interfacial regimes of control: Palantir's ICM in America's post-9/11 security technology infrastructures. *Surveillance & Society* 18 (2):231–43. doi: 10.24908/ss.v18i2.13268.

Lindgreen, A., & Swaen, V. (2010). Corporate social responsibility. *International journal of management reviews*, 12(1), 1-7.

Matten, D., & Moon, J. (2004). Corporate social responsibility. *Journal of business Ethics*, 54, 323-337.

Munn, L. 2017. Seeing with software: Palantir and the regulation of life. *Studies in Control Societies* 2 (1):1–16.

Palantir. (2023). *Privacy & Civil Liberties*. Palantir.
<https://www.palantir.com/pcl/technologies/>

Sanchez, J. C. (2022). EXTENDED CLASS PERIOD: Robbins Geller Rudman & Dowd LLP Files Class Action Against Palantir Technologies Inc. and Announces Opportunity for Investors with Substantial Losses to Lead Case – PLTR. *Business Wire*.
<https://www.businesswire.com/news/home/20221104005665/en/EXTENDED-CLASS-PERIOD-Robbins-Geller-Rudman-Dowd-LLP-Files-Class-Action-Against-Palantir-Technologies-Inc.-and-Announces-Opportunity-for-Investors-with-Substantial-Losses-to-Lead-Case---PLTR>

Stanton, A. (2018). Department of Justice – Civil Division: Privacy Impact Assessment for Palantir Relational Information Management Application (PRIMA). *Department of Justice*. https://www.justice.gov/d9/pages/attachments/2019/02/12/civ_pia_17-0146_prima_final_for_publishing.pdf

THE RISE OF INFRASTRUCTURAL INFLUENCE ON WIKIPEDIA

Heather Ford
University of Technology Sydney

This paper explores how the methods and possibilities for influencing the factual content of Wikipedia articles have changed in the context of semantic media (Iliadis, 2022) and the rise of AI-infused knowledgebases, virtual assistants, and chatbots. It is based on an ethnographic study of a single Wikipedia article and how it evolved over the course of a decade (Ford, 2022). The study found anomalies in common-held assumptions about Wikipedia editing in the documentation of current events that question the project's status as a venue for the neutral representation of consensus by impartial editors. This paper builds on the previous study to develop a framework for understanding new methods of controlling facts in the context of automated knowledge products. Central to this framework is the importance of semantic infrastructure to new methods of control and influence on Wikipedia and the wider knowledge infrastructures that are increasingly dependent on it. In this paper, I ask two questions: a) To what extent are individual editors able to control facts on Wikipedia that are prioritized by automated knowledge products?; and b) Are they acting unfairly or dishonestly?

I first describe the role of activist editors in influencing facts in the Wikipedia article about the 2011 Egyptian revolution. The editor who wrote the first version of the article the day before the protests began was “The Egyptian Liberal”, a young Egyptian democracy activist at the time who wrote the first version of the article the day before protests began, using an AFP source that described plans for the events rather than the events themselves. When Hosni Mubarak resigned from office on February 11, 2011, Liberal also helped support a change to a related article’s title (from “The Tunisian protests” to “The Tunisian revolution”) and, in so doing, support the change to “revolution” over at the Egyptian article title. The Egyptian Liberal also verified media reports using his experience and “original research” in the field. For example, when editors wanted to clarify whether Wael Ghonim, the administrator of the Facebook group used to coordinate protests in Egypt, had relinquished control of it, The Egyptian Liberal wrote, “I just spoke to Wael and no, he is still the admin of the page”. The editor, in his privileged position as witness to events on the ground, did his own research to verify media reports. This is very much against Wikipedia policy in normal times but there was no opposition to his actions during the fervor of the protests.

In the second part of the paper, I complicate this initial view of editor control of the article by describing the semantic infrastructure on which facts depend to travel to automated knowledge products. Semantic infrastructure includes both material and symbolic elements necessary for enabling a fact to both be stabilized and to travel in Wikipedia. Material elements include facts’ packaging (semantic metadata and infoboxes) and companions (attendant sources, categories and hyperlinks). Semantic metadata in which facts contained within Wikipedia articles are wrapped explains to computers what kinds of entities are being described and categorized. Infoboxes, the fact boxes on the right-hand side of most articles on Wikipedia that summarize the article, are another type of packaging. This packaging enables facts to travel through Wikipedia to reach search engines like Google and virtual assistants like Alexa and now chatbots like Chat GPT in the form of answers to users’ questions. They also constitute the data that will ultimately be extracted by third parties that make use of Wikipedia about the person, place, event, or thing you’re searching for. Today, the answer to the question, “What is the Egyptian revolution?” on Google, Bing, Siri and Alexa is sourced directly from English Wikipedia infoboxes and the opening paragraphs of the article.

Facts also require good companions (Morgan, 2010) in order to travel well. Sources are necessary companions for the travel of facts on Wikipedia, and the practice of citation is fundamental to Wikipedia epistemology. Editors use citations during breaking news events to back up claims being made, and as a trail for users to follow to verify whether the sources are being accurately reflected. Categories and internal links to other Wikipedia articles are essential to stabilizing a new article. If the article does not contain categories and links, it will be flagged as potentially harmful. The first version of the article contains a series of links: first, to related articles and “portals,” where work based on particular topics is coordinated; and, second, to categories of articles. Connecting to portals brings in other editors to help improve the article, since adding a new article triggers a notification to editors watching portal pages.

I describe moments in the evolution of the article when each of these infrastructural elements was being wrestled over and why they are important for supporting the key facts that end up being prioritized by automated knowledge products. I argue that this demonstrates a departure from the methods of influencing Wikipedia in two key ways. First, there is a focus by crowds and activist editors on infrastructural elements, rather than individual facts in the article. Second, activists are supported by crowds rather than individual editors who are able to move Wikipedia by the force of their will.

I conclude the paper by engaging with the question of manipulation in the context of popular protests. Manipulation requires a) control and b) unfairness or dishonesty. The questions, then, become a) How much are individual editors able to control facts on Wikipedia that are prioritized by AI platforms? and b) Are they acting unfairly or dishonestly? In response to the first question, I argue that individual editors can never entirely control the narrative of current events on Wikipedia because, although they can try to control individual facts and semantic infrastructures supporting those facts, they rely on multiple independent (material and symbolic) forces for the fact to travel. Catalytic events are contingent, and their representations are dependent on a myriad of forces, not least of which is the event itself and its underlying symbolic narrative of victims and oppressors (see Wagner-Pacifici, 2017) that drives media attention and thus Wikipedia editing. Crowds, on the other hand, are sometimes able to bend infrastructural elements (such as article titles) to their will and upend the ideal consensus-building process. This points to a need for the Wikimedia Foundation and other stakeholders to think through how to secure Wikipedia's infrastructures against attacks by crowds at key moments in the evolution of events.

The second question (whether activists like The Egyptian Liberal were acting unfairly or dishonestly) is more complex. Liberal was certainly open and honest about his allegiance to the democracy movement in Egypt but he was clearly conflicted when documenting events on Wikipedia. Does this constitute unfairness? Wikipedia's conflict of interest policy is focused mostly on paid editing and editing on behalf of companies. Citizens, who become part of popular protests, don't easily fit here, particularly because Wikipedians themselves are involved in activist efforts to prioritize the representation of women and people from the Global South, among others. More work needs to be done to understand how best to govern Wikipedia as it is increasingly being used for ideological (rather than financial) goals.

References

Dee, J. (2007, July 1). "All the News That's Fit to Print Out," New York Times (Online), New York: New York Times Company.
<https://www.nytimes.com/2007/07/01/magazine/01WIKIPEDIA-t.html>.

Ford, H. (2022). *Writing the revolution: Wikipedia and the survival of facts in the digital age*. MIT Press.

Iliadis, A. (2022). *Semantic media: Mapping meaning on the internet*. Polity.

Morgan, M. (2010). "Traveling Facts," in *How Well Do Facts Travel? The Dissemination of Reliable Knowledge*, ed. Peter Howlett and Mary Morgan. Cambridge University Press, 3-42.

Robin Wagner-Pacifici, R. (2017). *What Is an Event?* University of Chicago Press.