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The Gamergate Social Network: Interpreting Transphobia and Alt-Right Hate Online

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This paper explores the relationship of transphobia and other forms of harassment found across the events of the Gamergate hate movement through the development of an interactive social network analysis. With the social network being derived from hundreds of events tagged by hand, special consideration is given to the positionality and biases of its authors and how they affected this specific interpretation of Gamergate events. Informed largely by the transgender perspective of its first author, this paper draws particular conclusions around the propagation of transphobia in online hate movements, such as its intersectionality with other ideological cornerstones of Gamergate.

Cet article explore la relation entre la transphobie et d'autres formes de harcèlement observées lors des événements du mouvement de haine Gamergate à travers le développement d'une analyse de réseau social interactive. Avec le réseau social dérivé de centaines d'événements étiquetés à la main, une attention particulière est accordée à la position et aux biais de ses auteurs et à la manière dont ils ont influencé cette interprétation spécifique des événements de Gamergate. Principalement informé par la perspective transgenre de son premier auteur, cet article tire des conclusions particulières sur la propagation de la transphobie dans les mouvements de haine en ligne, comme son intersectionnalité avec d'autres piliers idéologiques de Gamergate.

Introduction

As one of the most virulent and explosive online culture wars around women, harassment, and the culture of gaming, the Gamergate movement—which started in 2014 (Quinn 2017)—serves as an essential case study in the ways that hate and harassment propagate online. While the movement began as a single accusation against a female game developer, thinly veiled as a call for "ethics in gaming journalism" (Wofford 2014), Gamergate and the havoc it wreaked would go on to make international headlines (Chess and Shaw 2015; Cross 2014). Importantly, the movement encapsulates the first widespread usage of online harassment strategies. Online tactics previously pioneered by the hacktivist organization Anonymous for left-wing political action (Coleman 2014) were adapted and given a populist and conspiratory spin by the alt right, eventually culminating in the online force behind the 2016 Trump campaign and extending into the modern QAnon movement.

Despite its historical and cultural importance, engaging with the individual events of Gamergate can prove an overwhelming task. Spanning hundreds of actors, dozens of online platforms, numerous forms of harassment, and economic boycotts and discrimination, it can be challenging for digital humanists and other researchers to even know where to start. Having faced this issue ourselves, our team sought a means to visualize, analyze, and interpret the events of Gamergate. We asked: How can we visually represent the events of Gamergate, and what can we learn from it?

The result of our efforts is the Gamergate Social Network (GSN)—a free-to-use, web-hosted, and interactive visualization that uses social network analysis (SNA) to visualize the relationships between actors, events, tactics, platforms, and more. Accessible online (Bevan and Tunggal 2024), the GSN is based on hand-tagged timeline data that is wholly human-curated. As a result, our project represents an interpretation of Gamergate largely informed by the subjectivities and positionality of its first author. While this inevitably means that there are certain limitations and blind spots, curating and tagging the data through the first author's transgender point of view resulted in a particularly insightful understanding of how transphobia manifests in online hate movements at the intersection of misogyny, conspiracy, "militant meninism" (O'Donnell 2019, 1), and anti-SJW vitriol.

What then can we learn from this interpretation? In this paper, we will explore the creation and use of GSN with the following topics:

1. Background on the Gamergate movement and the motivations behind the project
2. Detailing the process of preparing the data for SNA

3. Detailing the technical methodology employed, and how to use the interactive visualization
4. Deep-dive into how transphobia manifested and propagated in Gamergate
5. Additional analysis
6. Further work

Background and motivations

A brief history of Gamergate

To many scholars, activists, and journalists interested in advancing the feminist project in the gaming community, the term "Gamergate" likely brings back a number of unhappy memories. The movement originated as a call for "ethics in game journalism" when game developer Zoe Quinn was accused by a former partner of intimately soliciting better reviews from game journalists for one of her projects (Quinn 2017). The infamous "Zoe Post," published in August of 2014, quickly became the focus of right-wing agitation, as reactionary actors online used the situation as a recruitment opportunity (Wells et al. 2023). This space proved to be fertile ground for continued right-wing action, particularly as a social sphere known for a history of prioritizing men and toxic masculinity over women, even prior to the events of 2014 (Consalvo 2012; Campbell 2019). Ashley Peckford notes that the immediate backlash to the Quinn controversy reflected toxic and white supremacist trends within the "hardcore" gaming community, as "opinions expressed by Gamergate supporters … mirror those of right-wing extremists; namely, the 'us versus them' mentality of feeling disenfranchised, as well as the opinion that their community largely made up of white men had been 'invaded' by women and people of colour" (Peckford 2020, 67).

Gamergate culture quickly devolved over the following years to encompass some of the worst tendencies of the far right's presence on the internet (Alexander 2014). Reactionary actors used the movement as an opportunity to adapt their tactics to the online sphere. For instance, numerous scholars have noted the rise of right-wing memes being used as a method of conveying political messaging by shrouding bigoted content in claims of irony or trolling to lure in younger audiences (Conway, Scrivens, and Macnair 2019; Daniels and LaLone 2012). These tendencies were not harmless fun, but rather a concerted effort to cultivate a bigoted mindset and violent outlook within the gaming community. Jessica O'Donnell establishes that Gamergaters used a militaristic lens to frame their actions, pointing to a larger perspective of Gamergate as just one front in the culture war against feminism (O'Donnell 2019). Born-digital harassment tactics such as doxxing, swatting, death threats, and character assassination are all examples of direct tactics used by Gamergaters to intimidate progressives in the gaming space (Russworm 2018).

The ideological and tactical underpinnings of early Gamergate would eventually go on to influence the rise of the alt right between the years of 2014 to 2016. Thought leaders of the far right such as Steve Bannon and Milo Yiannopolous realized that they could harness the flourishing younger hate movement associated with gaming to support reactionary politics. As a result of their connections to right-wing platforms such as Breitbart, Bannon and Yiannopoulos were able to produce politicized coverage of the movement (Martin 2017) and popularize its methods and tactics. These developments, in turn, fed into popular discourse on the far right by normalizing conservative ideologies and directing hatred towards marginalized groups, finally cultivating in the meme culture surrounding the presidential campaign run of Donald Trump in 2016 (Martin 2017). At present, many examples of Gamergate's influence continue to materialize in far-right circles. Fascists have, on multiple occasions, dressed their actions in the symbolism of popular meme culture. From an origin point of weaponizing harmless memes such as the Pepe the Frog format (Topinka 2019), alt-right actors have developed these symbols into real-world domestic terrorism, including the Christchurch spree shooter's use of the contemporaneous "Subscribe to Pewdiepie" meme (DeCook 2020). Mainstream far-right conspiracy theories such as QAnon (Bleakley 2023), the anti-vax movement (Fiadotava et al. 2023), and the trans panic (Thorleifsson 2021) continue to proliferate on sites like 4chan and 8kun (formerly 8chan), which were originally organizing spaces for Gamergate, channelling the same militant rhetoric that was pioneered between 2014 to 2016 (O'Donnell 2019).

From timeline to social network: Translating data

The starting point of our data is an open-source timeline hosted and created on r/GamerGhazi, a subreddit dedicated in opposition to Gamergate. With hundreds of events and their sources spanning from August 2014 to April 2016, it is among the most comprehensive timelines and resources available on Gamergate. Importantly, the timeline is thoroughly documented, and while our team needed to update many of the URLs with their equivalent on archive.org, the wealth of sources allowed the team to interpret and analyze events beyond the couple of descriptor sentences written in the timeline. Nonetheless, the timeline also comes with its share of problems. First, maintenance of the timeline died off earlier than our research team required, as we wanted event data up to and including the election of Trump in November 2016. Second, its sheer length and lack of categorization makes it unwieldy to study. Third, the author wrote nothing of their process when selecting events to include or writing their descriptions, making it difficult to judge the quality of this data, which is clearly steeped in the subjectivity and biases of an anonymous Reddit user we know nothing about.

In response, our team undertook improving the timeline to address these problems. By using archived internet pages and time-specific Google searches, we created additional events to extend the timeline up to November 2016. Additionally, as a means of filtering and categorization, we began tagging each timeline entry with relevant information. We started out only tagging key figures, but after many iterations, expanded to the 10-category system that the GSN currently uses for its nodes to greatly increase the consistency with which connections were created. Finally, the team checked each source provided by the original timeline to verify its content and edited or extended the event's description when we felt the author's write-up was not sufficient—such as instances where, upon further digging into the provided sources, we determined that the author failed to mention a relevant actor or other detail. While it was difficult to verify if the original author had missed events that should have been in the data, the wealth of sources they provided assisted our team in developing our own understanding of the Gamergate timeline.

Although the tags provided satisfactory filtering and categorization, on their own, they did little to expand our understanding of the events of Gamergate. As a massive born-digital movement, Gamergate can be understood as a network encompassing a variety of actors, platforms, events, and tactics over a lengthy period of time. Disentangling and mapping these connections for the purpose of analysis was therefore a primary concern, alongside creating a useful product that was visually readable and theoretically accessible to other researchers. In response to these issues, we chose to approach tagging through the lens of social network analysis. SNA is a field that applies network analysis techniques to the social sciences by delineating and quantifying the nodes and edges in a social network system (Borgatti et al. 2009). In other words, SNA maps the connections in a system by identifying points of connection (nodes) and the ways they are linked to one another (edge). The resulting network graphs are able to be analyzed as larger systems, as patterns emerge concerning the types and quantities of connections made (Brandes et al. 2013).

SNA techniques have both historically and contemporaneously been used to monitor and analyze social movements, particularly online movements. Prominently featured are examples in the fields of business and systems management, such as the early deployment of actor-network theory to analyze online relationships developed by Potts and Jones (Potts and Jones 2011), and the proposal of SNA towards platform design demonstrated by Golbeck and colleagues (Golbeck et al. 2018) and Mehrabi and colleagues (Mehrabi et al. 2020). The use of SNA in the study of online hate and reactionary ideologies is equally well attested. Studies on anti-feminism are particularly prevalent, as scholars like Stefan Stijelja and Brian Mishara (Stijelja and Mishara 2023)

employ SNA techniques in their analysis of incel and men's rights communities, whilst a graduate thesis published by Kelly Fitzgerald (Fitzgerald 2020) engages with these questions covering the "manosphere" on Reddit. SNA is often focused on a particular platform. For instance, Ghasiya and Sasahara's (Ghasiya and Sasahara 2022) study used SNA to examine hate movements on Facebook, plotting groups as nodes and their shared posts as edges. Veilleux-Lepage and Archambault (Veilleux-Lepage and Archambault 2019) also used SNA to analyze hate on Facebook, instead plotting users as nodes and their connections via friend lists as edges, while Díez-Gutiérrez and colleagues (Díez-Gutiérrez et al. 2022) provide yet another example where SNA is adopted to analyze the far right on Twitter, plotting users as nodes and their interactions as edges.

The specific use of a plotted timeline to track developments in online hate movements is less attested but still important. One project by Mia Consalvo (Consalvo 2012) gives a sterling example, archiving the development of militant hate in the gaming community years prior to the explosion of Gamergate in 2014. That being said, the crossover between this timeline-based analysis and the use of SNA seems to be absent from the literature. We believe this provides a unique opportunity for novel research, as combining these disciplines allows for the possibility of extracting key points of connection through a temporal lens. For example, this can play out in very basic SNA techniques like degree centrality analysis, where the number of connections a tag node has with different timeline events highlights its overall prominence throughout the different stages of a movement.

However, while most social networks—including those cited above—generally use a singular "type" of node (such as people) connected by a common edge (such as following one another on Twitter), the interactive GSN has a multitude of disparate node types. From actors to forms of discrimination to media outlets to political movements and more, the large variety of nodes in our social network are connected through sharing a common event node. This is a direct consequence of our tagged timeline data from which the network is built. Summarized simply, each and every tag we assigned to an event—whether that was an actor, a form of discrimination, or a harassment tactic—was made a node. See **Figure 1** for an example of a timeline event prior to the creation of the SNA, including tags, URLs, event descriptions, and team-authored notes on its contents. While the team had no prior knowledge of examples of network analysis that combined such disparate node types, we found we can nonetheless draw valuable insights from applying SNA to our dataset. Key among these are GEPHI tools like the "Force Atlas" algorithm, which essentially organizes the visual orientation of our network via the "gravity" of different nodes, determined by factors like the number of connections and relative level of crossover shared between different tag nodes.

Applying this technique to a tagged timeline allows us to extract information through the spatiality of the final product. For instance, a closeness between the "transphobia" and "misogyny" nodes would provide evidence for how these bigotries have operated along similar lines throughout Gamergate, and the spatial similarity between specific platforms and tactics can reveal how different websites were more associated with a particular form of harassment than others. Considering this, we argue that we can draw valid and interesting information from the relative position of various nodes.

Figure 1: An example of a timeline event prior to the creation of the social network analysis. The hyperlinks beneath the title are the event's relevant "tags," and below is the description provided by the author of the Reddit timeline. An extension hand-authored to the description is made to clarify TotalBiscuit's inclusion in the tags, and finally the URL's link to the relevant web pages.

As digital humanists, we understand that data and networks are captured and interpreted rather than being given as a totally empirical view of the world (Drucker 2014). This project is no exception; rather, it is an intentional example of subjectivity and positionality informing multiple layers of human-curated data analysis. While tagging conventions were eventually established within the team, the process of determining and assigning tags/edges was highly personal and largely carried out by the lead author. Not only was assigning tags to each event a subjective process, but even determining which tags/nodes to create in the first place and what categories they would occupy was also highly personal decisions. No two people on the planet would tag the timeline in the same way. We wish to emphasize that what we present is but one interpretation of a virtually infinite system of connections.

Methodology

Nodes and categories

The current version of the GSN uses 10 categories of nodes: Events, Actors, Platforms, Tactics, Discriminations, Accusations, Media, Movements, Responses, and Miscellaneous. These categories—formed after significant time familiarizing ourselves with the Gamergate timeline—were created first and foremost as a means to help the team tag and assign edges to Gamergate events. With approximately 400 nodes, it was exceptionally easy to miss a relevant edge when all nodes were lumped together as one mass. Using the following category system, we could instead go through each category like an item on a checklist, asking ourselves of the relevant actors, then platforms, then tactics, then media, and so forth. What began as a means to assist with tagging then became a natural means for filtering and visualization. Users can filter by category using the "Group Selector" on the left-hand side of the graph, highlighting the ways that particular groups of nodes fall within the social network.
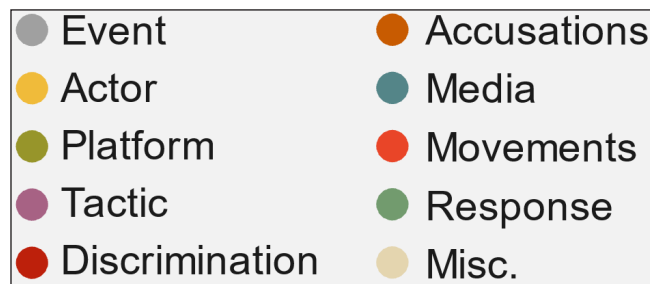

Figure 2: Legend featuring all 10 node types used in the Gamergate Social Network.

Given that our data is sourced from a timeline of events, *Event* nodes are the cornerstone of the visualization. In many ways, these function as the network's "edges"—all connections between nodes are made by first passing through an Event node. For example, while the Milo Yiannopoulos node is not directly connected to the "Transphobia" node, the two nodes are connected through a number of event nodes, such as "Milo accuses Brianna Wu of being transgender." While further iterations of the network may experiment with designating the Events as the edges between the other nine categories of nodes, certain Event nodes currently connect to other Event nodes directly when multiple events come together to form a single "storyline," hence the reasoning for keeping them visually as nodes. Additionally, Event nodes are divided into six different "phases," a concept explored by other members of the Gamergate team at the University of Alberta (Rockwell et al. 2021). This is represented visually through the varying shades applied to each Event node, with darker greys happening in earlier phases and lighter greys occurring towards the end of Gamergate.

Actor nodes represent individual people (victims, perpetrators, and neutral figures alike), as well as other conglomerates of people relevant to events of Gamergate, such as particular game development and tech companies. Events where communication and interaction with the Gamergate movement were made through collective statements are attributed to an actor node representing that collective; examples within the network include Google, Intel, the Digital Games Research Association, and Beamdog. Otherwise, individuals frequently connected to Gamergate events are represented with Actor nodes with their full names.

Platform nodes represent websites, social media platforms, news outlets, blogs, conferences, and more that hosted and/or disseminated discourse surrounding Gamergate. Some platforms functioned like active battlefields of harassment and counter-harassment (e.g., Twitter, 8chan); some disseminated information and interviews more akin to a third-party observer (e.g., *The Washington Post*); and others provided services such as crowdfunding (e.g., Patreon, Kickstarter), which enabled some actors to make money off their involvement in Gamergate or fund Gamergate-related initiatives.

Tactic nodes represent the different means through which actors perpetrated harassment online. While a few of these tactics are not unique to online harassment (impersonation, defamation, threats), they are manifested through different means in online spaces. Additionally, the most prominent tactics were those largely unique to online harassment—namely doxxing (the act of non-consensually making personally identifiable information public), and hashtag hijacking (rendering a hashtag useless by large groups of users spamming it with unrelated or hateful content). One of the less rigid subcategories under tactics that is worth noting is the "Gamergate Operations" tactic, which we defined as larger campaigns organized by Gamergate to achieve specific goals, such as the numerous boycotts organized by Gamergaters against game studios. While these larger operations were often made up of a plethora of more specific tactics, we thought it was important to add them as a distinct node to emphasize their character as mass-organized and militaristic campaigns akin to O'Donnell's militant meninism (O'Donnell 2019), in contrast to the individual or small-group actions that made up the majority of Gamergate tactics.

Discrimination nodes represent different categories of targeted harassment, from body shaming and racism to transphobia and misogyny. While bigotry—particularly misogyny—undergirds many of Gamergate's events, edges are only made to discrimination nodes when an event actively features the respective form of bigotry in an especially apparent fashion. For example, the event "Milo attacks journalist over article pointing out sexism in the tech industry" is connected with the misogyny

node, while events like "The Zoe Post is made" are not, despite obvious misogynist undertones. Make no mistake, bigotry underpinned a massive portion of Gamergate. The judicious method we used to create edges to discrimination nodes was not meant to underplay bigotry's presence in Gamergate, but to draw particular attention to when it was a defining force behind an event.

Accusation nodes represent three different forms of accusations made against Gamergate's enemies—accusations of collusion, censorship, and paedophilia—and the more generic "Conspiracy" node. Interestingly, despite the claim that Gamergate was about "ethics in gaming journalism," accusations of censorship handily outnumbered accusations of collusion, a pattern that is seen in the "freedom of speech"-obsessed alt-right discourse of today (Rodriguez 2021).

Response nodes represent the anti-harassment equivalent of Tactic nodes. From police involvement to media coverage and community action, Response nodes highlight the different ways that online harassment was reacted to by its victims, game developers, the media, and the international community at large.

The last remaining categories are as follows: *Media* nodes represent a small handful of TV shows, movies, and video games relevant to the Gamergate timeline; *Movements* nodes represent a small handful of outside movements that interacted with Gamergate (e.g., the Trump Campaign, White Supremacy); and *Miscellaneous* nodes catch a few outliers that did not fit elsewhere.

In addition to the visual clarity and filtering options provided within the visualization itself (using the "Group Selector" on the left-hand side), defining set categories of nodes helped immensely in assigning edges in a consistent manner. With these conventions in place, we were able to dramatically increase the quality and coherence of which edges were assigned to which events.

Technical methodology

Our work on the GSN was conducted using the SNA program GEPHI (Bastian, Heymann, and Jacomy 2009), resulting in a visualization made up of 389 nodes and 858 edges (see **Figure 2**). In our work we used the events as well as their various tags as nodes on the graph and the tagging relationship between them as edges. For example, if we determined an event had both transphobia and misogyny actively involved, three nodes would be created: a "Misogyny" node, a "Transphobia" node, and a node for that particular event. This Event node would then have an edge to both the "Misogyny" and "Transphobia" node respectively. The network's nodes and their text were scaled according to the degree centrality (i.e., the number of connections) and colour coded to allow users to see which tagged nodes contributed to any particular event and vice versa.

The visualization was spatialized using GEPHI's "Force Atlas" tool, a force-directed layout algorithm that organized the position of the various nodes based on attraction and repulsion strategies around degree centrality. As a result of this technique, we could apply analysis of the positionality of different nodes in the system based on where they were located in relation to one another. For instance, a closer positionality between a discrimination node such as "Racism" and a platform node like "Reddit" would suggest that they were both connected to a higher number of events than nodes which were spaced further apart. Conversely, nodes located distant from one another would suggest a lower correlation. See **Figure 3** for a bird's-eye view of the complete social network structure.
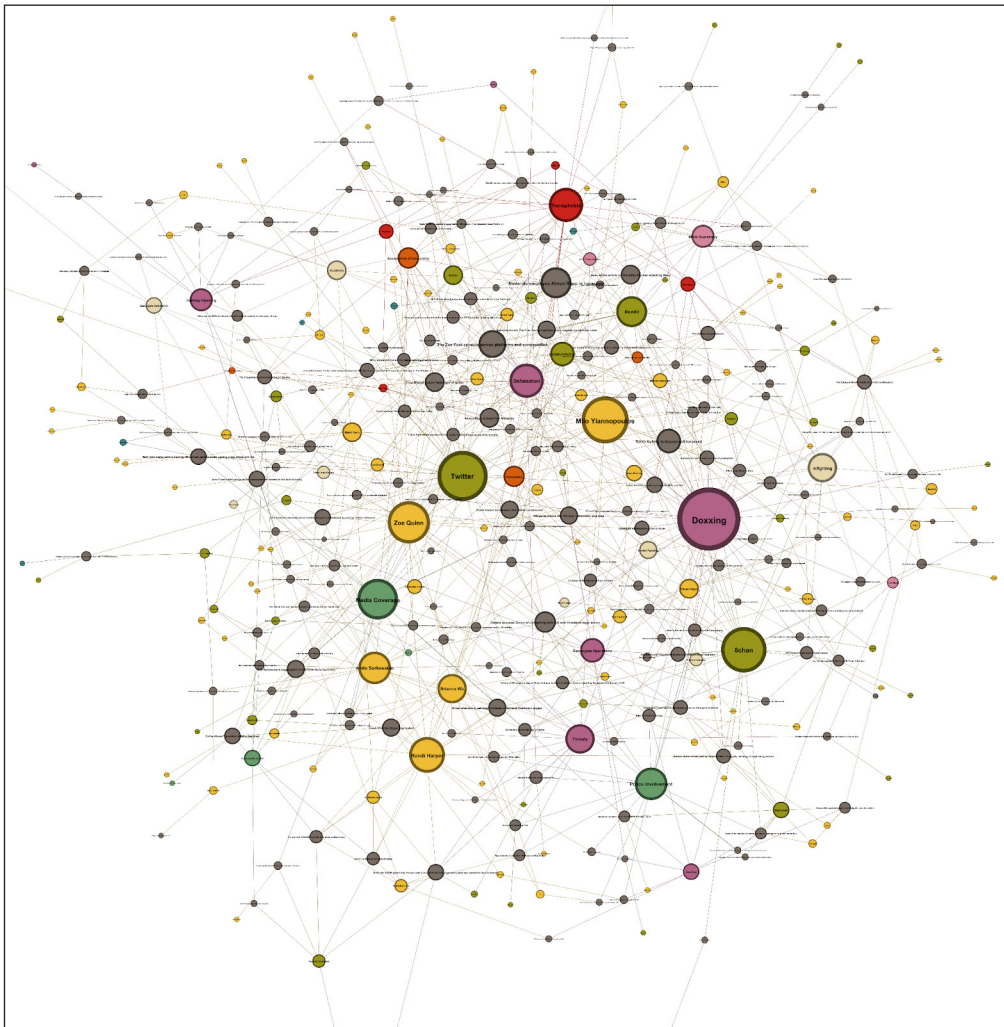

Figure 3: The Gamergate Social Network as a total networked structure. See the website for a closer look at node types and specific connections.

From this basis, we conducted a quantitative analysis of the data using the SNA tools available in GEPHI. Specifically, we used the degree centrality tool, which measures the number of edges (i.e., connections) that each individual node has. Degree centrality was a particularly useful approach because of the unique way our graph was configured. Since our data was formatted as connections between events and various tags (Actors, Platforms, etc.), degree centrality served as a measure of how many Event nodes each individual tag was associated with. Thus, we were able to gain a perspective on the relative importance of various tags because we could actively quantify their connectivity throughout Gamergate. We visualized the results using R custom tools in a series of bar graphs, which demonstrate key nodes according to their tag category (see the analysis section for examples).

Finally, our team published the results of our work using the sigma.js GEPHI plugin, which converted the original GEPHI graph into a javascript file that could be formatted for the web. For ease of use, we chose to host the visualization on a simple HTML website on GitHub pages (Bevan and Tunggal 2024). The final product is coloured and organized according to the description above with the added benefit of some web elements added for user readability. For instance, we have positioned a legend with a list of node types in the top left corner, and the site includes features such as a search bar, zoom functionality, and interactive nodes that display connections/degree centrality on click.

Ethics and analyzing hate

As a hate movement, much of the data associated with the Gamergate timeline was toxic enough to require additional ethical consideration. While it was necessary for us to check each timeline entry in detail, links and screenshots provided as sources in the timeline would frequently include hate speech, homophobic/transphobic/racial slurs, pornography, death threats, and other disturbing content. 8chan—one of the most prominent platforms hosting Gamergate activity—is infamous for hosting even exploitive child abuse content, with its Gamergate predecessor 4chan hosting content of similar toxicity. The Internet Archive purged all archived pages from the 8chan domain, and previous work by an adjacent team at the University of Alberta, which scraped Gamergate content off the web, deleted their archive of 4chan content for similar reasons.

Additionally, the ethics around naming Gamergate's victims were subject to much discussion internally within the team. The original Reddit timeline names each and every actor, whether victim or otherwise. While perpetrators of harassment choose to be harassers, the same cannot be said of victims. Victims of Gamergate were originally

targeted and involved in the movement against their will with no desire to be public figures, making their continued naming in relation to the movement nonconsensual (Quinn 2017). However, some Gamergate victims like Zoe Quinn would go on to fight back against Gamergate by raising awareness around the dangers of online harassment, creating tools and services to assist other victims, and even appearing in legal hearings to attest to the severity of hate online (Quinn 2017). For these actors, it would feel unfair not to recognize their efforts in combatting online harassment. As such, our team decided to take a mixed approach. GSN uses the full names of victims who appear across multiple events in their efforts to raise awareness of the dangers of Gamergate (such as advocates Zoe Quinn and Anita Sarkeesian), while respecting the anonymity of victims who were thrust into movement as temporary targets. While this is yet another instance of human-curated data and is prone to the same inconsistencies and imperfections discussed above, we felt it a better solution than defaulting to naming every victim.

Analysis

Transphobia: Intersectional hatred

While misogyny usually comes to mind first when thinking of Gamergate and its anti-feminist vitriol, familiarizing ourselves intimately with the timeline revealed the persistent and intersectional presence of transphobia. With only one less connection than the misogyny node (18 vs. 19), transphobia was there from the very beginning. Just two days after the word "Gamergate" was coined, Zoe Quinn came under additional harassment for old tweets (see **Figure 4**) confronting a game development competition that was using trans-exclusionary entrance requirements (metroidcomposit 2017).
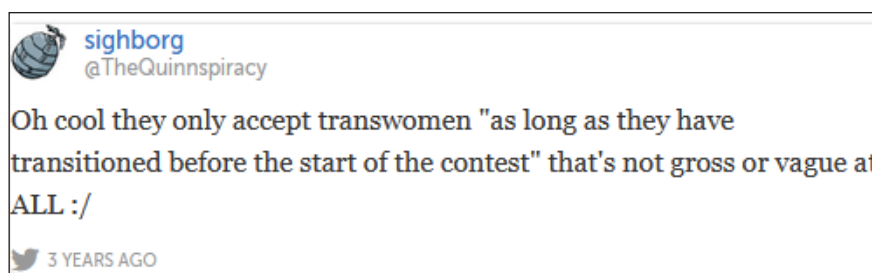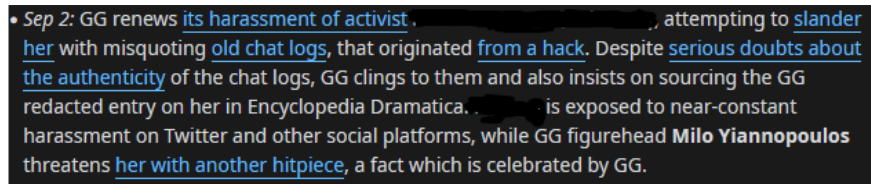

sighborg
@TheQuinnspiracy

Oh cool they only accept transwomen "as long as they have transitioned before the start of the contest" that's not gross or vague at ALL :/

3 YEARS AGO

Figure 4: Tweet from Zoe Quinn on the Fine Young Capitalist's game jam.

However, if we take the original Reddit timeline at face value, it would be impossible to recognize the pervasiveness of transphobia. Throughout the timeline and other forms of Gamergate coverage, instances of transphobia are often masked and addressed as any other form of harassment. An event will note that a woman is simply targeted

and harassed by Gamergate, but digging into the sources reveals the victim is a trans woman on the receiving end of slurs and hate speech. See, for example, in **Figure 5** a screenshot taken from the Reddit timeline that describes the harassment of a woman activist with no reference to her trans identity nor the nature of the harassment. Upon opening the hitpiece (see a censored screenshot in **Figure 6**) in the timeline entry, the victim is immediately outed as trans and has her deadname smeared.

Figure 5: Timeline entry from the GamerGhazi timeline describing a trans woman victim.

Figure 6: Screenshot of the first paragraph of Yiannopoulos's aforementioned hit piece, outing her and revealing her deadname.

It is unlikely that this was done out of any form of ill intent; it is more likely simply the result of a well-meaning cisgendered person being unsure of how to handle a sensitive topic. Given that our team is informed by the trans experience of its first author, we feel it is essential not to shy away from discussing transphobia, but to openly emphasize it.

Before the process of visualization had even begun, our team recognized particular patterns in the ways that transphobia manifested throughout the events of Gamergate. Namely, transphobia as it propagated within Gamergate encompasses many of the movement's central ideological "pillars"—misogyny, conspiracy, "militant meninism" (O'Donnell 2019, 1), and anti-SJW vitriol—in a singular, intersectional hatred. Misogyny is nakedly apparent; of the dozen or more events involving the direct harassment of a trans person, each and every one of them was directed at a trans woman. Following suit, "militant meninism" (O'Donnell 2019, 1)—an aggressive, militaristic "call-to-arms" rhetoric that urges men to rise up and fight against their supposed foes—views trans women as draft dodgers at best, and subhuman turncoats at worst. As for anti-SJW sentiment, fighting against "Social Justice Warriors" is different from solely being a misogynist insofar as it relates to taking a stand against social progress at large. Gamergate, spanning from 2014 to 2016, coincided with the coming out of Caitlin Jenner and an exponential increase in media coverage relating to trans identities (Compton and Bridges 2016). In other words, trans rights were even more of a contentious issue teetering on the edge of social acceptance than they are today,

earning the incessant ire of those branding themselves as "anti-SJW." Finally, in a fashion not unlike the manifestation of anti-Semitism in alt-right circles (Kofta, Soral, and Bilewicz 2020), conspiracy was used to spread transphobia like wildfire through Gamergate. The movement's most influential figurehead—Milo Yiannopoulos—published articles accusing victims of Gamergate of secretly being trans women (Yiannopoulos 2015). Across pro-GG boards like 8chan, users would piece together "evidence" of their targets' secret trans identities. Meanwhile, populist conspiracies of Michelle Obama being a trans woman were in full swing (Berlatsky 2017). Seen as the most vile and damning secret of all, trans identities were weaponised by Gamergate to churn out conspiracy after conspiracy.

How then does SNA contextualize the intersectional nature of transphobia in Gamergate, and what else can we learn from it? We can find the transphobia node towards the bottom-left of the visualization, seen in **Figure 7**.
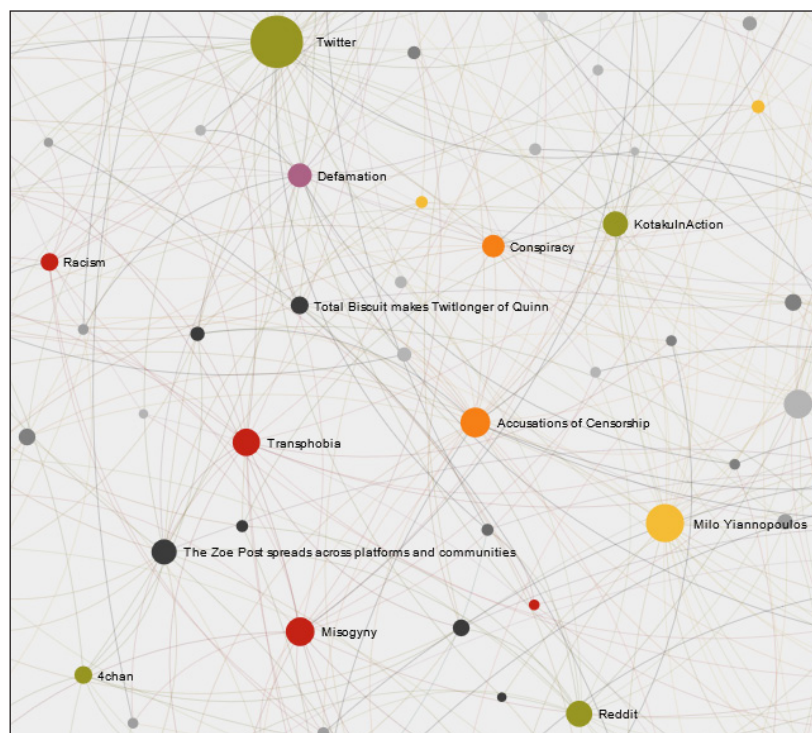

Figure 7: The bottom-left hemisphere of the visualization, home to the "Transphobia" node. Note the close spatialization of "Transphobia" and "Misogyny."

First, the size of the node. Coming in at 18 connections, transphobia was the second most common form of discrimination, with only one connection less than misogyny. While we should exercise caution in putting too much stock in our human-curated data, the relative prevalence of transphobia is important to note. In a similar vein, the

very origin of Gamergate itself—"The Zoe Post" and its subsequent spread—is found immediately next to the transphobia node. This suggests that not only was transphobia present from the very beginning of the movement, but that the associations and themes present in Gamergate's birth bore significant enough similarity to other transphobia-related events to render them next to one another within the social network. In other words, the nodes connected to "The Zoe Post"—such as figures like the Fine Young Capitalists, platforms like 4chan, tactics like defamation, and more—are found in a significant enough number of other transphobia-related events that the two nodes bear significant spatial resemblance. Additionally, the visualization also demonstrates that transphobia is closely related to events across all phases of the Gamergate timeline, with small event nodes in lighter shades of grey (denoting that the event was from a later phase) found in similar concentration to the darker, earlier events.

Another node that finds itself in the vicinity of the "Transphobia" node is the "Misogyny" node. Interestingly, this is not the result of misogyny and transphobia being connected to the same events—in fact, transphobia and misogyny only share a single event in common. While we recognize misogyny is found at the very heart of transphobia, special care was taken while tagging the data to distinguish which form(s) of discrimination were assigned to an event in order to avoid a situation where one form of discrimination was relegated to a "subcategory" of another, showing up only when its "parent" was also present. This was done under the hypothesis that different forms of hate/harassment/discrimination would manifest in different ways, even if they share roots. Yet, the GSN visualizes how misogyny and transphobia were intrinsically related throughout Gamergate, even when sharing virtually none of the same edges. This is due to their respective events sharing a remarkable similarity to each other; from platforms to accusations, actors to tactics, transphobia-related and misogyny-related events had significant and virtually identical correlation with one another in form and content.

Among their shared similarities are important nearby nodes. For example, the node of previously mentioned alt-right agitant Milo Yiannopoulos falls nearby, indicative of his frequent transphobic and misogynist attacks. "Accusations of Censorship" lies even closer, suggestive of the most common rebuttal given when a transphobe or misogynist is called out for their bigotry: that their opinion and freedom of speech is being unjustly quashed. The "Conspiracy" node also makes an appearance, predictably falling closer to transphobia than to misogyny.

Just as nearby nodes can tell us about which Actors, Responses, Accusations, etc. are closely related to transphobia, nodes on the opposite end of the visualization can tell us about what was only distantly related. See a more zoomed-out image of the visualization in **Figure 8**.
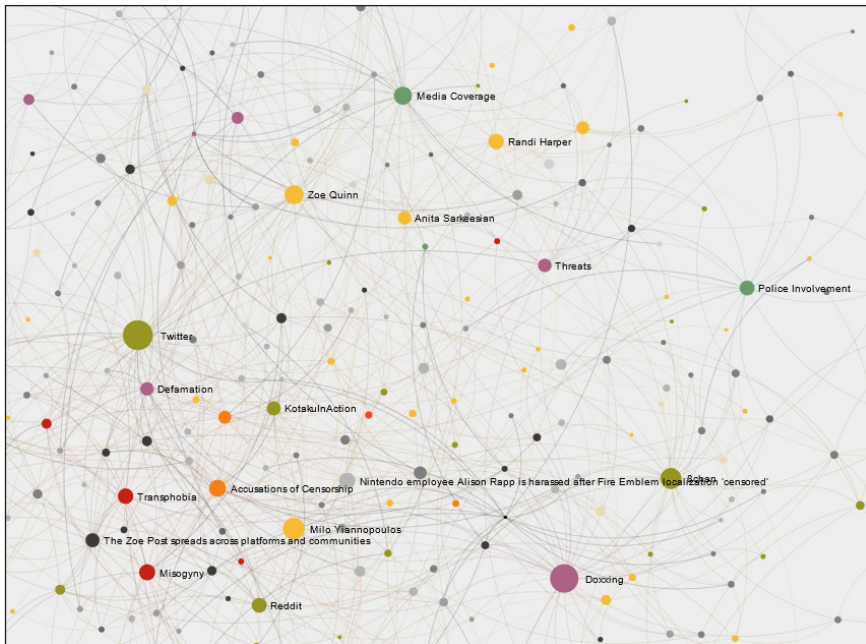
Figure 8: A bird's-eye view of the social network analysis. Note the spatial relationships between nodes "8chan," "Doxxing," and "Police Involvement."

Notably, both "Media Coverage" and "Police Involvement" find themselves far from the "Transphobia" and "Misogyny" nodes. In fact, all five Response category nodes are nowhere close. Part of this discrepancy is undoubtedly due to our method of tagging forms of discrimination to only appear on events in which a form of discrimination actively took place, not on events which simply describe discrimination, such as a journal article detailing misogyny in Gamergate. However, as seen in the analysis of the relationship between transphobia and misogyny, nodes do not need to directly share common events in order to appear within close vicinity in a social network. To appear on opposite ends of the network from one another, as they do here, means that there is very little similarity between events featuring bigotry and events of media coverage and police involvement. Our social network suggests that online bigotry alone is not enough to garner a response from law enforcement, the media, or the online community; either the harassment needs to escalate to physical threats (see: the proximity of the "Threats" node to "Media Coverage" and "Police Involvement"), or the harassment needs to be targeted at an already vocal figurehead (see: the proximity of major Gamergate figures Quinn, Sarkeesian, and Harper to "Media Coverage"). Otherwise, victims of online transphobia and other forms of bigotry are, more often than not, left to fend for themselves. The network helps to contextualize the attempts of major Gamergate victims addressing the United Nations (Frank 2015), creating resources to assist other victims of online hate, and teaming up with lawmakers (Crecente 2015)

in order to raise awareness of online hate and to have it treated with the same degree of severity as offline hate. As the social network helps to demonstrate, there is a clear disparity between how online and offline hate are seen in the eyes of the law and media.

Tactics

One of the immediate and striking observations we made regarding tactics was the prominence of born-digital techniques, specifically that of doxxing (see **Figure 9**). Doxxing is a strategy used in online spaces where one's personal information (such as name, address, and contact information) is posted publicly on a forum or website, opening the target up to harassment from others online. Through a degree centrality (DC) analysis, we discovered that the "Doxxing" node had the greatest number of connections (DC = 37) within the tactics category by a large degree, with "Defamation" (DC = 19) and "Threats" (DC = 16) coming in second and third respectively. This finding suggests that doxxing was the favorite strategy used by Gamergaters to engage with opponents politically, and this observation makes sense considering that doxxing is a gateway tactic that opens up individuals to further lines of attack. In addition, doxxing has a particularly painful relationship with trans people, as old "dead names" can be dug up and smeared as part of the doxx.

We additionally noticed a relationship between the Tactics (nodes in purple) and Platforms (nodes in olive green) like 4chan and 8chan with regards to their position on the visualization. The "Doxxing" node and many of the followup tactic nodes associated with it ("Swatting," "Threats," etc.) were located on the bottom right side of the visualization, correlating with the position of both the "4chan" and "8chan" nodes. Swatting is a particularly concerning follow-up tactic because it entails the report of a false threat to police at a target's home address, resulting in state violence being directed at the target and putting the person at risk of serious harm or death. This suggests that these more direct and violent tactics were associated with those boards, which is reasonable considering both websites' histories with trolling and far-right agitation. These observations are particularly interesting when one considers the positionality of the "Defamation" node, which is located on the left side of the visualization, alongside "Twitter" and other more popular social media platforms. This contrast demonstrates a division of tactics amongst the Gamergate crowd, where platforms like 4chan and 8chan are used to organize direct action, whereas behavior on more publicly and commercially palatable platforms like Reddit and Twitter were geared towards defaming opponents.

The relationship between various tactics and police involvement also yields some interesting insights. The "Police Involvement" node is located on the far-right side of

the graph, centred between three key tactic nodes, namely "Doxxing," "Threats," and "Swatting." This spatiality points towards a cause-and-effect relationship between Gamergate tactics being engaged, followed by a response from law enforcement, which further highlights the distinction between platforms like Reddit and Twitter versus 4chan and 8chan. However, the position of the "Police Involvement" node also demonstrates how underprepared or callous law enforcement was to the development of online hate. Notably, the "Police Involvement" node was on the opposite side of the network from the tactic node "Defamation," and as discussed, also distant from discrimination nodes like "Transphobia" and "Misogyny," despite the often-illegal activities present in events attached to these tag nodes. In the case of the act of swatting, law enforcement could even be seen as the spearhead of online hate, as Gamergaters manipulated police SWAT teams to violently assault victims. This is important to highlight considering the invisibility of violence experienced by women both online and offline (Gray, Buyukozturk, and Hill 2017), and the efforts made by major victims and a small handful of lawmakers to have online harassment be treated seriously by law enforcement throughout Gamergate (Crecente 2015). Ultimately, these observations suggest that law enforcement agencies over the course of Gamergate were, charitably, unable to develop mechanisms to keep up with and meaningfully combat online hate.
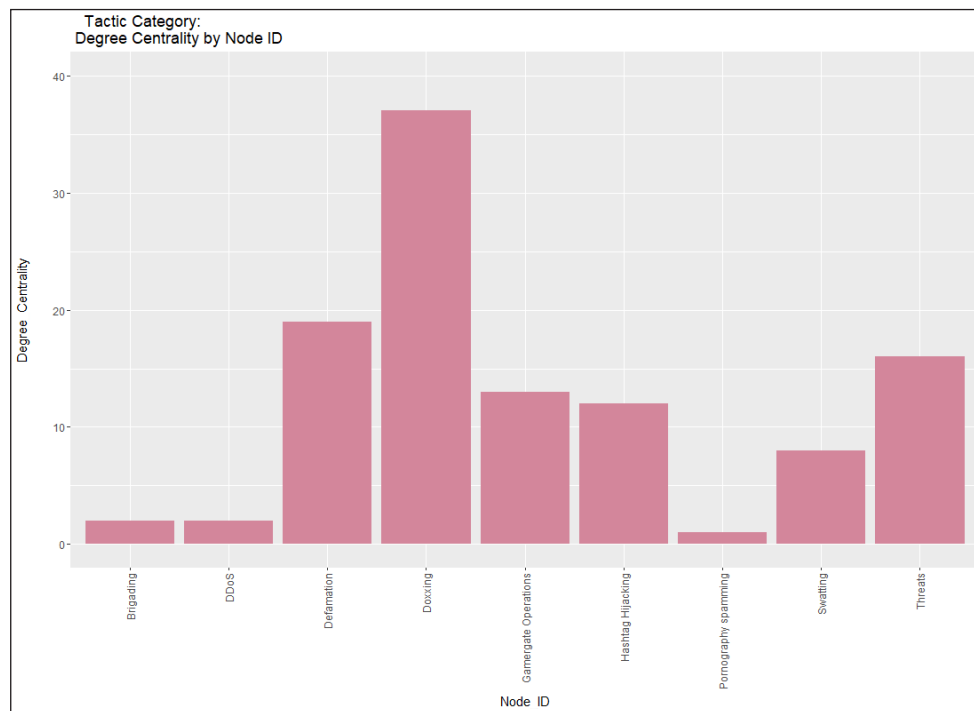

Figure 9: Degree centrality for each Gamergate tactic. Note the prevalence of the "Doxxing" tag.

Platforms

A brief overview of the different platforms seen throughout Gamergate immediately yields some important insights, namely the primacy of the nodes "Twitter" (DC = 29) and "8chan" (DC = 26) (see **Figure 10**). While it may be expected that a multibillion-dollar social media network like Twitter would occupy a prominent position in the movement, a relatively obscure internet forum like 8chan initially seems out of place. However, this prominence begins to make more sense when we consider the above-mentioned contrast between 8chan as a space for organizing hate campaigns and Twitter as a front-facing space for defamation and discourse. Despite both websites serving similar functions as forums for community engagement, closer analysis reveals that the practical applications of these platforms during Gamergate were vastly different. For example, Twitter historically served as a much more accepted social media platform, whereas 8chan had a reputation for little to no moderation and controversies with child abuse content and vicious racism. 8chan's total free speech policy made it amenable to illegal activity, having an outsized influence on the trajectory of the Gamergate movement. Seeing these points occupying a central position within the overall network therefore reveals a certain duality to the Gamergate movement, with different elements engaging on accessible "clearnet" websites like Twitter, while others operated from the anonymity and obscurity of 8chan.

The relationship between certain Actors (yellow), the "Media Coverage" node (teal), and the previously developed 8chan/Twitter dichotomy also provides some interesting analysis. Notably, the network shows that many of the Gamergate's key figures are positioned on the upper half of the visualization. Generally, they fall into Twitter's sphere of influence as opposed to 8chan's, with the "Zoe Quinn" node (DC = 24) being the closest to the Twitter node. This relationship makes sense historically, considering Quinn was one of the most visible victims of Gamergate and the discourse surrounding her was widely popular amongst both supporters and opponents of Gamergate. However, more interesting analysis can be generated when we add the context of the "Media Coverage" node. As alluded to previously, most of the key figure nodes are clumped around this point, and the largest key figures to fall into this pattern are high-profile victims of Gamergate (e.g., Zoe Quinn, Anita Sarkeesian, Randi Harper). This positionality demonstrates an interrelationship between discourse generated around high-profile victims and the expanding news coverage on Gamergate, which is supported by the history of the movement. Sustained efforts in raising awareness around Gamergate were consistently spearheaded by victims, and their efforts were a primary driving force behind the movement's ongoing presence in news media. Taken as a whole, this analysis shows how the Gamergate movement centred on discourse

around victims of hate as opposed to game ethics—and that activists fighting back against this hate were the primary point of focus in the mainstream sphere.
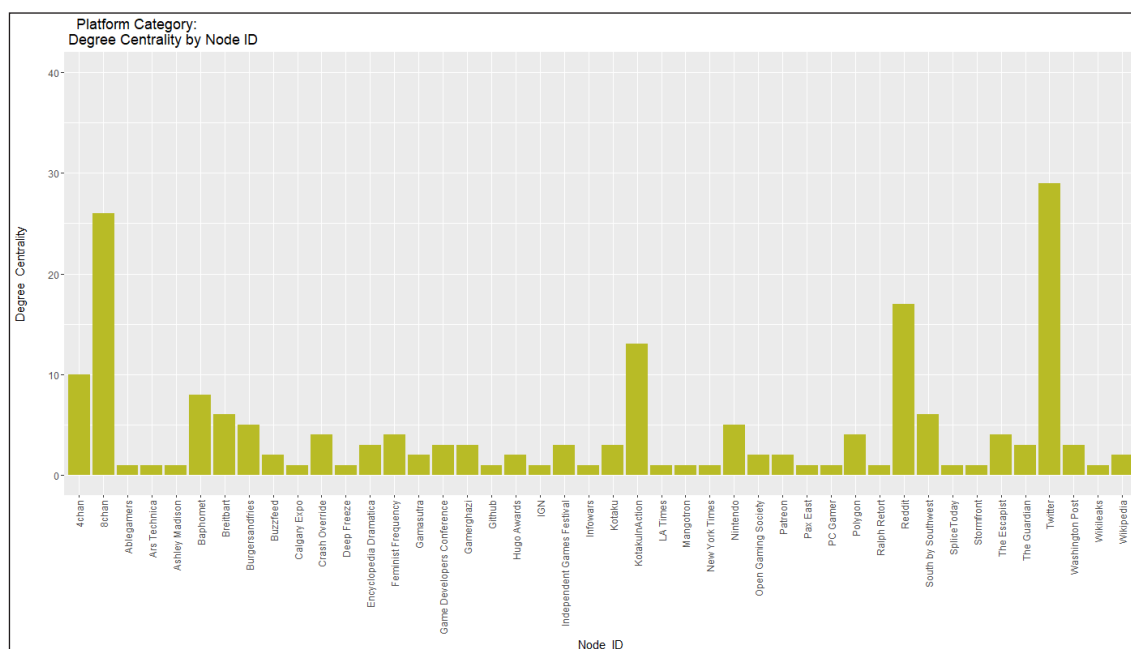

Figure 10: Degree centrality for each platform. Note the position of 4chan/8chan on the left and Twitter on the right, respectively.

Conclusion

Future work

Our work on the GSN provides a basis for future improvement and further research on the topic of Gamergate. We believe that the GSN as a social network and visualization tool may yield further insights depending on the framework that researchers apply to the network. For instance, while the main focus of our current analysis concerned the specific intersection of transphobia and the prominence of various platforms and tactics throughout Gamergate, the data may be parsed through other frames of intersectional analysis, such as an examination of digital racism. Beyond intersectional approaches, we believe that additional network analysis may offer insights into the work. While we applied a very broad use of degree centrality and spatiality to explore trends in this paper, other SNA tools may yield additional insights. To give one example, an eigenvector centrality analysis has the potential to unveil influential "facilitator" nodes, key tags, or events that provide access to the most well-connected nodes in the network. Applying eigenvector analysis to our current work, we would likely see the most benefit from its application to event nodes as connectors between key tag nodes.

Indeed, other researchers may even be interested in taking a more specific historical approach and reverse the analysis to focus on key events of Gamergate and their included tags, as opposed to examining the prominence and spatiality of tags.

There is also further work to improve the functionality for the site. First and foremost, we wish to create a networked timeline of events that is reflective of the original timeline we sourced our analysis from. This could be achieved using GEPHI's timeline feature, which can produce a network that is animated to demonstrate the unfolding of events during the movement, or alternatively by creating numerous smaller networks that represent key stages of development in the Gamergate movement. Additionally, while we provide a generalized content warning for the contents of the site's sources, a much better solution would be to have tailored content warnings for each external URL provided. Due to the spontaneous, online nature of our sources, forms of hate can be unexpectedly encountered in seemingly unrelated events (e.g., a transphobic slur appearing in a screenshot referencing a conference being cancelled), making it difficult for the user to judge whether or not a link is suitable for them to open. Hand-authoring individual content warnings for the URLs that require them would significantly reduce the chances of harm occurring from the user opening a triggering link. As for the infrastructure of the website itself, we wish to add further quality-of-life improvements, such as including brief descriptions when users click on individual nodes of actors, platforms, tactics, and more, as the additional context would greatly assist the reader in understanding terminology with which they may not be familiar. We would also like to expand the perspectives of the people going through our data so we have more lenses of analysis to choose from, which should result in a more nuanced network with respect to its intersectionality.

Final thoughts

Overall, we believe our work on the GSN project to be a valuable contribution to the ongoing discussion of online hate movements, how to combat them, and generally our collective reflection on the development of online political culture during the early 2010s. Our work provides a unique perspective on the phenomenon of Gamergate, utilizing an SNA in conjunction with a timeline-based dataset with potential to unveil many aspects of the ideology's relationality and temporality, while giving one example of application through the subject of transphobia. In this paper, we explained our methodology in creating the GSN, including the curation of a Gamergate timeline into an SNA-friendly format, followed by the visualization and analysis of that timeline. We used this tool to demonstrate the truly intersectional nature of online hate, highlighting the ways in which foundational pillars of online bigotry like anti-SJW

vitriol and conspiracy can intermingle with queer identity specifically. Creating this network has also given us a deeper understanding of the unique ways in which online hatred has historically developed, with born-online tactics like doxxing and hashtag hijacking taking centre stage, despite often being treated as less "real" than offline hate by media and law enforcement. But this is only one perspective superimposed on one curation of Gamergate's history. In the future, we hope that our methodology and results will serve as a useful guideline for researchers in deriving their own unique understanding of the events and actors of Gamergate, and indeed future hate movements.

Positionality statements

Catherine Bevan: The events of Gamergate strike a particular chord with me as a white bisexual trans woman in my twenties, particularly in relation to misogyny and queer-/transphobia. While I was not an active participant of Gamergate on either side, the movement reverberated throughout online culture during a time that I spent a large majority of my time on the internet and a time when my relationship with gender/sexuality was still in a state of unknowing confusion. I believe that this assists in forming a valuable understanding of the events of Gamergate; however, my intense emotional relationship with specific facets of Gamergate most assuredly led to a degree of tunnel vision. My interpretation of forms of discrimination with which I was not personally familiar—such as anti-Semitism or racism—were not given the level of focus that other researchers may have afforded them. Additionally, personal struggles with anxiety and mental health at large have further coloured my experiences unearthing the bigotry at the heart of Gamergate. This sometimes meant that working on this project was especially draining, likely influencing my interpretations and approaches to research.

Jess Tunggal: As a 24-year-old nonbinary masculine individual, I hold various subjectivities in relation to this research, as I've participated in queer spaces and have an understanding of the emotional and political damage that has been experienced as a result of the Gamergate movement. While I don't identify directly with many of the intersections involved in the work, such as being transgender or a woman, my proximity to those struggles in the queer community made me sensitive to that perspective, and I accordingly stepped away from elements of the research that would require a more focused perspective on such issues. Moreover, as an individual of mixed-race ancestry of both settler and newcomer on Turtle Island, I hold subjectivities and privileges that may have factored into my readings of events, particularly in cases of attacks against racialized victims and generally in racial discourse. Finally, as a former observer and

casual participant in the Gamergate movement from 2016–2017, I feel I have both unique insights into the zeitgeist of the time and a specific emotional relationship with its outcomes. My political progression from Gamergate has particularly soured my perspective on the movement, which may have direct implications on the analysis I contributed.

Andy Zhang: As a Chinese-Canadian man in my twenties, I don't have any immediate connections to the Gamergate movement insofar as it pertains to the harassment of and violence against trans women. This privilege of being unaffected by such a watershed moment in digital culture has required me to exercise additional care in my pursuit of allyship, as my transmisogyny-exempt status means I find it easier to empathize with other qualities of Gamergate victims, such as POC or neurodivergents. I have attempted to use my more detached identity to aid in this research, but this could also have the opposite effect in terms of missing something critical.

Geoffrey Rockwell: As an older white heterosexual male and a Professor of Philosophy and Digital Humanities at the University of Alberta, I recognize the privilege and power that comes with my academic position. My academic position gives me access to significant institutional resources and support. I became interested in this research when, in October 2014, a group of us realized that this controversy was going to be an important epochal moment in the understanding of game culture. By chance we had the resources to start gathering Twitter data related to Gamergate and have been slowly archiving and studying it. I have become convinced that segments of the videogame-playing population trade in racist, sexist, and homophobic tropes. I am therefore committed to research that will (a) document the misogyny/racism/homophobia, and (b) study it using DH (Digital Humanities) methods to advocate for positive cultural shifts.

Competing interests

The authors have no competing interests to declare.

Contributions

Authorial

Authorship in the byline is by magnitude of contribution. Author contributions, described using the NISO (National Information Standards Organization) CrediT taxonomy, are as follows:

Author name and initials:

Catherine Ilona Bevan (CB)

Jesaya Samuel Tunggal (JT)

Andy Zhang (AZ)

Geoffrey Rockwell (GR)

Authors are listed in descending order by significance of contribution. The corresponding author is CB.

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Data Curation: CB, AZ

Formal Analysis: CB, JT

Funding Acquisition: GR

Investigation: CB, JT

Methodology: CB, JT

Project Administration: GR

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References

Alexander, Leigh. 2014. "'Gamers' Don't Have to Be Your Audience. 'Gamers' Are Over." *Game Developer*, August 28. Accessed September 21, 2024. https://www.gamedeveloper.com/business/-gamers-don-t-have-to-be-your-audience-gamers-are-over-.

Bastian, Mathieu, Sebastien Heymann, and Mathieu Jacomy. 2009. "Gephi: An Open Source Software for Exploring and Manipulating Networks." In *Proceedings of the International AAAI Conference on Web and Social Media* 3(1): 361–362. Accessed July 14, 2024. https://doi.org/10.1609/icwsm.v3i1.13937.

Berlatsky, Noah. 2017. "Michelle Obama Trans-Truthers Reveal Persisting Prejudices." *Pacific Standard*, June 14. Accessed October 13, 2023. https://psmag.com/social-justice/michelle-obama-trans-truthers-reveal-persisting-prejudices-92320.

Bevan, Catherine, and Jesaya Tunggal. 2024. "The Gamergate Social Network." The Gamergate Social Network. Accessed September 9. https://ggsocialnetwork.github.io/ggsocialnetwork/.

Bleakley, Paul. 2023. "Panic, Pizza and Mainstreaming the Alt-Right: A Social Media Analysis of Pizzagate and the Rise of the QAnon Conspiracy." *Current Sociology* 71(3): 509–525. Accessed July 14, 2024. https://doi.org/10.1177/00113921211034896.

Borgatti, Stephen P., Ajay Mehra, Daniel J. Brass, and Giuseppe Labianca. 2009. "Network Analysis in the Social Sciences." *Science* 323(5916): 892–895. Accessed July 14, 2024. https://doi.org/10.1126/science.1165821.

Brandes, Ulrik, Garry Robins, Ann McCranie, and Stanley Wasserman. 2013. "What Is Network Science?" *Network Science* 1(1): 1–15. Accessed July 14, 2024. https://doi.org/10.1017/nws.2013.2.

Campbell, John L. 2019. "Why Did Donald Trump Really Get Elected?" *Journal of Public Governance* 46(4): 5–18. Accessed July 14, 2024. https://doi.org/10.15678/ZP.2018.46.4.01.

Chess, Shira, and Adrienne Shaw. 2015. "A Conspiracy of Fishes, or, How We Learned to Stop Worrying About #GamerGate and Embrace Hegemonic Masculinity." *Journal of Broadcasting and Electronic Media* 59(1): 208–220. Accessed July 14, 2024. https://doi.org/10.1080/08838151.2014.999917.

Coleman, Gabriella. 2014. "Anonymous in Context: The Power and Politics Behind the Mask." In *Organized Chaos: Reimagining the Internet,* edited by Mark Raymond and Gordon Smith, 71–96. Montreal: McGill-Queen's University Press.

Compton, D'Lane, and Tristan Bridges. 2016. "#Callmecaitlyn and Contemporary Trans* Visibility." *Contexts* 15(1): 84. Accessed July 14, 2024. https://doi.org/10.1177/1536504216628852.

Consalvo, Mia. 2012. "Confronting Toxic Gamer Culture: A Challenge for Feminist Game Studies Scholars." *Ada: A Journal of Gender, New Media, and Technology*. Accessed July 14, 2024. https://scholarsbank.uoregon.edu/xmlui/bitstream/handle/1794/26289/ada01-confr-con-2012.pdf?sequence=1.

Conway, Maura, Ryan Scrivens, and Logan Macnair. 2019. "Right-Wing Extremists' Persistent Online Presence: History and Contemporary Trends." *ICCT Policy Brief*, 1–16. Accessed July 14, 2024. https://www.icct.nl/publication/right-wing-extremists-persistent-online-presence-history-and-contemporary-trends.

Crecente, Brian. 2015. "Depression Quest Creator Speaks at Congressional Briefing on Cyberstalking." *Polygon* (blog), April 15. Accessed July 14, 2024. https://www.polygon.com/2015/4/15/8420237/depression-quest-creator-speaks-at-congressional-briefing-on.

Cross, Katherine. 2014. "We Will Force Gaming to Be Free." *First Person Scholar* (blog), October 8. Accessed June 18, 2024. http://www.firstpersonscholar.com/we-will-force-gaming-to-be-free/.

Daniels, Jessie, and Nick LaLone. 2012. "Racism in Video Gaming: Connecting Extremist and Mainstream Expressions of White Supremacy." In *Social Exclusion, Power, and Video Game Play: New Research in Digital Media and Technology*, edited by David G. Embrick, Talmadge J. Wright, and Andras Lukacs, 85–100. Maryland: Lexington Books.

DeCook, Julia Rose. 2020. "Trust Me, I'm Trolling: Irony and the Alt-Right's Political Aesthetic." *M/C Journal* 23(3). Accessed July 14, 2024. https://doi.org/10.5204/mcj.1655.

Díez-Gutiérrez, Enrique-Javier, María Verdeja, José Sarrión-Andaluz, Luis Buendía, and Julián Macías-Tovar. 2022. "Political Hate Speech of the Far Right on Twitter in Latin America." *Comunicar: Media Education Research Journal* 30(72): 97–109. Accessed July 14, 2024. https://doi.org/10.3916/C72-2022-08.

Drucker, Johanna. 2014. *Graphesis: Visual Forms of Knowledge Production*. MetaLABprojects. Cambridge, MA: Harvard University Press.

Fiadotava, Anastasiya, Anastasiya Astapova, Rebecca Hendershott, Merryn McKinnon, and Anna-Sophie Jürgens. 2023. "Injecting Fun? Humour, Conspiracy Theory and (Anti)Vaccination Discourse in Popular Media." *Public Understanding of Science* 32(5): 622–640. Accessed July 14, 2024. https://doi.org/10.1177/09636625221147019.

Fitzgerald, Kelly C. 2020. "Mapping the Manosphere: A Social Network Analysis of the Manosphere on Reddit." PhD diss., Naval Postgraduate School. https://apps.dtic.mil/sti/trecms/pdf/AD1126891.pdf.

Frank, Allegra. 2015. "Anita Sarkeesian, Zoe Quinn and More Take Aim at Cyber Harassment against Women." *Polygon* (blog), September 25. Accessed July 14, 2024. https://www.polygon.com/2015/9/25/9399169/united-nations-women-cyber-violence-anita-sarkeesian-zoe-quinn.

Ghasiya, Piyush, and Kazutoshi Sasahara. 2022. "Rapid Sharing of Islamophobic Hate on Facebook: The Case of the Tablighi Jamaat Controversy." *Social Media + Society* 8(4): 205630512211291. Accessed July 14, 2024. https://doi.org/10.1177/20563051221129151.

Golbeck, Jennifer, Jeff Gerhard, Farrah O'Colman, and Ryan O'Colman. 2018. "Scaling Up Integrated Structural and Content-Based Network Analysis." *Information Systems Frontiers* 20(6): 1191–1202. Accessed June 18, 2024. https://doi.org/10.1007/s10796-017-9783-x.

Gray, Kishonna L., Bertan Buyukozturk, and Zachary G. Hill. 2017. "Blurring the Boundaries: Using Gamergate to Examine 'Real' and Symbolic Violence against Women in Contemporary Gaming Culture." *Sociology Compass* 11(3): e12458. Accessed June 18, 2024. https://doi.org/10.1111/soc4.12458.

Kofta, Mirosław, Wiktor Soral, and Michał Bilewicz. 2020. "What Breeds Conspiracy Antisemitism? The Role of Political Uncontrollability and Uncertainty in the Belief in Jewish Conspiracy." *Journal of Personality and Social Psychology* 118(5): 900–918. Accessed June 18, 2024. https://doi.org/10.1037/pspa0000183.

Martin, Trevor. 2017. "Dissecting Trump's Most Rabid Online Following." *FiveThirtyEight* (blog), March 23. Accessed June 18, 2024. https://fivethirtyeight.com/features/dissecting-trumps-most-rabid-online-following/.

Mehrabi, Ninareh, Fred Morstatter, Nanyun Peng, and Aram Galstyan. 2020. "Debiasing Community Detection: The Importance of Lowly Connected Nodes." In *ASONAM '19: Proceedings of the 2019 IEEE/ACM International Conference on Advances in Social Networks Analysis and Mining*, edited by Francesca Spezzano, Wei Chen, and Xiaokui Xiao, 509–512. New York: Association for Computing Machinery. Accessed July 14, 2024. https://doi.org/10.1145/3341161.3342915.

metroidcomposit. 2017. "Zoe Quinn and The Fine Young Capitalists: The Full Twitter Conversation Between Them on February 28" Storify. Accessed October 13, 2023. https://web.archive.org/web/20170621081742/https://storify.com/metroidcomposit/the-conversation-between-zoe-and-tfyc-on-january-2.

O'Donnell, Jessica. 2019. "Militant Meninism: The Militaristic Discourse of Gamergate and Men's Rights Activism." *Media, Culture & Society* 42(5): 654–674, November 25. Accessed June 18, 2024. https://doi.org/10.1177/0163443719876624.

Peckford, Ashley. 2020. "Right Wing Extremism in a Video Game Community? A Qualitative Content Analysis Exploring the Discourse of the Reddit GamerGate Community r/KotakuInAction." In *A Closer Look in Unusual Times: Criminological Perspectives from Crim 862*, edited by Ted Palys, 65–80. Accessed September 12, 2024. https://www.sfu.ca/~palys/ACloserLookInUnusualTimes-2020-HR.pdf.

Potts, Liza, and Dave Jones. 2011. "Contextualizing Experiences: Tracing the Relationships Between People and Technologies in the Social Web." *Journal of Business and Technical Communication* 25(3): 338–358. Accessed June 18, 2024. https://doi.org/10.1177/1050651911400839.

Quinn, Zoë. 2017. Crash Override: How Gamergate (Nearly) Destroyed My Life, and How We Can Win the Fight against Online Hate. New York: PublicAffairs.

Rockwell, Geoffrey, Erin O'Neil, Ryan Chartier, and Paolo Verdini. 2021. "GamerGate: Experimenting with AI Techniques and Social Media Data." Paper presented at the Association for Computers and the Humanities (ACH) 2021 Virtual Conference, July.

Rodriguez, Jason. 2021. "Freedom of Speech or Freedom to Silence? How Color-Evasive Racism Protects the Intimidation Tactics of American Extreme Rightwing Organizations." *Race Ethnicity and Education* 24(4): 451–469. Accessed June 18, 2024. https://doi.org/10.1080/13613324.2020.1798385.

Russworm, TreaAndrea M. 2018. "A Call to Action for Video Game Studies in an Age of Reanimated White Supremacy." *Velvet Light Trap* 81: 73–76. Accessed September 12, 2024. https://muse.jhu.edu/pub/15/article/686904#sub06.

Stijelja, Stefan, and Brian L. Mishara. 2023. "Characteristics of Incel Forum Users: Social Network Analysis and Chronological Posting Patterns." *Studies in Conflict & Terrorism*, June, 1–21. Accessed June 18, 2024. https://doi.org/10.1080/1057610X.2023.2208892.

Thorleifsson, Cathrine. 2021. "From Cyberfascism to Terrorism: On 4chan/pol/ Culture and the Transnational Production of Memetic Violence." *Nations and Nationalism* 28(1): 286–301. Accessed June 18, 2024. https://doi.org/10.1111/nana.12780.

Topinka, Robert. 2019. "'Back to a Past That Was Futuristic': The Alt-Right and the Uncanny Form of Racism." *Boundary 2* (blog), October 14. Accessed June 18, 2024. https://www.boundary2.org/2019/10/robert-topinka-back-to-a-past-that-was-futuristic-the-alt-right-and-the-uncanny-form-of-racism/.

Veilleux-Lepage, Yannick, and Emil Archambault. 2019. "Mapping Transnational Extremist Networks: An Exploratory Study of the Soldiers of Odin's Facebook Network, Using Integrated Social Network Analysis." *Perspectives on Terrorism* 13(2): 21–38. Accessed June 18, 2024. https://www.jstor.org/stable/26626863.

Wells, Garrison, Agnes Romhanyi, Jason G. Reitman, Reginald Gardner, Kurt Squire, and Constance Steinkuehler. 2023. "Right-Wing Extremism in Mainstream Games: A Review of the Literature." *Games and Culture* 19(4): 469–492. Accessed June 18, 2024. https://doi.org/10.1177/15554120231167214.

Wofford, Taylor. 2014. "Is GamerGate about Media Ethics or Harassing Women? Harassment, the Data Shows." *Newsweek*, October 25. Accessed June 18, 2024. https://www.newsweek.com/gamergate-about-media-ethics-or-harassing-women-harassment-data-show-279736.

Yiannopoulos, Milo. 2015. "The Wacky World of Wu." *Breitbart*. Accessed October 13, 2023. https://archive.ph/kN3HL.