

Memes, Radicalisation, and the Promotion of Violence on Chan Sites

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Abstract

A number of violent far-right attacks in recent years have revealed an apparent connection with 'chan culture', not just in the tangible examples of attackers uploading manifestos, final messages and livestreams to chan sites themselves, but in the widespread community support exhibited in some corners of this online subculture where violence is both trivialized and glorified. Commonly, this is manifested in the visual culture present on chan sites, particularly memes, which may be used to promote extreme or even violent narratives under the guise of humor and irony. This paper seeks to understand how the visual culture of chan sites contributes to, and/or encourages violent discourse. We combine quantitative data scraping, ethnography and visual analysis across tens of chan sites ranging in popularity like 4chan, 8kun, and more niche sites between March – June 2020. Over all we collect a dataset of 135K images across different chans and provide a first qualitative characterization of the most popular images shared across different chans.

Introduction

On Friday, March 15th, 2019, the Australian national Brenton Tarrant opened fire during Friday prayers in two mosques in Christchurch, New Zealand, killing 51 people. Ahead of his killing spree, he posted on 8chan's '/pol/' (politically incorrect) board that it was "time to stop shitposting and time to make a real effort," which can be roughly translated as 'less talk, more action.' Tarrant then posted a link to a Facebook live stream of his attack, as well as a manifesto entitled *The Great Replacement*, which was littered with jokes from online 'chan' sites.

Consisting of a series of "fast-paced, interest-based, anonymous imageboards," each containing various sub-fora or "boards" (Manivannan 2019), chan sites represent the "antithesis of a [sic.] Twitter or Facebook," and constitute a vast subcultural ecosystem operating in parallel to mainstream social media. They have been linked to a string of recent far-right attacks. Indeed, just over a month after Tarrant's attack, John Earnest attempted to replicate his actions in an attack at the Chabad of Poway Synagogue in San Diego, California, killing one and wounding several others. Like Tarrant, Earnest also posted to 8chan's '/pol/' board prior to his attack, linking a manifesto which described the Christchurch shooting as a "catalyst." Then, in early August

2019, Patrick Crusius opened fire at a Walmart store in El Paso, Texas, killing 22 people of mostly Hispanic heritage, again uploading a manifesto to 8chan's '/pol/'. Crusius' motives chimed with Tarrant's, as he claimed to be defending his country from "cultural and ethnic replacement brought on by an invasion [of non-white US citizens]."

Following this string of violence, the US-based web infrastructure service 'Cloudflare' terminated 8chan's network security provision, pulling the plug on its ability to operate on the Clearnet. Yet, just months after it disappeared, 8chan was relaunched by its previous owners as '8kun', a new chan site containing a number of the same boards, although notably the ill-fated '/pol/' had been rebranded as '/pnd/', meaning 'politics, news, debate.'

The problem of violence emanating from within chan culture is not unique to 8chan. Just seven days after the El Paso shooting, on August 10th, 2019, Philip Manshaus posted to the fringe chan site 'Endchan', announcing his intentions to spark a "race war," before attempting to carry out a firearms attack at the Al-Noor Islamic Centre, in Bærum, Norway. Similarly, in October 2019, Stephan Balliet uploaded several manifesto-style documents and a link to a Twitch live stream to 'Meguca', an obscure chan site focused mainly on anime and manga-style art, before attempting to initiate a firearms attack inside a synagogue in Halle, Germany, eventually killing two people in the surrounding area (Basra et al, 2019). Notably, Balliet's manifesto contained several particularly irreverent references to chan culture, with one section containing a list of hypothetical "achievements" such as "Crusty Kebab: Burn down a Mosque," and "Gender Equality: Kill a Jewess," designed to challenge and encourage potential future attackers, playing on the "gamification" of violence present within chan sites, where users challenge each other to commit increasingly devastating acts of mass casualty violence (Evans 2019).

Thus, chan sites are not only notable for their connection to this string of interrelated attacks, but also because they foster relatively large online communities within which violence is simultaneously trivialized and glorified. In particular, memes and visual culture have been frequently deployed on chans to glorify mass casualty violence. Indeed, Marwick and Lewis (Marwick and Lewis 2017) have demonstrated that memes are a central aspect of far-right culture and they may lower the barrier for participation in extreme ideologies

by masking overtly racist narratives under a guise of humor.

This paper takes a comparative, data-driven approach to address exactly this problem. We conduct data scraping and digital ethnography on 17 boards across 10 chan sites,¹ specifically the '/pol/' or equivalent boards and '/k/' (weapons) boards between March – June 2020. We are then able to determine the most popular images shared on these chan sites, as well as their reach within the chan ecosystem, to show how they contribute to violent discourse.

Background

The term “meme” was first coined by Dawkins (1967) in his book ‘The Selfish Gene’, in which they were described as cultural analogues to genes through how they self-replicate, mutate and react to external events. In the context of internet culture, a meme can be defined as a “highly medium-specific” (Lamerichs et al. 2018) “unit of cultural transmission” (Dawkins 2016) through which (often humorous) messages are created in a visual medium or through the “intertextual” relationship between image and text (Huntington 2016). They are often designed to be quickly and easily disseminated within online space.

This paper refers to examples of terrorism, as defined by Hoffman (Hoffman 2017) as “violence — or equally important the threat of violence — used and directed in pursuit of, or in service of a political aim.” It is also concerned with extremism, defined in (Neuberger 2019) as the belief “an in-group’s success or survival can never be separated from the need for hostile action against an out-group.” Extremism may be “cognitive” in nature, where individuals simply hold “radically different ideas about society and governance,” or “behavioural” where they “pursue their extremist aims by violent means” (Neumann 2003).

We employ the umbrella term of ‘far right’ to describe “politically active groups or individuals which fall at the far end of the left/right political spectrum” (Davey and Ebner 2017). The term “far right” encompasses actors on the ‘extreme right’ who believe that democracy must be replaced and that violence against enemies is justified, and the ‘radical right’ who believe that democracy should be maintained but that liberal elites must be replaced (Bjørge and Ravndal 2019). Although the far-right sphere is comprised of a loose association of movements, Mudde’s broad characterization of these groups (see (Mudde 2002)) as linked by their allegiance to idealized authoritarian political systems, ethnic nationalism, and xenophobia, can be profitably employed to provide structure to the fractured far-right landscape.

Further to this, the “alt-right” can be considered as a particularly “nebulous, fluid [and] sometimes anarchic” facet of the broader far right, which exists almost entirely online (Hodge and Hallgrimsdottir 2020). According to (Ganesh 2020), the alt-right is a “product of decades of white supremacist organizing,” spanning across far-right narratives in both Europe and North America, leveraging the ideological underpinnings of scholars such as Barrés who

¹We initially looked at 12 different chans, but we have not seen a significant amount of images for two chans and we thus do not share those images as part of this paper.

theorized an inseparable link between cultural and racial philosophy (De Orellana and Michelsen 2019).

Chan sites are a subsection of imageboards with roots in Japanese “Otaku” (geek) culture and early Western Internet culture (Beran 2019). As on many imageboards, conversations are referred to as “threads” where users can leave “replies”, with a new thread being begun for each new topic. On most chan sites, users operate anonymously, and many delete old threads when new content arrives, leading to a “chaotic, fast-paced [user] experience” (Bernstein et al. 2011). Chan sites also vary in the size of the audience they attract, with the largest Western chan, 4chan, reportedly attracting over 20 million unique users per month, and smaller, more niche sites attractive only a handful of users. Finally, while many boards on chan sites discuss content unaffiliated with the far right or extremism, others, particularly /pol/, have long been staple spaces used by the online far right.

Ethical Statement

This study has been conducted with approval from the Centre for Research and Evidence on Security Threats’ (CREST) Security Research Ethics Committee (SREC) in addition to King’s College London’s Research Ethics Committee, which ensured our methods were ethical. This paper and the corresponding dataset contain a number of images depicting violent scenarios. This paper features only cartoon-style violent images as opposed to photographs depicting violence or gore, although a small number of such images are contained in the broader dataset. The images in this paper are deemed worthy of inclusion solely on the basis that they provide a visual representation of how chan users experience the sites in a way that textual descriptions alone cannot achieve. The dataset is intended as an academic resource and has been produced for the sole purpose of furthering understanding of the dynamics of online extremism.

Methodology

Our data collection involves developing a crawler to systematically gather material from 10 different chan sites and a total of 17 chan boards. We only collected data from /pol/ and /k/ (or equivalent) boards, as these boards have generally been associated with the far right, extremism, or attack planning which were relevant topics to the scope of this analysis. The objectives of the crawler are to: 1) Ensure completeness, i.e.: all pre-selected boards, threads, posts, and images are scraped in their entirety; 2) Ensure efficiency, meaning that we do not scrape images that had already been downloaded; 3) Ensure anonymity, meaning that our data collection remain anonymous and is not connected to our institutional network address. To complete this final step, we connect through TOR (The Onion Router), and repeat all steps several times a day, each time randomly selecting a new network address.

The data collection process is more challenging than those utilized in recent works on 4chan (Papasavva et al. 2020) because many of the alternative boards do not have publicly available APIs (Application Program Interfaces). To overcome this, we obtain the catalog of active threads in each

board by systematically browsing the index pages and scraping the identifiers of the most recent posts being discussed, as well as the threads they belonged to. We then download the Web page hosting the posts in a thread and stored a snapshot of all active threads every hour from when the thread is created. For each thread, we scrape all messages posted and download all images therein.

We then leverage the data collected to track how images are discussed across the different boards. In particular, we count the number of posts in which every image appears and rank the images based on their overall popularity and their spread across different chan sites. To compare images we apply an algorithm, called ‘Perceptual Hashing’, which calculates when two images appear visually similar. To account for small modifications in the images we apply the DBSCAN clustering algorithm, which was used previously in by (Zannettou et al. 2018). This algorithm connects images that are very visually similar to form clusters based on a distance function. We use the Hamming distance between Perceptual Hashes. To perform the clustering, we first make a pairwise comparison and extract the distances between all images, for which we use a high-end computer. The clusters which are analyzed in more depth in this paper have been selected based either on their size, or their relevance to the ethnographic observation of chan sites we also conduct.

We combine quantitative methods with ethnography, here defined as “the study of people... by methods of data collection which capture their social meanings and ordinary activities, involving the researcher participating directly in the setting” (Brewer 2000). Our ethnography focuses on the experiential practice of participating or ‘lurking’ on chan sites, enabling us to get an accurate feel of the different social and cultural climate of each platform and understand the technological specificities of chans as they pertain to user experience. Because the language and culture of many chan sites is cultivated to be off-putting to newcomers, this period of ethnographic observation is an important element to our research process, allowing us to thoroughly appreciate the nuanced social norms and practices common between chans and understand how these are reflected within memes.

Dataset Overview

Our dataset is formed of all images shared in the different chan board studies together with the following metadata: a map between the post identifier a the list of images that are listed in the post, the different hash values (including perceptual hash) seen, the pre-computed distance between all images, and the output of the clustering algorithm. To foster research in the area, we make our dataset available: <https://doi.org/10.5281/zenodo.4669960>

We provide an overview of our dataset from two angles:

- On the one hand, we look at top 200 images shared within each of the chan sites studied, ordered by their overall popularity, i.e.: the total number of times an image was observed on any of the chan sites.
- On the other hand, we look at the top 200 images shared between chan sites, ordered by their reach within chan

culture, i.e.: the number of unique chan sites that a specific image was observed on.

Table 1 shows an excerpt of the most popular images.

Take-Away

We see that although some images feature in both datasets, the type of content most frequently shared between chans appears to differ somewhat to content which achieves the most overall popularity. The primary distinction is that the content shared between chans contain more “textual” images, i.e.: images that display significantly longer excerpts of text, whereas the content ranked by overall popularity is primarily dominated by *thematic* images — or visual content that would be more easily recognizable as memes.

Textual images contain far more detailed arguments and analysis of ideological concepts than could be conveyed in a single picture containing little or no text. Thus, by sharing such images users are able to share and discuss ideological and political complexities with each other, as well as spread detailed accounts of conspiracy theories. This image format may remain popular within chan culture, as it allows longer-form content such as essays or even whole books to be easily downloaded and shared online in a single image, rather than requiring a user to type, or copy-and-paste large bodies of text into a thread.

Similarly, screenshots of written posts previously made to chan sites feature prominently in both datasets. By specifically sharing archived content from various chan sites, users are participating in the construction and preservation of a kind of ‘written history’ of chan culture. It is significant that posts originally made to the now defunct 8chan, or to niche chan sites that newer users might find difficult to access, gained traction as screenshots on the more mainstream 4chan. Although ideological and cultural differences exist between individual chan sites (and boards within sites), the sharing of chan-based content between various chan platforms clarifies that users of chans share some kind of overarching sense of community, distinct from mainstream social media.

Secondly, the prevalence of antisemitism in the inter-chan dataset of images is also significant. Of the 20 most popular images shared between chan sites, 12 referenced an omnibus of antisemitic conspiracies. Many of these narratives referred to Cultural Marxism — which suggests that Jewish people are attempting to subvert Western society from elite positions of power, often within the media. In general, the antisemitic conspiracies contained in these images suggested that Jewish people, by virtue of their nature, wish to destroy and exterminate the white race.

While antisemitic memes are certainly contained in the intra-chan dataset, these are often somewhat more subtle, and rely on visual stereotypes, such as in the ‘Happy Merchant Wojak’ meme. These images rely upon some prior knowledge of harmful stereotypes and often attempt to be humorous and therefore somewhat more innocuous than the long-form textual images contained in the inter-chan dataset. Indeed, some of the images in the second set contain extremely long passages of text and make no attempt at humor, such as the ‘Jewish Ritual Murder Archives’ image,

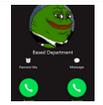
R	Name	Image	Interpretation	Statistics
Intra-chan Analysis				
1	Yes Chad		The meme shows the blonde-haired, blue-eyed ‘Nordic’ figure with a non-emotive face and is frankly captioned “Yes.”	Rep.: 743 Posts: 739 Boards: 3 Chans: 2
2	Winnie the Flu		This meme depicts Xi Jinping, the President of the People’s Republic of China drawn in the style of Winnie the Pooh next to a coronavirus cell. The meme is a continuation of online trolling of Xi Jinping by likening him to Winnie the Pooh.	Rep.: 659 Posts: 659 Boards: 4 Chans: 3
3	Crying Laughing Pepe		A laughing close up of the Pepe the Frog character which has become a symbol of the alt-right.	Rep.: 585 Posts: 585 Boards: 2 Chans: 1
4	Based Department		A mobile phone screen with an incoming call from the “Based Department” — the term “based” being a shorthand descriptor for concepts endorsed by the alt-right.	Rep.: 531 Posts: 551 Boards: 2 Chans: 1
5	Carlos		A meme featuring ‘Carlos’ from the children’s television show ‘The Magic School Bus’, which is often used as a response to puns made online.	Rep.: 472 Posts: 472 Boards: 5 Chans: 3
6	Screenshots		A number of 4chan posts discussing the history of Chinese culture and questioning its racial heterogeneity among other types of screenshots.	Rep.: 415 Posts: 412 Boards: 4 Chans: 3
7	Emotional Wojak		An angry and emotionally frustrated Wojak character.	Rep.: 359 Posts: 359 Boards: 5 Chans: 4
8	Pandemic Warning		Posts made to a very popular fringe chan in January 2020 by a user claiming to have insider information from the CDC and WHO about the coronavirus pandemic.	Rep.: 352 Posts: 345 Boards: 4 Chans: 3
9	It’s All So Tiresome		A screenshot taken from the 2011 documentary Empire of Dust. The image shows the Railway Engineering Company’s Head of Logistics, Lao Yang, express his frustration at having to work with Congolese people. It is often used as a reaction image online with racist undertones.	Rep.: 349 Posts: 303 Boards: 4 Chans: 2
Inter-chan Analysis				
1	Exposé of Jewish Council for Racial Equality		An image implying that Jewish-run organizations and elites are forcing international migration as a way to dilute ‘native’ [white] cultures.	Rep.: 43 Posts: 43 Boards: 6 Chans: 6
2	American D-Day Landing		A ‘macro-image’ of American paratroopers from the D-Day landing. The text implies that those who fought against the Nazis in World War Two enabled mass international migration orchestrated by Jewish elites.	Rep.: 11 Posts: 11 Boards: 6 Chans: 6
3	American Media Staffers		Lists of prominent Jewish media figures. The image implies Jewish people are over-represented within traditional media as part of an overarching conspiracy.	Rep.: 171 Posts: 171 Boards: 6 Chans: 5
4	Secret Role of Jews in China		Image ‘exposing’ the secret role of Jewish in China which implies Chairman Mao was acting under the influence or command of Jewish Elites.	Rep.: 118 Posts: 118 Boards: 5 Chans: 5
5	Black Sun		A symbol traditionally associated with Norse and Celtic cultures appropriated by the German Nazi Party, which remains a commonly used motif by white supremacists today.	Rep.: 44 Posts: 31 Boards: 5 Chans: 5

Table 1: Popular images, ranked (R) by number of times observed across all chans (intra-chan) and by unique chan sites (inter).

which details supposed instances of ritual murders committed by Jewish people, in an attempt to suggest they are inherently more murderous than others. These longer form textual memes are in this dataset, are generally overtly antisemitic and rely less on humor to mask these antisemitic intentions.

Thus, it may be that images which gain traction on multiple chan sites (particularly chan sites with smaller audiences) may be more overt in the harmful stereotypes and conspiracies they propagate. In contrast, it may be that those images which become popular on more mainstream chan sites (particularly 4chan) do so because their harmful content is somewhat obscured by ‘edgy’ humor. This suggests that as some users progress from spending time on 4chan to smaller chans, the content they consume may be progressively more overt in the harmful messages it contains.

Data Uses

This dataset is the first of its kind known to the authors of this paper. It is an invaluable resource for academics, policy makers and practitioners working on the far right online in aiding them in their understanding of the subtleties of radicalisation in online spaces. By outlining the overall most popular memes used on chan sites, practitioners will be able to understand how humorous images are utilized within far-right online communities to further racist and harmful agendas, and will be able to ascertain which kinds of images are particularly central to furthering these agendas. This is particularly useful for practitioners, as while a number of studies have highlighted the importance of visual culture in the radicalisation process, there is very little quantitative data currently available which tracks which images are the most prolific in spreading hateful messages.

Similarly, almost all work which has been conducted on chan sites thus far has concentrated on 4chan, with some emerging work studying its sibling site 8kun. This dataset is unique in that it allows researchers to compare images which have gained traction on larger chan communities like 4chan, to those which are popular among a range of smaller chan sites. This kind of data potentially enables terrorism researchers to understand how the visual content users consume online may become progressively more extreme, as they become involved in smaller online communities.

Both datasets also provide a starting point for future work, be it quantitative or qualitative. There is space to examine the visual similarity between memes in order to understand what kind of images go ‘viral’ within far-right communities online (Ling et al. 2021). Similarly, this paper has highlighted the prevalence of various themes throughout the datasets, in particular antisemitism and conspiracy theories. The datasets could be utilized in further studies seeking to examine dominant themes in far-right online spaces and their relevance to online radicalisation.

The Memetic Irony

In this section, we provide a characterization of the types of images that have been shared in the different chan boards during the collection period.

Memes and Malleable Meanings

We observe that many of the memes we collect do not have *fixed* meanings per say, rather these images take on different meanings depending upon the context in which they are deployed. For instance, the “Comfortable Pepe” meme, which depicts the Pepe the Frog character relaxing under a blanket, appears entirely innocuous when viewed on its own.² Indeed, the meme was often used with no obviously harmful intent to convey lethargy or smugness.

However, in other instances the image was also used to affirm racist sentiments. In late May 2020, a 4chan thread was created, sharing a link to a live stream of the Black Lives Matter (BLM) protests which occurred in Minneapolis in the wake of the death of George Floyd, an unarmed African-American man. One user replied using the Comfortable Pepe meme, excitedly commenting “Everything is burning! :D.” In this case, the meme is used to imply that the user finds the social unrest and collective distraught caused by George Floyd’s death amusing, and views the ensuing chaos as a source of entertainment. This is a commonly observed use of the meme where it is used to trivialize widespread suffering, often with clear racist overtones. Thus, while it is not insignificant that the meme discussed here features the Pepe the Frog character — which has become an enduring symbol of the alt-right — it is clear that the image can be used with a variety of intents, be they innocent, or intended to convey delight at observing racial tension and societal discord.

Other memes within our dataset also appear inoffensive upon first viewing, yet have potentially racist origins. One such image is the “Yes Chad” meme — the overall most popular image shared on chan sites (see Table 1). The meme is often used on other social media sites without any apparent racist connotations, however according to Know Your Meme,³ it originated on 4chan as part of “a series of memes in which various races, subraces, and nationalities, primarily Nordic and Mediterranean, are compared to each other.”

Indeed, many instances in which the meme is used on the chan sites are reminiscent of its racially charged origins. For instance, in one interaction the meme is simply posted as a response to one user ironically questioning whether /pol/ users are all fascists, while in another case it is posted as a reply to a thread which claimed “Black lives DO NOT MATTER.” In both instances, therefore, the meme is used as a kind of anti-humor, cutting through any potential irony or ambiguity which are common on chan sites, and simply affirming racist sentiments.

Thus, while the meme’s seemingly innocuous appearance allows it to be used without these connotations within mainstream social media circles, potential prior knowledge of the image’s origins and the context it is situated within during discussions of some racist threads, allow it to often take on racist meaning within chan culture.

Violent Images

We also manually identify a number of images with more ‘fixed’ meanings, which can not be interpreted as innocuous

²See <https://comfyneetpepe.tumblr.com/>

³<http://knowyourmeme.com>

no matter the context in which they were viewed. Specifically, we identify a subset of images which contain explicitly ‘violent scenarios.’ We define a violent scenario here as one which depicts physical harm being done to a human or animal, or which implies that physical violence has very recently occurred. We also see images showing figures covered in blood, or wielding firearms as shown in Figure 1.

The parameters of this analysis are designed to capture images that directly portray physical violence, and thus excludes other, less direct forms of violent action from this analysis. However there are some drawbacks to this chosen definition which we recognize. For instance images that can not be judged to have a threatening *tone* have not been included in this analysis. Following this definition, we identified five images depicting violent scenarios in the dataset containing the top 200 images ranked by their overall popularity. It was also seen that two further images depict cartoon-style characters covered in blood, and a further six images show various figures wielding firearms.

These results differ slightly for the dataset containing the top 200 images ranked by their spread between chan sites, where three images showing ‘violent scenarios’ are identified, a further one image show a cartoon figure covered in blood, and eight images depict figures wielding firearms. It is of additional note, that of these eight firearms-related images, three are screenshot taken from the Christchurch attacker’s live stream of his attack, with various edits made to increase the images’ aesthetic appeal.

Based on ethnographic observation of various chan sites, we observe many images depicting violent scenarios or implying violence which do not feature within these datasets, thus the absence of large numbers of violent images presented here should not undermine the fact that they can be found easily during casual browsing on chan sites. Nevertheless, it is noteworthy in itself that many extremely graphic images do not feature among the most popular images studied in this report — indicating that explicitly violent memes are re-shared less than seemingly innocuous or more subtly threatening images.

Finally, the potential impact of encountering a violent image online should not be belittled due to their underrepresentation within the datasets here (Feinstein, Audet, and Waknine 2014). Similarly, nor should it be suggested that it is only images depicting explicitly violent scenarios that may influence potential trajectories into violent extremism.

The memes on the right are examples of the kind of images classed as ‘violent scenarios.’ Figure 1 (a) depicts Pepe the Frog violently driving a stake or firearm through the skull of a figure depicted with overly stereotyped ‘Jewish features.’ The implications of the image appear clear, with the Pepe character being used to represent the alt-right more broadly, and thus implying that the violent murder of Jewish people is permissible within alt-right communities. The meme’s cartoon-style and the somewhat surreal inclusion of the anthropomorphized Pepe character contribute to the image’s subversive and ironic feel, conveying that violence against members of the Jewish community is something which can be trivialized. In contrast, the manga-style image in Figure 1 (b), which depicts a communist woman being



(a) Pepe murdering a ‘Happy Merchant’ figure



(b) Assassination of a stereotyped ‘communist’ figure

Figure 1: A selection of images judged to depict ‘violent scenarios.’ The most graphic content has not been included.

shot in the head, places more emphasis on the *sensation* of violence, using blurred lines to imply the intense thrill feel of shooting someone. The woman’s large eyes and pained expression in juxtaposition to the blood shooting from her head also make the image emotive particularly, when contrasted with the harsh lettering which frames the murder of ‘communists’ as acceptable.

Memes like these serve a dehumanizing purpose, suggesting it is permissible to kill or commit acts of violence towards groups or individuals identified as ‘outsiders.’ Luke Munn (Munn 2019) shows that through repeated exposure, the extreme narratives contained within far-right memes “slowly edge their way into the psyche, normalizing fascist beliefs and transforming the individual.” He goes on to note that sustained exposure to dehumanizing content “transforms rights-bearing subjects into apolitical objects,” paving the way for “targets to be mistreated, deportation schemes of racial utopias,” and as a logical extension of this concept, targeted in acts of physical violence. Indeed, Randy Borum (?) notes that processes of dehumanisation may “erode psychological barriers to violence,” thereby lessening one’s moral repulsion towards committing violent action against a designated out-group. Thus, repeated consumption of memes which trivialize violent scenarios may establish a new baseline, wherein one’s moral repulsion to such violence is weakened.

The surrealist cartoon-like style of such memes is likely intentionally ironic and trivializing, yet it also provides users with a degree of inherent deniability. The harsh depictions of violence, when juxtaposed with such a trivial aesthetic, not only allows extreme visuals to be masked by a guise of humor, but allows users to mock outsiders who might take the brutality of the images seriously by responding with shock or condemnation. It is this mechanism which enables the continuous replication of such images, and potentially, the gradual desensitization towards violence.

The potential dangers of this desensitization become more pressing when considering that the 54th most overall popular image shared between chan sites is a photograph of a white man kneeling beside the bloodied dead body of a black man who appears to have been violently murdered. The image, which is shared a total of 150 times, is an ex-



Figure 2: The original ‘Happy Merchant’ and two edits.

ample of extreme gore and exemplifies the fact that not only do some cartoon-style memes trivialize violence, other extremely graphic images glorify and to some extent fetishize it, transforming images of dead bodies into “dark spectacle[s]” within far-right communities (Nagle 2017).

Ideological and Conspiratorial Memes

Several images observed throughout this paper are used to convey complex ideological concepts. One example of this is the ‘Happy Merchant’ meme, which depicts a derogatory drawing of a bearded Jewish man with exaggerated facial features, rubbing his hands together in satisfaction. This visual representation of Jews is not novel, nor would it look out of place in the Nazi propaganda of 1930s Germany.

The Happy Merchant is one of the most ubiquitous memes shared within chan culture, and our analysis identifies a large cluster of 21 different variants of the original meme. Figure 2 shows an excerpt of three variants in our dataset.

The basic iteration of the meme is typically deployed to reinforce a myriad of antisemitic beliefs and conspiracy theories, including the idea that Jews throughout history have controlled the global financial market (Neuberger 2019). This is implied through the Happy Merchant’s greedy, hunched posture. The visual stereotypes conveyed by the images make it one of the memes within our dataset which must be considered discriminatory no matter the context it is situated within. It is an inherently antisemitic image. Furthermore, various ‘edits’ of the meme are observed which add nuance to its meaning.

One iteration of the meme is identified by the cluster analysis showing the Merchant character leering behind a mask (see Figure 2). Inherent within the image is the idea that while some individuals or organizations may appear innocent, they may be being controlled by so-called ‘Jewish influence.’ This notion accords with various antisemitic conspiracy theories such as the “Zionist Occupied Government,” and “Cultural Marxism” conspiracy, which both contend that Jewish elites secretly preside over, and rule various aspects of society (Tourish and Wohlforth 2000).

Accordingly, in early 2020 versions of the image depicting the Merchant figure wearing gloves and a face mask were circulated, appearing to imply that Jewish people are the creators or orchestrators of the Covid-19 pandemic, chiming with a number of antisemitic conspiracy theories which a 2020 investigation by the British charity the Community Security Trust (CST, 2020) shows were rife online during the pandemic.

In short, visually simple memes can be shared online to convey complex ideological concepts and conspiracy theo-



Figure 3: The original “corona-chan” meme and two variants, celebrating new infections and a sexualised depiction.

ries. These images may then be ‘built upon’ and edited to convey various layers of nuance to these narratives. This visual format is ‘easily digestible’ and allows complex ideological concepts to be easily transmitted in image format.

Key Events in 2020

The first half of 2020 proved to be especially turbulent, being a time of both political and societal unrest due to the Covid-19 pandemic and Black Lives Matter protests that spread globally. Because these events coincided with our data collection period, we have included this section to explore how certain memes played a role in fostering and accentuating extremist narratives and unrest within chan communities.

The Covid-19 Pandemic

The Covid-19 pandemic was a key aspect of discussion across all the chan boards studied in this report. Indeed, the 4chan archiving database ‘4plebs’ (2020) shows that the term “coronavirus” has been used in a total of 189,067 posts made to 4chan’s /pol/ board, with a further 67,375 posts featuring the term “Covid-19,” and 25,810 using “coronachan.” This influence was also evidenced in the visual culture across chan sites — of the top 200 most popular memes 43 made direct references to Covid-19.

On 21st January, the “Corona-chan” meme, which would go on to be the most widely shared and likely the most ubiquitous meme of the pandemic, was first posted to 4chan’s /pol/. The meme is an anthropomorphic representation of the virus itself, depicted as an Asian woman, often pictured carrying a bottle of Corona beer and waving the Chinese flag as shown in Figure 3. Since first being posted on 4chan, the meme has been reworked by various users and there are now numerous iterations, with the figure often wearing a face-mask or touting bat wings and vampire fangs.

The Corona-chan figure has a unique visual style and is very obviously depicted as being Chinese, most often wearing traditional Chinese garments, and originally drawn holding a Chinese flag. These visual choices irrevocably link China with the pandemic, conveying that Covid-19 is an inherently ‘Chinese virus.’ This depiction accorded with various instances of anti-Asian sentiment observed across chan sites throughout this research. Across many of the chans studied, users floated the conspiracy that the virus was deliberately engineered by scientists in China, using this narrative as justification for using a variety of anti-Asian slurs to describe the virus. This conspiracy appears to be reflected in several Corona-chan memes where the figure is pictured

celebrating new cases of infection (see central image in Figure 3), thus reinforcing the false notion that the virus was deliberately released and spread.

The artistic style also conveys a number of inherent power dynamics. Many popular Corona-chan memes collected were sexualized, depicting Corona-chan with large breasts or buttocks which could not be covered by her clothing. Images such as the one shown in rightmost side of Figure 3 accord with popular depictions of women in media where their agency is reduced to their sexual appeal (Stankiewicz and Rosselli 2008). Thus, many interpretations of the Corona-chan meme are imbued with misogynistic undertones. Another prevalent meme cluster was a ‘template’ Corona-chan meme, showing the figure holding a blank slate which could be filled with text. This kind of meme is designed to be easily shared and edited between users, with each new user being encouraged to insert new text onto the image, thereby bringing new meaning to each iteration of the meme. It is evident that many users utilized this remix function to combine the Corona-chan meme with more overtly racist and National Socialist messaging, editing in messages like “it’s okay to be white” — a favorite provocative catchphrase of the alt-right (ADL, 2018) — or “Hitler did nothing wrong and the Holocaust is a hoax.”

In summary, the Corona-chan figure was centrally important to discourse with chan culture, and in influencing and reinforcing racist and misogynistic stereotypes online. Some iterations of the meme also fostered active engagement from users, transforming them into active participants within online chan communities.

Black Lives Matter 2020

The death of George Floyd, which reignited the global BLM movement in 2020, significantly influenced discourse within chan sites. Across several chans, reactions to BLM protests were used to encourage traditional racist tropes, as well as to encourage popular extreme right-wing narratives that an apocalyptic ‘race war’ in the United States was imminent. In both instances, visual culture was instrumental in fostering the ‘in-group’ status of the chan user-base, through the re-sharing of memes that both trivialized racism and violence against minorities, while also glorifying the prospect of societal collapse and race war.

George Floyd’s death sparked a flurry of activity on 8kun’s /pnd/ board, which hosted an ongoing thread entitled “The Great Chimpout 2020,” where users compiled posts and information relating to the BLM movement, with other fringe chans referring to it as the “global chimpaning.” This choice of language invokes historic abuse that black people have long been subject to by comparing them to animals, specifically apes and monkeys, in a manner designed to dehumanize and ‘other.’ Deployed in this way, it is also used to undermine the legitimacy of the protests themselves, characterizing protesters as animals that lack human self-control. The most popular memes associated with these events reinforced the harmful stereotype of black men as criminals and intruders.

The death of Ahmaud Arbery, another unarmed African-American man shot and killed in the United States in early

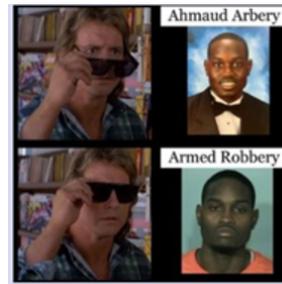


Figure 4: ‘They Live Sunglasses’ meme with Ahmaud Arbery/Armed Robbery.

2020 (BBC News, 2020) also became a feature of “The Great Chimpening” thread. Arbery had been jogging at the time of his murder, which became the source of wordplay within the thread as “jogger” was used as a synonym for the racial slur “n*gger.” The slur inherently trivializes how Ahmaud Arbery was killed and is exemplary of the mocking tone found within chan culture.

Visually, memes concerning Arbery’s death sought to draw a connection between his race and his alleged criminality. For example, Figure 4 shows a version of the ‘They Live Sunglasses Meme’, which is typically deployed within chan culture to symbolize a user’s understanding of the ‘true’ message behind a particular event. In this iteration, Ahmaud Arbery’s face is juxtaposed with a mugshot and the words “Armed Robbery,” implying that because of his race, Arbery was inevitably engaging in illegal activity at the time of his death, and thus ‘deserved’ to be killed. The meme therefore reinforces the stereotype that Black men are predisposed to criminality, whilst at the same time making light of his death.

Another trend observed in response to the protests was the promotion of the accelerationist narrative that the BLM protests signified the beginning of a race war in the United States and beyond. Parker shows accelerationism is an “ideologically agnostic doctrine of violent and non-violent actions taken to exploit contradictions intrinsic to a political system to ‘accelerate’ its destruction,” and seeks to disrupt the “political discourse to specifically concentrate attention on highly polarizing subjects.” (Parker 2020)

The visual promotion of accelerationist narratives is particularly revealing. The accelerationist edit of the ‘Yes Chad’ meme, as seen in Figure 5, was shared over 100 times across chan sites. The artistic style is indicative of how these communities wish itself to be perceived, as the paramilitary figure conveys power and strength — in comparison to Soyjack’s sobbing mess. Of note, are the neo-Nazi symbols emblazoned on his uniform including the Celtic Cross, the numbers 1488, the Black Sun, which was a symbol of the SS and the runic symbol ‘Wolfsangel’ which was appropriated by the Nazi Party, as well references to the far-right attacks in Poway, the United States, and Christchurch, New Zealand.

Given the context in which it was deployed, we can assume that this meme is intended to glorify and promote vi-



Figure 5: An accelerationist edit of the ‘Yes Chad’ meme.

olent accelerationism. Indeed, alongside this meme, a user commented “this is the perfect time for the next Saint to descend,” implying that another user should capitalize on societal discord and carry out a Christchurch-style attack.

Related Work

Chan Culture

Academic literature on chan culture is scarce and is particularly lacking in ethnographic insight, with some exceptions such as Manivannan’s various ethnographic studies on 4chan, which she considers as a “discourse community” where “anti-normative, egregious, and abusive dialogue” pervades (Manivannan 2013). Similarly, (Knuttila 2011) has researched 4chan by way of “ontological inquiry,” focusing on the holistic experience of participating on the site’s /b/ (random) board.

The first large-scale quantitative study of 4chan’s /pol/ board was conducted by (Hine et al. 2016), who studied over one million unique images shared by users over 2.5 months alongside analyzing “hate speech” on the board. Additional quantitative analysis of 4chan has been carried out by authors in (Zannettou et al. 2018), who find that the site’s /pol/ board was particularly influential in the propagation of racist and political memes into other online communities. However, they conclude that when normalized by its size, it is comparatively inefficient in this propagation concerning Reddit or Twitter, suggesting 4chan may primarily influence its internal audience.

Almost no studies have directly compared chan platforms, except for a study by the Anti-Defamation League (ADL), which found that genocidal language concerning “white supremacy, ethnic hatred and anti-Semitism” was “more pronounced” on 8chan than on 4chan and other far-right social media sites (ADL, 2018). This lack of comparative studies is concerning as the social climate between the chans is not homogenous (Nagle 2017).

Memes

Authors in (Milner 2013) show how many far-right memes are created to appear as comedic and benign, however often “familiarity with racist tropes is necessary to get the joke” (Lamerichs et al. 2018) meaning racial stereotypes are made more salient through their dissemination. Memes also act as a form of subcultural capital whereby through sharing them, users signal awareness of various alt-right norms, thus

creating a community bound by mutual understanding. By disseminating memes online, users may intend to shift the “Overton Window,” meaning the boundaries of acceptable public discourse, enabling the Gramscian-style slow creep of extreme right-wing narratives into broader societal consciousness (Nagle 2017).

Far-right memes may also influence radicalisation trajectories into violence, by contributing to the “online politics of transgression,” wherein offensive content is viewed as having inherent counter-cultural value (Nagle 2017). In some extreme far-right circles, users accrue status by sharing explicit and graphic “shock memes” (Hodge and Hallgrimsdottir 2020), which frame violence as inherently thrilling. Authors in (DeCook 2018), for example, shows how the memes circulated by the alt-right group, the “Proud Boys” aided its recruitment practices, by embodying an ideology that consists of symbolic and physical violence that is particularly attractive to young men in the West.

Conclusions

This paper has introduced a dataset of the most popular memes shared within and between a variety of boards on chan sites used by the far right. This dataset will enable researchers and practitioners working within the field of on-line extremism better understand the nuances of far-right radicalisation and the central role of visual culture within this process. In particular, by splitting our analysis between memes shared within and between chan sites, we have shown how different kinds of extreme images become pervasive in smaller, potentially more extreme, communities.

Our analysis of these online communities suggests that several boards within chan sites facilitate the ‘in-group’ status that is so critical in fostering an extremist mindset. Visual culture is centrally important to creating this mindset, potentially prompting users to become slowly more tolerant of radical and extreme ideologies.

When considering the promotion of violence, our findings reveal the malleable meaning of memes shared across chans, whereby memes which at first glance appear innocuous, yet take on subtle and more sinister meanings depending on the contexts in which they are deployed. However, our data additionally reveals a subset of popular images that explicitly glorify violence against ‘outsiders.’ While not all of these images should be taken as a literal endorsements of physical violence, their presence within chan culture may serve to dehumanize and ‘other’, whilst contributing to gradual desensitization to the concept of violence.

Finally, the overlapping of our data collection with several months of global and political unrest, namely the beginning of the Covid-19 pandemic and renewed Black Lives Matter protests provided us with unique insight into how the discourse within chan culture is shaped by real-world events and how visual culture plays a key role in reinforcing racist and misogynistic narratives, once more fomenting the ‘in-group’ status of the community.

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References

- Beran, D. 2019. *It Came From Something Awful: How a Toxic Troll Amry Accidentally Memed Donald Trump into Office*. All Points Books.
- Bernstein, M.; Andrés, M.-H.; Harry, D.; André, P.; Panovich, K.; and Vargas, G. 2011. 4chan and /b/: An Analysis of Anonymity and Ephemerality in a Large Online Community. *Proceedings of the International AAAI Conference on Web and Social Media* 5(1).
- Bjørge, T.; and Ravndal, J. A. 2019. *Extreme-right violence and terrorism: Concepts, patterns, and responses*. International Centre for Counter-Terrorism.
- Brewer, J. 2000. *Ethnography*. McGraw-Hill Education.
- Davey, J.; and Ebner, J. 2017. The Fringe Insurgency. Connectivity, Convergence and Mainstreaming of the Extreme Right. *Institute for Strategic Dialogue*.
- Dawkins, R. 2016. *The selfish gene*. Oxford university press.
- De Orellana, P.; and Michelsen, N. 2019. Reactionary Internationalism: the philosophy of the New Right. *Review of International Studies* 45(5): 748–767.
- DeCook, J. R. 2018. Memes and symbolic violence: #proudboys and the use of memes for propaganda and the construction of collective identity. *Learning, Media and Technology* 43(4): 485–504.
- Evans, R. 2019. Shitposting, inspirational terrorism, and the Christchurch mosque massacre. *Bellingcat, March 15*.
- Feinstein, A.; Audet, B.; and Waknine, E. 2014. Witnessing images of extreme violence: a psychological study of journalists in the newsroom. *JRSM open* 5(8).
- Ganesh, B. 2020. Weaponizing white thymos: flows of rage in the online audiences of the alt-right. *Cultural Studies*.
- Hine, G.; Onalapo, J.; De Cristofaro, E.; Kourtellis, N.; Leontiadis, I.; Samaras, R.; Stringhini, G.; and Blackburn, J. 2016. A longitudinal measurement study of 4chan’s Politically Incorrect Forum and its effect on the Web’.
- Hodge, E.; and Hallgrimsdottir, H. 2020. Networks of hate: the alt-right, “troll culture”, and the cultural geography of social movement spaces online. *Journal of Borderlands Studies* 35(4): 563–580.
- Hoffman, B. 2017. *Inside terrorism*. Columbia university.
- Huntington, H. E. 2016. Pepper spray cop and the American dream: Using synecdoche and metaphor to unlock internet memes’ visual political rhetoric. *Communication Studies*.
- Knuttila, L. 2011. User unknown: 4chan, anonymity and contingency. *First Monday*.
- Lamerichs, N.; Nguyen, D.; Melguizo, M. C. P.; Radojevic, R.; and Lange-Böhmer, A. 2018. Elite male bodies: The circulation of alt-Right memes and the framing of politicians on Social Media. *Participations* 15(1): 27.
- Ling, C.; AbuHilal, I.; Blackburn, J.; De Cristofaro, E.; Zannettou, S.; and Stringhini, G. 2021. Dissecting the Meme Magic: Understanding Indicators of Virality in Image Memes. In *Computer Supported Cooperative Work and Social Computing (CSCW)*.
- Manivannan, V. 2013. FCJ-158 Tits or GTFO: The logics of misogyny on 4chan’s Random-/b. *The Fibreculture Journal* (22 2013: Trolls and The Negative Space of the Internet).
- Manivannan, V. 2019. 7 “Maybe She Can Be a Feminist and Still Claim Her Own Opinions?”. *Digital Ethics: Rhetoric and Responsibility in Online Aggression*.
- Marwick, A.; and Lewis, R. 2017. Media manipulation and disinformation online. *Data & Society Research Institute*.
- Milner, R. M. 2013. FCJ-156 Hacking the Social: Internet Memes, Identity Antagonism, and the Logic of Lulz. *The Fibreculture Journal*.
- Mudde, C. 2002. *The ideology of the extreme right*. Manchester University Press.
- Munn, L. 2019. Alt-right pipeline: Individual journeys to extremism online. *First Monday*.
- Nagle, A. 2017. *Kill all normies: Online culture wars from 4chan and Tumblr to Trump and the alt-right*. John Hunt Publishing.
- Neuberger, J. 2019. *Antisemitism: What It Is. What It Isn’t. Why It Matters*. Hachette UK.
- Neumann, P. R. 2003. The trouble with radicalization. *International affairs* 89(4): 873–893.
- Papasavva, A.; Zannettou, S.; De Cristofaro, E.; Stringhini, G.; and Blackburn, J. 2020. Raiders of the Lost Kek: 3.5 Years of Augmented 4chan Posts from the Politically Incorrect Board. In *Proceedings of the International AAAI Conference on Web and Social Media*, volume 14, 885–894.
- Parker, J. 2020. Accelerationism in America: Threat Perceptions. Global Network on Extremism & Technology <https://gnet-research.org/2020/02/04/accelerationism-in-america-threat-perceptions/>. Online; accessed Jan 2021.
- Tourish, D.; and Wohlforth, T. 2000. Prophets of the Apocalypse: White supremacy and the theology of Christian identity. *Cultic Studies Journal* 17(1): 15–41.
- Zannettou, S.; Caulfield, T.; Blackburn, J.; De Cristofaro, E.; Sirivianos, M.; Stringhini, G.; and Suarez-Tangil, G. 2018. On the origins of memes by means of fringe web communities. In *Proceedings of the Internet Measurement Conference 2018*, 188–202.