Countering Pernicious Images: Memetic Visual Propaganda and the 2018 Elections

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Russian disinformation attacks through social media increasingly involve genuine photos paired with inaccurate captions to create false news. The relative ease and devastating impact of this meme-based (memetic) method have led domestic actors to adopt these same informational warfare tactics. This is apparent in an examination of the conservative effort to demonize the migrant caravan in the month before the 2018 midterm elections. Posters used misidentified images to push xenophobic tropes that the caravan was violent, rapacious, diseased, unpatriotic, and supported by outside funding groups including wealthy Jews. This Article is the first to systematically document these propagandist threads and present a legal countermeasure based on existing intellectual property and First Amendment doctrines.

Tracing the development of memetic misattribution reveals a powerful avenue for defense. Falsely captioned photographs in these memes typically originate from previously published news articles and are reused over several years. As such, a basic reverse-image search can debunk the majority of these images; a photo cannot simultaneously capture current events and predate those events by several years. Social media firms should incorporate reverse-image searches and resultant copyright information directly on their sites. This effort is imperative, as these firms have been slow to respond to this informational threat to our democracy. Moreover, an objective, measured approach is vital to avoid overregulating an important arena for speech. The novel transparency-based solution advanced in this Article achieves this balance.

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INTRODUCTION

Seemingly genuine photos of a bloodied police officer, a burning American flag, and an FBI director arrested in disgrace; these are potent ingredients for meme-based informational warfare. The last three years have seen a spike of national and international disinformation campaigns,¹ waged

largely through social media platforms such as Instagram, Facebook, and Twitter. The successful Russian campaign to undermine and influence the U.S. presidential election of 2016 brought needed attention to the lax content management in these sites. While politicians have conducted a series of hearings castigating the poor response of social network executives, progress has been wanting. As feared, the campaign leading up to the 2018 U.S. midterm elections again featured repeated disinformation or “fake news” crafted and disseminated by both foreign and domestic actors. These disinformation campaigns rely increasingly on easily produced memes.


8 See infra Part III.

9 Here, meme is used in the sense of a uniform message format, often paired with a photo, for repetition with minimal variation.
consisting of a genuine photo that is misattributed, misidentified and reused to slander or demonize targeted individuals. Meme-based\(^\text{10}\) propaganda is pervasive and effective, necessitating deliberate action from reluctant social media firms.

The problems stem, in part, from platforms’ reluctance to be “arbiters of truth.”\(^\text{11}\) More simply, while social media has entered a space normally mediated by news providers and attendant gate-keeping norms, social media disclaims responsibility for the content it delivers.\(^\text{12}\) This is unsurprising—the building block of service provider expansion has been the limited liability for content posted by third parties under the Communication Decency Act (“CDA”) Section 230.\(^\text{13}\) Outside of pornography concerns, there has been a dearth of consistent motivation to systematically curate content.\(^\text{14}\) Providers may also point to First Amendment concerns to justify a lack of mediation.\(^\text{15}\)

In the era of meme as propaganda, it is important to revisit the psychological means employed by visual propaganda and to provide

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\(^{10}\) This may help explain the efficiency of Instagram. “Instagram engagement outperformed Facebook, which may indicate its strength as a tool in image-centric memetic (meme) warfare.” DiResta, supra note 3, at 8.

\(^{11}\) "‘We are not the arbiters of truth,’ said Nick Pickles, Twitter’s head of public policy for the United Kingdom, during testimony before British lawmakers in Washington. ‘We are not going to remove content based on the fact this is untrue. The one strength that Twitter has is it’s a hive of journalists, of citizens, of activists correcting the record, correcting information.” Callum Borchers, Twitter Executive on Fake News: ‘We Are Not the Arbiters of Truth’, SYDNEY MORNING HERALD (Feb. 9, 2018), https://www.smh.com.au/world/north-america/twitter-executive-on-fake-news-we-are-not-the-arbiters-of-truth-20180209-p4yzsh.html.


\(^{13}\) 47 U.S.C. § 230(c)(1) (2018) (“No provider or user of an interactive computer service shall be treated as the publisher or speaker of any information provided by another information content provider.”).


\(^{15}\) The matter of whether social media networks may be sued as state actors is up for debate. Tucker Higgins, Supreme Court Agrees to Hear A Case That Could Determine Whether Facebook, Twitter and Other Social Media Companies Can Censor Their Users, CNBC (Oct. 16, 2018, 9:36 PM), https://www.cnbc.com/2018/10/16/supreme-court-case-could-decide-fb-twitter-power-to-regulate-speech.html.
technological tools to curtail the spread of this weapon. While independent fact-checkers do strive to counter duplicitous news, the effort is largely seen as failing. Fact-checkers armed with background knowledge and reverse-image search tools can effectively document the mendacity of visual propaganda. But, corrections can be drowned out by a wave of reposted propaganda as repeated lies gain credibility through ubiquity, or well-meaning corrective posts simply fail to reach targeted audiences. The imbalance of propagandists and fact-checkers, with the former receiving support from powerful political actors, is apparent and consequential. Fact-checkers may also have uncomfortable, temporary relationships with social media firms, creating additional barriers to addressing this problem through individual debunking.


17 Jasmin Boyce, “Relatively Few” Twitter Bots Were Needed to Spread Misinformation and Overwhelm Fact Checkers, Study Finds, NBC NEWS (Nov. 21, 2018, 1:00 PM), https://www.nbcnews.com/tech/tech-news/relatively-few-twitter-bots-were-needed-spread-misinformation-overwhelm-fact-a839021 (noting that bots may easily overwhelm fact-checkers); Chengcheng Shao et al., The Spread of Low-Credibility Content by Social Bots, 9 NATURE COMM., art. 4787, Nov. 20, 2018, at 4, https://www.nature.com/articles/s41467-018-06930-7#Sec7 (study finding same).


23 Chris Welch, Snopes Says No to Facebook’s Money and Leaves Fact-Checking Program, VERGE (Feb. 1, 2019), https://www.theverge.com/2019/2/1/18207285/snopes-facebook-fact-checking-program-exit; Ananny, supra note 16 (noting difficulties in fact-checker and social media partnerships; noting “a general unease among [fact-checking]
What is necessary then is a mechanism that is both scalable and objective, so as to combat widespread posts without inhibiting speech or misclassifying provocative content. The simple way to address this problem is to nest prior publishing information—that is, previous dates published and the copyright holder (if known)—directly on images. Reverse-image searching can yield exactly this sort of data. This information, if hosted next to a fraudulently identified image, would greatly weaken misattributed propaganda by immediately discrediting posts of “breaking” events with embedded photos years removed from the events.

A reverse-image-based approach does not suffer from problems of nuance; the information is essentially binary. Was the image copyrighted in the same year as the event it is claimed to depict? If not, something is fishy. This approach would facilitate the process of identifying suspect posts for more thorough debunking. This would also create an easier means for copyright holders to protect their property rights by issuing Digital Millennium Copyright Act takedowns (to say nothing of their moral rights in preventing their work from facilitating propagandistic hate speech).

This Article is the first to systematically document memetic propaganda and the continued disinformation campaigns hosted on social media sites during the 2018 midterm elections. Part I of this Article sets out the problem of continuing disinformation or “fake news” in relation to domestic elections, and of misidentified photos in particular. Part II provides a greater understanding of the legal recognition of the power of images, as well as the philosophical, psychological, and neurological workings of visual propaganda that explain its success in targeting viewers and underscore the need for prophylactic intervention. Part III demonstrates through case studies of posts related to the migrant caravan of October 2018 that misidentification-based propaganda was widespread and would be detected by the most rudimentary content evaluation such as a simple reverse-image search. Part IV sets out a solution to misappropriated image propaganda: requiring that social media provide content-neutral in-post image publishing date and author information, which will facilitate user assessment of a post’s credibility, copyright takedowns, and other referrals for content veracity. Part V addresses likely counterarguments against this proposal and outlines areas for future research.

24 Welch, supra note 23 (“It doesn’t seem like we’re striving to make third-party fact checking more practical for publishers—it seems like we’re striving to make it easier for Facebook. At some point, we need to put our foot down and say, ‘No. You need to build an API.’ The work that fact-checkers are doing doesn’t need to be just for Facebook—we can build things for fact-checkers that benefit the whole web, and that can also help Facebook.”).
I. THE ONGOING PROBLEM OF DISINFORMATION ON SOCIAL NETWORKS

Fabricated news with no basis in fact is endemic on social networks. While propaganda has existed for millennia, the novel interconnected informational climate gives rise to special dangers. Compounding these dangers is the fact that the social media disinformation tactics used by Russian agents in 2016 occasioned few (if any) social media firm countermeasures and now domestic actors have adopted those very same tactics. This section examines Russian agents’ disinformation campaigns to demonstrate the effectiveness of fake news on social media, and discusses the inadequate social media firm response to governmental attention, the continuing threat posed by disinformation propaganda—including from domestic actors—and the ease of producing memetic propaganda through miscaptioned photographs.

A. 2016: GRU and IRA Misinformation Campaign Highlights

Vulnerability of Social Media

Recent Russian cyberattacks against American electoral integrity have captured the public attention. The damage is still being uncovered, but the coordinated effort involved at least three distinct avenues of intrusion, targeting: (1) election infrastructure, including attempted manipulation of voter rolls; (2) individual accounts of election participants, primarily through cyberattacks; and (3) voters, through social media disinformation campaigns meant to enhance or, especially in the case of minority democratic voters, depress turnout. The former two attacks are fairly well-known, while the latter has only recently received greater attention.

The role of disinformation in the Russian effort to aid then-candidate

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25 See, e.g., Kenneth Scott, Octavian’s Propaganda and Antony’s De Sua Ebrietate, 24 U. CHI. PRESS 133, 133 (Apr. 1929).


Donald Trump and the appropriate U.S. government response has been a matter of intense debate, in part because of the extreme salience to relevant economic and political stakeholders.\textsuperscript{28} It is clear, however, that Russia’s intelligence agency, the GRU, and the Internet Research Agency (IRA), a troll army in the employ of the Russian government, attempted to influence the identity politics of the left and the right.\textsuperscript{29} The IRA created fake accounts and distributed memes tailored to numerous sub-groups of voters with specific goals in mind. A review of the groups targeted in Facebook and Instagram content (African-Americans, Conservatives, Liberals, Mexican-Americans, and Muslim-Americans) is instructive as it demonstrates the breadth and depth of the Russian social media attack.

The largest amount of Russian-linked content targeted African-American voters.\textsuperscript{30} The posts centred on endemic inequality in American society, and argued that boycotting the election and focusing on other pressing issues was the only way to improve the plight of African-Americans.\textsuperscript{31} This content included repetitive slogans about the inherent unfairness of the process and a focus on the Black Lives Matter movement.\textsuperscript{32} The themes merge in explicitly anti-Clinton messages, such as “NO LIVES MATTER TO HILLARY CLINTON. ONLY VOTES MATTER TO HILLARY CLINTON” (hosted on the Facebook page Blacktivist, 29 October 2016).

Conservative voters received content with three related themes: patriotic/anti-immigrant slogans; liberal favoritism of “outside” groups (for example, non-citizens, members of the LGBT community, and non-Christians) at the cost of “real” Americans; and the salvation offered by voting for then-candidate Trump.\textsuperscript{33} This content included appeals to gun culture and southern identity, while stirring disgust for mistreatment of the traditional order-keeping military and police force.\textsuperscript{34}

Russian propagandists targeted liberal voters with content primarily


\textsuperscript{31} Id.


\textsuperscript{33} IRA REPORT, supra note 31, at 18.

\textsuperscript{34} Id.
concerning LGBT rights. This was likely done to increase the ideological divide between liberals and conservatives. A limited amount of content also encouraged voters to support Bernie Sanders or Jill Stein.

Mexican-American voters were targeted with slogans emphasizing a separate identity from those individuals dominating the U.S. political system.

Muslim-American voters were targeted with narratives emphasizing Muslim achievements.

Overall, the top twenty Facebook pages generated by the IRA received a staggering amount of interest from users, with conservative pages attracting the most engagement. According to the Computational Research Project, these pages accumulated more than 38 million likes, 30 shares, 5 million reactions, and 3 million comments.

B. False News Stories: Pervasive, Effective, and Increasingly Domestic

A vital step in the Russian misinformation campaign was encouraging the retweeting of propaganda by domestic actors. Conservative American users spread Russian misinformation at a much higher rate than liberals, with the most retweets coming from red states such as Texas and Tennessee. Indeed, one Russian-linked account masqueraded as a Tennessee branch of the Republican party under “the Twitter account, ‘Tennessee GOP,’ [using] the handle @TEN_GOP.” Analysis of bot traffic and retweet patterns show that “[a]lthough an ideologically broad swath of Twitter users was exposed to Russian Trolls in the period leading up to the 2016 U.S. Presidential election, it was mainly conservatives who helped amplify their message.”

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35 IRA REPORT, supra note 31, at 20.
36 Id.
37 Id. This campaign appears to have been launched after the 2016 election, perhaps with the goal of increasing discord in the immediate aftermath.
38 Id.
39 IRA REPORT, supra note 31, at 35. Conservative aimed pages make up the top three: Being Patriotic, Stop A. I. (All Immigrants), and Heart of Texas. Id.
43 Emerging Technology from the arXiv, supra note 40.
The problem of false news stories is exacerbated by the speed with which the items may be disseminated online. Studies indicate that older users are especially vulnerable to fake news, and fake headlines can successfully trick adults approximately seventy-five percent of the time. Bot accounts also quickly retweet fake news, making the story appear to be popular with many people. This, in turn, elicits retweets from credulous individuals. Moreover, false news stories are often more alluring and novel than the truth, so readers may rapidly spread the falsehood out of a desire for it to be true. This is especially worrisome, as studies show that falsehoods almost always outperform truths on Twitter, spreading faster and deeper across networks.

There is widespread agreement that while the 2016 disinformation campaign can be typified as a foreign intervention, domestic actors have since adopted Russian social media disinformation tactics. While fake news is commonly used to sell fake products or promote scams, it may also

be used by interested domestic political factions. Of course, the interests of foreign and domestic actors may align, with each serving to amplify the message. During the debates concerning the nomination of then-Judge Brett Kavanaugh to the U.S. Supreme Court, Russian state media, GOP commentators, and Russian social media bots pushed out a consistent pro-Kavanaugh message.\textsuperscript{52} That is not to say that conservatives have a monopoly on disinformation;\textsuperscript{53} it appears a similar effort was launched by liberal groups in support of Senator Doug Jones.\textsuperscript{54} The genie is out of the bottle and wreaking havoc across the political spectrum. The domestic adoption of these methods also makes stopping them much more difficult. It is not as simple as asking social networks to monitor for international IP addresses or other signs of foreign interference. The calls are coming from inside the house.

C. Firms Reluctant to Intervene Despite Governmental Concern and Renewed Russian Meddling

The House Intelligence Committee acknowledged that Twitter, as well as Facebook, was a main dumping ground for false news in the 2016 election.\textsuperscript{55} Neither company had an impressive response to the foreign

\begin{itemize}
\item Indeed, false anti-Kavanaugh news also appeared on Twitter. A viral tweet by the user “Alan Covington” falsely alleged that the Wall Street Journal was reporting that “[Rachel] Mitchell advised Republicans that to continue questioning Kavanaugh she was required by her oath in Arizona to inform Kavanaugh of his rights after he lied to her.” Carlos Garcia, \textit{Journalists Made a Damaging Kavanaugh Story Go Viral- but It Was Too Good to Be True}, BLAZE (Sept. 28, 2018), https://www.theblaze.com/news/2018/09/28/journalists-made-a-damaging-kavanaugh-story-go-viral-but-it-was-too-good-to-be-true. No such report ever existed, as confirmed by WSJ on twitter. Matt Murray (@murraymatt), TWITTER (Sept. 28, 2018), https://twitter.com/murraymatt/status/104571332953530777. The falsity of the tweet was acknowledged by several prominent liberal jurists, such as Professor Laurence Tribe. Laurence Tribe (@tribelaw), TWITTER (Sept. 28, 2018, 10:49 AM), https://twitter.com/tribelaw/status/1045732159477166081.
\item See \textit{House Permanent Select Committee on Intelligence, Report on Russian Active Measures} 32, 33–35 (2018), https://www.hsdl.org/?view&did=809811; Kevin
disinformation threat. Facebook founder Mark Zuckerberg initially ridiculed any suggestion that disinformation on the social network impacted the election as a “pretty crazy idea . . . [because voters] make decisions based on their lived experience.” He later expressed regret for those short-sighted remarks. Zuckerberg’s lax response was also reflected in Facebook’s miniscule estimates of Russian-linked accounts active in the disinformation campaign.

Twitter had similarly tried to downplay the number of accounts employed in the disinformation campaign. The firm repeatedly revised upward the number of accounts and tweets. Twitter initially announced 201 accounts linked to Russian interference, after which Senator Mark Warner called Twitter’s presentation to the Senate Intelligence Committee “deeply disappointing” and “frankly inadequate on almost every level.” Prior to additional hearings, Twitter announced they discovered 2,200 accounts tied to the Internet Research Agency along with roughly 36,000


Russian bots; however, these figures were later revised to 3,814 and 50,000 respectively.

Instagram, also owned by Facebook, likely had a large impact that the firm initially downplayed. The firm estimated 20 million users viewed Russian misinformation, while researchers argued that the number was closer to 145 million. The case of Instagram is interesting, as commentators and analysts have largely ignored the platform in the context of Russian interference in spite of the outsized number of engagements attributed to the site.

Though network executives have assured politicians that firms are addressing the problem, the response has been underwhelming. While Facebook, which has partnered with various fact-checking groups like Politifact, is generally viewed as more effective than Twitter in fighting disinformation, fake news persists on both platforms in enormous quantities. Outside researchers have been especially critical of Twitter’s policies for content and account removal.

The Knight Foundation found that the great majority of accounts responsible for spreading false content were not removed by Twitter.

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69 Disinformation, ‘Fake News’ and Influence Campaigns on Twitter, KNIGHT FOUND.
These complaints should sound familiar, as victims’ rights activists have exhaustively documented Twitter and Facebook’s poor record of policing content, especially harassment and threats.\textsuperscript{70} Even as the networks have promised to dedicate additional staff to review this sort of content, results have been poor. All of these failures are unsurprising, as there may be nuance in determining when statements cross over into false news, hate speech, or actionable harassment, thereby exposing companies to accusations of chilling speech and attendant negative publicity.

Moreover, when companies do attempt to remove untruthful content, political actors have accused tech firms\textsuperscript{71} and fact-checkers of partisan bias. For example, when Facebook took down several pages linked to Right Wing News with 3.1 million followers for spreading false stories\textsuperscript{72} about Christine Blasey Ford,\textsuperscript{73} there was an outcry from the right.\textsuperscript{74} Leading up to and immediately after the 2018 midterm elections, tech companies’ supposed


The continued flood of misinformation, both foreign and domestic, in the lead-up to the 2018 elections further evinced the failure to tackle this problem. In response to the 2016 attacks, former FBI Director James Comey opined that the Russians are not done meddling: “They’re coming after America. . . . They will be back.” The coordinated attack on the foundation of American democracy highlighted the existential threat of such


attacks and the importance of improving social media infrastructure. Analysts similarly expected continued disinformation campaigns in 2018. These warnings were prescient.

In October 2018, the Justice Department indicted Russian nationals with conspiracy to defraud the United States for taking part in a scheme to spend in excess of $10 million since the beginning of the year on targeted social media ads and web postings intended “to sow division and discord in the U.S. political system.” Systems analysts detected an outsized number of social media posts containing links to Russian-controlled media. Defense Secretary Mattis noted that in 2018, Russia “tried again to muck around in our elections.” To combat this, the United States launched cyber countermeasures. The threat remains and must be addressed swiftly in light of the looming 2020 presidential election.

D. Real World Consequences to Propaganda Include Genocide and Terrorism

It is understandable that firms might balk at adopting new responsibilities in the face of obstacles and continued foreign meddling; however, providers’ reluctance to police their own information streams has serious real-world consequences. Beyond a general undermining of the democratic process and the nature of truth (that is, hardly minor externalities), propaganda is linked to genocide, hate crimes, and murder.

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81 James Clapper warned, “An American citizen should be very concerned about a foreign government, particularly our primary adversary, interfering with the most important foundational process that we have in this country, which is free and fair elections.” Mallory Shelbourne, Clapper: “Aggressiveness” of Russian Interference in Election “Unprecedented”, Hill (May 30, 2017, 8:22 AM), https://thehill.com/homenews/news/335575-clapper-aggressiveness-of-russian-interference-in-election-unprecedented.


Facebook’s inability to police hate speech from Myanmar military officials is likely a primary inciting factor in the Myanmar genocide against the country’s Muslim minority Rohingya.\textsuperscript{87} This included false stories of rape perpetrated by Muslim men against Buddhist women,\textsuperscript{88} a common propaganda tactic to demonize minorities and justify genocide.\textsuperscript{89} The social media campaign against the Rohingya should bring to mind similar radio campaigns against Tutsis in the lead up to the Rwandan genocide.\textsuperscript{90}

Stochastic terrorism, in which mass media is used to incite random actors to carry out terrorist acts that “are statistically predictable but individually unpredictable” also spawns a number of “lone wolf” mass murders.\textsuperscript{91} Robert Bowers, the killer responsible for the massacre of eleven people at a Pittsburgh synagogue, was an avid consumer of right-wing propaganda and of caravan propaganda in particular.\textsuperscript{92} Indeed, 2018 was one of the worst years for right-wing domestic extremist murders with fifty


\textsuperscript{88} See Mozur, supra note 87.

\textsuperscript{89} The archetypal example of this is the Nazi film Jud Süss, with numerous plot points focused on Jewish men raping German women. \textit{See Jud Süss} (Terra Film 1940). The contrapositive approach, in which propaganda encourages rape of minorities, is also observed. \textit{See, e.g., Human Rights Watch/Africa, Shattered Lives: Sexual Violence During the Rwandan Genocide and Its Aftermath} (Sept. 1996), https://www.hrw.org/reports/1996/Rwanda.htm (discussing Hutu propaganda calling for the rape of Tutsi women on the grounds that Tutsi beauty would be used to harm the state).


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deaths. Of those, thirty-eight were attributable to white supremacists. While a desire to prevent electoral interference is a focal point of social media regulation proponents, protection of targeted peoples and curbing domestic terrorism are also key concerns.

E. The Memetic Formula of Fake News: The Misattributed, Miscaptioned, Reused Image

A particularly effective means of capturing user attention and quickly conveying information is to pair a photograph with an incendiary statement. The presence of a photo lends credibility to the story and allows for easy consumption by viewers. While eye-popping headlines are costless to generate, a photo makes an even quicker and more powerful impression.

The basic formula of this brand of misinformation is to present a photo and assert (or imply) with caption text that the photo represents some violation of norms or decency. The post will claim that obvious facts are ignored by the mainstream media, further undermining confidence in typical news sources and emphasizing the need for transmission of the “true” facts contained in the post. The photo should appear genuine and be eye-catching, either due to the graphic nature of the post or the extreme ideological signaling therein. A graphic post may show a bloody victim, an act of violence, or the sexualization of children. An ideological post may show an individual dressed as a Nazi or a member of the Communist Party in

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94 Id.
96 See generally Piotr Winkielman & Yekaterina Gogolushko, Influence of Suboptimally and Optimally Presented Affective Pictures and Words on Consumption-Related Behavior, FRONTIERS IN PSYCHOL. (Jan. 29, 2018), https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5797300/ (finding that emotional images, but not words, influenced subject behavior and did so immediately). However, a photo also provides platforms with a simple way to empower users to authenticate and defeat the meme. An automated copyright filter can easily check the origin of these falsely captioned photos.
98 See Part III, infra.
100 See, e.g., Stuart Winer, Minister Calls for Probe After Top Politicians Depicted as...
countries with a deep antipathy to communism. Of course, the best images include both visceral and ideological appeal: For example, a photo of a bloodied police officer demonstrates the lawlessness of a situation and a threat to the established order.

The misattribution approach offers several advantages when compared to other avenues for propaganda. Misattribution of photos avoids the necessity of constructing a fake image through editing software such as Photoshop, a method that involves some time and skill. While there are several examples of the latter technique today, including a false image of President Trump rescuing flood victims or of school shooting survivors tearing up the Constitution, users may react negatively to blatant photo manipulation if they detect it. Those individuals employing the misattribution technique can more easily hide their methods or present them as accidental than can those who blatantly manipulate photos.

Misidentification itself also can be used as an excuse to further spread

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101 For example, a vice presidential candidate of Brazil was shown in a doctored photo with Fidel Castro. ("[A]n adult Rousseff with Fidel Castro (the photo of Castro is from 1959; at the time, Rousseff was only eleven years old). . ."). Marc Cho, How WhatsApp Turned Brazil’s 2018 Elections Upside-Down: An Autopsy Report, RIOONWATCH (Jan. 4, 2019), http://www.rioonwatch.org/?p=48419.


the image. The misidentification of a nude photograph as one of Congresswoman Alexandria Ocasio-Cortez is a contemporary example of this.\textsuperscript{108} The image is instead of Sydney Leathers, and was posted to a foot fetish site on September 25, 2015 (and was further commented on by other users on January 11, 2016).\textsuperscript{109} Though debunked as a false attribution, conservative sites chose to further publicize the image with the headline, “Here’s the photo some people described as a nude photo of Alexandria Ocasio-Cortez,”\textsuperscript{110} which does not make clear that the image is falsely attributed and serves to further disseminate the image.\textsuperscript{111}

The false photo meme is easy to produce and easy to reuse. This simplicity makes it more appealing to domestic propagandists and foreign actors alike. As explained by Joseph Menn, “Russian accounts have been amplifying stories and internet ‘memes’ that initially came from the U.S. far left or far right. Such postings seem more authentic, are harder to identify as foreign, and are easier to produce than made-up stories.”\textsuperscript{112} The method is simple, effective, and scalable.

As a simple demonstration, take the example of Andrew McCabe, the former Deputy Director of the FBI. McCabe announced his retirement from the FBI in January 2018 in the face of numerous attacks from right-wing


\textsuperscript{111} The story text notes that this is a false attribution; however, it curiously states that this misattribution is the work of “evil pranksters.” Betsy Rothstein, Anthony Weiner Mistress Stands Up for AOC After Evil Internet Trolls Spread Fake Nude Photo, DAILY CALLER (Jan. 7, 2019), https://dailycaller.com/2019/01/07/fake-nude-ocasio-cortez (note, the headline was subsequently changed, “Correction: An earlier version of the headline for this story made an inaccurate implication. The story has since been updated for accuracy.”).

politicians,113 most notably President Trump.114 Commentators immediately began circulating posts of McCabe surrounded by officers, insisting that he was escorted from the FBI building as a criminal.115 The post was also shared and advanced by right-wing media pundits, working for outlets like NewsMax.116


Nothing asserted regarding McCabe’s supposed FBI removal in the accompanying meme captions is true. A reverse-image search shows that the photos are not from 2018; they are Getty Images taken on December 21, 2017 and show McCabe’s security escort to the Rayburn House Office.


Building to give testimony to the House Intelligence Committee. The effort needed to craft this sort of post is minimal; simply frame a genuine photo to fit a false narrative.

II. THE LAW AND SCIENCE BEHIND VISUAL PROPAGANDA

The effectiveness of visual propaganda is intuitive. Indeed, the impact of images is taken as a given in phrases such as “a picture is worth a thousand words.” The law recognizes the potency and cultural necessity of visual images through doctrines such as those surrounding photographic evidence and the Visual Artists Rights Act (VARA). The law repeatedly signals that images deserve both extra protection and oversight. This approach is borne out by scientific examination. Psychological and neurological studies demonstrate that visual propaganda is a perniciously useful tool in arousing hatred and unreasoned emotional response in vulnerable individuals.

A. Legal Recognition of the Power of Visuals

The law is replete with references to the power of photographs to influence and impact the viewer. In the realm of criminal law, the power of photographic evidence has inspired jurists to both elevate photographs as visual truths and develop doctrines to screen jurors from deceptive or prejudicial photographs. Oliver Wendell Holmes, Sr. famously described photography as “a mirror with a memory,” a formulation that posits photographs as perfect memories. The use of such memories in the


118 Olga Shevchenko, “The mirror with a memory”: Placing Photography In Memory Studies, in *Routledge International Handbook of Memory Studies* 272, 272 (Anna Lisa Tota & Trever Hagen eds., 2015)
courtroom is exceptionally powerful, with early judges and lawyers regarding photographs as “the ultimate witness[es].”\textsuperscript{119}

The power of photographic evidence is demonstrated in the “silent witness” doctrine, which allows photographs to “speak for themselves.”\textsuperscript{120} As courts treat photographs as illustrative evidence, photos often serve in place of witness testimony. The Chief Librarian for the North Carolina Supreme Court most clearly expressed this view in 1946:

\begin{quote}
While a competent, verified photograph has, at times, been limited to the doubtful status that it may be used only to “illustrate testimony” . . . . We have drifted into this strange anomaly in our law by losing sight of this significant fact: Photographs may, under proper safeguards, not only be used to illustrate testimony, but also as photographic or silent witnesses who speak for themselves.\textsuperscript{121}
\end{quote}

Surveillance images, for example, may be introduced and authenticated, even absent an eyewitness with firsthand knowledge.\textsuperscript{122}

Videos have been treated in much the same way. The Supreme Court in \textit{Scott v. Harris} famously viewed videotape of a high-speed car chase as dispositive of reality.\textsuperscript{123} The issue before the Court was whether a high-speed chase, which resulted in a crash paralyzing the fleeing motorist, was excessive force in violation of the motorist’s Fourth Amendment rights.\textsuperscript{124} The Court relied almost entirely on the videotape to reverse an Eleventh Circuit decision allowing the argument to make its way to a jury.\textsuperscript{125} “Respondent’s version of events is so utterly discredited by the record that no reasonable jury could have believed him. The Court of Appeals should not have relied on such visible fiction; it should have viewed the facts in the light depicted by the videotape.”\textsuperscript{126} Justice Breyer, writing in concurrence, similarly flagged the importance of the video, stating “[b]ecause watching the video footage of the car chase made a difference to my own view of the case, I suggest that the interested reader take advantage of the link in the Court’s opinion . . . and watch it.”\textsuperscript{127}

\textsuperscript{120} Tal Golan, \textit{The Emergence of the Silent Witness: The Legal and Medical Reception of X-rays in the U.S.A.}, 34 SOC. STUD. OF SCI. 469, 490 (2004) (quoting Dillard S. Gardner, \textit{The Camera Goes to Court}, 24 N.C. L. REV. 233, 244–45 (1946)).
\textsuperscript{121} Id.
\textsuperscript{124} Id. at 372-74.
\textsuperscript{125} Id. at 380-81.
\textsuperscript{126} Id.
\textsuperscript{127} Id. at 387.
Courts have also recognized the empathetic impact of gruesome photographs on the jury. In studies of mock prosecutions for homicide, gruesome photographs greatly increase the inculpatory weight of all available evidence. Gruesome verbal descriptions, in contrast, have no marked effect. Visual evidence elicits a greater emotional response in jurors and triggers a higher punitive action against the defendant. It is for this very reason that prosecutors attempt to introduce such photos while defense counsel attempts to prevent publication to the jury by arguing that the prejudicial effect outweighs the probative value under Federal Rule 403 or the equivalent state rule.

State legislatures similarly understand that juries are swayed by photographs of victims, even when those photographs depict the victim before the crime occurred. Tennessee thus enacted the Victim Life Photo Act, which reads: “In a prosecution for any criminal homicide, an appropriate photograph of the victim while alive shall be admissible evidence when offered by the district attorney to show the general appearance and condition of the victim while alive.” Surely, there is little probative value of such a photograph, save for the rare occasion when the

129 Id.
133 “Living victim” laws are found in Tennessee, Oklahoma, Oregon, and Utah. See Rychlak, supra note 132, at 1430 n.41 (citations omitted). “[Pursuant to 12 OKLA. STAT. ANN. § 2403 (2018),] although relevant, evidence may be excluded if its probative value is substantially outweighed by the danger of unfair prejudice . . . However, in a prosecution for any criminal homicide, an appropriate photograph of the victim while alive shall be admissible evidence when offered by the district attorney to show the general appearance and condition of the victim while alive. . . . [Pursuant to OR. REV. STAT. ANN. § 41.415 (1987), in] a prosecution for any criminal homicide, a photograph of the victim while alive shall be admissible evidence when offered by the district attorney to show the general appearance and condition of the victim while alive. . . . [Pursuant to UT. STAT. ANN. § 77-38-9(7) (2014),] [i]n any homicide prosecution, the prosecution may introduce a photograph of the victim taken before the homicide to establish that the victim was a human being, the identity of the victim, and for other relevant purposes.” Id. (citations and internal quotation marks omitted); see also State ex rel. Carlile v. Frost, 956 P.2d 202, 208 (Or. 1998) (“[Section 41.415], in effect, declares the [victim] photographs to be relevant and not subject to balancing under OEC 403.”) (alteration added) (quoting State v. Williams, 828 P.2d 1006, 1013 (Or. 1992) (en banc)).
identity of the corpse is in doubt. Instead, prosecutors use such photos to “elicit emotions of bias, sympathy . . . [and] retribution” in the jury.\textsuperscript{135}

The power of images is obvious, such that judges in states without “living victim” laws are wary of admitting such images. “The horror of the homicide can be equally evoked with a photo of a victim who is a beautiful baby as it can be with gruesome death pictures. The emotional effect is as potentially damaging.”\textsuperscript{136} It is for this reason that Justice Souter, writing in concurrence in \textit{Carey v. Musladin},\textsuperscript{137} noted the danger of allowing court spectators to wear photos of victims:

[S]pectators at a criminal trial . . . wear[ing] visible buttons with the victim’s photo can raise a risk of improper considerations. The display is no part of evidence going to guilt or innocence, and the buttons are at once an appeal for sympathy for the victim (and perhaps for those who wear the buttons) . . . \textsuperscript{138}

\textbf{B. Legal Recognition of the Moral Rights of Visual Artists}

The power of visual images is also reflected in the extra protections the law affords visual artists. While writings and visual art both receive protection under the Copyright Act of 1976, visual artists receive additional moral rights protections under The Visual Artists Rights Act of 1990, “VARA.”\textsuperscript{139} These rights encompass the non-economic and personal rights of the artist, even if the copyright of the image has transferred to another party.\textsuperscript{140} VARA, which protects “paintings, drawings, prints, sculptures, or photographs produced for exhibition purposes” that exist in a single copy or limited edition of 200 copies or fewer,\textsuperscript{141} implicates three categories of

\begin{itemize}
  \item \textsuperscript{135} State v. Collins, 986 S.W.2d 13, 20 (Tenn. Crim. App. 1998) (internal quotation marks omitted).
  \item \textsuperscript{136} Franks v. State, 636 P.2d 361, 366 (Okla. Crim. App. 1981); cf. Commonwealth v. Rivers, 644 A.2d 710, 716 (Pa. 1994) (“This photograph was introduced for the purpose of engendering sympathy for the victim with the intent of creating an atmosphere of prejudice against the defendant.”).
  \item \textsuperscript{137} 549 U.S. 70 (2006).
  \item \textsuperscript{138} \textit{Id.} at 82–83 (Souter, J., concurring).
  \item \textsuperscript{140} \textit{Id.} § 106A(b) (“Scope and Exercise of Rights—Only the author of a work of visual art has the rights conferred by subsection (a) in that work, whether or not the author is the copyright owner.”).
  \item \textsuperscript{141} 17 U.S.C. § 101 (2018). A “work of visual art” is—

    \begin{enumerate}
      \item a painting, drawing, print, or sculpture, existing in a single copy, in a limited edition of 200 copies or fewer that are signed and consecutively numbered by the author, or, in the case of a sculpture, in multiple cast, carved, or fabricated sculptures of 200 or fewer that are consecutively numbered by the author and bear the signature or other identifying mark of the author; or
      \item a still photographic image produced for exhibition purposes only, existing
    \end{enumerate}
2019] COUNTERING PERNICIOUS IMAGES

rights: the right of integrity; the right of attribution; and the right to prevent destruction. While VARA would not apply to works-for-hire and likely not apply to the electronic embodiment of images and thus would not reach the images misused in visual propaganda at issue here, the existence of the statute recognizes the strong impact of visual art and its corresponding cultural importance. The legislative record notes that “it is paramount to the integrity of our culture that we preserve the integrity of our artworks as expressions of the creativity of the artist. . . . Any distortion of such works is automatically a distortion of the artists’ reputation and cheats the public of an accurate account of the culture of our time.” Moreover, VARA reflects the societal norm of attribution and a corresponding willingness to take necessary steps to prevent deliberate misattribution.

C. Psychology of Visual Propaganda: Framing and Auto-Persuasion

The effectiveness of propaganda has been the subject of study for over seventy years, with concerted focus on the methods of recruitment during the Second World War. The cornerstone of effective propaganda is message simplification; that is, to impart a simple argument supportive of the overall cause. The goal is not to holistically or accurately address counterarguments. Indeed, early attempts at Nazi leaflet propaganda attempted to win over converts through point-by-point debate; these efforts failed. A key feature of propaganda is repetition, such that audiences can immediately decode and consume constructs and symbols. In this way, meme-based propaganda is the logical evolution of visual propaganda—hard hitting, easy to produce, and oddly persuasive.

142 This prevents “any intentional distortion, mutilation, or other modification of an author’s work of visual art that would be prejudicial to the artist’s honor or reputation.” Flack v. Friends of Queen Catherine Inc., 139 F. Supp. 2d 526, 531 (S.D.N.Y. 2001).
143 This protects the author’s right to control the attribution of their own work. Id.
144 Id.
148 See PSYCHOLOGICAL OPERATIONS, US ARMY 159–63 (1962) (outlining propaganda techniques such as generalization and simplification as means of making messages soothing and easily understood).
150 See id.; PSYCHOLOGICAL OPERATIONS, supra note 148, at 215 (noting importance of repetition in audio propaganda).
The impact of visual propaganda is dependent on four mechanisms: priming; source credibility; attention capture; and emotional control. A brief review of these mechanisms shows the power of visual propaganda and the unique advantages of misattributed photos.

1. Priming

Humans can more easily and quickly understand images if we have previously been exposed to those images and if we are told what we will see. The more familiar the stimulus, the faster it “clicks” and the stronger the impact. Thus, an ambiguous image becomes a definite image if the audience is primed to recall a known image. Visual propaganda, therefore, succeeds both by repetition of motifs (e.g., enemies as despised animals, patriotic armies as defenders of justice) and simplifying captions that typify the scene. Simplifying towards a black-and-white scenario eliminates nuanced perceptions, in part because viewers are not primed to see grey. Thus, when politicians describe the migrant caravan as “violent predators” invading our border, viewers are primed to see pictures of the caravan as

151 Bryder, supra note 149, at 112.

152 Isabel Gauthier, Visual Priming: The Ups and Downs of Familiarity, 10 SCIENCE DIRECT 753, 753 (2000).


154 See, e.g., Clive Warren & John Morton, The Effects of Priming on Picture Recognition, 73 BRITISH J. PSYCHOL. 117, 117 (March 1982) (showing that prior presentation of an image or related image facilitates future recognition of like images).


violent and relate those images to other images of invasion and war.

2. Source Credibility\textsuperscript{158}

Propagandists attempt to woo their audience by establishing themselves as the preferred source of information. In the context of “patriotic” audiences, this may take the form of national accreditation with prominent endorsing badges.\textsuperscript{159} Thus, an Army recruitment poster will have large branding associated with the national government.\textsuperscript{160} A link to the establishment is not required, however, as propaganda may insist on its veracity by pointing out the lack of coverage offered by other established news sources. Source credibility can be established by giving the audience excuses to perceive images as real, un-doctored, or unfiltered.\textsuperscript{161}

3. Attention Capture\textsuperscript{162}

Propagandists attempt to deliver an engaging message that invites their audience to continue the persuasion process themselves. Thus, an image should have high salience to viewers while simultaneously offering the viewer an appealing, self-congratulatory reason for believing the message presented.\textsuperscript{163} An image may be a dramatic scene of violence or triumph over evil (a categorization that clearly applies to the enemy).\textsuperscript{164} Moreover, it may suggest the viewer is racially superior, destined for greatness, or simply more clever than other individuals.\textsuperscript{165} Misattributed photos typically offer the credulous viewer the reward of being part of an exclusive club that is not

\textsuperscript{158} Bryder, supra note 149, at 114.

\textsuperscript{159} In the case of the Rwandan genocide, Prime Minister Jean Kambanda called a key propaganda disseminating radio station (Radio Télévision Libre des Mille Collines) and announced that they were “one of the key weapons in the war.” Mary Kimani, RTLM: The Medium That Became a Tool for Mass Murder, in THE MEDIA AND THE RWANDA GENOCIDE 110, 113 (Allan Thompson ed., 2007). Similarly, President Trump has retweeted posts from hate speech outlets. Anthony Zurcher, Donald Trump Retweets Far-Right Group’s Anti-Muslim Videos, BBC NEWS (Nov. 29, 2017), https://www.bbc.com/news/world-us-canada-42166663.


\textsuperscript{161} See, e.g., JH Choi, JH Watt, & M Lynch, Perceptions of News Credibility About the War in Iraq: Why War Opponents Perceived the Internet as the Most Credible Medium, 12 J. OF COMPUTER-MEDIATED COMMUNICATION 209, 210, 213 (Oct. 2006) (noting that use of live images was critical to establishing media credibility in war reporting).

\textsuperscript{162} Bryder, supra note 149, at 112.

\textsuperscript{163} Bryder, supra note 149, at 109 (noting feelings of superiority attendant to successful propaganda).

\textsuperscript{164} See WILLIAM B. HART II & FRAN HASSENCAHL, supra note 155.

\textsuperscript{165} Bryder, supra note 149, at 109 (noting feelings of superiority attendant to successful propaganda).
easily duped by other, more mainstream avenues. A viewer is in possession of a rare truth that is not shared by the news media and is, in fact, actively obfuscated. Therefore, the viewer engages in self-praise by simply believing the image and selflessness by sharing the image with many other people.

4. Emotional Control

Effective propaganda controls the emotional state of viewers by first arousing the desired emotion and then offering the viewer a preferred way of responding to that emotion. In 1943, Nazi propaganda evoked fear of Bolshevik deprivation and urged viewers to relieve that tension by supporting a stalwart home defense led by German soldiers. In 2018, propaganda concerning the migrant caravan evoked fear of disease and rapacious violence, while noting that the President would prevent the invasion through the creation of a wall or the deployment of soldiers.

It is important to realize that each of these steps is reinforced through repetition—an oft presented image will be more familiar and evoke stronger feelings. Memes establish a visual lexicon, with shortcuts to emotional

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166 See supra Part III.
167 Bryder, supra note 149, at 111–12.
168 Id. at 114.
response displacing in-depth argument. These shortcuts, in turn, create a logical automaticity that comports with the philosophical underpinnings of propaganda.

D. Philosophy of Meme-Based Propaganda: Epistemic Endosmosis

Scholar Hamid Dabashi outlined the modern philosophical underpinnings of targeted propaganda, as exemplified by the framing of the Middle East in the decade after the 9/11 World Trade Center attacks. While previous views of propaganda centered on controlling ignorant or illiterate members of the populace with simplistic Manichean narratives, Dabashi’s innovation is recognizing that power is also enhanced by disseminating bad information to a thinking, literate body. That is not to say that propaganda seeks to create a coherent body of knowledge; instead, the goal is to provide single-purpose narratives that can be consumed to induce a specific response to a specific event. Thus, the goal is to provide enough information for members of the populace to feel that they are making informed decisions, when in fact they are being manipulated.

Both propaganda philosophies marry perfectly with the distribution networks within social media. An individual persuaded by propaganda will want—indeed he or she may consider it a duty—to share his or her latest discovery, as well as the appropriate decision to be reached, with other individuals (e.g., we are under attack so we must defend ourselves). Having shared the information, the sharer will be invested in the false narrative and continue to self-persuade in the face of new information. In this way, a

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171 See, e.g., Adolf Hitler specifically addresses this point in Mein Kampf, noting that propaganda should be “always and exclusively to the masses” rather than the “scientifically trained intelligentsia” because “to influence a whole people, we must avoid excessive intellectual demands on our public, and too much caution cannot be exerted in this direction.” Adolf Hitler, Mein Kampf 179–80 (Ralph Manheim trans., Houghton Mifflin Co. 1st ed. 1943).
172 Dabashi, supra note 170, at 222–23.
173 See Dabashi, supra note 170, at 213 (This is most eloquently summed up by Hamid’s comparison of disposable knowledge, or fast-knowledge, to fast food:

This epistemic endosmosis—interested knowledge manufactured in think tanks and percolating into the public domain—I propose is conducive to various manners of disposable knowledge production—predicated on no enduring or legitimate epistêmê, but in fact modeled on non-refundable commodities that provide instant gratification and are then disposed of after one use only. This is fast-knowledge produced on the model of fast food, with plastic cups, plastic knives, plastic forks, and hopefully biodegradable paper that can be recycled for environmental purposes.);

message accrues credibility while it permeates a peer group, with each peer joining a chorus of newly-crafted “experts.”

E. Science of Visual Impressions: Memorable and Emotional

Neurological processes lend further support to the psychological underpinnings of visual propaganda. While a complete review of medical literature is outside the scope of this Article, this section provides a helpful overview of the science relating to the differential power of images and words.

Images are a superior means for driving perception and forming memories. For the last four decades, research has consistently shown that subjects are more likely to remember pictures than words. For example, subjects may use photo references to prevent false recall and to speed memory retrieval. Subjects become familiar with an image more easily than they do a word, and this familiarity allows for better recollection and processing. In turn, words may assist viewers in resolving ambiguous images.

Visuals also assist with the memory of words and slogans. Anderson and Bower showed that memory of verbal information was enhanced when a visual was paired with words. This result supports dual-coding theory, which posits that verbal and visual information are processed by different channels and each channel has its own weaknesses. But images may be recalled through either cue (the image itself or the verbal cue for the image), whereas words are recalled only through the lingual cue. Paivio found that when subjects where shown pictures and words, they could recall the words best in sequence while pictures were best recalled in any order. This shows that text can be an optimal delivery device for chronologies and other sequenced information, whereas visuals can be information-rich even if shown out of order or divorced from context. Images also have a capability to be inherently distinctive and thus more easily recalled.

Pictures also have an intense ability to engender emotional responses.

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179 Id.
180 A. PAIVIO, IMAGERY AND VERBAL PROCESSES 37 (Psychology Press 2013).
Neuroscientific studies have repeatedly found that images depicting suffering elicit empathy in viewers, though it is unclear if this is due to mirror neurons or alternate cognitive processes. Propagandists have long understood the double-edged nature of this phenomenon and deployed selective visuals as a result: Atrocities perpetrated by the enemy are highlighted in film, while atrocities perpetrated against the enemy are discounted in text.

III. MISATTRIBUTED PHOTOS AND VISUAL PROPAGANDA AGAINST THE OCTOBER 2018 MIGRANT CARAVAN

In the final weeks of the 2018 midterm campaign, the GOP turnout effort increasingly focused on a caravan of migrant asylum-seekers making their way to the United States’ southern border from Honduras. To emphasize the danger posed to the United States, an intense misinformation campaign centered on misattributed images began. Conservative Politicians and right-leaning media pushed out numerous false

narratives about the caravan, while right wing Twitter posters circulated numerous misattributed images, copied and described in detail below. There are numerous examples of misattributed image propaganda deployed during this time. Phil Howard of Oxford University’s Computational Propaganda Project noted that this event had high salience for peddlers of false news: “Social media is awash with pictures that portray an angry mob heading for the US border . . . This kind of event is easy for junk news outlets to turn into a sensational news story.”

Although previous studies have focused on the different networks and diffusion paths for the spread of targeted propaganda, it is also vital to analyze the methods employed in the propaganda itself. This analysis can reveal avenues for response and prevention. To that end, this section will document and analyze misattributed photos used in this particular disinformation campaign related to four common propaganda themes concerning demonized enemy groups: violence, outside funding,  

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188 Enemy demonization has a very particular meaning in the context of propaganda. Jules Boykoff set out four criteria for enemy demonization: (1) the media and state advance frames depicting the enemy in moral terms; (2) the character of the opponent is binary or manichean (good v. evil); (3) the state originates the portrayal; and (4) there is no marked counternarrative from the state. JULES BOYKOFF, BEYOND BULLETS: THE SUPPRESSION OF DISSENT IN THE UNITED STATES 192 (AK Press 2007).

189 These themes are apparent in most anti-Semitic propaganda. See, e.g., DER EWIGE JUDE (THE ETERNAL JEW) (Deutsche Filmherstellungs and Verwertungs GmbH Nov. 28, 1940) (the Nazi film typifies the depiction of Jews as parasitic degraders of Aryan culture).

190 Atrocity propaganda is the clearest example of this trope, but wanton crime is also a popular approach.

filth/edegradation, and unpatriotic otherness.

A. Propaganda Violence: Caravan is Brutally Throwing Rocks at Peace Officers

A main right-wing talking point is that undocumented migrants are lawless thugs. Indeed, President Trump began his presidential campaign announcing that Mexican immigrants are criminals and rapists. In that same vein, conservative politicians and commentators moved to label the caravan something akin to an existential threat to the United States. President Trump made numerous claims to this effect: falsely claiming that the caravan included “Middle Easterners,” stating at rallies that the caravan consisted of “bad people,” “not little angels,” and “tough, tough people,” and ultimately deploying the military to defend the southern border from invasion. Visual propagandists did not miss these cues.

To emphasize the violent consequences of the caravan, posts circulated purporting to show bloodied Mexican police officers injured in skirmishes

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192 This often includes sexual violence, especially directed towards women or children of the homeland. See Nicoletta F. Gullace, Sexual Violence and Family Honor: British Propaganda and International Law During the First World War, 102 THE AM. HIST. REV. 714, 714 (1997) (noting that British propaganda during WWI focused on crimes against women, causing “graphic images of violence against women and children [to] permeate[] British public discourse”). Moral corruption is also a common theme. See, e.g., JUD ST:B (Terra Film 1940) (propaganda film depicting Jewish rape of non-Jews).

193 This is perhaps best typified by the Dolchstoßlegende (the stab-in-the-back myth) that blamed Germany’s defeat in WWI on the actions of anti-German civilians, a message amplified by the Nazi Party as targeting Zionist bankers. Richard Scully, Hindenburg: The Cartoon Titan of the Weimar Republic, 1918–1934, 35 GER. STUD. REV. 541, 545 (2012). It is worth noting that Russian propaganda regarding the Ukraine conflict makes use of many elements of this trope. John R. Haines, Russia’s Use of Disinformation in the Ukraine Conflict, FOREIGN POL’Y RES. INST. (Feb. 2015), https://www.fpri.org/article/2015/02/russias-use-of-disinformation-in-the-ukraine-conflict/.


with the migrants. The original posting appeared on October 20, 2018 from an account run by user Mike Allen.\textsuperscript{199} The text accompanying the image reads: “Mexican police are being brutalized by members of this caravan as they attempt to FORCE their way into Mexico – And WE are supposed to believe these are just poor, helpless refugees seeking asylum??? I am 100% behind POTUS deploying our military!”\textsuperscript{200} The post was modified by user Jacque Guinan, who slightly tweaked the language and appended two additional images. Other variants swapped the order of the three photos, focusing on the officer wounded on the ground.\textsuperscript{201}

\textbf{Propaganda: Blooded Officer [Shield, Ground, Bloody Lip variants] (2018)}

\begin{quote}
Mexican police are being brutalized by members of this caravan as they attempt to FORCE their way into Mexico - And WE are supposed to believe these are just poor, helpless refugees seeking asylum??? I am 100% behind POTUS deploying our military!
\end{quote}

\begin{quote}
The caravan is not an invasion?
Look what they do to the Mexican Police.
\end{quote}

\begin{quote}
Mexican police are being brutalized by members of this caravan as they attempt to FORCE their way into Mexico – And WE are supposed to believe these are just poor, helpless refugees seeking asylum??? I am 100% behind POTUS deploying our military!
\end{quote}

\textsuperscript{199} See post \textit{infra} (on file with author).
\textsuperscript{200} See post \textit{infra} (on file with author).
\textsuperscript{201} Constitutionalist Luke (@constitutionalist.sf), \textsc{Instagram} (Oct. 23, 2018), https://www.instagram.com/p/BpSIo9Jg93d/.
The post was widely distributed in conservative circles, with minor variations to the caption text to emphasize the failure of traditional media to share this image and to liken the migrants to an “invasion.” Widespread reference to the migrant caravan as an invasion by conservative commentators and politicians presaged the military action ordered by President Trump. The single image variant appears to have been more popular (e.g., 10 of the 12 examples embedded below).

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202 This is of course unsurprising in light of the fact that the image is fraudulently miscaptioned.
203 See post supra (on file with author).
Mexican police are being brutalized by members of this caravan as they attempt to FORCE their way into Mexico - And WE are supposed to believe these are just poor, helpless refugees seeking asylum?? I am 100% behind POTUS deploying our military to protect our border and keep out.

Mexican police are being brutalized by members of this caravan as they attempt to FORCE their way into Mexico - And WE are supposed to believe these are just poor, helpless refugees seeking asylum?? I am 100% behind POTUS deploying our military to protect our border and keep out.

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The post also received significant media exposure when it was reposted by Ginni Thomas, the wife of Justice Clarence Thomas. Thomas’ variant presupposes a familiarity with the image and its falsely-attributed subject matter. She does not define the scene, noting only that “The media won’t share THIS . . . an invasion,” nor does she outline the appropriate response.

Propaganda: Bloodied Officer [Shield variant] (2018)

In fact, none of the three images relate to this migrant caravan, or indeed, to migrants at all. A reverse-image search shows the primary image is from Photojournalist Gustavo Aguado, who took the picture in October 2012 during a Mexican police action evicting protesting students from high schools. Interestingly, the images were part of a wider photo spread of images largely showing bloodied protestors rather than bloodied officers. These other photos were obviously ill-suited for a

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209 Evon, supra note 205.


211 Photos: Eviction and ‘Censorship’ of the Normalist Account on Twitter, ARISTEGUI
misinformation campaign emphasizing migrant violence, but it would be worth noting that disrupting actors may use images such as this to create pro-migrant visual propaganda.

Reverse-image searches show the two appended images were taken years before the caravan and are unrelated to migrants. The appended image of a police officer with a bloody lip was taken in February 2011 and relates to clashes between police and teachers demonstrating against President Felipe Calderón in Oaxaca.212 The image of the officer on the ground is a 2014 photo213 taken by Cristopher Rogel Bianquet of a protest in Chilpancingo regarding forty-three missing students.214

Source Image (2012)

Source Images (2014; 2011)

NOTICIAS (Oct. 17, 2012, 6:34 AM), https://aristeguinoticias.com/1710/mexico/fotos-desalojo-y-la-censura-a-la-cuenta-de-normalistas-en-twitter/. There was an outcry that these photos were being censored from Twitter.


On October 29, propagandists used a different photo of the Mexican 2014 missing-student protests, with the false caption “Mexican official being dragged by the caravan. Anyone up for open borders??”

Propaganda: Dragged Officer (2018)

Again, a reverse-image search shows the image (a Getty Image taken by Pedro Pardo) has nothing to do with migrants in 2018 and in fact captures the height of protestor anger at police in 2014 “after gang suspects confessed to slaughtering 43 missing students and dumping their charcoaled remains in a river.”

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215 Evon, supra note 205.
Two related pieces of visual propaganda were created just before and soon after the election. On November 2, the user The Snarky Conservative 218 posted an image of young men throwing rocks, with the caption “To a liberal, its[sic] ok for poor people seeking refuge from violence to throw rocks at you.” The image text, in standard meme block letters, reads “ALL WE WANT IS A BETTER LIFE IN YOUR COUNTRY / SO WE`RE GOING TO THROW ROCKS AND TRY TO KILL YOU”. The image is signed “Dixon Diaz 2018.” This story was flagged as disinformation and debunked by Politifact.219

219 O’Rourke, supra note 218.
In fact, a reverse-image search shows that the image is not of the migrant caravan, but of Palestinians in the first Intifada. While the copyright is unclear, the image was first posted online in 2007. The user seemingly acknowledged the origin of the photo but kept the post up, adding the sentence “And that’s true whether it’s Palestinians or Central Americans, as long as they aren’t white.”

Source Image

After the election, another piece of visual propaganda was created in response to President Trump’s lie that border patrol agents had been “very badly hurt” by rock-throwing migrants. The user “Trump Train Conductor” posted a photo showing a bloodied border patrol officer, suggesting he was injured by members of the caravan.

221 O’Rourke, supra note 218.
222 Eric Levitz, Trump Falsely Claims That U.S. Agents Were Hurt in Border Clashes, N.Y. MAG. (Nov. 17, 2018), http://nymag.com/intelligencer/2018/11/trump-border-patrol-agents-tijuana-caravan-migrants-lies-brexit.html. The CBP disclosed that while four officers had been struck by rocks, each officer was wearing protective gear and was unharmed.
223 This image was used in other Instagram posts as well. See, e.g., (@the_typical_liberal), INSTAGRAM, https://www.instagram.com/p/Bqsn1jUBy6fnRDtrxMHItc62mv0ld4yIcjT9ro0/ (last visited Jan. 16, 2019).
In fact, the photo was taken at least five years earlier, following a skirmish with drug smugglers. A reverse-image search shows that the photo has circulated on right-wing sites for years, making annual appearances on Breitbart.
Prior Use (2014)

These examples have a consistent theme and similar propaganda purpose. The salience of the images (brutalized officers) and framing text (this event just occurred and the media does not share it) are obvious. Notably all of the photos used in these posts predated the caravan by several years and feature incidents unrelated to Central American migrants.

<table>
<thead>
<tr>
<th>Propaganda Violence</th>
<th>Different Year</th>
<th>Known Copyright Holder</th>
<th>Right Wing Use</th>
<th>Prior Use</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bloodied Officer / Shield</td>
<td>Yes / 2012</td>
<td>Yes</td>
<td></td>
<td>No</td>
</tr>
<tr>
<td>Bloodied Officer / Ground</td>
<td>Yes / 2014</td>
<td>Yes</td>
<td></td>
<td>No</td>
</tr>
<tr>
<td>Bloodied Officer / Lip</td>
<td>Yes / 2011</td>
<td>Yes</td>
<td></td>
<td>No</td>
</tr>
<tr>
<td>Dragged Officer</td>
<td>Yes / 2014</td>
<td>Yes</td>
<td></td>
<td>No</td>
</tr>
<tr>
<td>Rock Throwers</td>
<td>Yes / Before 2007</td>
<td>No</td>
<td></td>
<td>Unknown</td>
</tr>
<tr>
<td>Bloodied Officer / Eye</td>
<td>Yes / 2010</td>
<td>No</td>
<td></td>
<td>Yes</td>
</tr>
</tbody>
</table>

Note that posters also picked up a key talking point that the caravan hosted large numbers of MS-13 gang members. These relied primarily on suggestive photos of gang members, as depicted below, but do not seem to have been as popularly shared as posts involving injured officers.
B. Propaganda Funding: Democrats, George Soros, Rich Jews are Providing the Caravan with Assistance

Right wing commentators have also attempted to paint the caravan as sponsored by Democrats or by George Soros. Congressman Matt Gaetz tweeted a video of an individual handing currency to members of the caravan. Rep. Gaetz stated the footage was from Honduras, writing “BREAKING: Footage in Honduras giving cash 2 women & children 2 join the caravan & storm the US border @ election time. Soros? US-backed NGOs? Time to investigate the source!”

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President Trump retweeted that video, writing “Can you believe this, and what Democrats are allowing to be done to our Country?” He also later claimed the caravan was funded by Democrats.

“But a lot of money has been passing to people to come up and try and get to the border by Election Day, because they think that’s a negative for us. . . They have lousy policy. The one thing, they stick together, but they wanted that caravan and there are those that say that caravan didn’t just happen. It didn’t just happen. A lot of reasons that caravan, 4,000 people.”

The video itself was not shot in Honduras, but in Guatemala. Guatemalan journalist Luis Assardo reported, “I managed to speak with residents of the area who told me that merchants in the sector gathered money and gave it to people #CaravanaDeMigrantes. With this it is confirmed that what is published by @RepMattGaetz is vague and biased. This is how disinformation is disseminated.”

Rep. Gaetz’s unfounded accusation of George Soros followed President Trump’s earlier accusation that Soros funded protestors opposing the

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230 The protestors were also the victims of misattributed quote memes. One featured Ana Maria Archila, labelled as the “George Soros Activist that ambushed Sen. Jeff Flake” with the falsely attributed caption “When we take action, we must do really scary things. Things that make them cry and sometimes scare their families.” Media: Truth Matters (@patriotsun1), TWITTER (Oct. 9, 2018, 8:00 PM), https://twitter.com/patriotsun1/status/104911901268615169; Ali (@AliDee12017), TWITTER (Oct. 6, 2018, 8:40 AM), https://twitter.com/AliDee12017/status/1048598764775247878. This quote is not attested anywhere outside right wing memes. It is likely a corruption of “[w]hen we take action, we breathe new life and possibility into our democracy.” Ana Maria Archila, I Confronted Jeff
nomination of Justice Kavanaugh. The online attacks against Soros intensified, with propagandists reviving an earlier post that claimed Soros served in the Waffen-SS. The tweet by user MichelleMayber8 was retweeted approximately 6,500 times.

Propaganda: Soros Misidentification (2018, 2016)

In fact, a reverse-image search reveals the photo to be of Oskar Groening, the “Book-keeper of Auschwitz”.

Source Image and Debunk Meme

While the Soros as SS officer meme has been in right-wing circles for.

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specific anti-Soros migration memes appeared at this time. Though not photo based, the viral meme “FBI JUST CONFIRMED SOROS & OTHER DEMOCRATIC DONORS ARE FINANCING THE CARAVAN” appeared on October 22, from a Facebook user “Jim Snyder.” The post was shared 40,000 times and inspired numerous imitators. Soros was targeted with a mail bomb the day after the post went viral. Robert Bowers, the shooter in the Pittsburgh Synagogue massacre, apparently cited the theory that Jewish organizations were aiding migrants: “HIAS likes to bring invaders in that kill our people. I can’t sit by and watch my people get slaughtered. Screw your optics, I’m going in.”

At about the same time, visual propaganda appeared arguing that foreign transport was being provided to the migrants. On October 22, user Curtis Phillips posted two photos, one of people atop a train and another of people boarding buses, with the caption “[t]hey don’t want you to see this. . . THEY ARE NOT WALKING!! Why are the reporters hiding the fact that the migrants are coming on trains, buses, and trucks? These are not Mexican buses. . .” The post was shared approximately 94 thousand times.


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237 See post infra (on file with author).
In fact, neither photo relates to the October 2018 caravan. The train photograph, which a reverse-image search shows had been used by the Center for Immigration Studies238 in 2013239 and by Breitbart in 2014,240 as well as in non-partisan news sites241 is an Associated Press photo taken in April 2013.242 While it does relate to migrants, it predates the 2018 caravan by half a decade.

The bus photograph, which a reverse-image search shows had been used in a Breitbart piece in April 2018,243 depicted the earlier “Migrant via Crucis” caravan that dissipated before reaching the United States. The image is available at Getty Images with the caption:

Central American migrants taking part in the ‘Migrant Via Crucis’ caravan towards the United States, arrive in Puebla, Puebla State, Mexico, on April 6, 2018 where they will attend a legal clinic with NGOs on human rights. The caravan of migrants whose trek across Mexico infuriated US President Donald Trump began breaking up on Thursday, after abandoning its plan to travel en masse to the United States. Some headed to Puebla, where the activists who organized the caravan have convened a legal clinic to help them seek asylum or visas, whether in Mexico or the US. / AFP PHOTO / JOSE CASTAÑARES (Photo credit should read JOSE CASTANARES/AFP/Getty Images).244

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239 David North, Let’s Pay Some Attention to Mexico’s Southern Border and the OTMs, CENT. FOR IMMIGR. STUD. (July 23, 2013), https://cis.org/North/Lets-Pay-Some-Attention-Mexicos-Southern-Border-and-OTMs.
These anti-Semitic and foreign transport memes\(^{245}\) merged when right-wing\(^{246}\) posters began posting stills of a video report on the caravan, where a truck has a Star of David. The image had circulated on sites such as Daily


\(^{246}\) Bethania Palma, Does a Star of David on a Vehicle Traveling with the Migrant Caravan Prove Soros is Behind It?, SNOPES (Nov. 1, 2018), https://www.snopes.com/fact-check/star-david-migrant-caravan/.
Stormer, Stormfront, and various subreddits. Bowers reposted the image frequently, as he was obsessed with the connection between Jews and migrants.

The notion that the caravan was somehow created in response to clandestine Jewish, Democratic support calls to mind the Dolchstoßlegende (the stab-in-the-back myth) that blamed Germany’s defeat in WWI on the actions of anti-German civilians. This strain of propaganda also seeks to insulate viewers from empathetic responses towards poor, beleaguered travelers wandering on foot. These travelers are not poor, they are sponsored by domestic traitors and they are coming quickly on motorized transport. Both narratives were important in order to justify an immediate crisis response, while also tying the caravan to political opponents.

C. Propaganda Filth: Migrants are Dirty, Diseased, and Disrespectful

Another theme set out by propagandists was that the migrants in the caravan would soil America, spreading disease, trash, and vulgar behavior. The “dirty immigrant” trope is well attested in propaganda campaigns foreign and domestic. The message is present in conservative broadcasts and political discussions (see, for example, Tucker Carlson’s argument that immigration makes America “dirtier,” or Rep. Steve King calling immigrants “dirt”). The subthemes each made an appearance in the campaign against the caravan.

With respect to the threat of disease, right wing commentators claimed the caravan would spread leprosy and other plagues. This claim received media attention in part because Fox commentators claimed migrants would spread smallpox, a disease that was eradicated and thus is not spread

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255 Julia Belluz, *Fox News Says the Migrant Caravan Will Bring Disease Outbreaks. That’s Xenophobic Nonsense*, VOX (Nov. 1, 2018, 12:06 PM), https://www.vox.com/science-
naturally.

Propaganda: Skin Disease (2018)

The image showing a potential viral threat was not from the 2018 caravan. It was taken from a 2014 segment. A reverse-image search shows that the image has been used on right-wing blogs since 2014.256

Prior Use (2014)

Propagandists also made direct claims that the caravan was filthy. User Michael Wyrick posted a photo of trash along a highway, with the text “Trash being left behind by the migrant caravan. As they move through an area, along with the path of destruction, they leave behind utter filth (poop, pee, food scraps, etc) There are plenty of sources for documentation. THEY MUST BE STOPPED!” Variants to this widely shared post included mentions of theft or that the amount of items indicated outside funding of the

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In fact, the image is not related to the 2018 caravan or to Central American migrants.\textsuperscript{257} It first appeared online in 2015,\textsuperscript{258} attributed to Kamil Bulonis,\textsuperscript{259} and is described as trash from Syrian refugees near the Hungarian-Austrian border. A reverse-image search shows the photo is commonly reused to demonize refugees.\textsuperscript{260}

\textsuperscript{257} Trevor Hugh Davis, \textit{More Fake Photos Shared on Social Media About the “Caravan”}, \textsc{Medium} (Oct. 25, 2018), https://medium.com/@trevorhughdavis/more-fake-photos-shared-on-social-media-about-the-caravan-270ede8874c6.

\textsuperscript{258} Dan Evon, \textit{Does This Photograph Show Trash Left Behind by the Central American Caravan?}, \textsc{Snopes} (Oct. 26, 2018), https://www.snopes.com/fact-check/refugee-caravan-trash-picture/.


Attendant to propaganda threads about the migrants’ cleanliness were threads depicting the migrants as vulgar and rapacious. A photo of a man grabbing his crotch and another flipping off the camera was distributed to show that migrants were “not coming here for work,” with the implication that caravan members will be lazy, disrespectful, and sexual.


A reverse-image search shows the image appeared on right-wing publications since 2010, in memes regarding public expenditures on the
social safety net.\textsuperscript{261}

Prior Use (2010)

Similarly, the caravan was depicted as all male.\textsuperscript{262}

Propaganda: All Male (2018)

\begin{itemize}
  \item Medicaid ($2.5$ billion); treatment for the uninsured ($2.2$ billion); food assistance programs such as food stamps, WIC, and free school lunches ($1.9$ billion); the federal prison and court systems ($1.6$ billion); and federal aid to schools ($1.4$ billion).
\end{itemize}

\textsuperscript{261} Jim Goad, \textit{Mexico Sues Georgia for Making It a Crime to Be Illegal}, \textit{Taki’s MAG.} (June 20, 2011), https://www.takimag.com/article/mexico_sues_georgia_for_making_it_aCrime_to_be_illegal/.\textsuperscript{262} Davis, supra note 257.

\textsuperscript{262} \textit{Id.}; One Nation Under God, \textit{FACEBOOK} (Oct. 15, 2018), https://www.facebook.com/OnenationUnderGodUSofA/photos/a.649383995141907/2071690582911234/?type=3&eid=ARDgXe_d7Zwrzs9albu9h-k0uNEz70v09pLgw_pntkJNUKTFsLOYZ80G-
The photo used has been repurposed since 2016, when it was used as part of a “benis” meme. Prior Use in Benis Meme (2016)

<table>
<thead>
<tr>
<th>Propaganda Filth</th>
<th>Different Year</th>
<th>Known Copyright Holder</th>
<th>Right Wing Prior Use</th>
</tr>
</thead>
<tbody>
<tr>
<td>Skin Disease</td>
<td>Yes / 2014</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Roadside Trash</td>
<td>Yes / 2015</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Flip Off Camera</td>
<td>Yes / 2010</td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td>All Male</td>
<td>Yes / 2016</td>
<td>No</td>
<td>Reused as Benis Meme</td>
</tr>
</tbody>
</table>

D. Propaganda Unpatriotic: Migrants Burn the Flag and Hate America

The essential step of propaganda is to demonstrate that the enemy is the other, unlike the patriots of the homeland. To that end, propagandists also spread posts of migrants supposedly desecrating the flag by burning it or urinating on it. On October 22, user Tommy Adcock posted three images

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266 Id.

of burning flags, with the text “The illegal caravan of immigrants are flying the Honduras flag as they burn the American flag as they march towards the USA wanting asylum! They are not asylum seekers! They are invaders!” The post was shared approximately 19,000 times.


None of these photos involve the migrants and the top photo does not involve an American flag. The top photo is a 2016 photo of anti-Trump protestors outside a rally in Albuquerque (it is the thumbnail image of a Fox News video reporting on that event).268 The item being burned is not an American flag, but a Trump banner (the black lettering on the banner can be seen in the top of the photo). A reverse-image search shot shows that the image has been used on right-wing twitter accounts since 2016 to demonize protestors.269 The bottom-left image is a Getty Image taken by Dan Kitwood

in 2010. It is from a demonstration in London, against the threat of pastor Terry Jones, who had announced he would burn the Quran on the 9 year anniversary of the World Trade Center Attacks. The image has been used by several newspapers to accompany stories regarding President Trump’s political promises to ban flag burning. The bottom right photo is from a protest during the 2016 Republican National Convention in Cleveland and shows supporters of the Revolutionary Communist Party. It is a Reuters image, taken by Photographer Adrees Latif. It too has been featured in numerous stories related to President Trump’s proposed flag burning ban.

Source Images (2016; 2010; 2016)

271 Id.
Around the same time, posts appeared accusing the migrants of painting swastikas on the American flag before burning it. Variants appeared pairing the image with migrants holding the Honduran flag.


The swastika image was taken at a demonstration in front of the American Embassy in Tegucigalpa, Honduras on October 19, 2018, to protest the treatment of the caravan. It is an AP image, taken by Fernando Antonio. The image did not capture migrants, as the caravan was stuck at

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276 Beverly Bryant-Jones (@bbryantjones), Twitter (Oct. 22, 2018, 12:41 PM), (on file with author).
the Mexican-Guatemalan border at the time the photo was taken in Honduras. The appended bottom-right image is from the same protest in Tegucigalpa, Honduras.\[^{278}\] The appended top-right image is an AFP/Getty image, taken by Johan Ordonez.\[^{279}\] It is of a migrant at the Guatemala-Mexico border on October 18 and is therefore unrelated to the images of a protest occurring a day later and 226 miles away. All three images were used in the same Daily Mail story.

On November 2, posts showing a person standing on a flag and claimed that “REPORT: Migrants in the Guatemalan Caravan stand on, and then urinate on, U.S. flag before throwing it in the trash can.” There is no urine in the image and the image has nothing to do with migrants. A reverse-image search shows that the image is from 2016 and documents a protest outside a Trump town hall at the University of Wisconsin-Milwaukee.\[^{280}\] The image has previously been used on right-wing sites when discussing flag memorials\[^{281}\] and flag stomping.\[^{282}\]


E. Propaganda Crisis Acting: Denying the Veracity of Tear Gas Photos

It is worth noting that visual propaganda, even if it is not believed by its audience, may serve to weaken belief in all images. In a sea of falsely captioned images, actual photos of atrocities are more easily disregarded as staged or doctored. This is typified by the recent284 “crisis actor” conspiracy,

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283 Dan Evon, Does This Photograph Show a Migrant Caravan Member Urinating on the U.S. Flag?, SNOPES (Nov. 6, 2018), https://www.snopes.com/fact-check/caravan-urinate-flag-photol/.

284 Google Trends Crisis Actor, GOOGLE, https://trends.google.com/trends/explore?date=all&q=crisis%20actor (last visited Sept. 14, 2019) (showing a massive spike in searches for “crisis actor” in February 2018, the month of the Stoneman Douglas shooting, along with spikes in October 2017, the month of the Las Vegas shooting, June 2016, the month of the Orlando Nightclub shooting, and January 2013, immediately after the Sandy Hook shooting). The use of the “crisis actor” conspiracy is one way for conservative pundits to avoid discussion of gun control after mass shootings. Another method is to blame the actions of shooters on violent video games. See Andrew V. Moshirnia, Precious and Worthless: A Comparative Perspective on Loot Boxes and Gambling, 20 Minn. J.L. Sci. & Tech. 77, 111
in which victims are derided as paid governmental actors taking part in false flag operations. Such accusations have been employed against survivors of mass shootings, including Sandy Hook,\textsuperscript{285} Orlando,\textsuperscript{286} Las Vegas,\textsuperscript{287} and Stoneman Douglas,\textsuperscript{288} or terrorist attacks, such as the Boston Marathon bombing.\textsuperscript{289}

Right wing commenters employed the tactic frequently in the lead up to the election. For example, right-wing media personalities\textsuperscript{290} dismissed a series of mail bombs sent to prominent Left politicians as a false flag operation.\textsuperscript{291} The tactic did not end after the election, however.

On November 25, 2018, the U.S. Border Patrol launched tear gas at migrants. The event was captured by multiple photographers and was confirmed by the CBP.\textsuperscript{292}
In order to steer the narrative away from empathy, scenes of terrified children were described as posed and fake. To aid this narrative, the image was altered with writing supposedly pointing out posing victims and planted camera men.

Propaganda (2018)

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295 Bethania Palma, Was the 'Illegal Alien Mom with Kids' Photograph Staged?, SNOPES
IV. PROPOSAL: REVERSE-IMAGE SEARCH AND NESTED COPYRIGHT INFORMATION

This Article proposes that Congress push social media firms to adopt policies to automate reverse-image searches and nest the resultant publishing and copyright information in social media postings. Recent Congressional hearings threatened, in line with widespread international trends, far
strict regulation\textsuperscript{297} of social media,\textsuperscript{298} and firms may be eager to adopt an approach that does not require more stringent filtering.\textsuperscript{299} The proposal is not a content filter; instead, it simply automates a process to provide additional image information using tools that are freely available.

In the alternative, should firms continue to drag their feet in taking necessary precautions in the name of national security, Congress may legislate this requirement. While voluntary adoption would help side-step the First Amendment issues attendant to this policy, the policy may need to become mandatory if firms continue to abdicate responsibility. Specifically, sites would be required to embed immediately below the photo, the earliest known use of the photo and the copyright holder information, if this information is known. Sites must allow for a flagging system to correct automated misattributions, such as, a similar but distinct image mistakenly identified.

Should the proposal require legislation, the following amendment to the Digital Millennium Copyright Act (DMCA) subsection 512(i),\textsuperscript{300} with


\textsuperscript{299} Self-regulation to avoid governmental regulation is not novel in other contexts: movie studios and video game companies both adopted internal rating agencies in an effort to avoid regulation. Facebook’s attempts to avoid strict regulation are well known. Laura Kayali, Inside Facebook’s Fight Against European Regulation, POLITICO (Jan. 23, 2019), https://www.politico.eu/article/inside-story-facebook-fight-against-european-regulation/. At the same time, the European Union has proposed a far more stringent online copyright protection regime. To make such a regime viable, social media platforms may have to adopt robust content filtration systems. Matt Reynolds, What Is Article 13? The EU Divisive New Copyright Plan Explained, WIRED (May 24, 2019), https://www.wired.co.uk/article/what-is-article-13-article-11-european-directive-on-copyright-explained-meme-ban. These systems could be similarly employed to identify, correct, or quarantine disinformation content.

\textsuperscript{300} Section 512 sets out the safe harbor provisions of the DMCA:

i) CONDITIONS FOR ELIGIBILITY.—(1) ACCOMMODATION OF TECHNOLOGY.—The limitations on liability established by this section shall apply to a service provider only if the service provider— . . . (B) accommodates and does not interfere with standard technical measures. (2) DEFINITION.—As used in this subsection, the term “standard technical measures” means technical measures that are used by copyright owners to identify or protect copyrighted works and—(A) have been developed pursuant to a broad consensus of copyright owners and service providers in an open, fair, voluntary, multi-industry standards process; (B) are available to any
Whereas reverse image searching is a ‘standard technical measure’ employed by copyright owners to identify copyrighted works, and reverse image searching provides information in the national interest and does not impose substantial costs on service providers or on their networks, all service providers must facilitate automated reverse image searching and host such automatically generated information beneath uploaded images.

This section details reverse-image searching, explains how it is already used piecemeal to fact-check and detect misused images, and sets out the advantages of the approach.

A. History of Reverse-Image Search

Reverse-image searching is an image-retrieval system that relies on the content of a query image rather than on user input search terms. A user uploads an image and a search engine evaluates the image, devises a model of it, and crawls the internet to locate similar images. Search engines may also utilize the metadata of the image, such as embedded descriptors, to help identify matches.

Content-based image retrieval (CBIR) systems, the forerunners of the modern reverse-image search engines, have been commercially available since 1995 when IBM released QBIC (Query By Image Content). The technology would become more widely available to users in 2008, when TinEye, a Toronto-based reverse-image search company, launched its public beta. Perhaps the best-known tool came to the market in 2011, when Google released Google Images’ reverse-image search tool.

person on reasonable and nondiscriminatory terms; and (C) do not impose substantial costs on service providers or substantial burdens on their systems or networks.


m) Protection of Privacy.—Nothing in this section shall be construed to condition the applicability of subsections (a) through (d) on—

(1) a service provider monitoring its service or affirmatively seeking facts indicating infringing activity, except to the extent consistent with a standard technical measure complying with the provisions of subsection (i)


Jason Kincade, Google Search by Image: Use a Snapshot as Your Search Query, TECHCRUNCH (Jun. 14, 2011), https://techcrunch.com/2011/06/14/google-search-by-image-
estimated, however, that seventy-percent of users are unaware of the reverse-image service.  

B. Current Reverse-Image Search Tools and Uses

While an in-depth discussion of the engineering concepts behind reverse-image searching is beyond the scope of this Article, the various techniques employ algorithmic approaches to allow for the recognition of images. Thus, a reverse-image approach succeeds even if the image is modified. The reverse-image search allows fact-checkers to detect and call out false content. The technique is even used by individuals hoping to avoid dating scams or catfishing. Moreover, copyright holders are already using the tool as a means to detect unauthorized derivative works or outright image theft. Search firms, such as Pixsy, also offer their services to users looking to vindicate their intellectual property rights.

Today, well known reverse-image search tools include Google Images, TinEye, Bing Image Match, and Pintrest. Yandex and Baidu, the largest search engines for Russia and China respectively, also offer reverse-image search tools. Users understand that different engines can return different results, so reverse-image search aggregators are common. For example, ImgOps allows users to upload images and search using eight different

use-a-snapshot-as-your-search-query/.


307 These include Scale-invariant feature transform (SIFT), Maximally stable extremal regions (MSER), and Vocabulary Tree – Bag of Words (BoW). See generally S. O’Hara & Bruce A. Draper, Introduction to the Bag of Features Paradigm for Image Classification and Retrieval, COMPUTING RES. REPOSITORY (July 2010), https://arxiv.org/pdf/1101.3354.pdf.

308 Thorin Klosowski, Clever Uses for Reverse Image Search, LIFEHACKER (Apr. 26, 2013, 1:00 PM), https://www.lifehacker.com.au/2013/04/clever-uses-for-reverse-image-search/ (noting that “finding the fakes is easy with a reverse image search.”).


312 IMGOPS, https://imgops.com (last visited July 22, 2019) (“reverse / similar: google · bing · tineye · reddit · yandex · baidu · so.com · sogou”).
services. Publications suggest that TinEye and Pinterest are best at detecting image theft and should be used by media professionals, while Google Images is best as a broad scope detection tool.313

C. Advantages to Proposal

1. Immediately Lessening the Impact of Misappropriated Images

The presentation of immediately debunking information will help to lessen the impact of otherwise persuasive misappropriated images. At present, a miscaptioned photo may circulate hundreds of thousands of times before being debunked.314 Even when fact-checkers detect an image quickly, the rebuttal of the image may be buried in the replies of a single thread and is of little help when the image is rapidly copied and reposted by bots or eager users. For example, see the exchange below disputing the veracity of one of a number of repostings of the brutalized officers315

The caravan is not an invasion? Look what they do to the Mexican Police.

This approach makes debunking immediate and universal at least in cases where the target event does not occur in the same year as the target

314 See supra Part III.
315 See supra for post (on file with author).
photo. The year tag endures and continues to undermine the message of the propagandist. The benefit of immediate correction can hardly be overstated. The longer an image remains unquestioned, the further it can spread and the deeper its impact on viewers. Moreover, the negation of the image by temporal incongruity is far more effective than engaging in a thorough point-by-point debunking.

First, it avoids the phenomenon of negative framing. That is, if you are told “don’t think of an elephant,” an elephant naturally comes to mind. A thorough debunking often involves restating the false claims, which may inadvertently spread them. For example, even if one presumes that the Daily Caller was acting in good faith when using ambiguous headlines for the nude picture falsely attributed to a new congresswoman, the mere act of negating the false image serves to further publicize it.

Second, it allows for more rapid identification of false news for curation. While Facebook has partnered with various organizations to provide content curation, these efforts have been criticized as slow and little more than a public relations stunt. The provision of dates will allow individual users to help flag false posts. In the above examples, 16 of 21 photos would be revealed as pre-dating the event the image purported to show.

2. Facilitate DMCA Take Down Notices from Copyright Holders Whose Images have been Misappropriated

It is no secret that copyright violation allegations often trigger more expeditious action by social media firms than claims of defamation or harassment. Users seeking to remove “revenge porn,” for example, often resort to DMCA take down claims to remove images. While social media drags its feet on content curation, it must rapidly comply with DMCA removal requests or risk liability outside of subsection 512(c)’s safe

316 See supra Part III. But see supra Part III Burning Flag [Swastika Variant]. Part III does present propaganda examples where the photo year and event year do match, such as the Burning Flag – Swastika variant. However, a reverse-image search could still assist by linking the photo to the proper location or copyright holder.


318 See supra Part I.


It is inconceivable that Getty, AP, or other image clearinghouses would countenance the widespread copyright infringement that follows photo miscaptioning. There is no credible argument that propagandistic mislabelling is fair use of an image, especially an image that was not originally created in line with a political campaign. Moreover, individual photographers, while not holding many recognized moral rights in images under U.S. copyright, surely will be vindicated in pulling down hate speech created from their own works. If either copyright holding firms or photographers could easily be alerted to image misuse, it is logical that they would mobilize to protect their intellectual property. In the above examples, 15 of the 21 photos would have known photographer or copyright holder information, allowing for DMCA take downs or further clarification of images from commenters, fact-checkers, or social media firms.

3. Approach is Easy to Implement

Employees of Twitter, other social network firms, and political actors have expressed displeasure with needing to moderate social media content, as adjudicating posts is resource intensive and may alienate users. The proposal is minimally burdensome, however, it consists of an automated

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321 Section 512(c) provides three avenues for safe harbor: 17 U.S.C. § 512 (“A service provider shall not be liable for monetary relief, or, except as provided in subsection (j), for injunctive or other equitable relief, for infringement of copyright by reason of the storage at the direction of a user of material that resides on a system or network controlled or operated by or for the service provider, if the service provider—(A)(i) does not have actual knowledge that the material or an activity using the material on the system or network is infringing; (ii) in the absence of such actual knowledge, is not aware of facts or circumstances from which infringing activity is apparent; or (iii) upon obtaining such knowledge or awareness, acts expeditiously to remove, or disable access to, the material . . . .”).

322 Courts appear to take a far more lenient approach when the original photo was itself linked to a political campaign. See, e.g., Timothy B. Lee, Photographer Loses Lawsuit Over Use of Her Photo in Political Mailer, ARS TECHICA (Mar. 21, 2019), https://arstechnica.com/tech-policy/2019/03/using-opponents-photo-in-a-campaign-mailer-is-fair-use-court-rules/.


search and nested publishing script. Social media is not being asked to assess the veracity of a post or to pre-clear a post. Instead, this approach furnishes supplemental information that is easily obtained and published. This will encourage firm compliance while also preventing allegations of bias or chilling speech, which have plagued other fact-checking and account removal efforts.  

4. Approach is Consistent with the First Amendment and Prevents Greater Restriction of Speech

The current approaches taken by the social media networks of either ignoring disinformation or pulling down suspected content through terms-of-service violations are deeply troubling. The first three parts of this Article outline why allowing propaganda to flourish is deeply irresponsible and has serious consequences implicating hate crimes and potential genocide. Widespread pulldowns of propaganda, however, are also problematic.  

Widespread pulldowns implicate the rights of speakers as well as the rights of readers to receive information. While the First Amendment implications of private pulldowns from market actors guided by terms-of-service are lessened somewhat due to an insulation from government action, the fact that these pulldowns only came following threats of governmental regulation makes the question of whether state actors are implicated a bit closer. Pulldowns will invariably drag in innocent or good-faith actors. The result is an obvious chilling of speech that is incompatible with the ideals of the First Amendment, regardless of the actors doing the direct chilling.

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326 See supra Part I.
328 Stanley v. Georgia, 394 U.S. 557, 564 (1969) (“It is now well established that the Constitution protects the right to receive information and ideas.”); Griswold v. Connecticut, 381 U.S. 479, 482 (1965) (“In other words, the State may not, consistently with the spirit of the First Amendment, contract the spectrum of available knowledge. The right of freedom of speech and press includes not only the right to utter or to print, but the right to distribute, the right to receive, the right to read and freedom of inquiry, freedom of thought, and freedom to teach—indeed, the freedom of the entire university community.” (citations omitted)); Lamont v. Postmaster Gen., 381 U.S. 301, 308 (1965) (Brennan, J., concurring) (“The dissemination of ideas can accomplish nothing if otherwise willing addressees are not free to receive and consider them. It would be a barren marketplace of ideas that had only sellers and no buyers.”); Kingsley Int’l Pictures Corp. v. Regents of Univ. of N.Y., 360 U.S. 684, 688 (1959) (“Yet the First Amendment’s basic guarantee is of freedom to advocate ideas.”); Martin v. Struthers, 319 U.S. 141, 143 (1943) (“[F]reedom of speech embraces the right to distribute literature, and necessarily protects the right to receive it.” (citations omitted)).
The worldwide response to fake news has largely been to draft legislation that threatens speech freedoms: these bills criminalize the spread of false news and/or threaten platforms that allow for false news. These bills could unfortunately provide cover for government directed censorship against critics in the name of protecting social order. Alternatively, nations such as India have gone as far as to suspend state-wide internet service more than twenty times to prevent mendacious digital traffic. We must resist the temptation of sacrificing freedom for safety, yet we cannot ignore a threat to our democratic ideals.

The proposal prevents this Faustian scenario by offering a far less intrusive approach to speech. Instead of automatically pulling down or pre-filtering content, the proposal mandates more speech rather than less. Propagandists and good-faith actors may still post content. Social media networks would merely be adding their own information, not unlike a television disclaimer.

While a First Amendment analysis is not strictly necessary under the preferred approach of this Article, it is important to conduct such an analysis in light of the potential need for legislation. The regulation could burden both posters and social media networks, but these burdens are minimal and are substantially outweighed by national security and property interests.

The burden on the poster is minimal. The additional information is provided by a third party and is information that any viewer could generate by using a reverse search tool. The proposal merely automates that process. Moreover, this information serves as identifying information on copyrighted images. Intellectual property law repeatedly protects such information, both in terms of attribution through Section 43 of the Lanham Act and Section 15 U.S.C. § 1125 (2018). ("(1) Any person who, on or in connection with any goods or services, or any container for goods, uses in commerce any word, term, name, symbol, or device, or any combination thereof, or any false designation of origin, false or misleading description of fact, or false or misleading representation of fact, which—(A) is likely to cause confusion, or to cause mistake, or to deceive as to the affiliation, connection, or association of such person with another person, or as to the origin, sponsorship, or approval of his or her goods, services, or commercial activities by another person, or (B) in commercial advertising or promotion, misrepresents the nature, characteristics, qualities, or geographic origin of his or her or another person's goods, services, or commercial activities, shall be liable in a civil action by any person who believes that he or she is or is likely to be damaged by such act."). While Dastar Corp. v. Twentieth Century Fox Film, 539 U.S. 23 (2003), greatly curtailed the means by which creators could use trademark law to ensure attribution of their works, “powerful pro-attribution norms exist throughout modern American society.” Rebecca

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330 See supra note 296 (setting out international legal restrictions of false news).
333 15 U.S.C. § 1125 (2018). ("(1) Any person who, on or in connection with any goods or services, or any container for goods, uses in commerce any word, term, name, symbol, or device, or any combination thereof, or any false designation of origin, false or misleading description of fact, or false or misleading representation of fact, which—(A) is likely to cause confusion, or to cause mistake, or to deceive as to the affiliation, connection, or association of such person with another person, or as to the origin, sponsorship, or approval of his or her goods, services, or commercial activities by another person, or (B) in commercial advertising or promotion, misrepresents the nature, characteristics, qualities, or geographic origin of his or her or another person's goods, services, or commercial activities, shall be liable in a civil action by any person who believes that he or she is or is likely to be damaged by such act.").
punishing the removal of copyright management information including the title, name of author, and the information set forth in a notice of copyright. Speakers cannot merely excise attribution information or deliberately misattribute an image under existing doctrines.

The burden on the social networks is also fairly small. While social media companies have their own First Amendment rights, the compelled speech of posting copyright and publication information is permitted by existing speech doctrines. The most analogous regulations to the proposal are mandatory disclaimers. While disclaimers typically attach to commercial speech, and therefore encounter a lower level of attendant scrutiny, the Court’s treatment of disclaimers is instructive.

In Zauderer v. Office of Disciplinary Counsel of the Supreme Court of Ohio, the Supreme Court upheld an Ohio state law requiring disclosure in lawyer advertisements that litigants may be required to pay legal costs even if their suits are unsuccessful. Plaintiffs argued that this constituted compelled speech in violation of the First Amendment. The Court disagreed, holding that

appellant’s constitutionally protected interest in not providing any particular factual information in his advertising is minimal. . . . Because disclosure requirements trench much more narrowly on an advertiser's interests than do flat prohibitions on speech, “warning[s] or disclaimer[s] might be appropriately required . . . in order to dissipate the possibility of consumer confusion or deception.”

The Court in Zauderer highlighted the importance of preventing deception and the minimal burden of providing factual information. Zauderer is far reaching and the resulting test, allowing for mandatory disclaimers for information that is factual and uncontroversial has since been applied to cover information that does not seek to combat deception. For example, in National Electrical Manufacturers Association v. Sorrell, the Second Circuit upheld a mandatory warning label on light bulbs containing mercury, advising that the bulbs be disposed of in the manner of

Tushnet, Naming Rights: Attribution and Law, 2007 Utah L. Rev. 789, 791 (2007). Moreover, the misuse of material for hate-speech is likely to engender sympathetic judicial responses in line with defamation jurisprudence.

See Murphy v. Millennium Radio Grp. LLC, 650 F.3d 295 (3d Cir. 2011), for a thorough discussion of this approach.


Id. at 651 (quoting In re R.M.J., 455 U.S. 191, 201 (1982)).

Id.

272 F.3d 104, 110–13 (2d Cir. 2001).
hazardous waste.

While the Supreme Court recently clarified the meaning of Zauderer in National Institute of Family and Life Advocates v. Becerra,339 this clarification does not threaten the proposal here. In NIFLA, the Court held that a law requiring that crisis pregnancy centers post information concerning the availability of abortions violated of the First Amendment because it “impose[d] a government-scripted, speaker-based disclosure requirement that is wholly disconnected from the State’s informational interest” and because it targeted speakers rather than speech. Neither caveat applies here – the proposal does not discriminate between speakers340 and is intimately connected to the State’s interest. 341

Even if the proposal is viewed outside of the intellectual property and disclaimer context, it likely survives. Courts have shown a willingness to dilute the requirements of strict scrutiny when faced with purported threats to national security in any event. The Court’s decision in Holder v. Humanitarian Law Project342 demonstrates that grave national security concerns result in a strict-in-name-only scrutiny.343 The interest at stake is of the legitimacy of the electoral process and the prevention of genocide or domestic terrorism.344 The manner in which the regulation is applied is content neutral: it does not target specific speakers, specific viewpoints, or even specific types of images.345 Lastly, the approach is narrowly tailored, as it does not pull-down information but merely provides supplemental information.

V. ADDRESSING LIKELY COUNTERARGUMENTS AND AREAS FOR FUTURE RESEARCH

This section addresses likely counterarguments to the proposal and sets out areas for future research. Critics may point to technical challenges that may allow posters to avoid detection or cause incorrect information to nest below an image. Critics may also allege that the proposal will simply cause propagandists to generate novel images or move to less regulated media.

340 The proposal cannot discriminate between speakers or positions, it merely provides the posting date of photos.
342 561 U.S. 1 (2010).
344 See supra Part I.D.
345 See supra Part IV.C.3.
While these challenges exist, the advantages of the proposal outweigh potential negatives.

A. Approach Will Simply Invite Additional Photo Manipulation

With any technological intervention, the likely response by actors is file modification to avoid detection. Actors could take steps such as cropping, flipping, and layering to attempt to confuse reverse-image search engines. Indeed, such approaches are common on YouTube in an attempt to avoid detection under Content ID. While these efforts were successful in the short term, improvements to the identification algorithm have increased the detection rate. Meme creators are already taking similar steps to avoid detection under proposed European Union copyright rules, often to comedic effect.

Reverse search tools are equipped to identify modified images, so it is unlikely that cosmetic modifications would consistently elude detection. For example, Part III features several modified images that were found through reverse-image search, including cropped images and images stripped of text. However, the ability of propagandists to elude search tools and the ability of search firms to take appropriate countermeasures is a matter for future research.

More importantly, the very act of manipulation would degrade the credibility of the poster. As documented above, the key conceit of this propaganda is that the photo is fresh, genuine, and of obvious significance. A redrawn image or obviously altered image would simply carry less weight than a genuine, unfiltered image.

B. Date Captions Will Have Error Rates and May Mislead

The accuracy of the system could also come into question. Invariably the reverse-image search will have a false positive for some images, resulting in an incorrect posting date or attribution information. Critics may contend that if the system adds no useful information, it will impose a burden on social networks with no commensurate benefit. While this may be unfortunate, the advantages of the proposal outweigh the marginal disadvantage of a temporarily mislabeled image. Just as fact-checking itself

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347 Id.; Michael Soha & Zachary J. McDowell, Monetizing a Meme: YouTube, Content ID, and the Harlem Shake, 2 SOCIAL MEDIA + SOC’Y 1, 6 (2016).
will occasionally produce incorrect results, that fact is hardly a reason not to fact-check. A mechanism allowing users to address incorrect information will further mitigate this harm.

C. Coincidence of Dates for Event and Photos Will Lend More Credibility to False News

In cases where there is an overlap in year between the target event and the miscaptioned photo, a time stamp on the image may arguably increase the credibility of the meme. This claim should be taken seriously, as aligned dates will occur. Part III showcased several images that, while falsely attributed, did date to the same year as the target event. For example, false messages regarding the caravan burning flags included photos taken from protests that occurred in 2018. But the majority of images will not align by date. Even if they do, the proposal effectively prevents the constant reuse of images in propaganda. This is especially important in making the creation of propaganda more difficult, as researchers have noted that the main content churn in this field is driven by image reuse. Moreover, in those cases where date overlap occurs copyright data may be used to clarify, refute, or pull-down images

D. Propagandists Will Take Their Own Pictures

There is of course the possibility that propaganda shops will just start taking their own photos to avoid issues of prior posting and copyright. This approach, however, will not offer much respite. In the case of novel photographs with no known photographer, propagandists have been reluctant to disclose any information about the origin of the photograph, and thereby undermine their claims.

The best example of this is the claim by Judicial Watch that seven children were found trafficked in the caravan by Guatemalan authorities. Judicial Watch claimed that it received “exclusive” photos of the event. The story included a photo of minors, with faces blurred and no origin information.

351 Id.
352 Id.
The story was picked up by multiple right-wing blogs. Fact-checker Snopes could not confirm or debunk the story, based in part on the fact that the image does not appear in any reverse-image search.

*The Washington Times* (which previously advanced and retracted the Seth Rich conspiracy) then posted the story. Curiously, the image was presented without blurring, though the photo was credited to *Judicial Watch*. It is unclear why *The Washington Times* would run a different photograph than the “exclusive” photograph which *Judicial Watch* did not source. While the lack of information does not prove or disprove the veracity of the image, the dearth of detail does call the origin of the image into question. Moreover, even if novel images are authored, the ability of propagandists to reuse those images will be severely curtailed.

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E. Bot Detecting and Debunking Teams Are Better Approach

Critics may argue that bot detection rather than copyright information is the appropriate way to combat false news. In disinfection campaigns, bots amplified false stories.\textsuperscript{356} The use of bots to spread misinformation is well documented and not limited to American politics.\textsuperscript{357} Bots have been detected attempting to influence elections in Sweden\textsuperscript{358} and Australia.\textsuperscript{359} Indeed, bot detection and deletion has been a major focus of academics as a means of hampering disinfection campaigns.\textsuperscript{360} While this approach is important, it neglects to address the actions of interested domestic actors and the content of the posts themselves. The proposal does not suggest that bot detection efforts should cease (in fact they must continue), but notes that companies must do more than simply detect bots.

Despite the criticism fact-checkers have received, critics of this proposal may argue that adopting a mechanistic approach will undermine the nuanced fact-checking mission. But this proposal does not detract from the mission of fact check teams. Moreover, this complaint ignores the fact that fact-checking positions are vulnerable to outside capture. For example, Facebook executive Joel Kaplan reportedly advanced a plan to place the Daily Caller in a fact-checking role.\textsuperscript{361} This is highly inappropriate, as The Daily Caller traffics the same sort of memes that are the target of this


\textsuperscript{358} Richard Milne, \textit{Sweden Warns of Upsurge in Twitter Bot Activity as Election Nears}, FIN. TIMES (Aug. 29, 2018), https://www.ft.com/content/0f917b0c-ab9c-11e8-94bd-cba20d67390c.


\textsuperscript{360} For a wider discussion of bot concerns, and US Defense Advanced Research Projects Agency (DARPA) sponsored efforts to further bot detection, see V.S. Subrahmanian et al., \textit{The DARPA Twitter Bot Challenge}, ArXiv (Jan. 20, 2016), https://arxiv.org/abs/1601.05140.

Article. This approach also allows fact-checkers to avoid accusations of bias. Simply put, a mechanistic approach helps avoid predictable claims that fact-checkers are pulling down posts based on political leanings.

F. Propagandists Will Move to Other Outlets Like WhatsApp

As recent disinformation campaigns in Kenya, India, and Brazil show, disinformation can spread through sharing apps such as WhatsApp, rather than on Facebook alone. As this is an avenue that would not fall under the proposal, opponents may claim that propagandists will just shift tactics. While it is true that stopping propaganda is often a game of whack-a-mole, it is unlikely that WhatsApp will have the same level of engagement as Facebook, Instagram, and Twitter. Therefore, a movement of propagandists away from traditional social media to sharing apps is not ideal, but it is hardly a reason to ignore the current issues on social media. However, the spread of propaganda on apps such as WhatsApp is deserving of future study.

CONCLUSION

Social media is awash with targeted misinformation, crafted from genuine images with false attributions. While the method gained notoriety through foreign interference in the 2016 presidential election, domestic actors have adopted these duplicitous techniques. Images have a unique impact on viewers, one which strengthens and deepens with repetition. In the case of the October 2018 migrant caravan, degrading and horrific images were trafficked with alarming frequency. It is hardly surprising that violent extremists seized on these images and acted accordingly.

We live in an age of widespread visual propaganda. Social networks are inherently connected to our electoral infrastructure, presenting a


363 See supra Part I.
tantalizing target for foreign and domestic meddlers. This weakness has been and continues to be exploited. Misattributed photos make up a key component of memetic propaganda which threatens democratic ideals and the marginalized victims of stochastic terrorism, while simultaneously violating the rights of copyright holders. By supplying attribution information and borrowing from both intellectual property and national security speech doctrines, however, we may defend against this assault.

It is time for a robust response that lessens the impact of these mendacious campaigns, while simultaneously respecting freedom of speech. The problem will not simply go away without intervention, but we must resist the urge to criminalize subversive postings. By supplying attribution information we can immediately undermine the propagandists’ message and deny them a potent tool. Borrowing from both intellectual property and national security speech doctrines, we can gain greater security without sacrificing our liberty and further defend our democracy from assault.