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Memes, Macros, Meaning, and Menace

Some Trends in Internet Memes

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Memes, Macros, Meaning, and Menace: Some Trends in Internet Memes

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Abstract: This article maps some key patterns associated with how internet memes are conceived and how online meme practices have evolved and morphed during the period from 2000 to the present. We document the rise of internet memes during their early years as a broadly communitarian cultural engagement, mostly characterized by goodwill, humor, and an often "nerdish" sense of shared cultural identity. With the massification of internet access and participation in online social practices employing Web 2.0 and mobile computing capacities, changes occurred in how internet memes were conceived and created (e.g., image macro-generators). Since around 2012, many online meme practices have become intensely politicized and increasingly used for socially divisive and, often, cruel purposes. We explore some of these shifts and argue that what we call "second wave" online memes have been used as weapons in personal, political, and social-cultural wars. We conclude that internet memes scholarship would benefit from revisiting the original conception and theory of memes advanced by Richard Dawkins, and attending closely to what motivated Dawkins in this work.

Keywords: Memes, Internet Practices, Culture Wars

In the Beginning was Dawkins

In 1976, the Darwinian biologist Richard Dawkins (2006) theorized that human evolution was both biological (genetic) and cultural (memetic). At the biological level the unit of replication was the gene, and human organisms were the vehicles that "housed" these replicators. Over time, genes mutate to a greater or lesser extent, and some genes survive while others die out. The trajectory of human biological evolution is the outcome of this process. Gene replication and survival is a consequence of three main characteristics, which Dawkins (2006, 35) called "fidelity," "fecundity," and "longevity." The more faithfully a gene is replicated (copied), the more quickly and abundantly it is replicated, and the longer the gene survives, then the greater its evolutionary footprint.

Dawkins argued that an analogous process occurs in human cultural evolution. He called the unit of cultural replication the "meme" and identified tunes, good ideas, catch-phrases, clothing fashions, ways of making pots or building arches as typical examples (see Knobel and Lankshear 2007). In his original sense, memes are contagious ideas, styles and modes, and ways of doing things that spread from person to person within a culture. In addressing how it is that cultures get to be and abide over time with so much continuity and recognizable shape, Dawkins proposed "a substantial evolutionary model of cultural development and change, grounded in the replication of ideas, knowledge, and other cultural information through imitation and transfer" (Knobel and Lankshear 2007, 200). And as with genes, the memes that leave the greatest cultural footprint are those that share the characteristics of fidelity, fecundity, and longevity.

The Emergence of "Internet Memes"

It is common knowledge that the rise of the internet quickly spawned a cultural practice of creating and sharing internet memes. But the concept of internet memes that had emerged by the late 1990s was very different from Dawkins' original conception. Internet memes were identifiable as online artefacts made up of so many different kinds (and degrees) of innovative riff around some (often recent) originating event or other artefact. Internet memes were,

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basically, texts (images, words, etc.) that were deliberately modified in ways designed to catch attention and be passed on and further modified. And they were typically short-lived (at least in terms of evolutionary scale). Dawkins himself refers to this appropriation of his ideas as having hijacked the original idea of memes. It was a change whereby "instead of mutating by random change and spreading by a form of Darwinian selection, they are altered deliberately by human creativity. Unlike with genes (and Dawkins' original meaning of 'meme'), there is no attempt at accuracy of copying; internet memes are deliberately altered" (Solon 2013, para. 3).

Studying the Early Years of Online Memes

As students of new literacies, we were interested in the cultural phenomenon of internet memes from the outset and early on we identified "meme-ing" as a significant new literacy (Lankshear and Knobel 2003). We think that understanding some of the history of online memes and meme practices—similar to how geneticists study lineage, for example—may help to better situate current understandings of memes and how they are used. To do so, we begin by summarizing some of our early research on memes. By 2005, internet memes—in the form of images, videos, gifs, and stretches of language—were being passed along in ever increasing numbers on discussion boards and websites. The phenomenon of internet memes had attracted considerable media attention and numerous high-profile memes had emerged.

We were interested in mapping trends and tendencies within such memes and generated a pool of nineteen purposefully sampled memes (Knobel and Lankshear 2007). This pool comprised almost exclusively English language—and mostly North American in origin—memes that were well-known, had been reported in the mass media, and were widely regarded as successful (see Knobel and Lankshear 2007). In chronological order of release, our meme pool was: The Pancake Bunny (2001); Nike Sweatshop Shoes (2001); All Your Base Are Belong To Us (2001); Bert is Evil (2001); Tourist of Death (2001); Bonsai Kitten (2002); Ellen Feiss (2002); Star Wars Kid (2002); Black People Like Us (2002); Every time you masturbate... God kills a kitten (2002); Star Wars Kid (2002); "Girl A"/Nevada-tan (2003); Badger, Badger, Badger (2003); Read My Lips' "Bush-Blair Love Song" (2003); The Tron Guy (2003); Lost Frog/Hopkin Green Frog (2004); JibJab's "This Land is My Land" (2004); Numa Numa Dance (2004); Dog Poop Girl (2005); Flying Spaghetti Monster/Flying Spaghetti Monsterism (2005). This list provides an audit trail for readers to assess the claims we make about these memes below.

We analyzed each meme using two tools. The first involved three general axes of analysis used in discourse studies. These were (i) the "referential or ideational system" to focus on the meaning of the meme; (ii) the "contextual or interpersonal system" to focus on social relations of the meme; (iii) the "ideological or worldview system" to focus on values, beliefs, and worldviews communicated by the meme. We used three prompt questions for each axis (for details see Knobel and Lankshear 2007).

The second analytic tool—to ensure the analysis did not end up *too* text-centric—was James Gee's (2004) concept of "affinity spaces." This focused our analysis on memes as part of larger sets of interest-driven social interactions and social practices—resonating with Susan Blackmore's claim that "effective transmission of memes depends critically on human preferences, attention, emotions and desire" (1999, 58).

Our findings included the following.

(a) Humor was the overwhelmingly common feature across the pool. It took different forms; some of it "geek kitsch" humor (Taylor, 2001), or quirky, situational absurdist kinds of humor; for example, All Your Base, Ellen Feiss, Numa Numa Dance, Oolong the Pancake Bunny, and Every Time you Masturbate...God Kills a Kitten. The five politically flavored social commentary memes spanned tongue in cheek and sardonic humor through to bitingly satirical humor; for example, Read My Lips' "Bush-Blair Love Song," JibJab's "This Land," and Jonah Peretti's "Nike Sweatshop Shoes."

- (b) Several memes (e.g., Star Wars Kid, Lost Frog, All Your Base, Flying Spaghetti Monster) were characterized by rich intertextuality, involving cross-references to a host of popular culture events, artefacts, and practices. Some remixes of the Star Wars Kid meme added music, special effects, and highly recognizable Star Wars sounds (e.g., the lightsaber "swooshhum") to an original video a schoolboy had made of himself somewhat awkwardly miming a lightsaber fight using a long stick. Friends found and uploaded the clip. It was viewed by millions and remixed numerous times. Remixes included casting the Kid as Gandalf in Lord of the Rings, William Wallace in *Braveheart*, Neo from the *Matrix* movies, and the like. References to video games, popular movies, and movie genres tap into affinity spaces that recognize and appreciate such intertextuality, whilst blurring lines between ordinary life and the extraordinary lives that characters lead in game and movie universes. This rich layering of cross-references may have enhanced both the fidelity and fecundity—or the rate at which they were copied, innovated upon, and spread—of these memes by encouraging subsequent meme-makers to include their own engaging cross-cultural references, adding dimensions to already humorous contributions for those who are in the know.
- (c) Ten memes employed anomalous juxtaposition as a hook to maximize susceptibility to their ideas (this included, for example, incongruous couplings of ideas and/or images; deliberately provocative images or ideas; mixing the banal and the horrible). The Bert is Evil meme began when someone photoshopped an image of Bert the *Sesame Street* muppet into an image of Osama bin Laden and posted it humorously to an online forum. In Bangladesh, bin Laden supporters subsequently downloaded this photoshopped image and used it on street march banners in 2001. It seems that either the banner makers didn't notice Bert or didn't know who he was. Some broadcast media drew attention to Bert on the banner, prompting a slew of remixed images to "prove" Bert was actually evil and not a benign children's television character (see: bertisevil.tv). Bert was associated with Ku Klux Klan members, President Kennedy's assassination, the Manson murders, and the like. Juxtaposing tragic, seedy and otherwise offensive scenarios with a beloved puppet from children's television enacts a form of gallows humor that documents "proof" that is obviously untrue (see Knobel and Lankshear 2007).

We found that anomalous juxtaposition did not always emerge from humorous phenomena. The (notorious) Nevada-tan meme grew out of an event involving a child aged 11 in Japan—wearing a hoodie stamped with "Nevada"—killing a classmate at school, and included fan art, photoshopped images, and cosplay in a kind of extended and macabre homage to the child killer. The Nevada-tan meme exemplifies non-humorous anomalous juxtaposition, sparked by a shocking real-life event. Nevada-tan's website, replete with grisly and macabre images and references, and her young age generated debates in Japan about the social impact of internet use and age limits for criminal liability. Nonetheless, some online groups embraced Nevada-tan and drew her as a character in fan fiction manga. They created homage websites, dressed as her in cosplay and referenced her in pop songs. The anomalous juxtaposition of an everyday-looking child with a chilling murder she didn't even try to hide produced attention hooks that led to Nevada-tan's actions and persona becoming a meme within affinity spaces based on interest in evil, cruel, macabre or otherwise chilling events.

(d) Only one of the memes, Dog Poop Girl, did not display humor, intertextuality, or anomalous juxtaposition. When a young South Korean woman's dog pooped in a train carriage and she was repeatedly asked to clean the mess, she refused. A passenger photographed the woman and her dog and posted it online. It rapidly gained traction, spreading widely online in its original and some faintly remixed poster versions. The woman was identified and her personal information published online to punish her failure to be a responsible citizen. She was publicly hounded until she apologized online. The vigilante nature of this meme and its invasion of her personal privacy was reported internationally in the media.

Some Patterns and Trends Discernible in the Early Years of Online Memes

Our meme pool in no way represents anything like the full diversity of online memes during the period from the late 1990s to 2005, not even for Americentric English language memes, let alone the memesphere as a whole. While this severely limits generalizations, some significant patterns are nonetheless evident that apply far beyond our corpus. Photoshopping, image and video remixing, flash animation, image captioning, and the like were common new literacy practices integral to many early memes. They often presupposed considerable computer savviness in terms of software mastery, painstaking crafting, knowing how to access the kinds of online affinity spaces that would support image and video clip posting, and appreciating culturally what was being shared (cf., Knobel and Lankshear 2010; Lankshear and Knobel 2011).

A high proportion of early online memes were characteristically nerdish, and discussion boards or message forums played a prominent role in disseminating memes. Relative to internet time, some memes in our pool have endured well. These include Oolong the Pancake Bunny, All Your Base, Bert is Evil, Tourist of Death, and the Star Wars Kid. Other enduring early memes outside our pool include Chuck Norris Facts, Nigerian Prince letters, Leroy Jenkins, Mahir Cagri's "I Kiss You" website, and the Dancing Hamster gif, among others. This early period yielded significant instances of ethically or politically-oriented memes, like the images created by Adbusters.org, Jonah Peretti's "Nike Sweatshop Shoes" and "Black People Like Us," and the Read My Lips' "Bush-Blair Love Song." Equally, we find outlying examples of vilification or witch-hunt memes, anti-political or social correctness memes, and some that wittingly challenged the limits of free speech and conventional decency.

Nonetheless, the overwhelming trend in this time period was toward humor, entertainment and passing on ideas and styles and behaviors of being funny in mostly inoffensive ways. The three popular ROFLCon memes conventions (2008, 2010, and 2012) wrote the emphasis on internet humor into the name of the conference itself (Rolling on the Floor Laughing).

Memes as Macros and Macros as Memes

From around 2005, following dramatic changes in broadband and network capacity, creating and sharing online memes were relatively widespread practices, had gone mainstream, and no longer presupposed much software and network savvy on the part of users. The emergence of massive online social news and discussion forums like 4chan, Digg, Something Awful, Fark, and Reddit (among many others worldwide) made it relatively easy to create and share memes and to access large numbers of people who were likely to find these memes appealing and to engage with them and pass them on. Furthermore, the development of freely available "meme generating" services saw the massification of a particular kind of online meme known widely as "image macro memes." "Macro" is short for "macroinstruction;" a compressed set of instructions appearing as a single instruction in the programing code that is run or expanded to produce, in this case, a captioned image. Image macro generators provided an online interface enabling users to upload images, add text, and post or share the resulting artefact online. LOLcats is the archetypal example.

The LOLcats meme comprises captioned images of cats doing stuff. It taps into a larger, long-lived professed love for cats conspicuous in many online discussion forums. LOLcat memes consciously intend to make people "laugh out loud." Captioned images of cats had been commonplace on 4chan and elsewhere for some years, but in 2007 Eric Nakagawa and Kari Unebasami established a website that archived captioned cat images and provided an image macro generator that enabled visitors to the site to select an image, add text (in a white, sans serif font), and post it to the website (Wikipedia 2019a). Images include a range of stock characters (e.g., ceiling cat, monorail cat, basement cat, the itteh bitteh kitteh committee) and original cat photos. Captions make use of popular cultural references, idiosyncratic syntax and stock phrases

(e.g., pop cultural terms like "lasers on" and "n00b;" syntax like "i can has X?;" phrases like "I is in ur X, Ying all ur Zs") (see Knobel and Lankshear 2008, 28).

Seemingly, jokes about the secret lives of cute cats (as computer technicians, online game players, as having magical powers or the ability to mobilize smart tools and weapons for diverse purposes, and so on) tap into the kinds of interest in the absurd that abound among participants on computer and gaming discussion boards, where such images originated. Participation appears to signal solidarity and insiderliness: being part of it, getting it. For many, participating in the meme became a significant aspect of identity work and other dimensions of people reading and writing their worlds and their lives. As a meme in its own right, aside from larger ideas, LOLcat macro images contributed to cultural evolution by means of an online "cat speak" translator (speaklolcat.com); an esoteric programming language; printed posters on office doors; countless tshirts, coffee cups, wall posters and much more.

LOLcats appeared at a major historical conjuncture in terms of new technologies and cultural practices. The year 2007, and the years immediately preceding and following it, saw the emergence of smartphones and mass social media platforms like Twitter, Bebo, MySpace and Facebook. Along with near ubiquitous mobile computing capacity in many countries, these new platforms and increased mobile phone use created perfect conditions for innovations like image macro generators. With a rapidly escalating population online for many hours daily and regardless of location, new devices, platforms, apps and services enabled participation in memes on a vastly increased scale compared to the period up to 2005. LOLcats led the way in enabling ease of participating in memes.

Keeping pace with the growing popularity of LOLcats, the term "meme" became increasingly associated with captioned images that could be shared en masse with others. We think of image macro-generated memes as "second wave" internet memes because the earlier need for software and network savvy was largely elided by user-friendly online interfaces. With a few mouse clicks and key taps, anyone could choose an image—sourced online or uploaded add a caption (consistent with the genre of the meme), and share it with others via a message forum or social network site. We are not saying that early memes are now canonical or somehow cleverer and more creative. When it comes to internet memes, "high concept" will always trump "high tech." Our point, rather, is that the idea of what memes are became very tightly pegged to high-fidelity image macro memes in people's everyday understanding. Spreading out from LOLcats, the ubiquity and recognizability of image macros have generated numerous downstream industries, services, and big rewards for some—prefiguring the rise of today's Instagram and YouTube stars and influencers. Viral meme creators monetize their meme (e.g., Nyan Cat, Grumpy Cat), and/or appear on television talk shows. Image macro memes have spawned commercial products ranging from coffee mugs, to greeting cards, to underwear-all emblazoned with a popular meme image. People dress as "memes" for Halloween, and Amazon.com sells books of memes and meme-based board games. Advertising agencies trade on memes and meme references in their campaigns. Even school textbooks include meme images. Memes today are not only mainstream, but big business, too.

Since the advent of LOLcats, image macro memes have become fecund online and are now established as an everyday practice of reading and writing our worlds online and offline. Image macro memes are always very well represented within the highest profiled and ranked memes in a given year (e.g., the crowdsourced lists of popular memes on sites like Ranker.com and KnowYour Meme.com). The Advice Animals set of image macro memes and its revolving cast of characters (which includes animal and human images) remains enormously popular—with people building on and adding to the pool of shared ideas and genres. Awkward Penguin memes, for example, comprise various images of penguins and detail their creators' awkward social moments with which subsequent commentators empathize or laugh about or pass along in solidarity (e.g., "Start telling joke; forget punchline"); or Bad Luck Brian, comprising the image of a somewhat awkward looking school-aged lad and text concerning bad things that happened to

this mythical Brian or to the person posting the meme (e.g., "Cleans up park; gets needle stick injury").

Other highly popular image macro memes include Overly Obsessed Girlfriend, Most Interesting Man in the World, Grumpy Cat, Roll Safe, Good Guy Greg, Fail, Success Kid, and Doge. This is an infinitely tiny sampling of the Americentric image macros shared online (for more on memes around the world, see KnowYourMeme.com and accounts in: Davison 2012; Chagas forthcoming; Milner 2016; Nissenbaum and Shifman, 2018; Shifman 2014; Wiggins 2018). These sorts of contagious, ready-made memes seem to tap into people's shared (or imagined) experiences, beliefs or feelings at a personal, everyday level. The bulk of macro image memes are funny, wry, deliciously ironic, or constitute a shared joke, and in so doing encourage expressions of solidarity or empathy.

At the same time, exceptions are apparent in examples like the Confession Bear and Scumbag Steve/Stacy memes, and in high profile cases of image macros contributing to memes that engage in harassment and outright cruelty (e.g., "an hero" image macros; the Jessie Slaughter meme). In addition, image macros were appropriated early on in what Angela Nagle calls the "online culture wars"—where "the irreverent trolling style associated with 4chan grew in popularity in response to the expanding identity politics of spaces like Tumblr" (Nagle 2017, 19). Image macros were widely deployed in cultural struggles around issues of gender and race between different groups online, and "the shocking irreverence of chan culture" was juxtaposed by "anti-male, anti-white, anti-straight, anti-cis [expressions] from the cultural left" (Nagle 2017, 68; see, for example, https://twitter.com/AntiSJWmemes; https://knowyourmeme.com/memes/misandry).

Specialized meme generator apps for mobile phones made it easy to create image macro memes on the run to share with one's friends and contacts. While much more research would be required to assert these points with conviction, it would appear that "engaging in memes" has taken on strong interpersonal and relationship functions to run alongside older practices that were more about participating in affinities or causes. This goes along with what we discern as an individualist tendency in more recent meme creation and exchange, in the sense of "here is my meme" or "my version" by contrast with the earlier sense of being a part of, say, The Lost Frog meme.

One obvious trend is that once creating memes became closely associated with meme generators, many memes were created that were not memes at all in the sense of internet memes during the early period. There is little (or strictly limited) "contagion" in many cases, such as in memes becoming part of classroom life and routines whereby learners are asked to "create a meme" as part of their assignment work. In short, the term, "meme," increasingly seemed to refer solely to image macro memes and to one's individual contribution artefact-wise to macro meme pools.

It is also arguable that a degree of entrepreneurial intent and opportunism has become visible in the age of image macros that was less apparent in the earlier period. And while it may be a function of the image macro memes we have surveyed, we sense a more homogenized look and feel across these memes than was evident in the image-based memes we explored in the earlier period.

Non-image Macro Memes in the Period of Image Macros

So enormous was the explosion in image macro memes that we tried to get a fix on the extent to which they dominate the English-language memesphere and what other kinds of internet memes remained highly visible and popular. To do this we began from two bases. The first was what we see as the earliest conception of internet memes: contagious ideas passed on in visual forms that are modified or remixed in ways that nonetheless preserve the original idea in recognizable form; that can be seen as more or less "fecund"; and that have at least some longevity relative to internet time. The second base saw us trawling crowd-sourced sites like KnowYourMeme.com

and Ranker.com to get a sense of what everyday people identify as internet memes generally, and the best memes more specifically.

Working from the early conception of internet memes suggested that popular online memes that are not image macros include text-only memes (e.g., Navy Seal copypasta and its variants, 4chan's Rules of the Internet), photoshopped memes (e.g., Raptor Jesus, Aretha's Hat, Botched Ecce Homo, Doge memes), physical memes (e.g., planking, dabbing, duck face), video or gif remix memes (e.g., Dramatic Chipmunk, Keyboard Cat), a range of dance video remakes (e.g., Gangnam style remixes, Harlem Shake remixes), remixed and photo-based activist/political memes (e.g., We are the 99%), memes employing a blend of image macros and original work (e.g., Rage Comics, their four-panel format, and mix of stock characters and bad MS Paint drawings), and repeated and remixed catchphrases posted to Taringa, Bobaedream, 4chan, 2chan, 8chan, Gab, Voat, Facebook, Tumblr, Twitter, and the like.

Working from crowd-sourced lists of top/best memes proved interesting, if perplexing. We checked Ranker.com's crowd-sourced top-ranked memes for 2009 and 2018. Their top ten internet memes for 2009 included five viral videos (and subsequent remixes), a social event that triggered widespread attention (i.e., Balloon Boy) and generated countless parodies, and two image macro memes. Of the top twenty-two best memes listed by Ranker.com for 2018, all but seven were image macro memes, including memes produced by mobile phone apps and meme generators. These seven included two viral videos (a yodelling child and an actress clapping and not clapping at the Oscars), and a viral screenshot with a captioned line from a television show widely distributed on Twitter.

Insofar as trends might tentatively be deduced here, image macro memes seem to have become increasingly dominant during the past decade. For us, the most interesting trend emerging from trawls of crowd-sourced rankings is that the term "meme" has mutated to the point where it means almost anything depending on whom you ask. For example, when Hillary Clinton posted a gif clip from a movie where one character asks another, "Why are you obsessed with me?" in a Twitter response to a text maligning Clinton posted by Donald Trump in early 2019, commenters and media outlets referred to this in terms of Clinton posting a "meme" rather than, simply, a riposte. For some, memes are anything that goes viral. For others, memes are anything that involves using an image macro. For yet others, memes are anything that involve some kind of variation around a theme or a genre.

The equation of memes with virality—as in viral videos, for instance—is interesting, because insiders to geek-ish internet communities and internet memes scholars alike have often resisted a simple equation of "meme" and "virality" (see, for example, Shifman 2014). Nonetheless, Dawkins himself has acknowledged using the metaphor of a virus to help explicate memes, adding that "when anybody talks about something going viral on the internet, that is exactly what a meme is and it looks as though the word has been appropriated for a subset of that" (in Solon 2013, para. 8). From this standpoint, hashtags as used on platforms like Twitter and Instagram as labels for linking to like-minded posts or summarizing key content in a post could be considered memes to the extent that they are spreadable and can reach viral proportions. In any event, under current conditions there is a strong case to be made for the sheer importance of achieving scale in the economy of cultural ideas. Meanwhile, "meme" has become consistently ambiguous and multiple.

For the Lulz

The humor in most of the memes we have discussed above and, we would hazard, for a significant proportion of internet memes, has been funny in benign ways—intended to make people smile, laugh, or otherwise enjoy meme content good naturedly (see also Milner 2016; Shifman 2014; Yus n.d.). At the same time, as noted earlier, running alongside benign humor on the internet there has always existed a tendency toward an edginess that in many cases takes an uncharitable turn and, on occasions, can be downright mean, vicious and, increasingly, violent.

Memes used in the service of internet vigilantism or to pay homage to gruesome acts have long been part of online social networks (cf., the Nevada-tan and Dog Poop girl memes discussed earlier). Moreover, many real-world people behind popular online memes have had their lives negatively impacted by their meme-based notoriety (e.g., the lad featuring in the Star Wars Kid meme).

Within internet communities like Something Awful, Fark, Gab and, notoriously, 4chan and its /b/ and /pol/ discussion boards (and, later, 8chan), distinctive kinds of insider groups and humor quickly emerged. Across markedly different forms, this humor was designed to appeal to "insiders" and to establish insider status of one kind or another. On what we see as the benign end of the spectrum, is a long-lived meme like Chuck Norris Facts and its overblown claims about the action film actor's strength and power. This smart, quirky and hyperbolic humor spoofs Hollywood action heroes, and may not appeal to people who don't get satire or who take their action heroes seriously. While it's a meme that could conceivably make an individual (Norris) feel uncomfortable, the humor is generally so gentle that Norris himself admitted to finding a number of the meme variants very funny.

In stark contrast, we have memetic humor created by online trolls "for the lulz." Mattathias Schwartz (2008) dates "trolls" and "trolling" to the late 1980s, when the concepts were adopted by internet users to describe people who engaged in behavior designed to disrupt online communities and provoke strangers online (see also Dery 1994). By the time Schwartz was writing, trolls were operating *en masse* in spaces like 4chan's /b/ board, creating transgressive memes "for the lulz." Schwartz (2008, para. 8) describes "lulz" as "the joy of disrupting another's emotional equilibrium." One of his informants explains lulz as "watching someone lose their mind [in apoplectic rage] at their computer 2,000 miles away while you chat with friends and laugh" (Schwartz 2008, para. 8). Schwartz (2008, para. 7) claims that by 2008, "for the lulz" had already evolved from "ironic solo skit to vicious group hunt" and had spread far beyond 4chan's /b/ board. Today, memes created for the lulz are a major presence within the trend to politicize and weaponize memes.

The Politicization of Memes: Internet Memes as Divisive Weapons

By around 2015, academic meme researchers and media commentators were identifying a further shift in how memes were being created, replicated and spread online. Despite the bulk of online memes continuing to trade very largely on absurdist or feel-good humor and quirky anomalous juxtaposition it was fast becoming apparent that very many online memes were not benign or funny in a LOL kind of way, and that such memes were becoming increasingly visible and their deleterious effects increasingly apparent. Of particular interest here is the extent to which everyday meme practices have mutated to generate memes whose express purpose is to divide and sow hatred and violence between groups and otherwise disrupt the previous "mass culture sensibility" that marked earlier meme practices online (Nagle 2017, 2; see also Ellis 2017).

The infamous history of the Pepe the Frog meme provides a telling case. Pepe the Frog is a distinctive, crudely drawn frog head on a human-ish body created by Matt Furie for an online comic. Furie describes his character as "a chill frog-dude" and Pepe is regularly described in stoner terms (Furie 2016, para. 1; also Anderson and Revers 2018). His bulging-eyed frog head became hugely popular as a photoshopped/image-edited meme in online spaces like 4chan (where Pepe was launched and became "contagious") and, later, across Gaia Online and Myspace in the late 2000s. 4channers used Pepe as a kind of reaction meme—originally tagged with the catchphrase "feels good man" (e.g., "Just finished my exams! ... *feels good man*" Furie 2016, para. 5)—or to express a range of emotions (e.g., melancholy, smugness, sadness, anger). The bulk of these uses were about sharing insider jokes, emotions, or life experiences (Furie 2016).

By 2015, Pepe was identified as the most popular meme image on Twitter, Tumblr, and elsewhere (Hathaway 2015; Wikipedia 2019b). However, this increasing take-up of the Pepe meme by what 4channers referred to derogatorily as "normies" or "normal people" within the

internet mainstream (cf., Nagle 2017; Yopak 2018) was seemingly perceived as an encroachment into 4chan's anti-establishment culture and an appropriation of a key icon they seemingly felt was exclusively theirs. In response, Pepe memes on 4chan took a deliberately dark turn and replications became as "inflammatory, offensive or distasteful as possible" to reclaim the Pepe meme as 4chan's own (Yopak 2018, 14). Examples included "Pepes with Hitler moustaches or [in] Ku Klux Klan robes," designed to make Pepe completely unappealing to normies (Yopak 2018, 14). Around this time, too, Pepe the Frog became associated with the Trump election campaign, as well as with a range of alt-right (extreme conservatives) and white nationalist groups (Weill 2018; Wikipedia 2019b). Pepe began appearing in white supremacist/"white genocide" and neo-Nazi memes being passed around online, on placards carried in alt-right demonstrations, and as tattoos or lapel pins on well-known alt-right figures and their fans. In October 2015, Donald Trump posted an image of Pepe at a podium and looking presidential with the caption: "You Can't Stump The Trump." A few months later, the Russian Embassy posted a Smug Pepe image to their Twitter feed to comment on a meeting between British Prime Minister Teresa May and the newly-elected U.S. President Trump (Know Your Meme 2019a).

Furie (2016, para. 7) was distressed to have his beloved character become an "icon of hate" and a rallying meme for the alt-right and white nationalists. After trying a range of rehabilitation projects aimed at reclaiming his original Pepe, Furie officially killed off Pepe in a new comic in 2017. Nonetheless, Pepe the Frog—in all his incarnations—lives on strongly: online and offline. What Pepe now means as a meme in terms of hate and/or humor is complicated. The Anti-Defamation League, a U.S. organization concerned with anti-Semitism, added Pepe to its hate symbol database, whilst acknowledging that "most instances of Pepe were not used in a hate-related context" (Wikipedia 2019b, sec. 2, para. 2).

From a feel-good meme whose replications carried benign insider jokes, emotions, and life experiences, Pepe was appropriated for the lulz: to take delight in hurting or tricking others. From all accounts, 4channers in general didn't seem to be bothered by nationalist and fascist groups taking up their noxious Pepe image memes, but many of them did appear to enjoy the uproar and mayhem it caused (cf., Know Your Meme 2019a). This resonates with Nagle's account of a good deal of 4chan activity, which she explains in terms of being "transgressive" and "for the lulz" simply because it *can be*, and not necessarily in the service of a particular ideology or set of beliefs (Nagle 2017). But beyond generating lulz for 4channers, this meme became a highly contagious rallying point and membership "insider code" for groups whose activities and mobilizations are grounded in opposition to and, very often, loathing or hatred of other groups and communities. While such examples might seem to shift our discussion from *participation* in memes to *use* or *appropriation of* memes, we would argue that participation and use are inextricable and that both often generate new memes and new appropriations of existing memes.

Many politicized and weaponized memes are currently directed at specific religious groups (e.g., Muslims, Jews, Christians); racially or ethnically defined groups (e.g., Aboriginal Australians, Romani, people of colour); gender identity, sexual preference, and political groups/communities (e.g., the LGBTQ+ community, feminists, left-leaning social activists, males); and so on. They are actively used to recruit and radicalize people who often already entertain exclusionary and extreme beliefs. Passing such memes on is regarded as a "pledge of allegiance to your ingroup" and, in the process, does important identity work for many people (Watercutter and Ellis 2018, para. 9). Politicized antagonistic memes are fecund, and are increasingly shaping the ways many people are reading and writing their worlds online. This in turn influences how they act and treat others offline. Furthermore, challenging them is made difficult by the lulz factor and/or mock defensive outrage ("How could you possibly interpret innocently meant X as Y?!") built into propagating many such internet memes. Critics often are lambasted online for "falling for a joke" and for being "too serious" when the meme is indeed a

dog whistle—or insider call—to extremist groups to continue with, say, their nationalist, neo-Nazi projects and affinities (cf. NonCompete 2019).

What are now commonly called hate memes typically leverage existing image macros or use original digitally edited images and caption them with memetic expressions: for example, displaying the Confederate flag, or swastikas, in conjunction with phrases like "white genocide," and "it's all right to be white." Some are images captioned with "What about X?," designed to deflect attention away from racist or xenophobic position-taking (such as posting images invoking Christian massacres in Nigeria in response to the massacre of Islamic worshippers in New Zealand). For much more on this, see Ellis (2017), Chagas (forthcoming), and NonCompete (2019). One noticeable aspect of these kinds of online memes is that they do not use the same images repeatedly, as happens with, say, the Advice Animals genre of image macros. Rather, a hodgepodge of images, videos, and whatever else is to hand—like screen grabs of Twitter posts, televised news report gifs, etc.—are used to create statements of provocation or hateful responses to other people's comments. The content in these memes doesn't have to be "true" or the image itself well-executed or even completely interpretable (see Romano 2019, for more on "shitposting"). Many are designed to make people laugh and agree, while at the same time helping to spread divisive or hateful messages. Such online memes bear only a faint resemblance to the macro image memes of the pre-2015 internet, and are used instead to convey, endorse or reinforce beliefs and ideas that undermine social and cultural cohesiveness. These beliefs and ideas often have long histories themselves, too.

One mainstreamed and overtly contentious recent meme is the "NPC Wojak." "NPC" refers to a "non-playable character" in video games—these game-controlled characters have minor roles that help with the plot, but don't do much else. As with many memes, reference to humans as NPCs was made on 4chan and a crudely-drawn, grey, featureless cartoon man (a spin on an older meme character: Wojak) was used to represent someone who had no thoughts of their own and was completely controlled by their programming (Know Your Meme 2019b; De Cristogaro 2018). This image became a macro and began to appear more and more within political discussions, particularly on Twitter. In this early phase, it was applied to people who spouted repeated stock phrases (e.g., "Lock her up!" and "Trump is Hitler") and was used by the left and right in equal measure (possibly more by the left initially). This balance soon shifted dramatically, and NPC Wojak became "weaponized" by trolls wanting to rile people on the left by accusing them of being "brainwashed sheep who have been conditioned to parrot left-wing orthodoxy, in the manner of a scripted character" (Roose 2018, para. 6). They did so through image macros like: a multitude of NPC Wojaks captioned with "Strength in our diversity;" NPC Wojak captioned with "Orange man bad" and refusing to engage in reasoned debate.

In October 2018, Twitter was overrun with over 1,500 "NPC Wojak" accounts puppeteered by alt-rightists and those in it for the lulz. These accounts pretended to be left-leaning liberals and were posting "intentionally misleading election-related content," among other disinformation (Roose 2018, para. 2; see also D'Anastasio 2018). Twitter banned all NPC accounts for being a coordinated far-right trolling campaign that violated their terms of use. This only seemed to fan the flames and NPC hate rhetoric became even more widespread, appearing regularly in the pro-Trump discussion board on Reddit, The Donald, as an epithet for the left (and "social justice warriors," in particular), and the Twitter ban was referred to within the same space as the "NPC Twitter war," accompanied by a call to "NPC warriors" to not let the meme die. Indeed, in this same month, Infowars—"a far right American conspiracy theory and fake news website"—ran a competition for creating the best "Infowars-themed NPC meme" with a prize of \$10,000 (Know Your Meme 2019b, para 12). Trump retweeted the winning video. Currently popular examples of the image macro NPC meme include the iconic, hard-edged screen print of Che Guevara with Guevara's face replaced with NPC Wojak's face; a remix of the Roll Safe meme to say things like "You can't get offended by the NPC meme if your thoughts are your own;" and so on. NPC Wojak also appears in YouTube videos, as graffiti, on t-shirts, and on coffee mugs with the text "I'm offended on behalf of this black coffee" or "That's enough creamer, racist." Protestations concerning the maliciousness of the meme are typically met with derision and ridiculed as further evidence that the left "can't take a joke" (Roose 2018).

Hoax hate meme "campaigns" on 4chan's /pol/, on Voat and Gab etc. have escalated since 2014, too (Anti-Defamation League 2017). The goal of these campaigns is to generate hoax memes designed to trick "normies" (and the media, in particular) into thinking a new hate meme has arisen. The recent mayhem and media panic around the "okay" hand symbol is an example. Launched on 4chan, Operation O-K-K-K was a trolling campaign designed deliberately to co-opt the meaning of the globally recognized "okay symbol" (created by making a circle with the thumb and pointer finger with the palm facing forward and extending the remaining three fingers) and turn it into a white supremacy symbol. 4channers were called to troll the mainstream public with this gesture and its revised meaning until it became something that couldn't be ignored and would be picked up by the media and spread even further (Alexander 2018). This happened. Many 4channers reacted with glee at the resulting uproar, and deflected criticisms by arguing that the okay symbol could never be seen by anyone sane as a dog whistle for the altright. Photos of alt-righters and people wearing Make America Great Again caps and all making the okay sign suddenly started proliferating on Twitter; whether they were trolling, sending dog whistles, or simply using what used to be a very innocuous gesture cannot be judged with any confidence. If the hoax was purely for the lulz, it has nonetheless had material effects. The okay hand gesture currently has two mainstream meanings, and the individual charged with the Christchurch mosque murders flashed the gesture during his court arraignment.

It is very important to point out that extremism and hate are by no means the sole preserve of the alt-right and other creators and sharers of the kinds of memes we have surveyed above. In the interests of balance and fairness we need to recognize that left-wing movements like the antifa (anti-fascists), use online and offline direct-action campaigns against those they identify as far right extremists (like members of the alt-right). We have focused on examples from the right simply because they have been far more successful at "mainstreaming" (Innuendo Studios 2017) than anything that might be dubbed "alt-left" or "social justice warrior" or "extreme feminist" or even "liberal/progressive" in origin. While hate memes and other weaponized memes of the alt-right may be a relative minority of all internet memes, they are the ones that are currently most reported in the mainstream media—thereby disadvantaging competing memes in the quest for traction—and are among those of greatest concern for long term cultural wellbeing. Furthermore, the way that hoax memes get attached to hate memes, in a kind of meme complex, greatly strengthens these hate memes.

Summary and Conclusion

Internet memes have only existed since the late 1980s, but they have already travelled a complex, interesting, and (currently) troubling trajectory. This trajectory reflects a deep irony, given where and how the concept and theory of memes originated. Dawkins (2006) conceptualized and theorized memes by drawing an analogy with genes and biological evolution, in hopes that by understanding what memes are and how they function culturally, we might use our imagination in conscious foresight and create ways to cooperate with one another and, ideally, to extend altruism to others. His theory invited us to enlist our capacity for meta-level cultural thinking and agency in the cause of overriding the otherwise "natural" course of memetic cultural evolution and ameliorating adverse effects.

With internet memes the emphasis shifted from *identifying* memes and *understanding* how they work culturally, and with what implications for human wellbeing, to a preoccupation with trying consciously to *create and modify* memes—what Dawkins meant by "meme" being hijacked. In the wake of this hijacking we have to a significant extent collectively turned "memes" into practices of interest-serving cultural innovation, economic self-advancement, would-be turf ownership and control over that turf, and perpetuating longstanding forms of

elitism, tribalism and mutual group antagonism. Amidst all this, "meme" now means almost anything or everything depending on whom we ask. It has lost almost all conceptual and theoretical focus and potential. Furthermore, as a complex collective, we who participate in the kinds of memes discussed in this article may have lost sight of how a deep understanding of memes could, perhaps, assist the pursuit of an ethical orientation that might enhance life for human beings at large and across future ages. Alternatively, however, as a reviewer of this article suggests, it could be argued that all the variation and messiness we have discerned might express agency for different groups to the extent that internet memes reflect subordinate and dominant discourses—and from that standpoint, memes are whatever people take them to be.

Many of the trends and tendencies we have mapped above were evident in the earliest internet memes. If there was humor of a LOL kind in Badger, Badger, Badger, there was more than a trace of the lulz in Bonsai Kitten, and it is hard to believe that those who uploaded the found video of the Starwars Kid had his best interests at heart, even if they were primarily interested in sharing something they found funny. Mobilizing memetic effects for political ends was a major motivator within the memes pool we studied early on. If there was human empathy in at least some of the "replications" of the Lost Frog poster, there was a generous measure of ill-will and outright vigilantism in Dog Poop Girl.

Other trends and tendencies that we have mapped are familiar motifs in the history of (digital electronic) technologies to date. For example, if it can be monetarized it will be; if it can be automated it will be; if it can be made accessible to all, then the original cultural and institutional practices, tenors and shapes will inevitably change, and "mainstreaming" will occur; if it can be mobilized to serve or ameliorate our felt needs and interests, it will be. The details and the equilibrium may have shifted throughout the period we have observed, and tendencies that were not so apparent or emphatic early on may now have become foregrounded and be commanding the greatest attention and concern. But virtually every trend and tendency we have mapped can be seen and understood in terms that Dawkins (2006) would have recognized when he originally thought and wrote about memes.

In some ways, concepts and practices of internet memes have trivialized and cheapened Dawkins' original project. Even analyzing the content of internet memes from some academic theory of literacy or media orientation seems pallid in comparison to being called to practice conscious foresight and develop altruism as a disposition (see Dawkins 2006). Current troubling tendencies in memes and meme practices can serve as a wake-up call for students of internet memes, not least because the most troubling memes and memetic trends right now are the very stuff of what Dawkins understood memes to be, and of why we need to understand them in the kind of way he advocated (e.g., as ideas that are selfishly interested in survival; how successful memes "choose" the right hosts; how memes work in complexes; see also Satell 2012).

We conclude that right now would be a good time for anyone seriously interested in memes to revisit Dawkins' work in light of how internet memes have evolved over the past three decades and reflect on what most merits careful and conscientious research attention. This will likely take us a long way from memes themselves and deep into considerations of the kinds of circumstances, conditions, and larger patterns of distribution and welfare that make ordinary human beings susceptible to particular kinds of ideas and values and how this then plays out in the larger world.

Note on the Use of Non-Credible Sources

A number of sources have been used in this article that would fall under the journal's category of non-credible sources (e.g., Wikipedia, KnowYourMeme). Where such sources have been used, it is to refer to artefacts, examples and simple matters of fact, and not as authoritative support for arguable claims or values. Such use is practically unavoidable in work dealing with aspects of popular culture.

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