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When Disinformation Studies Meets Production Studies: Social Identities and Moral Justifications in the Political Trolling Industry

JONATHAN CORPUS ONG¹
University of Massachusetts Amherst, USA

JASON VINCENT CABAÑES
De La Salle University Philippines, Philippines

The field of disinformation studies remains relatively silent about questions of identity, motivation, labor, and morality. Drawing from a one-year ethnographic study of disinformation producers employed in digital black ops campaigns in the Philippines, this article proposes that approaches from production studies can address gaps in disinformation research. We argue that approaching disinformation as a culture of production opens inquiry into the social conditions that entice people to this work and the creative industry practices that normalize fake news as a side gig. This article critically reflects on the methodological risks and opportunities of ethnographic research that subverts expectations of the exceptionally villainous troll and instead uses narratives of creative workers' complicity and collusion to advance holistic social critique and local-level disinformation interventions.

Keywords: networked disinformation, fake news, trolls, production studies, digital labor, political marketing, ethnography, complicity, Philippines

This article broadens the ambit of current inquiry about disinformation by putting it in dialogue with production studies. Existing works in disinformation studies—along with journalistic exposes of “fake news factories” (Silverman & Alexander, 2016) and their incisive profiles of racist and misogynist influencers of the far right (Moore, 2016)—have brought to light the unanticipated scale of organized social media manipulation around the world. Even to the most technopessimistic of analysts, the shocking revelations about the toxic alchemy of technology and politics have come at a whiplash pace. From entrepreneurial Macedonian teenagers peddling clickbait content to Trump supporters for easy money, to Cambridge Analytica's crafty servicing of psychographic hype and old-school blackmail techniques to political clients, to the 9 million Russian troll tweets offered by Twitter as a “goldmine for researchers” (Burgess, 2018), disinformation research currently has no shortage of insidious strategies of political influence to report.

Jonathan Corpus Ong: jcong@umass.edu
Jason Vincent Cabañes: jason.cabanesh@dlsu.edu.ph
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¹ Our title is inspired by Vicki Mayer's (2016) “The Places Where Production Studies and Audience Studies Meet.”

In the midst of all these revelations, recent work in disinformation studies has developed new taxonomies aimed at critiquing digital disinformation across its different dimensions: as *content*, *agents*, and *technologies* (Wardle & Derakshan, 2017). Scholars have also proposed new typologies differentiating the variety of fake news (Tambini, 2017) and conducted meta-analysis of how “fake news” has been used in academic scholarship (Tandoc, Lim, & Ling, 2017). Other disinformation studies have demystified the persuasion strategies at the heart of the disinformation enterprise. Often beginning with a normative stance of denunciation that assigns the role of villain to disinformation agents, their forensic objectives range from enumerating the populist and/or posttruth rhetorical styles of hate-spewing politicians (Govil & Baishya, 2018) and paid trolls (Bulut & Yörük, 2017) to tracing their coordinative networking and message dissemination strategies (Donovan & Friedberg, 2019; Marwick & Lewis, 2017). Also at the heart of such disinformation studies lies the thrust to investigate the extent to which specific features of digital technologies accelerate disinformation and threaten democratic deliberation. Hence, a wave of case studies dedicated to the close study of individual platforms such as YouTube (Lewis, 2018) and discrete technologies such as Twitter bots (Woolley & Guilbeault, 2017) has pondered individual platforms or technological consequences for radicalization, polarization, and discrimination.

By drawing from the rich tradition of production studies and the cultural studies of media industries (Banks, Conor, & Mayer, 2015; Grindstaff, 2009; Hesmondhalgh, 2007; Mayer, Banks, & Caldwell, 2009), this article opens an expansive approach to examining disinformation as a culture of production. This means conceptualizing disinformation as both product and process emerging from organizational structures, labor relations, and entrepreneurial subjectivities.

One important value of approaching disinformation as a culture of production is that it exposes the broader systems and cultures of practice that normalize and incentivize its everyday work arrangements. To do this, we move away from the usual starting point of exposing or naming and shaming disinformation producers as exceptional villains; instead, we begin by listening to them, and recording their intentions and their experiences in their own words. Through this, we get to a closer understanding of why fake news producers do this kind of work. We can identify the social conditions that have led them to their work, the cultural scripts they use to justify their work to others and themselves, and, crucially, the opaque institutional procedures that have allowed their work to flourish.

A second value of the production studies approach is that it underscores how disinformation is a process of both collaboration and competition and an intentional product of hierarchized and distributed labor. This insight helps disinformation studies propose new questions of ethics and accountability that consider broader institutional relations at play. It raises concerns about how we assign responsibility to the diversity of disinformation producers acting in various capacities as masterminds, complicit colleagues, or low-level likers in what is essentially an open industry secret. It also pushes us to think of how we can expand our notion of disinformation interventions from content regulation and platform banning of bad actors and their harmful content to include process regulation of the ways political campaigns and consultancies are conducted (see Ong, Tapsell, & Curato, 2019, p. 38). Recognition that fake news workers can themselves be precarious digital workers prompts reflection of appropriate industry safety nets to prevent (mostly young, millennial, aspiring-middle class) people from slipping into underground work.

Here, we want to address how our move away from naming and shaming disinformation producers toward understanding them within their situational and institutional contexts might be misconstrued as reticence toward *parrhesia*, “the practice of frank and courageous speech delivered at the risk of angering . . . a more powerful interlocutor” (Roudakova, 2017, p. 38; see also Foucault, 2011). Our attention to precarity and uncertainty in the distributed labor of fake news might be misunderstood as possibly deflecting moral critique or, worse, playing into the hands of these savvy media manipulators. We want to clarify that in taking a production studies approach that seeks to first listen to them, we do not absolve them from the work that they have done. Rather, the goal is to understand them so that we can subsequently engage in a nuanced reflection on complicated moral questions of “complicity and collusion” in our media participation (Silverstone, 2007). By subverting expectations of people about who exactly paid trolls are and where they come from, we critique the workings of the system at large and the different levels of responsibility at play. We wish that this approach contributes to broader debates about the political value of representing perpetrators’ narratives, which in media scholar Fernando Canet’s (2019) view can deepen “understand[ing of] both the personal and situational dimensions that could lead a human being to commit such acts [and] help us to determine how to prevent future cases” (p. 15).

As an empirical anchor for this article’s exploration of digital disinformation as a culture of production, we draw from our research project that involved interviews and participant observation with the actual authors of false news in Philippine political campaigns during and after the 2016 national elections. This focus on the Philippines is significant because it has been at the forefront of contemporary innovations in digital disinformation and, hence, often signals in advance what other democracies in the world could be confronted with. The May 2016 elections in the country catapulted populist authoritarian Rodrigo Duterte to the presidency after a savvy campaign that mixed the shock value of his profanity-laced speeches with the firepower of vociferous social media influencers, bloggers, fan groups, and anonymous paid trolls amplifying his message of anger against the elite establishment. Local and global media headlines were quick to reduce Duterte’s triumph to what they assumed to be the exceptional innovation of his click army. An academic study based on secondary surveys of news reports unfortunately replicated this misleading assertion and inaccurately spotlighted Duterte’s party as the Philippines’ sole player in organized social media manipulation (Bradshaw & Howard, 2017).

Moral panics commentaries on Filipino fake news often miss retelling the broader historical narrative of the image-based patronage political system in the country that has normalized spin and “black propaganda” negative campaigns orchestrated by branding strategists from the creative industries (Gloria, Tabunada, & Fonbuena, 2004). Rather than an exceptional invention of angry populist politics or social media, digital disinformation should be seen as but the current iteration of tried-and-tested techniques of promotional marketing transposed into the political sphere. It is the culmination of the most unscrupulous trends in Philippines media culture and politics, borne out of the country’s weak political party ideologies and affiliations that are completely overwhelmed by political personalities building clientelistic relationships with their supporters (Coronel, Chua, Rimban, & Cruz, 2004). At the same time, we acknowledge that their vile and volatile consequences for the country’s democracy are also unprecedented, especially against the current backdrop of a violent drug war, attack on democratic institutions, and muffling of opposition voices.

Adopting the more expansive commitment of production studies to foreground producers' subjectivities—"their similarities, their diversity, and their own internal contradictions" (Banks et al., 2015, p. xi)—our study was able to reveal not only the broad reach of organized social media manipulation, but also its deep entanglement with a professional hierarchy led by advertising and PR experts. We call these arrangements the *architecture of networked disinformation*. We return to this concept in the latter half of this article, where we flesh out its key characteristics and identify how political trolling has become an easy sideline job in the booming creative economy.

Shared Agendas

In this section, we draw connections between the burning questions and interests of disinformation studies with key principles and approaches advanced by production studies. The aim here is to show shared agendas of the two areas of study, which can serve as generative starting points for future research.

It is important to note that disinformation research itself acknowledges the need for closer inquiry into the "agents of information disorder." Claire Wardle and Hossein Derakshan's (2017) comprehensive report outlines a broad research framework for the field. They highlight three "elements of information disorder" along with accompanying key questions: (1) agents (Who are they and what motivates them?), (2) messages (What format do they take?), and (3) interpreters (How do they make sense of the messages?). Wardle and Derakshan introduce classification categories for the study of the three elements, which taken together correspond with traditional distinctions in the "circuit of culture" consisting of producers, texts, and audiences (du Gay et al., 1997). Their analytical categories pertaining to agents are level of organization, type of motivation, level of automation, and intentions to mislead/harm specific audiences (Wardle & Derakshan, 2017, p. 28).

Certainly, these suggestions build on the many gaps left by dominant social network and content analysis approaches in disinformation research. Social network and content analyses theorize on agents' intentions to mislead or harm out of digital forensics of their coordinative behaviors and their produced messages (media content such as tweets, memes, etc.). When deployed effectively, these approaches map out processes by which conversational frames, policy discourse, and mainstream media headlines are hijacked by bad actors (e.g., Uyheng & Carley, 2019). Less effective approaches are those that fetishize the effects of new technologies such as Twitter bots, without situating these within broader campaign infrastructures or the social contexts of the agents that design them (e.g., Woolley & Guilbeault, 2017).

An engagement with the anthropological spirit behind the above questions—Who exactly are these agents and what motivates them?—demands that we understand the dynamics of how social identities, class, and labor relations unfold within everyday moral economies of production. Here, production studies can suggest new analytical categories: How do intersections of age, class, gender, sexuality, and ethnicity affect agents' recruitment or participation? What are the vertical and horizontal relations of leadership, collaboration, and competition? What are the features of the local political culture? How are diverse sectors of the creative economy involved? What is agents' communicative intent of using one medium over another to spread disinformation within an integrated "polymedia"

(Madianou & Miller, 2012) communication infrastructure? Production studies would also demand greater reflexivity about the research setting and the place of the researcher in relation to the field and the diversity of agents s/he meets, epistemological and methodological concerns still absent from the core disinformation research agenda.

In Mayer and colleagues' (2009) introduction to the first volume of *Production Studies*, they describe production studies as a field that takes

the lived realities of people involved in media production as the subjects for theorizing production as culture . . . gather[ing] empirical data about . . . the complexity of routines and rituals, the routines of seemingly complex processes, the economic and political forces that shape roles, technologies, and the distribution of resources according to cultural and demographic differences. (p. 4)

Attending to the "slippery social nature of labor practices" (p. 5) and juxtaposing them alongside official statements, regulatory standards, and press coverage intend to disrupt popular assumptions around the authorial intent and ingenuity of a visionary producer. Georgina Born (2008) conceptualizes media production as the translation work of broad normative principles into institutional codes and then into diverse media producers' personal intentions. Applying this insight to the study of disinformation producers is a worthwhile step back from the headline-grabbing politicians and influencers to whom we attribute fake or hateful content, and a step closer to understanding their position and status in relation to the vast network of paid political trolls and real supporters participating in the circulation of fake news.

The intention of a production studies approach would not at all be to displace normative judgment about the democratically destructive effects of disinformation, but to get to the collisions and convergences of economic incentives and vested interests that gave rise to this intentional object. By recording the voices of invisible workers responsible for bad objects—from the casting agents of (racist/classist) *Jerry Springer* (Grindstaff, 2009) to the cameramen of (misogynist) soft-core porn (Mayer, 2008)—production studies mediate the knee-jerk demonization of individual characters, providing instead a more holistic social critique.

Applied to the study of disinformation, production studies' aim to link individual experience with broader socioeconomic arrangements can be read alongside political ethnographies of populist publics and the "rationalities" behind their support for Donald Trump in the United States (Hochschild, 2016), Narendra Modi in India (Chakravartty & Roy, 2017), and Rodrigo Duterte in the Philippines (Arguelles, 2019; Curato, 2016). For Hochschild (2016), the roots of the populist upsurge in politics do not lie in economic distress as much as they lie in a story about economic distress. Production studies and political ethnographies offer disinformation studies a broader analytical frame beyond the study of an exceptional event of "alternative facts" into the meticulous construction of mediated narratives at the heart of populist authoritarianism (Cabañes, Anderson, & Ong, 2019; for a similar argument from within political communication, see Kreiss, Barker, & Zenner, 2017). Recent disinformation studies apply some of these insights in emphasizing the volatile collaborative work arrangements behind fake news (e.g., Starbird, Ahmer, & Wilson, 2019).

Disinformation and Digital Production

Many principles of production studies have also informed a broad range of relevant research into neoliberal precarious labor arrangements in digital gig economies. Interdisciplinary research in media studies as well as sociology and anthropology elaborates on diverse factors that inhibit worker autonomy, satisfaction, and political solidarity for IT workers in Australia (Gregg, 2011), digital influencers in Singapore (Abidin, 2016), content moderators in the Philippines (Roberts, 2016), and click farm workers in Indonesia (Lindquist, 2019). Provocatively, the sociologist Antonio Casilli (2016) argues that recent political outcomes, particularly of Trump's election and the global rise of fascism, are best understood in light of global digital labor arrangements. As he puts it,

fascism, but coming in different shades, goes hand in hand with the oppression of digital technology users, marginalized, forced into accepting only one centralized, normalized, censored and exploited mode of platform governance . . . the structure of the current click economy and global digital labor market helped Trump's victory. Not algorithms. Nor fake news. (blog post)

These studies have particularly inspired our curiosity to inquire into whether or not the disinformation producers in our Philippines field site are inscribed in the same distributed labor, "race-to-the-bottom" arrangements as previous research on "digital sweatshops" in the Global South has described (Graham et al., 2017).

Within disinformation studies, the insightful works of Joan Donovan and Brian Friedberg (2019), Rebecca Lewis (2018), Alice Marwick (Marwick & Lewis, 2017), Whitney Phillips and Ryan Milner (Phillips, 2015; Phillips & Milner, 2017), and Matti Pohjonen and Sahana Udupa (Pohjonen & Udupa, 2017) make use of ethnographically inspired approaches from their diverse backgrounds of social anthropology, folklore studies, and within media research fan studies and science and technology studies to produce holistic and grounded analyses of disinformation production.

Shared agendas with production studies are evident here and provide a useful roadmap for future research. First is the sustained commitment to locate and contextualize bad objects within broader media ecologies and institutional histories. For instance, Phillips (2015) traces how troll culture actually extends from (the critique of) mainstream media culture, which challenges the simplifying and pathologizing discourses of shock or exoticism that usually accompany popular coverage of fringe political actors in online spaces. Meanwhile, Marwick and Lewis's (2017) helpful concept of "attention-hacking" situates bad actors' messaging and coordinative strategies alongside critique of "vulnerabilities" of mainstream media, as they show how news media's own predilection to hastily cover trending news items can be turned against them if they are not careful.

Second is the anthropological commitment to attend to global difference and culture as important grounds for critique and judgment. For instance, Pohjonen and Udupa (2017) reject tendencies in current disinformation debates to apply from the top-down the legal frame of "hate speech" and its "assumptions around politeness, civility, or abuse as universal features of communication with little cultural variation" (p.

1174). As an intervention to binary classifications between hate speech and acceptable speech, they propose that media and policy research draw from anthropological approaches that are sensitive to emic categories and the “complex politics involved in labeling certain kinds of speech as one thing or another” (p. 1187). Future projects on disinformation agents or producers have much to build on from reading previous disinformation studies alongside production studies. In the next section, we expand in greater detail the methodological choices we made in our research that attempt to apply production studies’ concern with researchers’ reflexivity and dialectical analysis of systems and individuals.

Method

To demonstrate concretely how underexplored aspects of disinformation might be analyzed as part of a broader analysis of the moral economies of digital media production, this section discusses the methodological choices we made in our research project on the production of digital disinformation in the Philippines. Our research was conducted in Manila from December 2016 to December 2017, in the aftermath of the campaigns for the May 2016 Philippine national elections, which saw the intensification of online political vitriol and the rise of controversial politician Rodrigo Duterte to the country’s presidency.

This was a politically volatile period with Duterte’s drug war registering casualties in the thousands, key figures of the political opposition jailed, and critical journalists trolled and harassed, including with arbitrary legal claims of “business violations” (Soriano, David, & Atun, 2019). It is clear that political trolling is not confined to verbal abuse but can escalate to physical or even mortal harm. Many journalists and academics responded by shaming Duterte supporters as brainwashed mobs, sluts, and cyber pests in online discourse as well as through investigative reports aiming to “unmask the trolls” (Almario-Gonzalez, 2017), thus creating a vicious cycle of hateful confrontation across political camps.

Thus, when we reached out to personal contacts we knew to have worked in political campaigns, we made sure to carefully explain our main interest in digital labor, particularly in the procedures and structures of digital political operations. Following the protocols of university research ethics, we emphasized to them that we would disidentify information that could be traced to individuals. Conscious of the sensitive nature of labels such as “troll” and “fake news” especially in our initial recruitment of participants, we only used these words after respondents themselves used these terms in the course of an interview and only after we had established rapport with them.

Finding respondents was a slow and tricky process. Searching for high-level strategists, we learned early on that it was actually an open secret in the media and advertising and public relations circles who the lead campaigners were. Given the country’s personality- rather than party-based political system, ad and PR consultants have traditionally served central roles in branding political candidates. Thus, a number of these high-profile strategists did not feel implicated in debates on fake news and happily boasted of their services in interviews with local and global media (Jenkins, 2018). We met other strategists who kept to the shadows but used the interviews with us to highlight their own savvy. Our positionality here as Filipino academics in high-status positions as professors with degrees in foreign universities surely helped in recruitment; we interpreted that many of the strategists sought status and credit not only from their peers in the industry, but also from credentialed others whom they regarded as “experts.”

From these initial interviews, we uncovered the hidden hierarchy of digital disinformation producers as the ad and PR strategists introduced us to lower-level workers who assisted them in campaigns. These people were cagier when it came to sharing details compared with the confident, financially well-off strategists. Although some of them had already quit their political trolling jobs, a few found it difficult to recount events, as if they had not spoken about the work they had done to anybody before. To gain their trust, we emphasized our empathetic approach, reassuring them that our focus was understanding the broader system of trolling rather than “exposing” individual workers or clients and their bad actions.

In total, we conducted 90- to 120-minute interviews with 20 disinformation producers. These included six of those whom we call the “chief architects of networked disinformation,” the lead advertising and PR experts in charge of the overall communication plan; five “anonymous digital influencers,” the aspirational middle-class digital workers moonlighting as operators of anonymous accounts that command 50,000 or more followers on Facebook and Twitter that do the important work of translating campaign strategies into the popular vernaculars of pop culture references, snarky gay humor, or gutter language; and nine “community-level fake account operators,” the precarious middle-class digital workers tasked with sharing and amplifying core campaign messages in the online communities and Facebook groups they had infiltrated.

To supplement these interviews, we also conducted participant observation of more than 20 publicly accessible Facebook groups and pages and Twitter accounts supporting various political camps—including those that were explicitly pro- and anti-Duterte—as well as those that had no explicit representation of candidates or political parties, but who claimed to curate “social media news.” This allowed us to understand how networked disinformation campaigns were translated into specific posts or memes. During our fieldwork, some participants showed us fake accounts they operated and even shared their passwords to these accounts. This provided us an added opportunity to compare and contrast what our participants said in the context of the interview with what they actually did in the online profiles they created, as we were able to check on the digital traces they left in their Facebook histories. In academic writings as well as our own interviews with curious journalists about our work, we are conscious not to disclose usernames or handles, following anonymization protocols for “risky research.”

Networked Disinformation as a Digital Project

Earlier in this article, we introduced the concept of “networked disinformation” to describe the primary model of disinformation production in Philippine political campaigns. This concept foregrounds the hierarchical but distributed labor of loosely organized campaign operators. In this section, we explain the two key features of a networked disinformation project by drawing on the experiences of workers at various positions in this professional hierarchy. As we pointed out earlier, these workers include the chief disinformation architects, the anonymous digital influencers, and the community-level fake account operators.

The first key feature of networked disinformation that we want to highlight is how it is rooted in general principles in advertising and public relations. We discovered in our project that networked disinformation for Filipino politicians was a hyperextension of corporate marketing practices, in which techniques of “attention-hacking” (Marwick & Lewis, 2017) were first tested out in advertising and PR campaigns for shampoo or soft drink brands and then transposed to political marketing. Both campaign

principles and work structures followed models first developed in advertising and PR, and they were applied to campaigns for politicians across the political spectrum.

Grace (44 years old), one of the more cutting-edge digital PR strategists in the disinformation industry, for example, explained that she first developed Twitter disinformation techniques while handling the accounts for a high-profile telecom brand and international celebrity events. During this time, she perfected the craft of recruiting several Twitter influencers who would execute her two-pronged plan. One involved “trending,” which meant organizing influencers to boost the same hashtag through diverse witty, snarky, and pop culture-savvy posts that aimed to draw the attention of journalists as well as the general public. The other technique involved what we call “signal scrambling,” which involved the same influencers torpedoing their opposing campaign’s hashtags by dividing support for these through similar-looking but syntactically different decoy hashtags. Grace said that she had recently ventured to doing more political consultancies in the 2016 elections as she needed a challenge different from her typical gigs with corporate brands. She insisted that with the creativity and talent of social media influencers in the Philippines, the country was actually “sitting on a stockpile of digital weapons.”

Certainly, digital influencers themselves saw the financial opportunities in disinformation operations but justified that these were natural extensions of doing native advertising for corporate brands. Most of the digital influencers operated between three to six accounts of various personas—from “positive” inspirational meme pages to pseudonymous pop culture characters with bitchy personas—that variably translated the same communication objective into diverse expressions that appeared “organic” or “on-brand” to the particular social media profiles they maintained. Thirty-year-old Dessa told us, however, that she had to construct from scratch the bitchy accounts that used snarky gay humor for political clients: “For corporate brands, we need to stick with more positive messaging. Political clients don’t have brand bibles though and so it’s normal for us to go on attack mode against their opponents.”

The second key feature of networked disinformation is its project-based nature, where workers were employed on short-term contracts with their clients who measured the delivery of outputs along specific criteria and metrics. These were often taken on as sideline work, as people maintained their day jobs in advertising, online marketing, or serving as politicians’ administrative staff. As distributed labor, different workers were enlisted to achieve discrete objectives while only having loose and informal connections with their fellow workers. Often disinformation workers did not share the same office and were not always clear how certain campaigns fit within overall objectives of political clients.

Illustrative of this project-based nature of networked disinformation was a campaign aimed at shifting public sentiment about one of the Philippines’ most prominent political clans using historical revisionist narratives. In the course of talking to different strategists, we learned that although there was a singular campaign objective that unified this campaign, the disinformation producers involved in it were working in completely separate teams. Although these teams were working on different elements of the campaign, they all tried to top each other in the aim of impressing their common client. Gloria (48 years old), one of the lead PR experts in this campaign, was extremely proud of the documentary-like YouTube series that she and her team had produced. She explained that what made these videos effective was that they were not outright lies, but that they were based on “truths, but slightly fudged.”

Meanwhile, digital influencers needed to be competitive with their fellow influencers even when working on the same team and reporting to the same lead PR strategist. Influencers were compensated based on a competitive matrix of reach and engagement that meant that those whose posts went viral were rewarded with higher pay and other bonus rewards such as the latest iPhone model or a meet-and-greet with a top-level celebrity. Influencers with existing relationships with the PR strategists were familiar with these pay arrangements as they often follow the same model as their corporate marketing gigs. But unlike corporate gigs in which brands have more of a say about both tone and content, influencers used toilet humor or gutter language for a political campaign as politicians did not sign off on campaign executions or review postcampaign reports.

In the next two sections, we underscore two problematic implications of networked disinformation. One is that it pushes producers to compete and outdo each other to craft messages with the greatest potential for attention-hacking. Second is that it also allows disinformation producers to invoke moral justifications that minimize the pernicious impact of their work.

Competitive Collegialities Lead to Volatile Virality

As we indicated above, the distributed labor structure of disinformation projects led the workers within and across teams engaged in a constant one-upmanship. This meant that although campaigns were designed at the top with a certain objective, distributing the execution of this objective among workers led to unpredictable consequences.

Lead strategists required the promotional labor of digital influencers who were more fluent with popular vernaculars and were able to weaponize these into effective social media posts that mobilized public sentiments of anger and resentment. Conversely, influencers and fake account operators also needed the chief strategists to broker projects for them. The strategists did the crucial work of interfacing with clients who did not necessarily wish to know all the lurid details behind the viral hashtag campaigns they paid for. In effect, strategists legitimized disinformation projects for both their clients and their team of digital workers.

During the course of our fieldwork, we came to a gradual understanding of how strategists used euphemisms for “fake news” and “trolling,” drawing from industry jargon as ways to neutralize stigma not only when they spoke to us as researchers, but also when they pitched their services to political clients. For example, in our interview with the 29-year-old digital strategist Aisa, she proudly claimed that her firm never used “fake news” in promoting a mayoral candidate, but mentioned instead how they relied on “supplemental accounts” to amplify posts from that mayor’s official Facebook page. From our digital ethnography, we compared what she said with what their firm actually did and discovered how those “supplemental accounts” were Facebook pages that claimed to curate independent local news but were insidiously seeding manipulative memes promoting their mayoral candidate. Another strategist, Grace, meanwhile used the term “digital support worker” in interviews. We figured out over time that this was a PR industry term Grace used as a catchall when she justified her staff budget of fake account operators to her political clients.

On some occasions, campaigns led to online discussions with greater vitriol than strategists intended. As influencers were incentivized by strategists along a competitive matrix of reach and engagement, some ended up producing offensive content that was not agreed on at the beginning. For instance, one particularly racist meme that attempted to humiliate a politician for having dark skin went viral as it tapped into deep-seated postcolonial racial hierarchies in the Philippines (see Cabañes, 2014). The strategist we met explained that although the team did plan a coordinated attack, she said that she was frustrated how her team of influencers had "gone too far." We interpreted the strategist's frustration as less rooted in moral indignation around racism and more about how the attack almost backfired and created an underdog and victim position for their rival.

Again, the major consequence of competitive collegialities was the displacement of responsibility for the outcomes of networked disinformation. Most workers in the disinformation architecture were focused on staying ahead (for the strategists) or, more desperately, getting ahead (for the influencers and the fake account operators). As such, no one wanted to address or assume accountability for the misogyny and racism, among other things, that emerged in the aftermath of networked disinformation activities. None of them was interested in self-regulation.

Entrepreneurial Trolls' Moral Justifications

The second consequence of the architecture of networked disinformation was that it enabled the disinformation producers to invoke moral justifications that not only minimized the pernicious impact of their work, but that also displaced it too. Here, we begin with the chief disinformation architects at the top of the hierarchy. During our fieldwork, we met 40-year-old Dom, who we heard from key informants in the advertising and PR industry has a long record of handling high-profile candidates including presidential aspirants. We learned during our interview that she is known by her peers as a seasoned creative director, particularly for her skill with coming up with clever corporate taglines. Speaking to us in her luxury apartment in Manila's business district, she described her work as a political consultant as a more thrilling and challenging version of her everyday work handling corporate brands.

It is evident that strategists like Dom relished the thrill and adrenaline rush they got from their risky projects. She told us,

Maybe if I had this power 10 years ago, I would have abused it and I could toy with you guys. But now I'm in my 40s, it's a good thing I have a little maturity on how to use it. But what I'm really saying is we can f*ck your digital life without you even knowing about it.

Moments like these in our fieldwork reminded us of the power these high-status and well-connected strategists wielded over us as researchers, but also over the hapless folks in the industry who might have crossed this woman.

At the same time, however, strategists like Dom expressed discourses of gamification and fictionalization to justify their work. They drew from cultural scripts from Western entertainment to fictionalize the dangerous consequences of their actions and block feelings of real involvement. For example,

the PR strategist Grace compared herself with the popular *Game of Thrones* character Olenna Tyrell, who invisibly orchestrated the death of a king in the hit HBO show: "Other people like taking credit for trending-*this*, campaign-*that*. But not with me. I like working from the shadows, you know, like Olenna Tyrell. Nobody needs to know it was me!" This suggested to us too that some ad and PR strategists managed personal strategies of evading accountability and psychological distance from the disinformation materials actually produced. Ad and PR strategists saw themselves as taking on the more professional work of crafting campaign objectives and messages when compared with the digital influencers who had to do the dirty work of translating their objectives and messages into actual social media content.

Ad and PR strategists also explained that digital operations were an opportunity to disrupt existing social hierarchies and challenge established power players in political campaigning. As 28-year-old Rachel shared,

I'd actually like to phase out our company practice of paying out journalists to seed or delete news because they can be entitled or unscrupulous. The reason why I'm more passionate and committed about online work is because I don't like the politics in journalism.

In this quote, it is interesting how their cynicism about mainstream media is used as a moral justification to dispose of institutionalized practice by replacing it with another version equally lacking in scruples yet ultimately benefiting themselves. By expressing statements that exaggerate evil or corruption in existing public institutions, these ambitious workers imagined themselves as agents that could even bring about innovation without accepting moral responsibility for their own actions (for a related analysis of cynicism in media practice, see Roudakova, 2017, chapter 4).

Meanwhile, for the anonymous digital influencers we met, the casual and short-term nature of disinformation projects meant that they could downplay their involvement in it. Because the work was just one sideline gig they juggled with others, they could tell themselves that fake news did not define their whole identity. For example, we met 28-year-old transgender Georgina who operated by herself six anonymous accounts and worked with her other transgender friends for corporate and political marketing projects that needed signal boosting on Twitter.

She explained, "Being a character or a 'pseudo' is only very fleeting because you are not the person. You just assume that personality. You trend for a while and then move on." We found out that Georgina's day job was in search engine optimization, helping clients improve their Google page rank. An early adopter of new technology, she claimed she had always been fascinated by new financial opportunities offered by digital platforms. When she grew in her understanding of the influencer industry a few years ago, she created a meme account and steadily grew its followers seeking daily inspiration from its feed of feel-good positivity quotes. Eventually, she was hired to promote campaigns for local telcos, then celebrities and their movies, then political clients.

As part of the aspirational middle class, anonymous digital influencers were driven by financial motivations in their disinformation work. They previously endured less stable jobs in the creative and digital industries and see influencer work as giving them more freedom, including when choosing clients. We found

out that disinformation projects occasionally meant being in an aspirational work environment. The influencers we met recalled with pride how they did campaigns while booked overnight in a five-star hotel suite or in a mansion in a gated village.

At the bottom level, community-level fake account operators cited primarily financial motivations for engaging in this kind of work—extra work for extra cash. Most of the respondents in our study were (a) fake account operators working within politicians' own administrative staff. These were usually junior-level employees tasked to "help" with a political campaign, and they usually begrudged the fact that there was no additional pay for this kind of publicly derided work they did not sign up for. Other fake account operators were (b) freelancers paid on a per-day basis on achieving a set number of posts or comments and (c) office-based fake account operators who worked in a call center kind of arrangement, some of whom operated in provinces that were bailiwicks of politicians.

Many fake account operators appeared to be workers who had previously tried out other risky enterprises as a means to achieve financial stability. Although in many cases fake account operators colluded with people who offered financial rewards in exchange for accomplishing morally sketchy tasks, we also heard stories of subtle forms of resistance from within a disinformation project.

For instance, in 26-year-old law student Risa's case, we found an example of a reluctant worker who resisted and very likely sabotaged the fake account operations work she was compelled to do. Reporting to a very domineering, take-no-prisoners chief of staff of a fledgling mayoral candidate in one of the largest cities in Metro Manila, Risa and her cohort of fresh college graduates could not but agree to do the shameful work of creating fake accounts and trolling Facebook community pages. What was worse was that this was additional work, without additional pay. In election season after all, taking on additional work showed *pakikisama* [getting along with others] and *utang na loob* [fulfilling debt obligations], especially for young people fresh out of college.

Following the example of the chief of staff who maintained two fake accounts herself, Risa and her colleagues were tasked to come up with fake profiles and populate a Facebook group dedicated to the city they were trying to win. Although Risa did not admit it during her interview, it seemed to us quite probable that she intentionally sabotaged her own fake account. She told us she had only become Facebook friends with 20 people, unlike her other colleagues who maintained "bikini troll" accounts that lured 500 new friends with overtly sexual profile pictures. Unlike her colleagues, Risa never spoke about the "thrill" of creating viral memes. The discomfort was evident in her body language during the interview: Her narration was slow and stilted, as if the words brought her physical pain the moment they left her body.

Risa's case, along with other disinformation producers' experiences, suggested to us the ease of corruptibility within established systems of corporate marketing, digital influencer work, and political administration. Disinformation production has become an add-on to a portfolio of marketing services, particularly in the absence of any self-regulation mechanisms for political consultancies and digital advertising. In the Philippines, there are no existing frameworks promoting transparency in political consultancies and digital PR. The creative industries have self-regulatory bodies to monitor corporate brand claims and promises, but there has yet to be any systematic tracking or monitoring of marketing firms that

take in political clients. In the concluding section, we offer reflection on the opportunities as well as risks that production studies have to offer for disinformation studies.

Trade-offs of a Production Studies Approach to Digital Disinformation

By exploring disinformation workers' social identities and moral justifications, this article has offered insight into how fake news is not just a matter of political leadership, angry populist fervor, or technological innovation, but also an issue of political economy. Political trolling has become a lucrative sideline that is widely available for entrepreneurial workers within in a country at the forefront of both the high-status creative digital economy and its underbelly of low-status outsourced jobs from call center work (Graham et al., 2017) to commercial content moderation (Roberts, 2016). This expanding industry thrives in "structures of disprivilege" (Udupa, 2019) that impels a large number of social media entrepreneurs to cater to the demands of the digital underground. Our description of an advertising and PR work model of "networked disinformation" has more similarity to large democracies with strong personalistic political systems such as India, a country where advertising and PR executives also moonlight as political consultants for maximum profit and little political accountability (Udupa, 2019). But they can broadly apply to Western liberal democracies with image-based political cultures, relying on image consultants from the PR industry in which "disinformation is in the DNA" (Edwards, 2019 [blog]). Our descriptions of precarious digital labor are also relevant to understanding the work contexts of Russian troll workers and Chinese 50-cent army workers, although our account emphasizes a more creative and networked aspect to disinformation production that is not centrally commanded.

A production studies approach thus sheds light into how digital disinformation is not an all-new Duterte novelty; it is in fact the culmination of the most unscrupulous trends in the country's media and political culture. Many of the techniques of disinformation were first tried and tested in marketing shampoos and soft drinks before extending them to marketing politicians and their narratives. The difference is that seeded hashtags that aim to drown out dissent pose greater dangers to political futures.

In conclusion, we find it important to acknowledge the conceptual as well as political trade-offs in taking a production studies approach to digital disinformation. We only hope that our study as well as our policy lobbying efforts alongside civil society watchdogs in the Philippines complement, rather than replace, other interventions such as journalists' reporting and civil society lobbying for more investment in platforms' content moderation of hate speech.

The first trade-off of a production studies approach is that instead of naming and shaming high-profile personalities, it maps out the broader system and incentive structures to fake news production. For us, this offers a corrective to current initiatives dedicated to fact-checking fake news. As Whitney Phillips (2018) warns, some fact-checking efforts potentially popularize, or "oxidize," bad content by playing into the very intentions of media manipulators to influence the mainstream media agenda. By focusing on structures rather than individuals, we cut short the news cycles of attention hackers' shocking headlines and focus on foundational ethical flaws in political marketing and digital influencer practices. A less personality-oriented approach also enables us to capture the micro-level influence operations at work instead of just the easy targets.

The second trade-off is that instead of mobilizing a heroes-and-villains frame when talking about fake news, we reflect on everyone's "complicity and collusion" in its practice (Silverstone, 2007). Although our production studies approach means we are unable to serve in the frontlines along with Filipino journalists directly speaking "truth to power" against Duterte's violent regime, we can instead call out the broader network of disinformation architects serving less controversial politicians that use the same disinformation tactics but escape the glare of observers. Journalists themselves have also been unable to hold accountable the advertising and PR strategists behind digital disinformation campaigns as these powerful individuals control the corporate advertising money that their news agencies greatly depend on. In this light, we see our work as also speaking "truth to power" to those in high positions of economic power in the creative industries who consider themselves "kingmakers" in the political realm. Our ethnographic descriptions of various workers' complicity and collusion in disinformation production challenge us to move beyond partisanship in fake news moral panics discourse and call out politicians and workers complicit in this practice wherever they may fall in the political spectrum. We argue that journalists who tend to overemphasize "fake news" as merely a Duterte phenomenon or a recent case of state-sponsored propaganda run the risk of enabling the entrenchment of amoral disinformation architects in the political system. This simply allows disinformation architects to slip undetected, engineer more innovations, and ally with new political patrons that offer them power and protection for the next election cycle.

Finally, the third trade-off of a production studies approach is that instead of focusing policy lobbying efforts at global-level content regulation by the tech platforms, we highlight local-level process regulation aiming for transparency in the context of political campaigns and influencer marketing. We observe worrying trends of content regulation in neighboring Southeast Asian countries where "anti-fake news laws" have been weaponized by government to censor dissenting voices and silence the opposition in social media (George, 2019). A production studies approach would mean rejecting illiberal responses of censorship for process-oriented responses that aim for transparency and accountability in the conduct of political consultancies, election campaigning, and influencer marketing.

Our ethnographic approach begins with an imperative for empathy to understand the conditions that push people to engage in precarious disinformation work, but this does not mean we absolve these workers of their lack of ethics and accountability. In fact, we assign greatest responsibility here on the top-level advertising and PR strategists and their political clients who benefit the most from the architecture of networked disinformation.

References

- Abidin, C. (2016). "Aren't these just young, rich women doing vain things online?" Influencer selfies as subversive frivolity. *Social Media + Society*, 2(2), 1–17.
<https://doi.org/10.1177/2056305116641342>
- Almario-Gonzalez, C. (2017, January 20). Unmasking the trolls: Spin masters behind fake accounts, news sites. *ABS-CBN News*. Retrieved from <https://news.abs-cbn.com/focus/01/20/17/unmasking-the-trolls-spin-masters-behind-fake-accounts-news-sites>

- Arguelles, C. (2019). "We are Rodrigo Duterte": Dimensions of the Philippine populist publics' vote. *Asian Politics & Policy*, 11(3), 417–437. <https://doi.org/10.1111/aspp.12472>
- Banks, M., Conor, B., & Mayer, V. (Eds.). (2015). *Production studies, the sequel! Cultural studies of global media industries*. London, UK: Routledge.
- Born, G. (2008, April). *The normative, institutional ethics, and practical ethics: For an anthropological ethics of media*. Paper presented at the Ethics of Media Conference, Centre for Research in the Arts, Social Sciences and Humanities, Cambridge, UK.
- Bradshaw, S., & Howard, P. (2017). *Troops, trolls and troublemakers: A global inventory of organized social media manipulation*. Oxford Internet Institute. Retrieved from <https://comprop.oii.ox.ac.uk/wp-content/uploads/sites/89/2017/07/Troops-Trolls-and-Troublemakers.pdf>
- Bulut, E., & Yörük, E. (2017). Digital populism: Trolls and political polarization of Twitter in Turkey. *International Journal of Communication*, 11, 4093–4117.
- Burgess, M. (2018, October 17). We finally know the full extent of Russia's Twitter trolling campaign. *Wired*. Retrieved from <https://www.wired.co.uk/article/twitter-troll-data-russia-ira-iran>
- Canet, F. (2019). Documenting atrocities around the world: Why engage with the perpetrators? *International Journal of Cultural Studies*, 22(6), 804–822. <https://doi.org/10.1177%2F1367877919840042>
- Cabañes, J.V.A. (2014). Multicultural mediations, developing world realities: Indians, Koreans and Manila's entertainment media. *Media, Culture and Society*, 36(5), 628–643.
- Cabañes, J.V.A., Anderson, C.W., & Ong, J.C. (2019). Fake news and scandal. In H. Tumber & S. Waisbord (Eds.), *The Routledge companion to media and scandal* (pp. 115–125). London, UK: Routledge.
- Casilli, A. (2016, November 20). Never mind the algorithms: The role of click farms and exploited digital labor in Trump's election. *Antonio A. Casilli*. Retrieved from <http://www.casilli.fr/2016/11/20/never-mind-the-algorithms-the-role-of-exploited-digital-labor-and-global-click-farms-in-trumps-election/>
- Chakravartty, P., & Roy, S. (2017). Mediatized populisms: Inter-Asian lineages. *International Journal of Communication*, 11, 4073–4092.
- Coronel, S., Chua, Y., Rimban, L., & Cruz, R. (2004). *The rulemakers: How the wealthy and well-born dominate congress*. Quezon City, Philippines: Philippine Center for Investigative Journalism.

- Curato, N. (2016). Politics of anxiety, politics of hope: Penal populism and Duterte's rise to power. *Journal of Current Southeast Asian Affairs*, 35(3), 91–109. <https://doi.org/10.1177/%2F186810341603500305>
- Donovan, J., & Friedberg, B. (2019). *Source hacking: Media manipulation in practice*. *Data & Society*. Retrieved from <https://datasociety.net/output/source-hacking-media-manipulation-in-practice/>
- Du Gay, P., Hall, S., Janes, L., Madsen, A.K., Mackay, H., & Negus, K. (1997). *Doing cultural studies: The story of the Sony walkman*. Milton Keynes, UK: Open University.
- Edwards, L. (2019, September 22). Expert says PR needs an ethical upgrade. *Mediawatch*. Retrieved from <https://www.rnz.co.nz/national/programmes/mediawatch/audio/2018713710/expert-says-pr-needs-an-ethical-upgrade>
- Foucault, M. (2011). *The courage of truth. Lectures at the Collège de France 1983–1984*. New York, NY: Palgrave Macmillan.
- George, C. (2019, October 7). Disinformation: A debate that needs to be better informed. *Freedom from the Press*. Retrieved from <http://blog.freedomfromthepress.info/2019/10/07/disinformation-2/>
- Gloria, G., Tabunada, A. M. L., & Fonbuena, C. (2004). *Spin & sell: How political ads shaped the 2004 elections*. Makati City, Philippines: Foundation for Communication Initiatives and Konrad Adenauer Foundation.
- Govil, N., & Baishya, A. K. (2018). The bully in the pulpit: Autocracy, digital social media, and right-wing populist technoculture. *Communication, Culture and Critique*, 11(1), 67–84. <https://doi.org/10.1093/ccc/tcx001>
- Graham, M., Lehdonvirta, V., Wood, A., Barnard, H., Hjorth, I., & Simon, D. P. (2017). *The risks and rewards of online gig work at the global margins*. Oxford Internet Institute. Retrieved from <https://www.oii.ox.ac.uk/publications/gigwork.pdf>
- Gregg, M. (2011). *Work's intimacy*. Cambridge, UK: Polity Press.
- Grindstaff, L. (2009). Self-serve celebrity: The production of ordinariness and the ordinariness of production in reality television. In V. Mayer, J. Banks, & J. Caldwell (Eds.), *Production studies: Cultural studies of global media industries* (pp. 71–86). London, UK: Routledge.
- Hesmondhalgh, D. (2007). *The cultural industries*. London, UK: SAGE Publications.
- Hochschild, A. (2016). *Strangers in their own land*. New York, NY: The New Press.

- Jenkins, C. (2018, February 10). Fake news: Trolling in the Philippines. *Channel 4 News*. Retrieved from <https://www.channel4.com/news/fake-news-trolling-in-the-philippines>
- Kreiss, D., Barker, J., & Zenner, S. (2017). Trump gave them hope: Studying the strangers in their own land. *Political Communication, 34*, 470–478. <https://doi.org/10.1080/10584609.2017.1330076>
- Lewis, R. (2018). *Alternative influencer: Broadcasting the reactionary right on YouTube*. *Data & Society*. Retrieved from https://datasociety.net/wp-content/uploads/2018/09/DS_Alternative_Influence.pdf
- Lindquist, J. (2019, January 6). The “like” economy: Who are behind the illicit click farms shaping your social media feeds? *Hong Kong Free Press*. Retrieved from <https://www.hongkongfp.com/2019/01/06/like-economy-behind-illicit-click-farms-shaping-social-media-feeds/>
- Madianou, M., & Miller, D. (2012). *Migration and new media: Transnational families and polymedia*. London, UK: Routledge.
- Marwick, A., & Lewis, R. (2017). *Media manipulation and disinformation online*. *Data & Society*. Retrieved from https://datasociety.net/pubs/oh/DataAndSociety_MediaManipulationAndDisinformationOnline.pdf
- Mayer, V. (2008). Guys gone wild? Soft-core video professionalism and the new realities in television production. *Cinema Journal, 47*(2), 97–116. <https://doi.org/10.1353/cj.2008.0005>
- Mayer, V. (2016). The places where audience studies and production studies meet. *Television & Media, 17*(8), 706–718. <https://doi.org/10.1177%2F1527476416652482>
- Mayer, V., Banks, J., & Caldwell, J. (2009). Introduction. In V. Mayer, J. Banks, & J. Caldwell (Eds.), *Production studies: Cultural studies of global media industries* (pp. 1–12). London, UK: Routledge.
- Moore, C. (2016). Send in the clown: Internet supervillain Milo doesn't care that you hate him. *Out*. Retrieved from <https://www.out.com/out-exclusives/2016/9/21/send-clown-internet-supervillain-milo-doesnt-care-you-hate-him>
- Ong, J. C., Tapsell, R., & Curato, N. (2019). *Tracking digital disinformation in the 2019 Philippine midterm elections*. *New Mandala*. Retrieved from <http://newmandala.org/disinformation>
- Phillips, W. (2015). *This is why we can't have nice things: Mapping the relationship between online trolling and mainstream culture*. Cambridge, MA: MIT Press.
- Phillips, W. (2018). *The oxygen of amplification: Better practices for reporting on extremists, antagonists, and manipulators online*. *Data & Society*. Retrieved from <https://datasociety.net/output/oxygen-of-amplification/>

- Phillips, W., & Milner, R. (2017). *The ambivalent Internet: Mischief, oddity, and antagonism online*. Cambridge, UK: Polity Press.
- Pohjonen, M., & Udupa, S. (2017). Extreme speech online: An anthropological critique of hate speech debates. *International Journal of Communication*, 11, 1173–1191.
- Roberts, S. (2016). Commercial content moderation: Digital laborer's dirty work. In S. U. Noble & B. M. Tynes (Eds.), *The intersectional Internet: Race, sex, class and culture online* (pp. 147–159). New York, NY: Peter Lang.
- Roudakova, N. (2017). *Losing Pravda: Ethics and the press in post-truth Russia*. Cambridge, UK: Cambridge University Press.
- Silverman, C., & Alexander, L. (2016, November 14). How teens in the Balkans are duping Trump supporters with fake news. *Buzzfeed*. Retrieved from <https://www.buzzfeednews.com/article/craigsilverman/how-macedonia-became-a-global-hub-for-pro-trump-misinfo>
- Silverstone, R. (2007). *Media and morality: On the rise of the mediapolis*. Cambridge, UK: Polity Press.
- Soriano, C. R., David, C., & Atun, J. M. (2019). Crystallizing the official narrative: News discourses about the killings from the Philippine government's campaign against illegal drugs. *Ateneo School of Government Working Paper, 19-001*. Retrieved from <https://ssrn.com/abstract=3311422>
- Starbird, K., Ahmer, A., & Wilson, M. (2019). *Disinformation as a collaborative work: Surfacing the participatory nature of strategic information operations*. Preprint version, Human Centered Design & Engineering, University of Washington. Retrieved from <https://pdfs.semanticscholar.org/7cc2/37d467770517f0121aed7c2eda15bc63d13d.pdf>
- Tambini, D. (2017). *Fake news: Public policy responses*. *London School of Economics*. Retrieved from http://eprints.lse.ac.uk/73015/1/LSE%20MPP%20Policy%20Brief%2020%20-%20Fake%20news_final.pdf
- Tandoc, E., Lim, Z. W., & Ling, R. (2017). Defining "fake news." *Digital Journalism*, 6(2), 137–153. <https://doi.org/10.1080/21670811.2017.1360143>
- Udupa, S. (2019, January 31). India needs a fresh strategy to tackle online extreme speech. *Engage*. Retrieved from <https://www.epw.in/engage/article/election-2019-india-needs-fresh-strategy-to-tackle-new-digital-tools>
- Uyheng, J., & Carley, K. (2019). Characterizing bot networks on Twitter: An empirical analysis of contentious issues in the Asia-Pacific. In R. Thompson, H. Bisgin, C. Dancy, & A. Hyder (Eds.), *Social, cultural, and behavioral modeling!* (pp. 153–162). London, UK: Springer.

Wardle, C., & Derakshan, H. (2017). *Information disorder: Toward an interdisciplinary framework for research and policy making*. Council of Europe. Retrieved from <https://rm.coe.int/information-disorder-toward-an-interdisciplinary-framework-for-researc/168076277c>

Woolley, S., & Guilbeault, D. (2017). *Computational propaganda in the United States of America: Manufacturing consensus online*. Oxford Internet Institute. Retrieved from <http://comprop.oii.ox.ac.uk/wp-content/uploads/sites/89/2017/06/Comprop-USA.pdf>