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Critical Theory in a Digital Media Age: Ways Forward

Editor

Robert E. Gutsche, Jr.

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Editorial

Critical Theory and *Being* Critical: Connections and Contradictions

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Abstract

This editorial responds to a professionalization and constrained notion of “critical theory” to argue for an academic and humanist-centered approach to developing debates and discussions around the future of critical theory and “being critical.”

Keywords

critical theory; digital media; journalism

Issue

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1. Introduction

Increasing digitization of journalism and other forms of media continue to attract the attention of social scientists and sociological approaches to interpret change and to predict the future for audiences and producers alike. However, emerging forms of surveillance and sousveillance among and by media producers, threatened privacy amid massive data collection, and globalization at the center of digital communication across continents and economies warrants a revision of critical theory within media and communication studies. While critical theory provides promise for much engagement with new technologies and interactions of power systems in media and communication, the area largely remains spoken about in select corridors of scholarship and certainly outside of industry discussions about media and communication.

There is a need to revisit (and return to) the works that emerged in the 1970s and 1980s in the U.K. and U.S., not only as a targeted approach against increasing neoliberalism globally, but as commentary about the dangers of established social, scientific and sociological approaches to politics, advertising, and journalism that failed to question dominant ideologies of the day. The work of scholars most aligned with contemporary attempts at critical scholarship in journalism and media research amid technological change include Stuart Hall,

Hanno Hardt, bell hooks, Marx, and, of course, a host of postmodern theorists. While studies with a focus on technological determinism keep pace with the technological advancements of media, captured there is a threat to the role, forms, and functions of critical theory in journalism, media, and communication scholarship. In turn, we are missing deeper meanings that exist within dominant, normative assessments of journalism and the Fourth Estate, sociological inquiries into journalistic boundary work, and deterministic interpretations of technology that remain at the forefront of popular journalism and media studies.

I am not arguing against the need for normative work that asks difficult questions about technological advancement or positions journalism fully outside of fulfilling its democratic aims; however, my wish is for critical theory to engage and enlighten researchers to ask about and apply critical positions in order to develop those theories, unveil new ideas about current questions, and plow a way forward for critical perspectives in increasingly digital means of communication.

When I started this thematic issue, I sent out this call to leading scholars, asking if they would be willing to participate. Time pressures and competing projects kept some people out of submitting. Others felt they couldn't write about “critical theory” in a journal that charges authors for open access publication rights. Even one well-published and recognized scholar of critical

theory took issue with the journal's open access rate and rebuked my offer to consider publishing an essay on the topic. In their message to me, they sent comments to the effect that publishing such a thematic issue—and having to pay for it—was a reflection of my own limited intellect and commitment to critical approaches. The scholar, who I am not naming, wrote:

Unfortunately, you do not seem to understand the basics of Critical Theory. Everyone who has read a bit of Adorno will be wary of capitalist online publishing as it is just a new form of the culture industry—you are not...

This is not just sad, but disgusting...

I wish you worst of luck with this special issue and am sure it will be a complete failure...

Learn to understand some foundations of the critical political economy of online publishing...

It is sad that many scholars will recognize that tone and contempt. As an Associate Editor of another journal, I, too, sometimes (thankfully, not often) see such language and personal attacks even from people and in situations where scholars think they are fighting for the sanctity of scholarship itself. But is this kind of close-minded approach to “critical theory” today what we really want from scholarship of tomorrow? Is this critical theory, or are we “being critical”? Are they one and the same? Is there room in “critical theory” for a more, open way of thinking about intellectual pursuits and an idea of “being critical” that doesn't fit the establishment's expectations?

There is no doubt that I put into the call the names of “critical theory” scholars that we most identify with in related discussions. And maybe I should have called then for a wider range of names and perspectives. I am glad the articles that appear in this issue have done so, seeing this as an opportunity to write in the name of critical theory and in producing theoretical cases and discussions that show the world of critical theory can emerge beyond the often confining and hegemonic positions of accepted theory. (And just as a note, publication costs for articles in this issue that qualified were waived.)

My rationale for publishing in this journal, one that does have a (high) fee for its open access rights, was

in response to its first years of celebrating technological traditions, sometimes without “critical theory” to the point that we seemed to be reading and writing “to each other.” At a time when Western governments are increasingly attacking “critical” thought taught in places of education, it may be that just as we need to revisit where we believe “critical theory” fits in our scholarship, we need to think about *being critical* in ways that support one another, unite against oppression, and do so in ways that elevate kindness (where appropriate) over being right. Just as we might debate the definitions of “critical theory” and discuss if that's the same as “being critical” or informing such an act, we should debate the future of how such approaches are being produced in graduate programs, particularly PhD programs in fields of Communication, where industry, metrics, and quantitative methods seem to have (again) strengthened their roots in the past decade, particularly in the U.S.

The same debate about the role of “critical theory” and “being critical” should be had in tenure and promotion policies across the globe, our obsession with article citations, the movement of university “engagement” about bringing in money than actually talking to someone off-campus about their interests, needs, and contributions. “Being critical,” then, isn't to dismiss “critical theory,” but is a light step in examining just how well-steeped some are in the conventions of elite thought, and perhaps we could use some time to consider the intersections of these ideas, and their diversions, fit in how we encourage and support others in their own efforts to bring about ideas of the world that challenge the status-quo. The job of scholarship is hard enough. Writing and working against systems (and each other?) takes a special spirit, and we should remember that first and foremost in academic debates about what “critical” is and what it can be.

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Conflict of Interests

The author declares no conflict of interests.

About the Author



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Article

Making Watergate “Look Like Child’s Play”: The Solyndra Discourse (2011–2012) as Flak

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Abstract

In analyzing the distinction between flak and scandal, this investigation focuses on the discourse around Solyndra in 2011–2012 on two media platforms. Solyndra was a solar panel firm that went bankrupt after receiving American Recovery and Reinvestment Act (‘The Stimulus’) funds. The analysis shows that *National Review*—a rightwing journal of opinion that increasingly operates as an online platform—unswervingly utilized the Solyndra bankruptcy as an instrument of political combat. Following flak lines rehearsed by Republicans in congressional hearings, *National Review* narrated Solyndra as scandalous evidence of the Obama administration’s putative ineptitude and/or criminality that, moreover, discredited the efficacy of green energy. The performance of the mainstream newspaper *The Washington Post* presented a grab-bag mix as its objective methods insinuated flak packaged as scandal into stories when they followed Republican talking points. At the same time, *The Washington Post*’s discourse noted that no evidence of administration corruption was discovered despite extensive investigation and that government intervention into the economy is often highly beneficial.

Keywords

Democrats; flak; *National Review*; political scandal; Republicans; Solyndra; *The Washington Post*

Issue

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[Solyndra made] Watergate look like child’s play. (Republican Party Congresswoman Michelle Bachmann, as cited in Kamen, 2012, p. 28)

1. Introduction

During the 2012 U.S. presidential campaign, Republican candidate Mitt Romney made a pilgrimage to the “shuttered headquarters” of a firm in Fremont, California (Henderson, 2012, p. A4). Rather than extolling the company, “Romney and his allies are hoping that Solyndra,” the bankrupt firm that had manufactured solar panels, “will become a household name” (Henderson, 2012, p. A4): A one-word index of the Obama administration’s alleged corruption and ineptitude. Solyndra’s bankruptcy had previously triggered a series of Republican Party-led congressional hearings in 2011. The hearings’ purpose of pushing a spurious Solyndra storyline was, in turn, oriented toward impacting the 2012 election. When asked

how long investigations into Solyndra would continue, Republican Congressman Jim Jordan replied: “Ultimately we’ll stop it on Election Day” while U.S. voters “evaluate who they are going to vote for in November [2012]” (as cited in Theel, Fitzsimmons, & Greenberg, 2012, para. 18). Rightwing media, notably *Fox News*, framed Solyndra’s bankruptcy as both scandal and a presumptive synecdoche of the folly of the Obama administration’s support for the green economy (Theel et al., 2012).

The stakes are high in branding an event as scandal that, in this case, was better understood as a costly error. In examining the discourse around Solyndra, this investigation is structured around differentiating the political combat engendered in flak from genuine scandal. Herman and Chomsky (1988) proposed a concept of flak in reference to practices that condition news media behavior. In their ‘propaganda model,’ the authors identified flak with complaint and punitive action (from angry letters to the editor to lawsuits) intended to discipline

news media toward the U.S.'s prevailing ideologies of monopoly capitalism and nationalism. In the decades following Herman and Chomsky's seminal discussion, flak has become a far more widespread and potent sociopolitical force that is now invigorated by new digital media platforms.

In a series of investigations, I have characterized flak more broadly as political harassment that is mobilized to delegitimize, damage, or disable its targets (people, organizations, or causes). Flak campaigns extend far beyond legitimate, good faith criticism. Moreover, flak campaigns are backed by sociopolitical power toward consequential ends. Generously funded rightwing flak mills have waged ongoing campaigns against, for example, professional journalism, urban advocacy, voter registration and climate science (Goss, 2009, 2013, 2018, 2020). Flak need not be simply false, although it was in the case of Obama-era 'birtherism' intended to impugn the 44th president's legitimacy (Mikkelsen, 2011). However, as a strategy of irregular political combat, flak merchants operate in bad faith with, at least, indifference to truth. In a similar vein, the rightwing invention of the 'Obama-gate' election year gambit in spring 2020 that alleged (unspecified, amorphous) misconduct by Obama's administration has been characterized as "a hashtag in search of an actual scandal" (Page, 2020, para. 10); accusation does not wait for evidence in the sphere of flak.

Although it is tendentious and purposefully weaponized for sociopolitical effect, flak merchants camouflage their flak products as something distinctly different; to wit, flak merchants assay to disguise a flak episode as serious, sober scandal. John B. Thompson (2000) conceptualizes scandal as characterized by examination of suspected wrongdoing in order to establish the truth. While the process is often messy, Thompson posits that scandal vets the public sphere of bad actors and ascertains what happened in the scandal's narrative resolution.

By contrast, rather than arriving at the truth about suspected wrongdoing, a flak episode collapses accusation into conviction. Moreover, rather than being driven by evidence toward a resolution, flak can thrive on an endless regress of suspicion. Indeed, in a head-spinning paradox, evidence against flak campaigns (for example, the existence of Obama's birth certificate) can be incorporated into the flak narrative as a further sign of wrongdoing that extends ineffably deeper than previously supposed. Flak depends not on solid evidence, but on sheer repetition of claims to acquire the veneer of truth (Pennycook, Cannon, & Rand, 2018); repetition that lends itself to the echo chambers of the current digital media environment.

To analyze the distinction between flak and scandal with its further implications for digital versus mainstream legacy media, this investigation revolves around an analysis of 150 articles from two distinctly different sources. In particular, I will analyze *The Washington Post* (here-

after, *TWP*), a pillar of high-reputation mainstream journalism, alongside the long-established rightwing journal of opinion *National Review* (hereafter *NR*) that is regarded as a seminal intellectual organ of the right. 100 articles from *TWP* were identified by searching the Nexis University database using the term 'Solyndra,' sorted by Nexis for salience and published between 1 September 2011 and 31 December 2012. 50 articles were harvested for analysis from *NR* within the same 2011–2012 timeline. The articles were identified by using the *NR* web site's search function that sorts results by relevance.

In the analysis that follows, I will differentiate between rightwing *NR*'s scandal-mongering flak and the legacy-media *TWP*'s commitment to objectivity. In turn, *TWP*'s pursuit of objectivity generated a chimerical discourse. Objective reporting enabled tendentious flak claims to circulate and to gain elaboration in *TWP*'s discourses when journalists followed their Republican Party sources. At the same time, *TWP* also published material that extensively contradicted flak premises.

Thus, an important stake of this investigation implicates revision of widely held views of the rise of new platforms vis-à-vis mainstream objective journalism. Examination of the recent past should disabuse scholars and the wider public of wistful nostalgia about news media prior to the entrenchment of new media platforms. Earlier phases of what constitutes news in the U.S. were deeply flawed in systematic ways; for example, the degree to which flak-driven scandal-mongering is at least partially compatible with the objectivity doctrine in practice. Careful study of the tendentious, flak-intensive discourses of *NR* makes a legacy-media news organ such as *TWP* look more hard-nosed than it is at conveying the textures of reality. This impression of hard-nosed reporting may, in turn, be construed an unearned victory for mainstream journalism that needs to better capture the contours of reality—and not to simply out-perform tendentious, partisan flak-mills. Prior to examining *NR*'s and *TWP*'s discourses, I will sketch the Solyndra's backstory and Republicans' congressional hearings about the firm that attempted to conjure scandal through flak.

2. Solyndra Backstory

Solyndra did not become the electoral game-change narrative that Republicans contrived it to be. That said, the company also never realized its promise. In 2010, *The Wall Street Journal* rated Solyndra as the top clean energy firm in the U.S. while the *MIT Technology Review* fingered the company as one of the world's top 50 innovative firms (Fong & Theel, 2011). Solyndra's solar panels had the advantage of being easy to install and bet on copper indium gallium selenide over the industry preference for polysilicon materials; a design feature that fatally negated Solyndra's competitive advantages when the cost of silicon underwent a steep and abrupt decline.

The Department of Energy (DoE) program that granted Solyndra a \$535 million loan guarantee in 2009

originated with the Bush-era Energy Policy Act of 2005, a law designed to cultivate promising alternative energy projects. Following the 2008 financial crisis, the program was expanded through the Obama administration's American Recovery and Reinvestment Act of 2009 (i.e., 'The Stimulus'). As Bush's term wound down, Solyndra's application for a loan guarantee advanced into the final 16 candidates among 143 firms. Solyndra had also attracted almost a billion dollars of private financing. The Bush administration's DoE established a timeline to complete Solyndra's review, and the department's credit committee, staffed by career employees, approved Solyndra's application in March 2009 during the opening weeks of the Obama administration. Following further due diligence, Solyndra's loan guarantee was finalized in September 2009 (Fong & Theel, 2011).

All was not as it seemed with Solyndra as the firm was subsequently investigated for giving false information to the government (Stern & Snyder, 2011)—although Solyndra's subterfuge has, for rightwing flak purposes, been enduringly reverse-engineered to imply that the Obama government engaged in fraud (Diaz, 2019). By February 2011, an agreement between DoE, Solyndra and private investors Argonaut Ventures and Madrone Capital Partners pumped new private financing into the company. New financing was conditioned on the provision that private investors' money would be treated as senior—i.e., paid off before DoE—in the event of bankruptcy prior to 2013 (Fong & Theel, 2011).

New investments taking priority over the public stake present bad optics, even as it is a recognized practice for 'new funds' to gain seniority during loan restructuring. Given a difficult choice, DoE's considered position was that if Solyndra were to go prematurely bankrupt, it would be game over for the investment—and less would be recovered than a restructure that gave the company a "fighting chance" to continue, an opportunity that would also maintain employment (Silver, 2011, para. 19). If the firm nevertheless failed, its collateral could also become more valuable as a result of restructure, thus enabling more funds to be recovered even in the event of bankruptcy. Following proper procedures that included dialogue with financial consultants and Office of Management and Budget approval, DoE signed off on the restructure.

Nonetheless, congressional Republicans performed a make-over on the bad optics to craft accusations of criminal crony capitalism with concomitant demands for investigatory zeal. In this vein, Republican Congressman (and fossil fuel fundamentalist) Lamar Smith demanded that a special independent examiner be appointed by the Department of Justice to scrutinize Solyndra (Graves, 2011)—thereby piling on to ongoing inquiries by Republicans in Congress. Notice that the Republican caucus' commitment to vigorous scrutiny of the executive branch would be abruptly cancelled, come what may, when a Republican administration was installed in January 2017.

3. Chewing over Chu: A Congressional Hearing to Seed Scandal

I will briefly characterize one of the hearings by the Committee on Energy and Commerce's Subcommittee on Oversight and Investigations in order to trace some of the flak talking points that were, with some success, insinuated into the news hole. Regardless of whether wrongdoing is found in Congressional investigations, the mere fact of an officially convened inquiry generates the appearance of scandal in objective news reports, day-by-day in headlines—smoke that implies that there must be a bonfire of wrongdoing.

The hearing that I will characterize occurred on 17 November 2011 and featured Secretary of Energy Steven Chu. Republican flak performances around Solyndra at the hearing were notably redundant in repeating flak talking points and assertions of wrongdoing, garnished with indignant demands for apologies with sound-bite potential. In this vein, Republican Marsha Blackburn grandstanded as follows in an apparent reach for sound-bite gravitas: "The hearing today is about the possible abuse of Executive power and of the taxpayers' money" (Subcommittee on Oversight and Investigations, 2011, p. 57).

Republican Cliff Stearns began the oversight subcommittee hearing in the manner of the hanging judge assuming wrongdoing, with Obama in his sights:

While our investigation continues, it is readily apparent that senior officials in the administration put politics before the stewardship of taxpayers' dollars....Our goal is to determine why the Department of Energy and the administration tied themselves so closely to Solyndra and why they were so desperate to repeatedly prop up this company. (Subcommittee on Oversight and Investigations, 2011, pp. 1–2)

Republican Joe Barton (who would later leave congress in disgrace following a tawdry scandal; Livingston & Allbright, 2017) similarly assayed to tie Solyndra directly to Obama. Against the evidence of the Solyndra application timeline, Barton's "first question...is why did the Obama Department of Energy reverse the Bush Department of Energy" vis-à-vis Solyndra (Subcommittee on Oversight and Investigations, 2011, p. 14). Later in the hearing, Democrat Jan Schakowsky addressed the internal record that shows that Solyndra was one of the Energy Department's top priorities for a loan guarantee as time ran out on the Bush administration (Subcommittee on Oversight and Investigations, 2011, pp. 52–53): A rebuttal to Barton's effort to narrate Solyndra's loan guarantee as exclusively an Obama administration creation. Nonetheless, in discourse, the startling accusation can often be better remembered than the measured correction.

Democrat Henry Waxman, made the most assertive efforts to present a countervailing storyline to the

Republican-organized hearing's frame as an ostensible examination of wrongdoing. While "oversight...is part of our job," Waxman claimed that committee Republicans denied Democratic requests for witnesses and suppressed "release of exculpatory documents" in favor of "cherry-picked emails that were contradicted by other documents" (Subcommittee on Oversight and Investigations, 2011, p. 17). Waxman flagged a flak strategy, although he did not employ the term to describe Republicans' resort to political combat: "House Republicans and their coal and oil industry allies are manufacturing a scandal, trying to discredit you [Chu], President Obama, [and] the clean energy companies" (Subcommittee on Oversight and Investigations, 2011, p. 32). The bid for scandal needed to be contrived, Waxman posited, because Solyndra was a "decision that was made on the merits," based on the "voluminous records" before the committee (Subcommittee on Oversight and Investigations, 2011, p. 32). Waxman further characterized alternate energy as implicating "economic growth" while "our national security will be determined by whether we succeed in building these new industries" (Subcommittee on Oversight and Investigations, 2011, p. 17). It is important to notice that, despite a prominent congressman's meta-critique of the hearings as a flak exercise, Waxman's analysis was not considered in either *NR*'s or *TWP*'s coverage. What then constituted the coverage of Solyndra in these two sources during 2011–2012?

4. *NR*: Flak in Search of Scandal

NR was established in 1955 by flamboyant right-winger William F. Buckley. 30 years old at the time of *NR*'s launch, Buckley had already established himself as a polemicist who targeted putatively 'liberal' institutions (media, academics) through writings such as *God and Man at Yale* (1951). In a funding appeal to its readers in 2020, *NR* continues to assay Buckleyan erudition through a farrago of military allusions, anti-government ideology and nationalism:

Bayonets sharpened, loins girded, the charge sounded, for 65 years *National Review* has been at the forefront of the fight to push back the leftist ideologues and their schemes, aimed at aggrandizing government while crushing liberty and tradition. Our fight is your fight—critical for the sake of Justice and of our Nation, this last best hope of earth. ("Stand with *NR*," 2020, para. 1)

Like its media-savvy founder, *NR* asserts a confident profile as a journal that fortifies what it regards as a rightwing intellectual elite: "The hallmark of *NR*'s reliable reporting, its informed analysis, its intelligent commentary, its truth and sanity. What we accomplish is profoundly impactful" ("Stand with *NR*," 2020, para. 2). *NR* has generally long eschewed "cranky or vicious"

rightwing movements as a byproduct of the publication's intellectual pretensions (Burner & West, 1988, p. 13). Nonetheless, at the publication's origins in the 1950s, *NR* defended Joseph McCarthy's infamous anti-communist cause and argued for racial segregation. As Burner and West observe (1988, p. 13): "It is the West itself that is under siege, warned essays in *NR* from its beginnings," peril asserted to be due to "the forces of secularism and socialism." Into the present, *NR* pursues a Manichean, anti-left vision of politics in the U.S.: "The Left knows your generosity, combined with our journalism, is a serious threat. Truth...has that effect" ("Stand with *NR*," 2020, para. 3).

Notwithstanding its high appraisals of its standards, *NR*'s Solyndra discourse marshaled exaggeration and wild speculation to force the conclusion that the firm's fate was a scandalous residue of Obama. Toward this end, *NR* problematized all aspects of the Solyndra story with drip-by-drip 'revelations' of details and punditry that incrementally advanced the ongoing flak narrative. Rather than being a commonplace in a market milieu, Solyndra's bankruptcy in a fledgling industry is "shocking" for *NR*'s Andrew McCarthy (2011b, para. 3). *NR* fashions "Solyndra Questions for Obama" as he must be personally blamed for punchy flak purposes and beseeched to answer endlessly (Stiles, 2011a). Andrew Stiles (2011a, para. 4) asserts that "the most pressing question" is "the extent to which the White House was involved" in approval of the Solyndra loan guarantee that was indeed made, properly, at the department level. Stiles does not merely interrogate, he also answers; the executive branch was, he claims, "aggressive" in its drive to extend a loan guarantee to Solyndra (Stiles, 2011a, para. 4). Stiles announces the flak-forced conclusion that the "Obama administration" is "consciously corrupt" (Stiles, 2011c, para. 12) via actions that are "almost certainly a violation of federal statute" (Stiles, 2011c, para. 9)—insistence that rests on insinuation, while naming no statutes.

The stakes in asserting Solyndra as a scandal are evident in the title of an *NR* article with an obligatory Obama possessive, i.e., "Obama's Solar Scandal." Michael Barone (2011, paras. 1–3) intones:

One factor favoring President Obama's reelection, according to a recent article by political scientist Alan Lichtman, is the absence of scandal in his administration. Lichtman may have spoken too soon. The reason can be encapsulated in a single word: Solyndra.

Here and elsewhere, *NR* posits an iron chain of associations: Solyndra is coterminous with Obama and Solyndra is asserted to equal scandal. Toward this end, Barone theatrically poses ostensible 'questions' that are hysterical flak indictments: "Did somebody slip somebody a bribe?" (Barone, 2011, para. 12)

NR editor Rich Lowry (2011) brands Solyndra as "Obama's Enron." In Lowry's semiotic construction,

Obama ‘owns’ Solyndra which is, in turn, asserted to be equivalent with Enron. Except in point of fact: Enron’s implosion in 2001 was the biggest bankruptcy in history when it occurred, triggered new regulations on corporate governance, and engendered fines and jail sentences. In the register of collateral damage, the scandal also brought down Enron’s once formidable accounting firm, Arthur Anderson, for its part in the cascades of fraud (Segal, 2020). Nonetheless, flak narratives need not be characterized by proportionality as they may correspond with other flak narratives rather than material reality. Thus, under the headline “Solyndra and the Obama Administration,” Stiles’ avers that the “investigation into the Solyndra scandal continue [sic] to *unearth disturbing evidence* about the *Obama administration’s role*” in the loan guarantee (Stiles, 2011b, para. 1, emphasis added). While deficient in evidence of its claims, the article nonetheless joined forces with the rest of *NR*’s flak discourse in air dropping Solyndra squarely into Obama’s lap.

For flak purposes, Solyndra was transformed from a costly error to a crime. McCarthy thunders: “The Solyndra debacle is not just Obama-style crony socialism as usual. It is criminal fraud” (McCarthy, 2011b, para. 1). McCarthy envisions 30-year sentences for the perpetrators, citing his *NR* colleague Stiles in the course of a speculative exercise in connecting dots. McCarthy reasons by analogy that Obama is, somehow, like Martha Stewart, as he conjures “illegal” acts (McCarthy, 2011b, para. 2) embedded within “deep and suspect involvement of the Obama administration” (para. 4) in “fraud” (para. 5). McCarthy (2011a) returned to the flak battlefield a day later under a headline “Solyndra Scandal Widening” that doubled down on previous assertions.

A story becomes scandal—or, more pointedly, flak impersonating scandal—when the story is repeated often enough to seem newsworthy and true by virtue of the very fact of its repetition. *NR* preempts forensic evaluation of whether the events around Solyndra constitute a scandal—or a costly mistake, incubated across two administrations and exacerbated by shifts in the market terrain. That is, Solyndra’s rejection of the industry’s preference for polysilicon materials for solar panels turned into a losing bet when the price of polysilicon suddenly crashed. Nevertheless, flak opportunity superseded good faith judgements in the Republican-led hearings and in the resultant *NR* discourse.

Turning to the election year of 2012, Republican National Committee chairman Reince Preibus reinforces the flak campaign around Solyndra for *NR*’s readers. Preibus positions Solyndra as the centerpiece of Obama’s first term, with questions-cum-accusations that begin with the article’s subtitle: “How can Americans trust a president who created such a mess?” apparently single-handedly, while *NR* disavows the extent to which Obama’s administration largely remedied the crises that it inherited from its Republican predecessor. Preibus continues to his flak punchline: Obama “created the

Solyndra mess” (Preibus, 2012, para. 18)—once again, apparently as a solo act—because he is “hostile to the private sector” (Preibus, 2012, para. 19). Aside from denying the stimulus’ part in saving U.S. capitalism from itself, Preibus displays characteristic rightwing agnosia toward the consistent historical pattern of decisive government intervention to nurture and strengthen the market (Polanyi, 2001). Similarly, in Stiles’ earlier flak contention, the Obama administration amassed an “extensive portfolio of failed investments” (Stiles, 2011d, para. 1). Outside *NR*’s flak discourses, the loan program, and the larger stimulus project, registered substantial success in aggregate (Lewis, 2018, pp. 60–63) in pulling the battered U.S. economy from the brink of collapse after 2008’s financial crisis.

Flak need not make sense, nor need it be even minimally consistent, since indignant accusation in a quest to exact reputational damage presents a central flak tactic. Flak also need not be accurate since it is engineered to meet the lower standard of corresponding with other flak tropes. In the long game before the 2012 elections, Republican flak messaging pushed Solyndra as the epitome of scandal with almost parodic determination. By September 2011, Congressional Republicans seized on Solyndra to argue against bills for worker retraining benefits, disaster relief, cancer treatment and autism research. Dana Milbank reports that “the government faced the prospect of a shutdown because House Republicans added a provision to the spending bill to draw more attention to....Solyndra” (Milbank, 2011, p. A8).

5. Chimerical Coverage in *TWP*

Whereas *NR* has long positioned itself as an intellectually formidable insurgent battling a dominant but decidedly wrong liberal power structure, *TWP* can be characterized as part of the same mainstream ‘establishment’ against which *NR* rails. Along with the prestige that comes with its status as the hometown newspaper of the nation’s federal district, the paper has been ensconced in mythology as a pillar of liberalism in the U.S. *TWP*’s central part in the 1970s Watergate investigations have long nourished the paper’s reputation. Even as *TWP* listed toward the U.S.’s political center across decades, it retained its aura as an oppositional tribune of the professional left (Goss, 2003). The paper’s status as an exemplar of quality, mainstream journalism is underscored by its haul of 65 Pulitzer prizes as of 2018 (Watson, 2019). *TWP*’s Pulitzer award case includes prizes in 2018 for having unmasked rightwing flak mill Project Veritas’ attempt to plant a false story in *TWP* as part of its shambolic effort to discredit the paper (Goss, 2020, pp. 117–121).

TWP’s coverage of Solyndra is far more polyvocal than that of *NR* in which all mentions of Solyndra collapse into condemnations of Obama. By contrast, one moment of *TWP*’s Solyndra discourse observes that “as much as \$60 billion in U.S. funds has been lost to waste and fraud in Iraq and Afghanistan over the past decade

through lax oversight of contractors, poor planning, and payoffs to warlords and insurgents” (Rhea, 2011, p. A13). While expressly putting Solyndra into perspective as a news story, the author claims “a waste of 120 times as much taxpayers’ money” in failed war-making “should get, oh, twice as much attention” as failed solar panel-making (Rhea, 2011, p. A13). Nonetheless, even as *TWP* printed this observation, the proposed measure of proportionality did not characterize the newspaper’s discourse. Indeed, the above-quoted comparison between ‘war waste’ and Solyndra was entertained only briefly in *TWP*—and it was drawn from reader Tina Rhea’s “Letter to the Editor” (Rhea, 2013)!

In analyzing the panorama of *TWP*’s Solyndra discourse, I begin with the series of reports by Carol D. Leonnig and Joe Stephens. Hereafter, I will generically refer to them as ‘Leonnig and Stephens’ for clarity, although they also published articles alone, in the reverse order of authorship, as well as with other *TWP* journalists. Their presence in bylines constituted about one-third of *TWP* articles on Solyndra in 2011–2012 that inform this investigation. Both reporters have achieved high professional reputations, including a Pulitzer Prize in 2015 in Leonnig’s case.

As concerns Solyndra coverage, Leonnig and Stephen’s narratives often chimed with the Republican-led House Energy and Commerce Committee’s investigation. Leonnig and Stephens’ 15 November 2011 article (Leonnig & Stephens, 2011) was indeed introduced as an exhibit in the Chu hearing (Subcommittee on Oversight and Investigations, 2011, pp. 84–85). The article reads as largely structured by Committee Republican briefing points, prior to being laundered into the congressional record as an ‘independent’ *TWP* article; that is, the Republican talking points inform the news report subsequently brandished as the proof of the talking points. In this manner, reporting that abides by formal objective procedures may nevertheless be skewed to sources who are themselves partial—in this case by contriving hearings for flak effect that masquerade as scandal in motion.

Nevertheless, in sharp contrast with *NR*’s narrative in which flak accusation is alpha and omega, Leonnig and Stephens at times shade Obama’s government as more apprehensive than Machiavellian. Due to internal disagreements, the journalists report that the administration convened “tense discussions among officials at the White House, its Office of Management and Budget, and the Energy Department” around Solyndra as the firm floundered (Stephens & Leonnig, 2011b, p. A1). Their reports regularly cite loose facts that complicate the scandal premise that they otherwise engage. At the same time, Leonnig and Stephens often insinuate compromised competence and perhaps knowing wrongdoing on the Obama administration’s part around Solyndra—even as they do not play on the word scandal and follow the formally ‘objective’ idiom. When Leonnig and Stephens co-authored articles with other *TWP* reporters, shadings of scandal narrative were notably less evident.

In drip-by-drip suggestions of scandal, Leonnig and Stephens’ narration often dwells on oil magnate George Kaiser. As the reporters acknowledge—albeit, in passing—Kaiser had no direct investments in Solyndra (Stephens & Leonnig, 2011a). Argonaut Ventures, a subsidiary of the Kaiser Foundation, was Solyndra’s leading investor. The second leading investor that participated in Solyndra’s loan restructure, Madrone Capital, is linked to the Walton (Wal*Mart) family (Fong & Theel, 2011). Solyndra’s investment ties to the Republican-leaning Waltons were mentioned neither in Republican discourse nor in Leonnig’s and Stephens’ reporting. As for the structuring of Argonaut, George Kaiser would not personally benefit or lose money with respect to Argonaut’s activities as its investments were beyond his reach (Theel et al., 2012); gains or losses would impact instead on the Kaiser Foundation (Fong & Theel, 2011).

During the Chu hearing, Waxman rattles off a series of figures who were pivotal in the loan guarantee program who did not know who Kaiser was and/or had no idea he was a campaign contributor for Obama, according to evidence obtained by the oversight subcommittee (Subcommittee on Oversight and Investigations, 2011, p. 90). Elsewhere in *TWP*’s discourse, Steven Mufson reports that when Chu approved the ill-starred Solyndra loan guarantee, he claimed before the House committee that he did not know who Kaiser was. Moreover, Chu stated that no political pressure from the White House was exerted on him over the Solyndra loan guarantee that “was absolutely made only on the merits” (as cited in Mufson, 2011, p. A18). However mistaken the appraisal of those merits proved to be, Chu’s statements were delivered under oath.

Nevertheless, Leonnig and Stephens frequently air-drop Kaiser into their reports as an apparition of ill-defined ‘scandal,’ even when he seems tangential to the story at hand. In an article on the Obama White House’s alleged unwillingness to furnish documents to the House committee, Leonnig writes, “Solyndra’s largest investor was the family foundation of George Kaiser, a major Obama fundraising bundler” (Leonnig, 2012). As there is no further mention of Kaiser in the article, here as elsewhere, the reader is led toward the inference that the spectral figure of Kaiser somehow looms large.

Solyndra never took off as a major scandal despite congressional hearings, devoted attention from rightwing opinion, and sustained attention on *TWP*’s high-profile, mainstream platform. In what reads like a valedictory address and final stand on the topic, the reporters’ page one report on 26 December 2011 extends for more than 2,700 words. They characterize the documents that informed their reporting as having achieved “an unprecedented glimpse into the high-level maneuvering by politically connected green technology investors” (Stephens & Leonnig, 2011a, p. A1). Stephens and Leonnig acknowledge that “the record does not establish that anyone pressured the Energy Department to approve the Solyndra loan to benefit

political contributor”—even as their report drops teasers of scandal and improper influence. The article mainly reprises Stephens and Leonnig’s previous reporting but adds a further titillating set piece. To wit, Kaiser sat next to Obama at a Reno, Nevada fundraiser for Senator Harry Reid. The 26 December 2011 front-page article cites Kaiser’s private emails that claim that he discussed China’s ‘dumping’ of underpriced solar panels and what Obama said to Kaiser about Reid’s reelection chances; gossip that presumably signifies the reporters’ capacity to conjure panoptic detail.

Leonnig and Stephen’s implicit assumption of scandal at least suggests a news media watch-dog function, in contrast with carnival barking from *NR* that directly serves a partisan flak narrative. Nonetheless, Mufson’s less frequent reporting on Solyndra presents more explicit (less ‘objective’) judgements about the Solyndra spectacle—and arguably conveys more substantive truth for doing so. In covering Chu’s five-hours of testimony before the House Energy and Commerce Committee, Mufson notes: “The emails fail to support GOP [Republican] lawmakers’ worst accusations, but many have been embarrassing to the Obama administration” (Mufson, 2011, p. A18)—a judgement, for certain, but one that presents more judicious parsing of truth than objective reporting’s ritualistic exercise of convening an endless regress of claim/counterclaim. Moreover, cherry-picked emails that may be embarrassing when read by a broader public do not rise to the level of wrongdoing, even if such leaked emails have often been highly serviceable to flak narratives (Goss, 2020).

5.1. Backstory and Context in *TWP*

In making characterizations around Solyndra, *NR* does not furnish substantive backstory beyond what served flak-driven narratives propelled by animus toward the Obama administration. By contrast, for being less overtly driven by ideology and more committed to professional codes than *NR*’s unbridled indulgence of opinion, *TWP* assays some textured characterizations. Mufson’s portrait of Chu, for example, presents the Energy secretary as an “unorthodox” cabinet officer: A Noble Laureate who is more comfortable with arcane paradoxes of physics than politics (Mufson, 2011, p. A1). Along with detailing the bureaucratic particularities and conflicts at DoE, Mufson’s portrait of Chu channels the strengths and weaknesses of journalistic objectivity. That is, Chu may be interpreted as a visionary cabinet appointment or as a fish-out-of-water, depending on what a reader highlights in Mufson’s objective account.

Mufson and Leonnig’s (2011) report on 27 September also embeds Solyndra in backstory, without the shadings of scandal that color Leonnig’s collaborations with Stephens. Mufson and Leonnig (2011, p. A1) observe that the U.S. economy was “in crisis” when Obama and Chu arrived in Washington at the start of 2009; non-normal times called for exceptional measures.

In turn, the sum of stimulus money to be allocated as grants and loan guarantees was greater than the DoE’s previous budget, signaling sharp intensification of the department’s workload. Despite the parlous circumstances under which the Obama administration stimulus was implemented, Mufson and Leonnig report that the loan guarantee program registered notable successes in seeding economic expansion and employment. In another Mufson and Leonnig collaboration, the reporters are attentive to the economic multipliers that occur with a successfully funded firm. That is, a successful firm does not simply employ people, but also synergizes the economic health of its supply chain partners and their employees (Leonnig & Mufson, 2011), part-and-parcel to the economic rationale for economic stimulus.

By 2012, *TWP*’s reporting further bears out the Obama administration’s positive intervention through economic stimulus: “Top economic forecasters estimate that the stimulus produced about 2.5 million jobs and added between 2.1 percent and 3.8 percent to our gross domestic product,” as a result of the government’s push to set virtuous cycles of economic multipliers in motion (Grunwald, 2012, p. B2). On *TWP*’s Business pages, Michael Grunwald observes that although the sum lost on Solyndra’s loan guarantee was substantial, “Independent reviewers have found that the overall [clean energy loan] portfolio is in fine shape” (Grunwald, 2012, p. B2). Moreover, “Republican investigators have found no evidence that cronyism drove the Solyndra loan” despite sustained attention to the issue and hearing room histrionics (Grunwald, 2012, p. B2).

5.2. *TWP*’s Editorials

All of *NR*’s discourse can be construed as editorial, including the ostensible ‘beat’ reporting of Stiles. By contrast, *TWP* follows the traditional distinction between reporting and editorial content that are labelled as such. *TWP*’s first unsigned editorial on Solyndra chastises Obama, positing that he should be “more upset” about the loss of government funds around Solyndra’s bankruptcy (“The Solyndra syndrome,” 2011, p. A20). The editorial approvingly repeats Treasury Secretary Lawrence Summers’ conviction that “government is a crappy vc [venture capitalist]” (“The Solyndra syndrome,” 2011, p. A20); a claim that overstates the scope of government action as the loan guarantees and grants were not simply ‘ventures’ but flowed to projects that were beyond initial stages of development. *TWP* doubles down a month later when it claims that government investment in new technologies is overly risk-laden and leaves taxpayers exposed (“No fun in the sun,” 2011).

Despite the unsigned editorials’ line, two editorials published in *TWP* by outside contributors give strong support to government intervention into clean energy industries. California’s Republican governor (2003–2011) Arnold Schwarzenegger (2011) observes that the government already massively intervenes in energy indus-

tries via subsidies. However, he continues, it does so for the established players in fossil fuels, with 10-times as much subsidy as is devoted to renewable energy. Schwarzenegger claims that, in California, green energy had grown 10 times faster than other economic sectors since 2005 and emerged as a significant source of investment and employment. The former governor expressly dismisses the “simplistic and misleading one-word argument against clean energy—Solyndra!” (Schwarzenegger, 2011, p. A19).

In *TWP*'s pages, the chairman of the National Small Business Association, also editorializes against Solyndra flak hysteria with arguments for the government to continue to make interventions on behalf of renewable energy. Larry Nannis laments that the harsh discourse around Solyndra could disable action for the green economy: “Companies seeking loan guarantees might resist applying for them for fear of being part of a congressional hearing” (Nannis, 2011, p. G2). Nannis rebuts the “government is a crappy vc” line, noting that private sector could readily be called a ‘crappy venture’ capitalist; failure for as many as 19 in 20 venture capitalist projects is typical, while a success rate of one in three is “a home run” (Nannis, 2011, p. G2). Rather than throwing money around, Nannis calls for “complete due diligence process and the understanding that risk is part of what we do” in seeding the successful industries of the future.

In other words, *TWP* presents a ‘something for everyone’ grab-bag in its discussion of Solyndra and the larger market system. This approach may not nail down the truth but, in contrast with flak, professional procedures of reporting are at least enacted in good faith.

6. Conclusion

To reiterate, despite furious efforts at *NR* and on the right more generally, the Solyndra flak narrative did not gain flight as a full-blown scandal storyline. This was due to the ‘business-as-usual’ character of a firm failing in an emerging industry as well as the irreducible absence of evidence of government malfeasance to nourish a scandal narrative. Nevertheless, Solyndra has continued to function as a scandal-signifier for the political right. In this vein, *Fox News* sensationalizes and contentiously narrates a 10-year commemoration of Solyndra’s loan guarantee (Diaz, 2019). *Fox News*’s report concludes with unqualified denunciations of government intervention into the economy from a Trump factotum, in spite of the favorable record of government intervention to steer markets as needed. In this view, the Solyndra flak campaign was one episode in the political right’s highly regimented, long game campaign to degrade the public’s perception of government efficacy vis-à-vis management of the capitalist economy in pursuit of an unrestrained, deregulated market (Mayer, 2016; McLean, 2017). The flak campaign that rallied to Solyndra can also be interpreted as part-and-parcel to other arm-waving efforts to tarnish Obama’s adminis-

tration between election cycles (for example, the risible ‘birtherism’ flak narrative).

As concerns the two publications in relation to their platforms, both *NR* and *TWP* were long-established print publications prior to the rise of the Internet. At present, *NR* can be construed as the more digitally oriented media organ. *NR* is largely open to any reader with an Internet connection while *TWP* has substantially retreated behind pay walls. In this investigation, the more traditionalist publication performs better as a news organ with a stronger, if flawed, commitment to good faith reporting. Nonetheless, *TWP*’s commitment to objectivity and elite sources (congressional Republicans) also enabled flak to circulate in its discourses.

At the same time, in this investigation’s comparison, the digital platform *NR* falls far short of the relatively paleo-news *TWP*’s standards since *NR* is devoted in the first instance to ideologically driven partisanship that is readily compatible with flak campaigns. *NR* may have always been a flak mill surveilling political opponents from its origins in 1955 (Goss, 1996), but the seductions of the deregulated and unfiltered online ecosystem readily intensify tendencies toward flak.

Along with critical assessments of news performance, constructive prescriptions for the future of mainstream journalism are in play in this investigation. A better model of reporting prioritizes truth over the techniques of “indiscriminant objectivity” (Boorstin, 1987, p. 22) and further implicates educating the public over merely informing it. Solyndra hearings were ‘pseudo-events,’ in Daniel J. Boorstin (1987)’s terminology. Yet, the hearings were still covered straight-up in *TWP*—even as one congressperson flagged the hearings’ flak purpose to contrive scandal. When a political faction and the events it convenes are designed to fake even their context for flak purposes, news that ceases to merely transcribe—indeed, news that calls out and labels flak as such while refusing to engage or humor its narratives—is vital to the cause of truth.

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Article

The Commodification of Virtual Community Content in Increasing Media Traffic

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Abstract

Traffic is activity on a page of a site resulting from Internet visits and activity on that page. The more a site is visited, and the more activity Internet users engage in on the site's pages, the higher its traffic. Traffic is like an audience on a television station, listener to the radio station, or circulation on print media. Traffic is the overall activity of readers on online media sites. Data collection from cnnindonesia.com is the commodification of content in an online forum, as in Kaskus and Kompasiana. The media are certainly competing to present exciting news content so that their readers remain loyal to their online. Exciting content on news portals and other efforts are employed solely to increase traffic. One such effort is the use of referral traffic, that is traffic which comes from other websites other than the major search engines, sources such as forums, blogs, and minor search engines are categorized as referral traffic. Visitors come to the online media portal through other websites and blog intermediaries. Although the contribution of made by referral traffic is not as great as the other sources, this practice considered quite useful as it does increase traffic in the media, traffic which is essential—and a measure of success.

Keywords

commodification of content; media traffic; online forum; virtual community

Issue

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1. Introduction

Current technological developments have prompted change in various fields. Alongside technological developments, the mass media also develops (Jenkins, 2006). Electronic devices such as radio, television, and computers have led to a communication revolution requiring all information to be conveyed quickly (Kaplan & Haenlein, 2010; Turow, Hennessy, & Draper, 2015). Moreover, with the emergence of Internet technology, the speed of information is critical. The Internet has overcome the spatial and temporal limitations of previous information dissemination processes (Benkler, 2006; Jenkins, 2006; Kamary, 2018).

The presence of the Internet has increased the pace of technological development, almost all over the world today, the Internet can be accessed anywhere. Based

on the We Are Social report, there are some astonishing facts: Global Internet use has now reached more than 4,5 billion people, with more than 3,8 billion of those using social media (We are Social, 2020). Internet usage in Indonesia is also relatively high, the Ministry of Communication and Information Technology recently revealed that 63 million people now have Internet access (Kominfo, 2020). Of these, 95% use the Internet to access social networks.

Internet users in Indonesia generally access web pages directly (Lim, 2011). Various forms of access to information and entertainment are now easily accessible from various parts of the world through the Internet. The ease of access to all types of information is also an advantage of the Internet as it has given rise to the evolution of many types of communication media, namely writing, images, symbols, and sounds. Everything is

integrated neatly because of the existence of communication and information technology.

One of them is the development of Internet-based media, which is now a new media choice for the public to communicate. Since the development of the Internet in the 1990s, new journalism has emerged to facilitate journalists' work processes (Lim, 2011). With several different features from traditional journalism, it provides unlimited possibilities for the processing and dissemination of news (Romli, 2012, p. 19). McQuail (2010, p. 43) states that "The new media's main characteristics are their interconnection, their access to individual audiences as message recipients and senders, their interactivity, their various uses as open characters, and their ubiquitous nature."

In contrast to print or electronic media, new media content reflects a combination of audio, audio-visual, and print simultaneously (Lim, 2011). Thus, online media is the 'third generation' mass media after print media (newspapers, tabloids, magazines, books) and electronic media (radio, television, and film/video). Online media is defined as mass media that is presented online via Internet websites.

Online media has two main principles of knowledge management. The first principle is that knowledge stored digitally, which has been uploaded and stored on an Internet network maintained, categorized, analyzed, updated, and disseminated more efficiently. The second principle is that access to data should be facilitated for. can be downloaded by individuals and organizations to disseminate the information for effective information exchange.

Currently, the number of online media in Indonesia is increasing. The 2018 Indonesian Press Freedom Index Survey data claims that there are 47,000 mass media throughout Indonesia. Of these, 2,000 are print media, 674 are radio, and 523 are television, local, and other online media sources. However, the Press Council (2018) reported that, of the 43,000 online media in Indonesia, only 168 were actually able to work professionally. The proliferation of online media has intensified competition between providers to become the best in providing information.

Previous studies have mostly raised the topic of online media management strategies carried out by mainstream media in Indonesia. Such as research on the use of online media between readers, profit, and ethics (Margianto & Syaefullah, 2011), democratization and corporation of media in Indonesia (Lim, 2011), the landscape of the media industry in contemporary Indonesia (Nugroho, Putri, & Laksmi, 2012), multimedia practice in online journalism in Indonesia (Adzkiya, 2015), and cultural commodification as a discourse of cultural tourism in Indonesian mass media (Sulistyorini, Sudardi, Wardo, & Wijaya, 2017). Global academic interest in economic practice in Indonesian media has attracted the attention of various studies on the impact of audiences on the media (Arsenault & Castells, 2008; Bolin,

2012, 2018; Fuchs, 2014; Hesmondhalgh & Baker, 2011; Kamary, 2018; Kaplan & Haenlein, 2010; Landay, 2008; Terranova, 2000).

In the media industry approach, it focuses on the role of the audience who is the victim of commodification in the mass media where the audience has become a commodity for advertisers. The more the audience, the more interested the advertisers will be to add to their advertisements in the media. Commodification in the mass media has become a popular concern today due to the large and rapidly developing information needs. In the media industry approach, it cannot be separated from the role of the audience who is the victim of commodification in the mass media. Audience has become a commodity for advertisers, meaning that the more the audience, the more interested the advertiser will be to reduce their advertising in the media. Commodification in the mass media has become a popular selling material today, this is due to the large and rapidly developing information needs. Vincent Mosco (2009, p. 134) defines "commodification as the process of converting goods and services that are valued for their usefulness into commodities that are valued because of what is provided for market needs. Commodification converts use value into exchange value for profit".

Kaskus and Kompasiana are basically online forums that fall into the category of social media. Both employ the user generated content model in which content is generated by previously registered users. Online forums are a part of social media where users can interact with each other, share information both individually and collaboratively on a certain scale, and simultaneously provide feedback on certain issues. As has been found from previous studies on economic practices in media, it is interesting to observe how mainstream media such as CNN Indonesia employ online forums such as those managed by kaskus.co.id and kompas.com. The purpose of this article is to explain how the practice of content commodification is to show that amid efforts to dominate the media, it continues to seek opportunities to take advantage of online forums for profit-oriented strategies and illustrates that the capitalists' control of everything has converted personal values into exchange values.

A media company can make sufficient revenue from advertisers' in the media (Arsenault & Castells, 2008). Online media itself can have a lot of incoming advertisers if their traffic is high. Simply put, traffic is the activity on one page of a site that results from visits and activity on that page. The more a site is visited, and the more activity Internet users perform on that site's pages, the higher their traffic. Traffic is like the audience on a television station, listeners on a radio station, or circulation in the print media. Traffic is the overall reader's activity on online media sites. The more people visit a news site and linger there and engage in 'click' activities, then that is a business advantage of the media. Traffic is what advertisers offer to place advertisements (Margianto & Syaefullah, 2011, p. 29).

In getting traffic, the media are competing to present exciting news content so that readers remain loyal to their online media. Apart from presenting interesting content on news portals, other efforts are made solely to increase the traffic itself. One of them is by using referral traffic. Referral traffic comes from websites other than the main search engines such as forums, blogs; even traffic coming from minor search engines is categorized as referral traffic. Visitors come to the online media portal through other websites and blog intermediaries.

McQuail (2010, p. 205) says that media products are commodities or services offered for sale to a particular group of potential consumers. Meanwhile, the codification of content refers to changing messages from a set of data by the media to media content or journalistic products that are marketable and prioritize profit-oriented (Burton, 2005; Fuchs, 2014; Hesmondhalgh & Baker, 2011; Terranova, 2000). So, commodification refers to converting use value into exchange value and the various ways this process is extended into the social sphere of communication products, audience, and labour, which have received little attention. This commodification process illustrates how capitalism takes its capital through changes in use value to exchange value (Mosco, 2009).

2. Literature Review: The Commodification of Media Traffic Practices

According to Karl Marx, commodities occur from a wide range of needs, both physical and cultural, and their use can be described through various ways commodities can emerge from various kinds of social need, including physical satisfaction to the fulfillment of status in society. Thus, use-value is not only limited to meeting survival needs but extends to satisfaction based on social needs (Mosco, 2009, p. 141). So, commodification refers to converting use value into exchange value and the various ways this process is extended into the social sphere of communication products, audience, and labour, which have received little attention. This commodification process illustrates how capitalism takes its capital through changes in use-value to become an exchange value.

According to Adam Smith, use value and exchange rate are two values that can differentiate a product (Mosco, 2009, p. 140). Adam Smith and classical economics distinguish between products whose value comes from the satisfaction of specific human want and need, referred to as use-value, and products whose value comes from the product's ability to be increased, referred to as exchange value. Commodification is an attempt to convert anything into a commodity or merchandise as a means of getting profit. Media content is a commodity to increase audience size. Audience number is a commodity that can be sold to advertisers. Incoming advertisements are profit and can be used for media expansion. The expansion of the media generates even more power in controlling society through the sources of media production in the form of technology, networks and others.

There are two significant dimensions in the relationship between commodification and communication: communication processes and the technologies that contribute to the process of commodification in general. For example, due to the development of technology and communication channels, industrial production has been transformed, and distribution and sales systems improved. This can improve control and make producers more responsive to consumer tastes (Sulistyorini et al., 2017).

The forms of commodification in communication is the commodification of media content, audiences, and workers. The commodification of media content involves changing messages from data sources to thought systems and the creation of marketable products. The commodification of media content is influenced by the creation of surplus or profit value—media content made in such a way as to bring profit to the owner from the capital.

Mosco (2009) states that “mass media have two roles: a direct role of creating surpluses through the production and exchange of commodities” (p. 147). Smythe (as cited in Mosco, 2009, p. 148) mention that indirect commodification through advertising in the creation of surplus value through other sectors of commodity production. Advertisers also play a role in determining the content of the media, thus creating audiences as commodities; takes a different view of these ideas by emphasizing that the audience is in fact the primary commodity of mass media. In Smythe's view, mass media is formed from how media companies produce audiences and send them to advertisers. In his view, the process creates a respectful and binding relationship between the media, audiences, and advertisers. Media programs or content are used to form audiences, and advertisers pay media companies to gain access to such audiences, thereby bringing the audiences to the advertisers.

The characteristics of media production emphasize the dimensions of individual creativity (Kamary, 2018). This value is what distinguishes the media industry from other industrial sectors; it requires a relatively high level of conceptual thinking and so it requires both manual and skilled labour (Landay, 2008). This distinction occurs in the commodification of education, which ultimately results in a managerial class that form part of the capital owners or which represents their interests.

Bolin (2018, p. 247) states that the phenomenon of commodification has commercial purposes, which will directly eliminate idealism from the media (Bolin, 2018, p. 247). The media have been carried away in economic and political currents and become a contested business—one which has sacrificed its own audience. Audiences who should be seen as free and active have turned into mere tools for use by the media to generate as much profit as possible, and have become just ratings and share data. The development of the global market has made media companies surrender their audiences to advertising companies. So, in order to gain an advantage, broadcast-quality is no longer the priority.

Traffic is the activity on a page of a site resulting from Internet user visits and Internet user activity on that page (Margianto & Syaefullah, 2011, p. 29). Two things intersect about traffic with editors and journalists. First, of course, traffic is gained by the attractiveness of a news site to its readers. The allure of news site can be its credibility, which is likely to encourage users to visit. Second, traffic may also be generated from interaction in the spaces provided by the news site. For example, traffic can be generated from discussion in its comment pages. Many readers open a story many times because they are following the discussion on its comments page. Traffic is also generated from other interactive services outside of the news. For example, specific news sites provide forums, games, or the ability to buy products (Margianto & Syaefullah, 2011, pp. 30–32). In the newsroom, traffic is obtained as a result of news productions made by journalists. Readers click on the news which produces a pageview. The more news is clicked on, the bigger the pageview gets. The bigger the pageview, the greater the business potential that can be achieved.

Three types of traffic need to be known: organic traffic, direct traffic, and referral traffic (Evenbound, 2019). Organic traffic is the traffic which comes from an engine. Recommended search engines are trusted ones such as Google, Yahoo, and Bing, and image searches such as google images. Organic traffic indicates that a website or blog is popular in the eyes of search engines. Direct traffic is direct traffic or visitors coming to a website/blog directly without intermediaries. They enter directly by typing the name of the website in the browser. Websites that have direct traffic are likely already well-known because visitors stop by the website/blog directly without website intermediaries. Referral traffic comes from websites that do not use search engines such as forums, blogs, or even the more minor search engines which are also categorized as referral traffic. It means that visitors come through an intermediary for another website/blog. To get this referral traffic, visitors can take advantage of social media sites, social bookmarking, forums, and blogs.

Referral traffic is a google method from referral sources outside its search engine (Bashara, 2018). When someone clicks on a link to a new page on a different website, Google Analytics tracks the click as a referral visit to the second site. The originating site is called a 'referrer' because it refers to traffic from one place to the next. Referral traffic is one of the three statistics that Google Analytics tracks. The referral traffic will be routed through the user's browser, so this information is tracked and passed through the HTTP referrer. These referrals identify where the user is from and where they are located. When someone clicks on the link provided, the browser sends a request to the referral server. The request includes a field with data about the last site the user visited (Van Covering, 2008). Google Analytics then captures this data and reports it to the website owner as a referral domain, such as twitter.com or facebook.com.

3. Method

The paradigm used in this research is the critical paradigm considering the influence of the presence of interests and power networks in the process of production and reproduction of meaning. Critical analysis emphasizes the constellation of forces that occur in the process of thinking that sees discourse as a political meaning and represents the ideology of the group. The data were collected through interviews and document observation techniques. Interviews were conducted with an unspecified number of informants, but based on their urgency related to the research topic, mainly traffic manager cnnindonesia.com. The document observation includes traffic data and evidence that points to the benefits both of them have achieved. The data collected was categorized, analyzed, and then conclusions were drawn. Data collection was carried out from 2019 to mid-2020.

Kaskus is the largest buying and selling forum in Indonesia. Kaskus is a home for anyone to find everything they need. Millions of people use Kaskus to find information, knowledge, join new communities, to buy and sell all kinds of goods and services at the best prices. Kaskus is divided into two parts, namely Forum and Buy and Sell. Forums are places to discuss anything. Buying and selling is a place for buying and selling all kinds of products. Kaskus discussion forums often report information that is not found on other news portals. Kaskus Buy and Sell have also proven to be the most comprehensive place to find all kinds of products and services. Kaskus also created jargon and distinctive terms that eventually formed part of the culture of Internet users in Indonesia. Some of them are Juragan, Pertamina, Rakber, Cash on Delivery, and other terms.

Kompasiana is a blogging and online publishing platform developed by Kompas CyberMedia. Each content in the form of articles, photos, comments made, and is broadcast directly by Internet users who already have a Kompasiana account is commonly called Kompasianaser. Kompasiana's uniqueness lies in the simultaneous management of content. Although every article made by Kompasianer goes live, Kompasiana moderates its content at all times to ensure that no one violates their terms and conditions.

4. Findings

4.1. Content Modification in Online Forums

CNN is the first TV news channel in the United States owned by conglomerate Ted Turner. From its launch in 1980 until now, CNN has reached more audiences by working with national media in many countries. In 2013, CNN International entered into an agreement with Chairul Tanjung as the owner of CT Crop to establish CNN Indonesia. The media, the result of this franchise collaboration, is present as a television station and online

news portal, cnnindonesia.com. Even though it is under two significant media companies, CNN International and Transcorp, cnnindonesia.com still stands alone in that it formulates its own editorial policy. However, it is possible to help each other in large-scale coverage. SEO Specialists cnnindonesia.com gives a statement:

The cnnindonesia.com greeted readers for the first time on October 20, 2014. Even though it is only in its infancy, cnnindonesia.com has managed to rank in the top 10 of the Comscore version of Indonesia's digital media with 7,3 million Unique Visitors (UV) and 53,85 million Page Views on desktop and mobile web. In the Comscore December 2017 data, cnnindonesia.com is approximately 100 thousand UV away from Kompasiana in the ninth rank and 1,5 million UVs, and this is followed by the presence of CNN Indonesia TV on August 17, 2015.

In online media culture, traffic is the main aspect that becomes a commodity for profit. What CNN Indonesia has done with online forums such as kaskus.co.id or kompasiana.com is an illustration of social media trends based on the interests of capital accumulation. Activities in online forums are directed to increase traffic which is then directed to get sponsors that lead to capital. Online forums are one of the doors for the two media to increase traffic figures. For CNN Indonesia in managing the business, traffic is clearly directed to be sold to sponsors. Traffic data such as the number of visitors, how long it takes for visitors to access online forums and their interactions will be shown to sponsors to advertise on CNN Indonesia.

The staff charged with writing are asked to write six articles per day, four of them are to be uploaded to Kaskus; two to Kompasiana. Article material is obtained from previously broadcast news from CNN Indonesia. In the selection of article material, the author is released by the boss or user. However, based on the supervisor's direction, news that can be used as article material is light news that is not time-bound, such as news about health and exciting tips about lifestyle. The article material selected from the news on cnnindonesia.com, following an explanation from social media operators:

The operator is asked to rewrite the news into an interesting article in Kaskus and Kompasiana. Rewriting is done by first understanding the characteristics of each platform: Kaskus and Kompasiana. The Kaskus's articles are made lighter and more attractive. The trick is to add an image related to the article and to make an emoji visible on Kaskus. Meanwhile, in Kompasiana, articles are produced more seriously, as is the news in online media in general. Articles on Kompasiana must be based on facts and not copies of other writers' articles. If the article turns out to have an element of a hoax or to have been plagiarized, it can be deleted.

Besides Kaskus and Kompasiana's characteristics, the article also adds a news source link from cnnindonesia.com. With this link, readers at Kaskus and Kompasiana can directly visit news on cnnindonesia.com without bothering to look for themselves. If readers click on the link provided, they will be directly connected to cnnindonesia.com. This will increase the amount of traffic on cnnindonesia.com. If the six articles have been completed, then the author will report their work to the user. Job reports are in the form of a list of links in Kaskus and Kompasiana that were carried out that day. The list of links is entered into a document on Google Drive, to be seen and checked by the user.

Kaskus and Kompasiana are online forums that can be used by anyone, in both, people can write the articles they want to write. Various articles and discussions can be found in Kaskus and Kompasiana. Starting from the latest news to light tips about life and much more. Of course, these two forums are written in a different style to online media in general; news writers there must follow the rules enforced by press institutions such as the Indonesian Journalists Alliance, whereas no such rules exist in the Kaskus and Kompasiana forums.

Those working for Media in Kaskus and Kompasiana are free to upload any articles, even articles from materials whose sources are not yet transparent. Not infrequently, for example, in Kaskus, there are articles uploaded without confirmation from related parties that can cause hoaxes. Then at Kompasiana, the writers of articles in the forum also often label themselves as citizen journalists who are carrying out work like media journalists in general. However, the veracity of such articles often cannot be ascertained with certainty. Regardless of how the article content is made, the point is that people can write any type of article content for Kaskus and Kompasiana.

The mass media has a function to convey information, provide entertainment, persuade audiences to do certain things, such as transmit cultural values (Bolin, 2012; Castells, 2007; Schapals & Porlezza, 2020). The freedom to write articles in Kaskus and Kompasiana is used indirectly to increase economic income in a media, in this case, cnnindonesia.com. News content that has been published on cnnindonesia.com is intentionally rewritten to generate profits. The news chosen is usually light such as the Lifestyle channel news, where news about health or beauty tips are most frequently rewritten. This rewritten article will not be a matter of much concern to many parties, but it will still be an engaging read regardless of its publication date. An example of the news entitled "Increased Diabetes Risk Amid the Pros and Cons of the Keto Diet." This news was chosen because it is light and easy to reach by many groups rather than news from the National channel.

In Kaskus, the article content made with material obtained from news on cnnindonesia.com is rewritten in its own style of writing. In Kaskus, for example in Figure 1, the article is made more attractive, photos or images

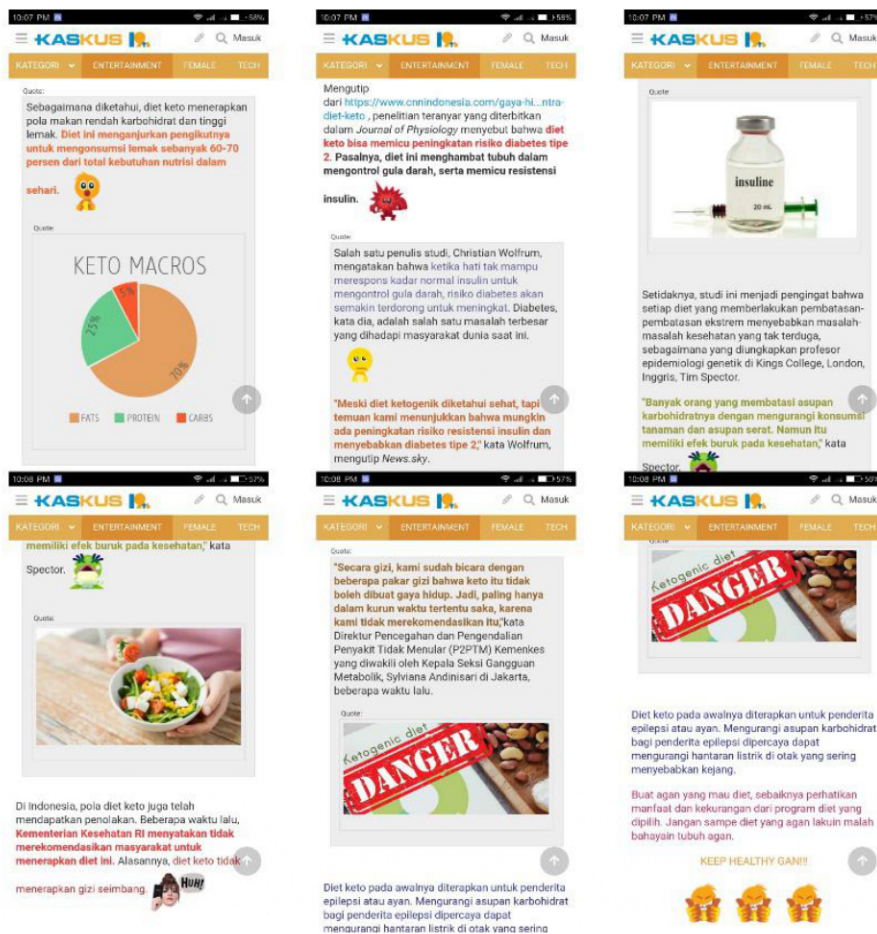


Figure 1. A modified article for kaskus.co.id. Source: CNN Indonesia. Source: Widiastuti (2019).

are usually added to better illustrate the content under discussion. Its articles are also usually embellished with emojis that are available on Kaskus, the goal is to make the articles exciting enough to be widely read.

Even though the articles made already have the functions of mass media in general, such as education, information, and entertainment, other things are contained in the article content so that the practice of commodification occurs. This medium is the addition of a news source links, namely news from cnnindonesia.com. The content of articles on Kaskus is modified to perform other functions besides education, information, and entertainment.

Similar practices also operate in Kompasiana, although they are written in a different style (Figure 2); Kompasiana’s articles are made more like news in online media in general and tend to include more writing with only a few photos or images. The source material for Kompasiana also came from news on cnnindonesia.com, which was rewritten. The article content in Kompasiana was also modified by adding news links from cnnindonesia.com.

Commodification is the process of converting use values into exchange rates. By media capitalists, content is commodified in such a way as to become a commodi-

ty that generates profits or surplus value. In the realm of online forums, where users are both consumers and producers of information, user data in the form of any information accessed, downloaded, uploaded, accessed on social networks that is including users interests and interactions with other users, etc. is sold to advertisers as a commodity. This phenomenon, like CNN Indonesia as mainstream media, utilizes detailed information on kaskus.co.id and kompas.com users as a form of refinement of the content commodification model from online forums. It can be interpreted that the media is a means of change to make a conversation in an online forum tradable. In this case, commercialization in the media industry occurs through the commodification of content to transform information exchange so that it can generate profit.

4.2. Online Forum for Referral Traffic in cnnindonesia.com

Typically, news sites use traffic counting engines such as Google Analytics, Comscore, or Effective Measure as a traffic indicator engine on their site. At least, there are two profit-seeking models employed by Kompasiana by utilizing existing traffic. First, programmatic buying

unique visitor, page-view, and length of visit (Margianto & Syaefullah, 2011). The visit can be considered how many people visited a site in the first 30 minutes. A unique visitor visits a computer device with the same IP address and browser in a month. Meanwhile, a page-view is the number of pages viewed. Then, the visit's length shows how long people stay on their visit to the site. Traffic figures can be seen or obtained from subscribed traffic machines, one of which is Google Analytics.

4.3. Content Commodification and Referral Traffic as Increasing Media Traffic

Media companies, apart from spreading the word to the public, are of course businesses run to gain corporate profits (Schapals & Porlezza, 2020). The economic transformation which has occurred now means that a media company business can make a living from advertisers willing to place their product advertisements among their media (Arsenault & Castells, 2008). However, it is not an easy matter to get advertisers. The media, especially online media, must have data to prove that their offerings are in great demand by the public. In online media, the amount of traffic becomes a gateway for advertisers to advertise on their media. In short, traffic is a large number of visitors who enter the online media portal; the higher the amount of online media traffic, the more advertisers will enter the online media. So, to generate increased traffic, one of the means that the media employs is the commodification of content.

One of those who practice this is cnnindonesia.com. Although cnnindonesia.com does not use content commodification on the news published on its media portals, they use other platforms to increase its media traffic. From there, the commodification can increase their traffic indirectly. However, unfortunately, other functions were deliberately changed for the sake of profit. Commodification is an effort to convert anything into a commodity or merchandise as a means of getting profit (McQuail, 2010). Commodification relates to how changing goods and services and their use-value into a commodity that has an exchange rate in the market. Media products in the form of information and entertainment cannot be measured like goods in general economic measurements, such products are somewhat less tangible than other goods and services (Landay, 2008). Media products can, however, still become tradable goods that can be exchanged and have economic value.

The commodification in cnnindonesia.com occurs not on the news they make, but on the codification of article content in Kaskus and Kompasiana. The goal is to generate referral traffic for cnnindonesia.com. The use of Kaskus and Kompasiana is recognized by SEO Specialists cnnindonesia.com as below:

Because of the two forums are included in the list of 50 sites that are frequently accessed by alexa.com version. The forums use a natural thing to do in cal-

culating CNN Indonesia with Kaskus and Kompasiana both benefit from this practice. Thus, this practice is a legitimate activity to be implemented to increase traffic on cnnindonesia.com.

The material for making articles in Kaskus and Kompasiana is previously uploaded news from cnnindonesia.com which are rewritten. Although there is nothing wrong with writing articles in Kaskus and Kompasiana, other things are intentionally done for the media, namely placing a cnnindonesia.com link in every article rewritten in Kaskus and Kompasiana. The goal is, of course, to increase traffic to cnnindonesia.com. The content is also written as light news so that it is still safe in delivery even though it carries the name cnnindonesia.com. For online media, traffic is one of the most important elements—online media lives off traffic. From here, many online media are competing to catch this traffic, and they use a variety of ways to do so. According to SEO Specialist cnnindonesia.com:

Traffic is the most important because the success of a medium can be seen based on the amount of traffic available. Google Analytics is used by CNN Indonesia as a website analysis site to see the amount of existing traffic. In Google Analytics, existing data in the form of users, number of users, reading duration, and how many articles were read by the user when accessing the portal. Also, where the traffic sources come from can be seen through Google Analytics.

However, Google Analytics can only be accessed by people or companies that work directly with Google Analytics. Thus, the existing data is not for public consumption. However, several website analysis sites can be accessed freely by anyone, such as alexa.com and similarweb.com. In the cnnindonesia.com SEO Specialist's narrative, Google Analytics is the most precise in reading the data. Other website analysis sites have not been able to show the correct data. However, other sites can act as benchmarks that are close to the actual data.

Based on Alexa's data (2020), CNN Indonesia ranks 26th in the Alexa version of the most famous sites in Indonesia. Then, globally, cnnindonesia.com ranks 503 (Figure 3). This figure was considered quite good in the first six years of the establishment of cnnindonesia.com. When viewed in the existing graph, cnnindonesia.com has experienced a slow increase in traffic but continues to increase.

On the similarweb.com website analysis site (Figure 4), there is a substantial amount of data regarding the traffic on cnnindonesia.com. The largest traffic source (53.66%) came from 'search traffic,' also known as organic traffic, followed by introduces a sequence, a descending scale on direct traffic (31.38%), social media traffic (9.9%), and referral traffic (3.36%).

At similarweb.com, search traffic sources or organic traffic contributed 53.66% of the total traffic on

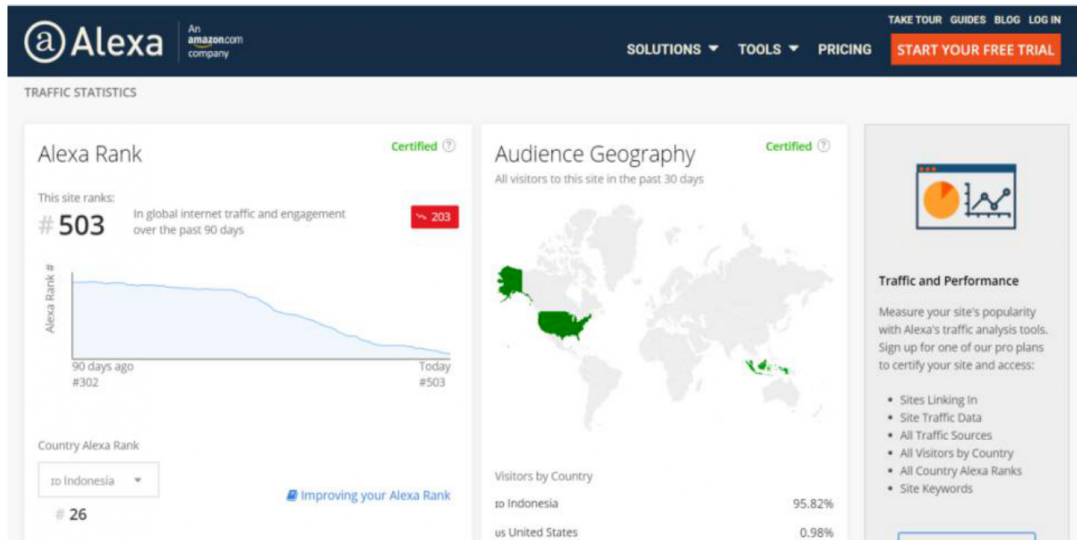


Figure 3. The rank of cnnindonesia.com. Source: Alexa (2020).

cnnindonesia.com. Organic traffic is the most considerable traffic contribution to cnnindonesia.com, which is obtained by typing keywords in the Internet search system. This data is obtained by clicking on the cnnindonesia.com portal to go directly to the cnnindonesia.com news portal. Then, the direct traffic shown on SimilarWeb.com contributed 31.38% to the total traffic on cnnindonesia.com. Direct traffic accounts for the second-largest traffic after organic traffic. Direct traffic is obtained by directly searching or clicking on the news portal cnnindonesia.com. Direct this by directly via WhatsApp and Line, by clicking the link directly to CNN Indonesia.

In this era of rapid technological development, social media also contributes to increasing traffic for online media. The success of social media in attracting the public is, of course, well utilized by cnnindonesia.com. As proven by Google Analytics, social media is the

third-largest contributor to traffic for cnnindonesia.com. At similarweb.com itself, social media traffic contributed as much as 9.9% of the total traffic. The next traffic contributor is referral traffic, where the traffic will be routed through the user's browser, so this information is tracked and passed through an HTTP referrer. This reference identifies where the user is from and where they are (Van Couvering, 2008). When someone clicks on the link provided, the browser will send a request to the referral server. The request includes a field with data about the last site visited. Google Analytics then captures this data and reports it to the website owner as of the referral domain. Based on Google Analytics, referral traffic is the fourth largest contributor to traffic, providing as much as 3.36% of the total traffic amount at cnnindonesia.com. Referral traffic is obtained from forums outside cnnindonesia.com, which are deliberately created to get this referral traffic.

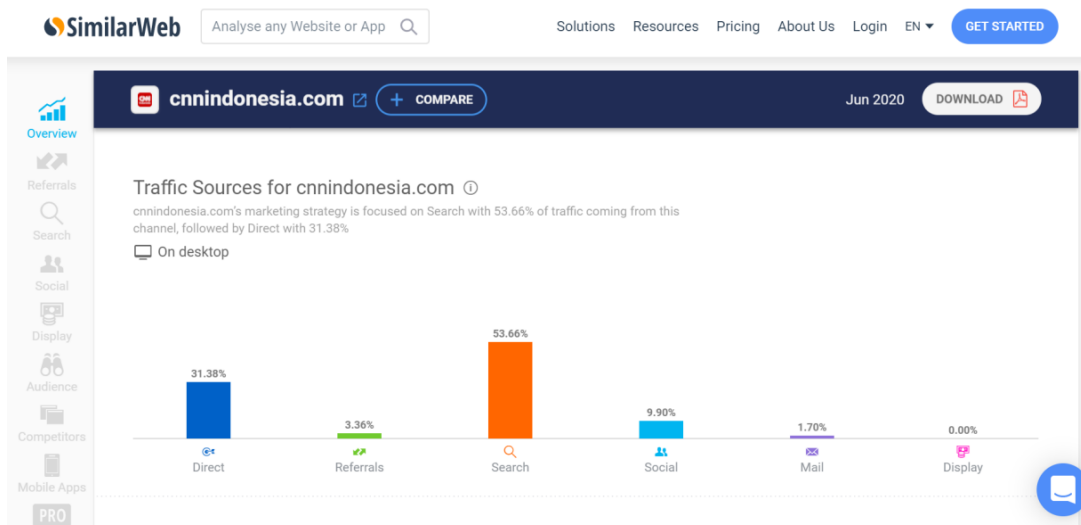


Figure 4. The traffic of cnnindonesia.com. Source: Similarweb (2020).

The media even specially prepared a channel that raises topics that are currently viral on social media. Channels are newsgroups based on issues or similar topics. Not only that, the term ‘fact-checking journalism’ has recently emerged because there is an opportunity for traffic to correct scattered hoax information, especially from social media (Bolin, 2012). This media seems to be afraid of not getting a portion of the traffic, so they collect information on social media and turn it into the news. In fact, certain topics taken from social media, developed or raised in mainstream media are actually able to increase traffic and, in some cases, they even beat news traffic from professional journalists’ reporting in the field. So, something that is being discussed on social media, if captured and reprocessed, can gain traffic.

Traffic is used in online culture to describe the extent to which a content’s productivity increases the number of readers, including their level of interaction: Such traffic leads to advertisements. Interestingly, based on discussions with several channel managers in online media, a channels’ sustainability depends on the traffic it generates. If they are unable to meet targets, discipline from management may be likely with poorly performing channels at risk of closure in order to meet the expected traffic targets.

5. Conclusion

Capitalism is a model of social-economic organization that focuses on profits; companies aim to generate capital, and so business practices are able to produce goods and services in return for monetary profit from such production. Capitalism requires individual ownership of various means of production, a market economy, and also a division of labour in order to encourage the production of media. Capitalism takes the form of a commodity production system, in which content produced can later be sold, such content is produced because of capitalist control. Commodities, in this sense, are interchangeable because they have a use value and an exchange value. The value contained in a commodity depends on how much social labour is required to produce it. The value of a commodity will depend on the cost of its production. Exchange value and use value become vulnerable when it comes to public information. The audience is potentially exploited by the commodification of content, but their efforts are not repaid even with minimal wages by the media. The media generates as much profit as possible on use value commodities and exchange value from conversations carried out by audiences through online forums.

The intersection between traffic-related to news-editorial and journalism that traffic is gained by the attractiveness of a news site to its readers. The allure could be the credibility of the news site. Because of the credibility of the information presented, many readers came to visit the site. The traffic is also generated from the interactivity space provided by a news site.

Regarding news, traffic is generated from discussions that take place on comment pages. Not a few readers open one-story many times because they follow the discussion on the comments page. Traffic from other interactivity services outside of news. For example, forums, games, or commerce provided by specific news sites.

The presence of forums in online media spaces is a must. The Internet, especially after the web 2.0 era, has made two-way communication possible, and online media that do not open spaces for participation will lose their online character. However, on the other hand, interactivity also has an essential role for a site to gain traffic. There is a traffic interest behind the initiative to present spaces for interactivity in spaces such as forums and blogs. The contribution of forums to traffic is very significant, so people do not come to these sites first because they want to see the news. So, it is no surprise that the dynamics of online forums is something the media are chasing after.

Concerning this page-view, online media generally practice a distinctive news writing style, namely news updates in fragments or fragmented news. Some call online news journalism with four paragraphs because, in one story, there are only four paragraphs. An argument that states fragmentary news is online because online news must be fast and a series of developments on an event. However, from a business perspective, shredded news is beneficial because it can double page-views. We will see later how the news of this model will conflict with the ethical principles of journalism. News is more seen in terms of interest in an exciting title, and if the title is not attractive, will not generate many clicks.

Although referral traffic is not as significant as the others, this practice is considered quite useful to help increase traffic in the media. Slowly but surely, media traffic has continued to experience growth since it was inaugurated six years ago. Traffic, for online media companies, is the most crucial thing; it is a measure of their success. Not surprisingly, all means are taken to increase it. With high traffic, advertising will come quickly, and media companies can benefit from it.

In the future, suggested that further research can find sources that discuss in-depth and detailed commodification content regarding the relationship between concepts in order to better understand the practice of giving value to social media to generate media profits. To be credible, online media is expected to provide educational, informative, and entertaining news content—as per the role of mass media. Regarding how to increase traffic, it should make news content even more enjoyable. Besides this, it could also conduct media campaigns so that people are more aware of the existence of online media.

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Conflict of Interests

The author declares no conflict of interests.

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Article

The Commodification, Spatialization and Structuration of Social Media in the Indonesian Cyber Media News

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Abstract

This research aims to uncover the commodification, spatialization, and structuration of Social Media within Cyber Media News in Indonesia. A critical perspective was used to conduct the study using a case study method. Through the use of Vincent Mosco political economy theory of media, the authors conclude that *Tribunnews.com*, the cyber media news, and the object of this research, makes social media a commodity and a content distribution channel, by involving all parts of the newsroom to utilize social media (structuration). The commodification of content is carried out by making information on social media an initial source for news production. Audience commodification by using the followers of social media accounts as a source of income. This was achieved by offering social media accounts to the advertisers to put their advertisement on official social media accounts. Through the use of social media, journalists are used by *Tribunnews.com* for profit. Utilization is carried out by distributing journalists' work to social media, and to other cyber media news included in the media group—without providing additional wages. Spatialization was carried out by using social media as a means of news distribution or amplification. The goal is to reach readers who mostly get their information through the Internet, including through smartphones and social media. Structuration achieved through the formation of a team dedicated to managing the use of social media in the production and distribution of news.

Keywords

commodification; distribution; followers; Indonesia; journalism; news; social media

Issue

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1. Introduction

This study aims to reveal the commodification, spatialization and structuration of social media carried out by cyber media news in Indonesia. Research is based on the phenomenon that the presence of social media has influenced the work process of journalism (Nasrullah, 2015, p. 155). Bossio explained that social media has changed the process of production, distribution and consumption of news (Bossio, 2017, p. 70).

Agus Sudibyo called social media a ‘frenemy,’ a friend and an enemy, or a friend as well as an opponent of press or journalistic publishing. Nikos Smyrniaios (2015), as cited by Sudibyo, said that there was a contest between social media and major media in the form of cooperation and competition (Sudibyo, 2019, p. 4). It is known as a cooperative friend because social media has recently provided a lot of information which has facilitated the production of news and has also become a channel for disseminating information from major media.

Meanwhile, it is known to compete with and oppose, because social media is essentially a media company that makes it living from the process of selling information or the commodification of information, as do the major media companies, including cyber media news.

The Cyber media news outlet under study here is *Tribunnews.com*. There are many reasons for making *Tribunnews.com* an object of research. First, when this research was conducted, *Tribunnews.com* was ranked as the top cyber media news outlet in Indonesia, based on Alexa ranking. Currently, *Tribunnews.com*, in terms of pageview visitors, is in second place in the Alexa ranking. But in terms of the percentage of search traffic, *Tribunnews.com* comes first with 61.60% (Alexa, 2020). Second, *Tribunnews.com* is one of the cyber media news in Indonesia that has viewed social media as a friend since its inception on March 22, 2010: "Since *Tribunnews.com* was founded, I have seen social media as the most important part of the overall, the strategy of *Tribunnews.com*" (Interview with informant 1, on November 11, 2019). Third, *Tribunnews.com* was the largest cyber news media in Indonesia, having a network across 24 cities throughout Indonesia.

Research on social media influencing journalism, from gathering, production, distribution, and consumption of news has been conducted by previous researchers (Brandtzaeg, Følstad, & Domínguez, 2017, pp. 1–21; Djerf-Pierre, Lindgren, & Budinski, 2019, pp. 235–247; Ferrucci, 2018, pp. 1–12; Jukes, 2019, pp. 248–258; Safori, 2018, pp. 148–162; Zakaria, & Razak, 2018, pp. 29–49). However, research on the cyber news media who engage in the commodification, spatialization, and structuration of social media, especially in Indonesia, has not been conducted by many researchers to date. Research on the commodification carried out by the media in Indonesia generally focuses on certain issues or topics, such as religion (Anggraeni, Wuryanta, & Wenats, 2020, pp. 61–73). This is why the research presented here different to previous research.

There are many reasons why research using the political economy theory of media in recent decades has become increasingly relevant and important. This is in line with the trend in the media business that takes advantage of the development of communication technology, especially that relating to social media. First, there is a growing concentration of media around the world with more concentrated power in the hands of a few and a tendency to combine the hardware and software industries. The media industry includes social media which is controlled by a large group of media. Second, there is a growing global information economy that involves increasing convergence between telecommunications and broadcasting. Third, the reduction of control of the mass media and telecommunications in the public sector due to deregulation, privatization, and liberal policies. Finally, there are problems with the development of information inequality, the digital divide (Ibrahim & Akhmad, 2014, pp. 15–16).

Research on the commodification, spatialization, and structuration of social media by cyber media news is important for two main reasons. First, the findings in this study are expected to become a comprehensive reference in the management of the cyber media news industry in Indonesia on how to use social media for managing cyber media news. Besides, the factual findings of this research can be used as reference material and study in the development of learning about journalism in the era of social media. The research questions are:

RQ1: How was social media commodified by *Tribunnews.com*?

RQ2: How was social media spatialized by *Tribunnews.com*?

RQ3: How does *Tribunnews.com* conduct structuration in utilizing social media in its journalistic work process?

2. Study of the Political Economy of Media in the Era of Social Media

The political economy theory of media is defined as a social criticism approach that focuses on the relationship between the economic structure and dynamics of the media industry and the ideological content of the media. According to this theory, media institutions including social media were considered part of an economic system that was closely related to the political system (McQuail, 2011, pp. 245–247).

Social media has now become a new force called the fifth pillar of democracy, after the executive, legislative, judiciary, and press freedom. The birth of this fifth pillar was due to public disappointment with the four other pillars of democracy (Syah, 2014, p. 14). Social media is not just a platform for sharing text or video, but in principle, it is a media company the same as any other which aim to make a profit. Social media as a media company was also the object of media economy studies.

Vincent Mosco's media studies are related to issues around the political economy of the media, problems in the labour sector in the media industry, as well as studies of the development and presence of new media. Mosco defined political economy as "the study of relations, particularly the power relations, that mutually constitutes the production, distribution, and consumption of resources" (2009, p. 2). Mosco divided the political economy into three parts: commodification, spatialization, and structuration (2009, pp. 11–17).

Commodification is the process of changing or converting the value of goods into exchange rates. There are three types of commodification in the media industry, namely content commodification, audience commodification, and the commodification of media workers (Mosco, 2009, pp. 129–140).

Spatialization is related to the extent to which the media can present their products to an audience within

space and time constraints. Structuration is described as the process by which social structures are upheld by social agents which later become part of the structure and act to serve other parts. This structuration explains the relationship of ideas between community agents, social processes, and social practices (Mosco, 2009, pp. 158, 189).

The political economy of media from Mosco remains relevant as a basis for exploring the relationship between cyber news media and social media. Social media is accessed by 85% of Internet users in Indonesia (Pertwi, 2019) and has been used as a commodity by cyber media news for profit. Apart from being a commodity, social media is also used as a distribution of content produced by cyber media news to reach a wider audience (spatialization). Journalists who form part of cyber media news must understand the dynamics of social media to support their journalistic work processes (structuration).

3. Sources of Income for Cyber Media News in Indonesia

At the end of 2019, there were 47,000 cyber media news outlets in Indonesia, of which only 2,700 (5.7%) had been verified by the Press Council—the remaining 94.3% were unverified (AMSI, 2019). The number of cyber media news creates intense competition, including competition for traffic. Traffic is the activity on one page of your site that results from visits on that page: The longer the site page is visited, and the more visitors are active on it, the higher traffic will be. The purpose of traffic for online media is to acquire advertising revenue, which is the main source of income from cyber media news in Indonesia (Margianto & Syaefullah, 2014, p. 29)

Marina Korobka explained there are six sources of income for cyber media news: paid articles, sponsored links, paywalls, the sharing of experts' opinions, PPC (AdSense) networks, and banner ads. Paid articles, also known as advertorials, are articles in cyber media news that are sponsored by a product. The sponsored links that appear in such articles provide sponsorship for the publication of the article. A paywall is a subscription system that attracts payments from users or readers to allow them to access or read certain content in full. Numerous cyber media news apply such a paywall system, including *The Washington Post* in the US and *Kompas* in Indonesia. PPC network and Google AdSense are advertisements provided by Google and installed on web pages in collaboration with Google. The owner of cyber media news only provides a place for Google's clients to advertise. Banner ads are advertisements placed directly by advertisers on news sites (Korobka, 2020).

4. Methodology

This study used a qualitative approach with a critical paradigm. The method used was a case study.

According to Rob VanWynsberghe and Samia Khan, a critical paradigm can use the case study method because a case study is a trans-paradigmatic research method that is relevant to all research paradigms both positivistic, post-positivistic, critical, and constructivist or interpretive. Besides being trans-paradigmatic, a case study is also transdisciplinary which seeks to describe in full, detailed evidence of phenomena that have been collected in various forms, such as events, concepts, programs, and processes (VanWynsberghe & Khan, 2007, pp. 80–94).

Stake (2009, p. 301) divided case studies into three types: intrinsic case studies, instrumental case studies, and collective case studies. Yin stated that a case study should be carried out when the researcher wants to do detailed and complete research on an individual or a social unit during a certain period which involves the researcher in a deeper investigation and a thorough examination of the person's behavior or observed cases. A case study is a more suitable strategy if the main question of the study regards 'how' and 'why.' With the choice of these questions, the expected answers from the results of the study may not seem very broad, but they are discussed in great detail (Yin, 2018, p. 41).

Based on the characteristics of this case study, the research requires a case-study approach. The case raised in this study was the process of journalistic work carried out by *Tribunnews.com* as they made use of social media. This research aimed to answer the question of how *Tribunnews.com* carries out the commodification, spatialization, and structuring of social media in the process of producing news for their website.

Data collection in this study was carried out in two ways. First, semi-structured interviews with nine informants managing *Tribunnews.com*, numbered 1 to 9. Informants were selected based on their duties and responsibilities in utilizing social media at *Tribunnews.com*. Second, utilizing documents such as editorial meeting notes, lists of proposed reports, and news texts related to social media published on *Tribunnews.com*. Data were collected from November 2019 to March 2020 at the *Tribunnews.com* Newsroom Jakarta and Solo, Central Java, Indonesia.

The data analysis technique in this study followed the stages of analysis developed by Creswell. First, the data from interviews with informants and data on the use of social media in publications on *Tribunnews.com* was processed and prepared for analysis. Second, the data was all read before, third, being coded manually. The code provided was then adjusted to the information we wanted to find: commodification of content, audience, workers, distribution channels, and structuration. Fourth, the coding was applied to describe the categories and themes to be analysed. Fifth, this showed how the description and theme should be restated in a qualitative narrative/report. Sixth, the interpretation of the data was carried out. The validity of the data was tested by triangulating sources, triangulating data and methods,

checking members, and making rich, detailed descriptions of research results (Creswell, 2016, pp. 264–268).

The reliability procedure used in this study also followed a procedure developed by Creswell: We checked the results of the informants' transcripts to ensure there were no errors in the transcription process. We ensured that there were no ambiguous meanings in the code in the coding process, and we asked other coders to code existing data. The coding results from other coders were then compared with the coding results from the researchers. If there were differences in coding, a discussion was held, so that an intercoder agreement could be reached between the researcher and other coders (Creswell, 2016, p. 272).

5. Result

5.1. Commodification of Content: Social Media as an Initial Source of News

Content commodification was carried out by *Tribunnews.com* by utilizing social media content as a source of initial information to produce published news. All popular social media in Indonesia, Twitter, Facebook, Instagram, YouTube, and Tik Tok are all used as initial information sources for producing news, except WhatsApp and LINE. WhatsApp and LINE are not used as initial information sources because of the large amount of misinformation and disinformation information that is prevalent in the two social media based on the conversation or chat (Interview with informant 2, on February 19, 2020).

According to informant 2, the criteria for social media content that were used as the initial source of information for the news were whether an item is viral, a trending topic, or is something sought out by many readers, whether it is unique, or contains information about celebrities, official government statements, and policy-makers. Besides, the information must not contain mystical elements, sadism, sexual harassment, expressions of hatred, expressions of ethnicity, religion, race, or anything highlighting intergroup differences.

One day, *Tribunnews.com* produces an average of 300 news stories sourced from social media. This amount is equivalent to 30% of the total news generated by *Tribunnews.com* in one day—as many as one thousand articles (Interviews with informants 2 and 1). The informant's explanation is in line with the results of observations for two months, June and July 2020 regarding the news published on *Tribunnews.com*. The social media content used as a news source in *Tribunnews.com* takes the form of photos for news illustrations, and text for references in writing news.

There are many reasons why *Tribunnews.com* makes social media content a commodity. First, information on social media is rapidly changing and highly diverse. The speed and variety of information are then used as initial information which is then processed into news

(Nasrullah, 2015, pp. 156–160). Second, if the news on *Tribunnews.com* is not made in line with the conversation or trending topic on social media, the site will be left by those readers, who previously received their information from social media (Interview with informant 1). Even though readers may receive information from social media, they still need cyber media news as a means of checking the veracity of information on social media (Interview with informant 2). This is in line with the role of journalism in the era of social media, namely as an authenticator (Kovach, & Rosenstiel, 2012, p. 184).

Third, there is a change in the behavior of news sources. Currently, news sources such as state officials and public figures upload activities, statements, and attitudes regarding issues of interest, to social media accounts such as YouTube, Instagram, and Twitter. Information on the informants' social media accounts, after being verified for authenticity, is used as part of confirmation and verification (Kovach, & Rosenstiel, 2003, p. 6).

Fourth, there is a change in the use of media by readers, especially among generation Y (millennial) and generation Z (Interview with informant 2). The two generations are highly dependent on smartphones and are highly active on social media. According to data from *socialmediaweek.org*, millennials spend an average of six to seven hours per week on social media, while generation Z, 44% of them check their social media accounts on an hourly basis ("Mengenai Karakter," 2018). According to the Chairman of the Indonesian Press Council (2016–2019), Yosef Adi Prasetyo, Generation Y and Z follow the developments taking place around them through social media (Prasetyo, 2018).

Fifth, social media conversations which become trending topics, if they are valuable and newsworthy, will be reported by *Tribunnews.com* (Interview with informant 4, on March 12, 2020). Adornato (2018, pp. 20–21) and Alejandro (2010, pp. 14–15) explained that social media has changed the process of finding news or news-gathering. Before the editorial meeting, the editor will read social media, to find out what discussions are popular on social media.

What *Tribunnews.com* has done, in the view of Yosef Adi Prasetyo (Chairman of the Press Council 2016–2019), is logical given the development of communication technology, especially smartphones which are widely used to access social media. The media must adapt if they do not want to be abandoned by their readers (Prasetyo, 2018).

5.2. Audience Commodification: Social Media as a Means of Making Money or Monetizing

The commodification of the audience is achieved by *Tribunnews.com* by monetizing its social media account followers. *Tribunnews.com* has a range of accounts on a popular social media platform in Indonesia: on YouTube under the name *Tribunnews.com* with 2,44 million subscribers, as of April 5, 2020; on Instagram, with the

name @tribunnews, it has many as 982,000 followers; on Twitter with an account called @tribunnews, it has as many as 927,000 followers; and on Facebook, with the name *Tribunnews.com*, it was followed by 8,2 million people and liked by 8,3 million. Monetization is achieved by offering followers of each of these social media accounts to advertisers. Advertisers can place an advertisement on all social media accounts belonging to *Tribunnews.com* by paying a fixed amount of money.

There are two forms of monetizing of social media audiences carried out by *Tribunnews.com*. First, as stated by informant 2, is direct selling: marketing in which *Tribunnews.com* offers advertisers direct placement of ads on *Tribunnews.com* social media accounts. Second, profit sharing with social media platform companies, using *Tribunnews.com* allowing programmatic advertising managed by social media platform providers:

Facebook is also looking for companies that want to put an advertisement on them. We placed and entered their environment. We entered their ecosystem. They put advertisements; it is up to them. Later, the profit will be shared by those who control the Facebook. (Interview with informant 1)

5.3. *Commodification of Journalists by Tribunnews.com Company and Social Media Companies*

The use of social media had resulted in the commodification of journalists by *Tribunnews.com* and social media companies. In practice, journalists not only work for *Tribunnews.com* but also indirectly work for social media companies such as Facebook, Twitter, Instagram, LINE, and YouTube—the social media platforms where *Tribunnews.com* has accounts. The reason is that the content produced by journalists is not only uploaded on the *Tribunnews.com* but also shared on social media accounts. From the uploaded content, both *Tribunnews.com* and social media benefit materially. However, journalists only receive their salary from *Tribunnews.com*; they get nothing from social media companies.

Tribunnews.com management argued that the distribution of journalists' work content to social media is normal, as part of media convergence, to get more readers. This is what in the commodification of workers is called naturalization. Naturalization is an effort by a company that considers normal, ordinary, and reasonable social relations or relations between labour and capital, and although this is exploitative, the workers accept it without thinking (Pratopo, 2017).

The commodification of journalists was achieved via several means by *Tribunnews.com*. First, disseminating content produced by journalists to other cyber media news websites located in the *Tribunnews.com* network in 24 cities throughout Indonesia, and other cyber media news within the Kompas Gramedia Group. Although it is distributed to other cyber media news, journalists do not receive any additional wages. Second, it requires journal-

ists to produce content in the form of text, photos, and videos. Each day, a journalist has a content production target; if not achieved, it will affect the assessment of their performance.

According to informant 1, the distribution of *Tribunnews.com* content to other media which is still in the same Kompas Gramedia Group is not exploitation, but rather an act of efficiently managing content. The reason is that the journalists' content actually belongs to *Tribunnews.com*, not the journalists. Such content can therefore be distributed to all cyber media news within Kompas Gramedia Group's cyber media network. Thus, other cyber media news do not need to pay to produce their content, as they are able to acquire it from *Tribunnews.com* at no cost.

Meanwhile, informant 2 explained that journalists who work at *Tribunnews.com* must have a range of skills and ability to multitask: In the era of media convergence, journalists must be able to make news in the form of text, photos, and video:

As the field reporters, they are now multitalented. They must be able to type quickly, take photos and videos, although taking videos is not as active as making news. First, after getting the news, they go to the office to make the news. Then we change it to real-time. News can be directly written and sent in real-time. This is a long process when we were first introduced to reporters. After that, the road is already established and there are new demands. They must make videos. (Interviews with informant 2)

Media owners use efficiency and multitasking to justify the commodification of journalists. Efficiency is a naturalization in the process of journalist commodification, which is then accepted as a natural state of affairs. Multitasking is a way for companies to ensure their workers are highly productive—and more likely to bring greater profit to the company. In order not to create an impression of exploitation, a false belief has been constructed that multi-tasking is a must for journalists in the current era of media convergence.

5.4. *Spatialization: Social Media as a Channel for Content Distribution or Amplification*

Tribunnews.com makes social media the primary means for the distribution and amplification of content to ensure it reaches sufficient numbers of readers. This method is done to reach readers who now consume the majority of their information consumption via the Internet, through smartphones and social media (Adornato, 2018, pp. 25–27). According to a survey conducted by DS Research in 2017, about the behavior of the Indonesian Internet community's news consumption through social media, Facebook was used by 70.85% of the Internet community in Indonesia to search for new news, followed by LINE Today, with

50.64% (DailySocialID, 2017). DS Research's research is in line with research conducted by the Indonesian Research Institute, or LIPI, stating that 60.6% of generation Z access political news through social media (Setyowati, 2018).

According to informant 1, when *Tribunnews.com* was first established on March 22, 2010, the best social media for content distribution was Twitter. However, because online media already had strong competitors on Twitter, *Tribunnews.com* chose Facebook as for its content distribution. The reason is that if they had used Twitter, they would not have been able to compete with those outlets whose followers had reached tens of millions, while *Tribunnews.com* had only just got started. Besides, Twitter is more widely used by the Internet community in Jakarta and Bandung. Outside these two cities, Facebook is more widely used. Besides, many Tribune networks are in the regions. Although Facebook is the main choice for content distribution, *Tribunnews.com* does not neglect other social media platforms for content distribution. Twitter, Instagram, YouTube, and LINE are also used for content distribution:

Twitter is a big city phenomenon such as Jakarta and Bandung at that time. It is very strong. However, outside of these two cities, Facebook was the one that was growing very rapidly. There are many Tribune Networks in the regions, so that, those two reasons explain why now, strategically we put Facebook as an important part of our distribution channel. (Interview with informant 1)

According to informants 2 and 8, not all content on *Tribunnews.com* is distributed through social media, but only content that has high traffic, lots of readers, is actual news and is much sought after by the readers. To identify which content is currently high in traffic, most sought after, and read by people, Google Analytics tools, Google Trends, and trending topics on Twitter were used: "So, we open google analytics. How about the traffic in the content or overview. If the overview is in the top 10 highest on Facebook, or throughout *Tribunnews.com*, then we choose to share it" (Interview with informant 8, on March 11, 2020).

The time for the distribution of content to social media varies, depending on the platform. According to informant number 8, for Facebook, content is uploaded every 10 to 15 minutes. There is no set time to upload content to Twitter. Content can be uploaded at any time, as long as it is new, actual, interesting, and has high attention from readers.

Meanwhile, Instagram follows the division of time between prime time and non-prime time. *Tribunnews.com* considers that the prime times to share content to Instagram is 7am–10am and 4pm–5pm. During these prime times, *Tribunnews.com* will upload content to Instagram much more frequently, as often as possible.

Content shared on social media takes the form of text, videos, and links for readers to enter content on *Tribunnews.com* (Interview with informant 8). As for YouTube, according to the platform, everything is in the form of video, as of February 6, 2021, 79,143 videos had been uploaded (*Tribunnews.com*, 2021).

Informant 8 explained that the distribution of content to LINE is only done on weekends, Saturdays, and Sundays. According to informant 3, this step was taken because there was a policy change from LINE in early 2019, which limited the amount of content shared to LINE to only 20–25 items per month. Prior to this policy change, *Tribunnews.com* content was uploaded daily to LINE, in the same pattern as Facebook (Interview with informants 3 and 8 on March 11, 2020).

5.5. Making a Special Social Media Team

The presence of social media has influenced the news production process. Journalists must pay attention and observe the dynamics that occur on social media, to be used as news writing material (Bossio, 2017, pp. 67–69). Information on social media is used optimally to support news production—as *Tribunnews.com* does.

To maximize the use of social media in the newsroom, *Tribunnews.com* formed a section to manage social media. According to informant 4, the *Tribunnews.com* social media teams were made up of 48 people: three editors, 16 uploaders, 28 reporters, and one assistant manager (Interview with informant 4). The task of the social media team is to create content by utilizing secondary sources such as social media, television programs uploaded on YouTube, distributing content on websites, and social media accounts.

Meanwhile, informant 2 explained that, in addition to forming a special social media team, *Tribunnews.com* management also required all members of the editorial team outside the special social media team, to utilize social media in the process of finding news or gathering news. This enables them to determine the issues which are active and getting the attention of netizens. Besides, at this time most news sources from government agencies, state officials, and public figures such as celebrities were using social media to convey their attitudes and views on issues or problems. This method is very helpful in the process of confirming a problem because there is no need to do a direct interview with a news source, one can simply take the information from their official social media account (interview with informant 2).

Tribunnews.com's step requiring all members of the editorial team to use social media is part of the process of involving all agents within the organization's newsroom: As explained by Mosco (2009), they structure the agents involved to be part of the structure and to serve other parts. The editorial members, specifically the social media section and those who work alongside them, all act to serve the interests of the company, which is looking for profit by making the most of social media.

6. Conclusion

This research concluded that *Tribunnews.com* has exploited social media by making it a commodity, a content distribution channel or spatialization, and by involving all sections or agents of *Tribunnews.com* in the usage of social media or structuration. The commodification of content is carried out by making information available on social media as the initial source for producing news or content uploaded to *Tribunnews.com*. As much as 30% of the content on *Tribunnews.com* sources originally comes from social media.

In using social media by *Tribunnews.com*, journalists are exploited by online media companies and social media companies as their work is distributed to other online media in a media group Kompas Gramedia Group without providing them any recompense. Besides, the commodification of workers is carried out by requiring journalists at *Tribunnews.com* to produce a certain amount of content in the form of text, photos, and videos. Unmet targets negatively affect the assessment of journalists' performance.

Spatialization is carried out by using social media as a means for the distribution or amplification of *Tribunnews.com* content. The goal is to reach those readers who nowadays consume the majority of their information consumption via the Internet, through smartphones and social media.

Structuration is carried out through the formation of a team to manage the use of social media in the production and distribution of news, as well as through the requirement that all members of the editorial team use social media in the process of producing news uploaded on *Tribunnews.com*.

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Conflict of Interests

The authors declare no conflict of interests.

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Article

Training for the Algorithmic Machine

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Abstract

In thinking about the ubiquity of algorithmic surveillance and the ways our presence in front of a camera has become engaged with the algorithmic logics of testing and replicating, this project summons Walter Benjamin's seminal piece *The Work of Art in the Age of Its Technological Reproducibility* with its three versions, which was published in the United States under the editorial direction of Theodore Adorno. More specifically, it highlights two of the many ways in which the first and second versions of Benjamin's influential essay on technology and culture resonate with questions of photography and art in the context of facial recognition technologies and algorithmic culture more broadly. First, Benjamin provides a critical lens for understanding the role of uniqueness and replication in a technocratic system. Second, he proposes an analytical framework for thinking about our response to visual surveillance through notions of training and performing a constructed identity—hence, being intentional about the ways we visually present ourselves. These two conceptual frameworks help to articulate our unease with a technology that trains itself using our everyday digital images in order to create unique identities that further aggregate into elaborate typologies and to think through a number of artistic responses that have challenged the ubiquity of algorithmic surveillance. Taking on Benjamin's conceptual apparatus and his call for understanding the politics of art, I focus on two projects that powerfully critique algorithmic surveillance. Leo Selvaggio's URME (you are me) Personal Surveillance Identity Prosthetic offers a critical lens through the adoption of algorithmically defined three-dimensional printed faces as performative prosthetics designed to be read and assessed by an algorithm. Kate Crawford and Trevor Paglen's project Training Humans is the first major exhibition to display a collection of photographs used to train an algorithm as well as the classificatory labels applied to them both by artificial intelligence and by the freelance employees hired to sort through these images.

Keywords

algorithmic culture; artificial intelligence; critical theory; facial recognition; selfies; surveillance; technological reproducibility

Issue

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1. Introduction

Today one's face has come to replace one's fingerprint as the primary unit of identification. Currently, there are over 30 companies across different sectors such as banking, beauty brands, food and beverage brands, and hotels that are developing and testing facial recognition technologies ("Facial recognition," 2019). Among them is the retail giant Amazon which in 2018 unveiled its affordable software for facial recognition Rekognition. According to Amazon's website:

Rekognition is an image recognition service that detects objects, scenes, and faces; extracts text; recognizes celebrities; and identifies inappropriate content in images. It also allows you to search and compare faces. Rekognition Image is based on the same proven, highly scalable, deep learning technology developed by Amazon's computer vision scientists to analyze billions of images daily for Prime Photos. (Amazon, 2020a)

For under \$10, now anyone can deploy this computer-vision, deep learning AI driven tool to identify 'targets'

and ‘innocents’ based on photographs or video footage (Amazon, 2020a). Rekognition has been deployed in a variety of contexts. For example, the Oregon Police Department uses the software to identify ‘persons of interest’ (Fazzini, 2018); Aella Credit on the other hand has deployed the software as means of identification of potential borrowers in emerging markets while Daniel Wellington relies on this technology to identify customers who come to return items bought in their high-end jewelry stores (Amazon, 2020b). The customer list posted on Amazon’s website also boasts working with the dating company Soul to “to detect objectionable content before it’s posted while minimizing the need of human involvement” and with the children-oriented app Go Girls, the photo service Sen Corporation, the summer camp platform CampSite. My point is that the use of facial recognition software, be it Amazon’s or that developed by one of the other tech giants such as Google and Facebook, has become a ubiquitous part of our everyday life. It is used in digital and analog spaces to identify and track all of us adults as well as our children.

The Rekognition software enables the recognition of both loyal customers and those deemed undesirable. Rendered through the Rekognition algorithm, the individual becomes either a celebrity or a stalker; in other words, either a legitimized public figure or a criminalized private citizen. Rekognition is indeed being sold to celebrities as a way to manage fans and stalkers and this dichotomy is anchored in the public description of the algorithm itself. In a sense then, algorithmic surveillance is constantly categorizing the humans that it detects into honorific and repressive categories. The repressive use of the algorithm is particularly problematic because of the perceived veracity and actual factual inaccuracy with which it operates. Recently, Pasco County Sheriff’s office deployed a biased algorithmic predictive system that “generates lists of people it considers likely to break the law, based on arrest histories, unspecified intelligence and arbitrary decisions by police analysts” and then sends deputies to interrogate the targeted individuals (McGregory & Bedy, 2020). In verifying the criminal status of individuals, facial recognition has also often proven to be inaccurate; this inadequacy has been demonstrated by multiple studies and incidents. Notably, Robert Julian-Borchak Williams was arrested based on a comparison of two photographs taken by a surveillance camera and his driver’s license (Allyn, 2020). The match was justified by an argument that algorithms are objective and can identify criminals better than humans based on an assessment of similarity between visual images. This was one of few cases in which the “police admitted that facial recognition technology, conducted by Michigan State Police in a crime lab...prompted the arrest” (Allyn, 2020). Algorithms are deployed in all aspects of our lives and have come to guide biopolitical decisions on our behalf. What is different here is the biopolitics of everyday life are now entrusted in a technological system that is further curtailing the role of humans as the decision makers.

Human agency, in other words, is relegated to the production of ‘raw’ material that is to be gathered, accessed, categorized, and acted upon through algorithmic means on behalf of technocratic corporations.

As their training base, facial recognition algorithms often use ‘scraped’ consumer photographs (i.e., taken from the Internet without notifying users) such as selfies and digital images as well as state-issued photographs such as those used on driver licenses. Consumer photographs posted on Amazon Prime Photos were used without the explicit permission of the users who took and uploaded them for the training of the Rekognition algorithm. The Digital photographs became the basis for algorithmic surveillance and as such, they permeated not only the social media landscape but also the space of algorithmic culture more broadly. As the windows to our souls are reshaped into iris scans and the pictures of our minds become faceprints, it is important to note not only when and how these scans and prints are used to assess the risk that one poses to society but also when and how our eyes and faces became measurable windows/pictures in the first place.

Algorithmic culture functions as a technological culture rather than simply as a digital media culture. Digital culture has traditionally articulated to the ways in which digital media has shaped culture, whereas in the context of algorithmic culture, digital and algorithmic technologies well beyond media are shaping society. As I have argued, “[I]n the context of an algorithmic culture, then, it is increasingly important to understand the ways in which algorithmic structures through recognition, calculation, automation, and prediction are shaping everyday life” (Hristova, 2021, p. 3). The term technological culture, as coined by Jennifer Slack and Gregory Wise (2015, p. 9), broadly describes the ways:

Culture has always been technological, and technologies have always been cultural. Technologies are integral to culture and not separate from it....Human culture has always existed in relation to what we understand to be technologies: from voice, stone, and fire, to clock, computer, and nanotechnology.

As such, the contemporary moment can be seen as the orientation of a culture towards a new technology—namely that of algorithmic technologies and should be discussed in the context of technological culture alongside notions of mediated culture. The term algorithmic culture “draws attention to the reality that culture is increasingly explained by, responsive to, and shaped in and by the pervasive work of algorithms” (Slack & Hristova, 2020, p. 18). Algorithmic culture thus accounts for the ways in which this new form of digital technology is changing all aspects of everyday life, not just our engagement with media. The study of algorithmic culture then, as articulated through its technological and cultural aspects, necessitates critical perspectives that grapple with the nexus of new technological developments,

politics, economics, and practices of resistance. Arguably, the current moment is not the first time that we have encountered the problem of pervasive surveillance coupled with the proliferation of right-wing regimes worldwide. Indeed, critical theory as articulated by Theodore Adorno and Walter Benjamin emerged under a similar historical context and is indeed quite relevant for addressing our contemporary predicaments. Benjamin's work offers important concepts that "differ from others in they are completely useless for the purposes of fascism. On the other hand, they are useful for the formulation of revolutionary demands in the politics of art" (Benjamin & Jennings, 2010). Moreover, Benjamin's ruminations on technology offer myriad concepts that help us untangle the technological transformations in the context of the increased presence of right-wing ideology and right-wing authoritarian governments. For Benjamin, understanding the ways in which visual apparatuses construe us and actively training to perform a desired identity in the context of technological surveillance holds the possibility of technological disruption. In other words, being knowledgeable of how technology frames us allows for a more intentional presentation of the self, which in turn holds the potential to render technologies themselves impotent or useless to autocratic regimes of power.

In the context of algorithmic culture, surveillance has become an increasingly important topic (Benjamin, 2019; Gates, 2011; Monahan, 2006; Noble, 2018; Pasquale, 2015). In exploring the ways in which our presence in front of a camera has become engaged with the algorithmic logics of testing and replicating, I summon Walter Benjamin's seminal piece *The Work of Art in the Age of Its Technological Reproducibility* with its three versions, which was published in the United States under the editorial direction of Theodore Adorno (Benjamin, 2002, 2003; Benjamin & Jennings, 2010). The first version was written in 1935, while the second version of the essay from 1936 is a "revision and expansion...of the first version...[and] represents the form in which Benjamin originally wished to see the work published" (Benjamin, 2002, p. 122). The third and most popular in the United States version, which Benjamin completed in 1939, was modified based on the editorial input of Adorno who facilitated the translation, publication, and popularization of this work (Benjamin, 2003, p. 270). The third version backtracks some of the celebratory stances awarded to the notion of replication and reproducibility (that are found in the first two versions) and bears clear traces of Adorno's fascination with the authentic as well as his disdain for mass art. It also moves away from an understanding of visual and visualization technologies and towards a narrower articulation of visual media. In this essay, I highlight two of the many ways in which the first and second versions of Benjamin's influential essay on technology and culture resonate with questions of photography and art in the context of facial recognition technologies and algorithmic culture more broadly. First, Benjamin provides a critical lens for understanding the role of unique-

ness and replication in a technocratic system. Second, he proposes an analytical framework for thinking about our response to visual surveillance through notions of training and of performing a constructed identity—hence, being intentional about the ways in which we visually present ourselves. These two conceptual frameworks help to articulate our unease with a technology that trains itself using our everyday digital images in order to create unique database identities that further aggregate into elaborate typologies and to think through a number of artistic responses that have challenged the ubiquity of algorithmic surveillance. Adapting Benjamin's conceptual apparatus and his call for understanding the politics of art, I focus on two projects that powerfully critique algorithmic surveillance. Leo Selvaggio's URME (you are me) Personal Surveillance Identity Prosthetic offers a critical lens through the adoption of algorithmically defined three-dimensional printed faces as performative prosthetics designed to be read and assessed by an algorithm. Kate Crawford and Trevor Paglen's project Training Humans is the first major exhibition to display a collection of photographs used to train an algorithm as well as the classificatory labels applied to them both by AI and by the freelance employees hired to sort through these images.

2. Replication for Whom: Humanistic and Technological Assemblages

Benjamin articulated his well-known concept of reproducibility as operating on two different levels: One in which "objects made by humans could always be copied by humans and another in which the reproduction was articulated through technology and thus became 'technological reproduction'" (Benjamin & Jennings, 2010, p. 12). This second mode of reproducibility was articulated through the emergence of the woodcut, became amplified through the technology of lithography, and culminated in the introduction of photography, which was seen as a technology further displacing the human from the process of reproduction by delegating the process of "pictorial reproduction...to the eye alone" (Benjamin & Jennings, 2010, p. 14). In this context, the eye follows the primary mediation of the original conducted by the lens. In terms of algorithmic culture, the processes of reproduction and detachment are further amplified and dehumanized. Indeed, this dehumanization emerges as a fundamental process that accompanies the move away from the prehistoric connection between technology and ritual towards a machine age driven by technological reproducibility. Writing prophetically in the 1930s, Benjamin foresees the continued displacement of the human and humanity towards technological autonomy. In thinking about the distinction between ritual-based and machine-based technologies, he wrote:

Whereas the former made the maximum possible use of human beings, the latter reduces their use

to the minimum. The achievement of the first technology [seen in a prehistoric context for example] might be said to culminate in human sacrifice; those of the second [rooted in the Machine age], in the remote-controlled aircraft which needs no human crew. The results of the first technology are valid once and for all....The results of the second are wholly provisional (it operates by means of experiments and endlessly varied test procedures). (Benjamin, 2002, p. 107)

Under the auspice of photography, the process of reproduction became one that is exclusively visual and continuously technological. The eye here is further displaced as photography was seen as “bringing out aspects of the original that are accessible only to the lens” (Benjamin & Jennings, 2010, p. 14). Like the remote-controlled aircraft without a human pilot, replication through photographic means is now directed not for the human eye itself but rather it is distilled into a set of features that are accessible only to the lens and the algorithm: faces become faceprints, eyes become iris scans. Trevor Paglen has theorized the emergence of images in relation to machine learning and AI as “invisible images” embedded in “machine-to machine seeing” in which “digital images are machine-readable and do not require a human in the analytic loop” (Paglen, 2019, p. 24). Whereas for Benjamin visual film-based technology (photography and film) revealed optical unconscious properties unattainable to “natural optics” such as “enlargement or slow motion” but are ultimately made perceptible to human vision (Benjamin, 2002, p. 102). In the contemporary context, however, visual algorithmic technology reveals properties that are even less unattainable by human perception as they articulate a set of data points meaningful only to algorithms. For example, an iris scan consists of at least 240 data points and thus distills the world in a manner that is understood by machine vision and machine knowing (learning). While the photograph captured faces, an algorithm-driven camera now sees face models that are meaningless to human vision.

This translation of face-to-face model in the context of facial recognition algorithms is evident in reading Amazon Rekognition’s developer guide where a face model becomes defined as a bounding box and further given coordinates for the expected elements: eyes, nose, mouth:

```

“FaceModelVersion”: “3.0,”
“SearchedFaceBoundingBox”: {
“Height”: 0.06333333253860474,
“Left”: 0.17185185849666595,
“Top”: 0.7366666793823242,
“Width”: 0.11061728745698929
},
“SearchedFaceConfidence”: 99.99999237060547

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Amazon’s surveillance software articulates personhood first as the presence of a face and second through the existence of posture. Furthermore, a face is conceived as consisting of a left eye, a right eye, a nose, the right side of one’s mouth, and the left side of one’s mouth. The face thus becomes the locus of personhood in the context of algorithmic surveillance (Amazon, n.d.). Through this process of technologically reproducing people through visual capture of either subjects or photographs of subjects, the image is distilled into image-data. This distillation obfuscates the relevance of the real, the original beyond its datafied existence. Within the context of facial recognition technology, this process informs the technological articulation of both the input and output of the technological reproduction process.

Portraits, selfies, and photographs of people, in general, are particularly susceptible to this transformation as bodies in front of a camera are captured by its lens and further translated into data for an algorithm. The endpoint of the camera is no longer a photograph. It is data. The lens then produces not an image but a dataset. Facial recognition algorithms use consumer photographs such as selfies and digital images as well as state-issued photographs such as those used on driver licenses as their training base. Once within the sphere of the algorithm, the human body is relevant only as data and the image itself becomes a useless intermediary. These data-points are articulated in big data structures from which typologies emerge. Thus, the individual who stood in front of the camera for a portrait or selfie, or simply walked in front of a consumer or commercial camera is simply understood in algorithmic terms, as an example of a larger ‘measurable type’ (Cheney-Lippold, 2017).

In an algorithmic culture, the authentic individual is replaced with an entity enthralled in a projected typology in which common habitual traits are replicated and reproduced. In other words, the uniqueness of individuals or their aura is the main fuel of the algorithmic machine. The machine relies on difference and differentiation in order to trace unique database ids through time and space. Benjamin’s critique on the insistence of holding on to the notion of authenticity, of customization, of uniqueness is quite powerful. In an algorithmic culture, if the original is already a replica without an aura, then the process of technological reproduction is disempowered. For the algorithm to work, individual behavior must demonstrate patterns or ‘trends’ but it also must be distinct enough as to articulate a separate data point or big data. In other words, individuation is useful to an algorithm as it provides a point into a set of big data. Without multiple individual points, there is no big data, and thus the algorithm has nothing to work with. The individuation we are currently afforded is a superficial one—one that is based on quantitative difference: We can buy a blue case for our similar iPhone, or choose to purchase a pink Rumba to clean our floors. We, however, are seen as static unique entries that wear pink or blue (variation) but remain constant and unique at the same time. Benjamin

proposes an alternative framework in which individuals, not just art, might consider operating as consciously reproducible entities without an aura. In a post-aura technological landscape, accepting a level of sameness on a mass scale can defeat the big data impetus of algorithms and thus render us useless to this technology. The level of sameness here addresses the attempt of algorithms to reconstruct us as digital selves, as unique digital identities within group clusters. In a culture of corporate standardization and surveillance capitalism, algorithms attempt to reinstate algorithmic aura by defining the terms that make us unique in a way that is inaccessible to us (Zuboff, 2019). What is authentic and what is replicable about our own selves and our behavior is no longer a choice that we as humans can make but is rather relegated to an algorithmic calculation. Our algorithmic aura is neither comprehensible nor accessible to ourselves.

This theme of the non-original is visualized in Leo Selvaggio's project URME (you are me) Personal Surveillance Identity Prosthetic in which he offered his own face as a 3D printed mask in order to flood the streets with Leos as far as facial recognition technologies are concerned. Selvaggio's project mobilizes reproducibility, reproduction, and replication as a political tactic against the reappearance of the algorithmic aura and its dominating uniqueness. With the prosthetic, while the human eye is able to detect the mask, the replication for the algorithmic eye is flawless and the algorithm 'sees' a series of Leos. This distinction is important. Masks traditionally have been seen as technologies of resistance. As Zach Blas (2013) wrote, "The mask is the most popular implementation of defacement, a celebration of refusal and transformation." Masks are valuable defacement mechanisms in a human and algorithmic context. Selvaggio's project both builds upon and moves away from masks as a mechanism for defacement and towards an exploration of masks as standardized humanoid surfaces. His work is a prime example of an artistic anti-surveillance camouflage practice that asks individuals to explore the practice of algorithmic reproducibility as an act of resistance. This project "involves the design of masks that are eerie reproductions of his own face, potentially spawning swarms of expressionless doppelgangers moving through the street" (Monahan, 2015, p. 166). These masks were tested with Facebook's recognition systems and proven to trigger the detection of Selvaggio's face. Selvaggio's narration of the project is quite poignant:

I imagine a future where everyone wears my face, literally. Take a moment to consider this future. As you walk down the street to the subway, you pass by me over and over and over again. The sliding doors of the train open to a swarm of Leos. (Selvaggio, 2015, p. 165)

Thus, forgoing the process of individuation renders the face when understood as face model useless.

3. Training for the Camera: Constructing Identities in the Age of Machine Vision

Algorithms are trained on our images. This primary framework for training is precisely what Amazon's Rekognition software deployed without the knowledge of the Internet users whose faces were used for the establishment of surveillance categorizations. If we are to understand ourselves as constantly being subjected to processes of surveillance and further replication through the lens of algorithmic calculations, we must consider the intentionality underlying the adapting of our everyday behavior. We should consider training ourselves in order to understand how the algorithms work in order to resist this new apparatus of surveillance. In an age where technology is further displacing the idea of humanity away from authenticity and towards replicability with the illusion of an algorithmic aura, Benjamin sees film as a training ground for resistance through the medium's ability to help us to understand the mechanism that guides reproduction and learn how to be present for the technological apparatus. With regard to the potentiality of film, Benjamin wrote that "the function of film is to train human beings in the apperceptions and reactions needed to deal with the vast apparatus whose role in their lives is expanding almost daily" (Benjamin, 2002, p. 108). His distinction between the stage actor and the film actor is helpful here for understanding the new way in which our replicas percolate in the algorithmic technological landscape. For the film actor, the "original form, which is the basis of the reproduction, is not carried out in front of a randomly composed audience but before a group of specialists" (Benjamin & Jennings, 2010, p. 22). This process enables training with experts of the technology and thus responding to the primary modality of algorithms training on humans without the permission or even knowledge of the latter. As photography, film, and social media bleed into algorithmic facial recognition systems, a similar call is being issued by prominent artists today. For example, Paglen powerfully noted that:

The point here is that if we want to understand the invisible world of machine-to-machine visual culture, we need to unlearn how to see like humans. We need to learn how to see a parallel universe composed of activations, keypoints, eigenfaces, feature transforms, classifiers and training sets. (Paglen, 2019, p. 27)

Understanding machine vision is crucial in order to be able to train and perform identities suited to this new technological landscape. Much like the actor, each of one of us is encouraged to understand and intentionally train in front of the algorithmic apparatus. In the context of film, or rather filming, the actor practices the act until it is made perfect for the lens: a "single cry for help, for example, can be recorded in several different takes" (Benjamin & Jennings, 2010, p. 22). Thus, for the

film actor, being in front of the camera for the film actor is a “performance produced in a mechanized test” of a premediated fictional role and an intentionally constructed identity. Intentionality here is key because the film actor is allowed to train with the help of experts whereas workers are subjected to the same exact tests and judgment but participate in them ‘unaware.’ Furthermore, Benjamin warned that “the film actor performs not in front of an audience but in front of an apparatus [in which] the film director occupies directly the same position as the examiner in an aptitude test” (Benjamin & Jennings, 2010, p. 22). It is this awareness and intentionality that bring humanity back into the process as “for the majority of city dwellers, throughout the workday in offices and factories, have to relinquish their humanity in the face of the apparatus” (Benjamin & Jennings, 2010, p. 23). In a film test, it is only the performance of the character that is captured in this test, not the authenticity of the actor.

Selvaggio’s project engages precisely with this intentional performative model. He suggests that “when we are watched we are fundamentally changed. We perform rather than be” (Katz, 2014). Thus, this performance thus is not an act of hiding, it is an act of modifying one’s performance for the camera, much like an actor performing a character would. Selvaggio revealed the strategy behind his project as one that “rather than hide a face, substitute[s] it” (Selvaggio, 2015, p. 174). This substitution is articulated in the context of facial recognition technologies deployed precisely in relation to crime.

For Benjamin, the film apparatus provided a training ground for the ways in which one’s mirror image became replicated and distributed across networks. His observations could be translated to the context of digital photography and algorithmic surveillance, where the selfie has become the mode par excellence of self-broadcast to the world via social media networks and algorithmic surveillance is seen as the most pervasive modality of non-consensual capture and datafication of selfies, digital portraits, and street photography. The notion of being aware of the ways in which the camera and the algorithm translate our physical selves into reproducible data-selves is crucial here. Being unaware of the surveillance regimes in which we are embedded removes individual agency. Thus, it is critical to understand how algorithmic surveillance works and how one can test in front of it and perfect a performance of an identity that is intentionally crafted to respond to the technological apparatus. Unfortunately, we are asked to consider both conscious and unconscious behavior at a micro-level. Consider the millisecond you spend while scrolling on Facebook while looking at sponsored content or the ways in which you raise your eyebrows while reacting to digital content. One implies an interest in a product and sells your potential consumer power. The other outright renders the consumer into a product to be evaluated: If your eyes are too close to your eyebrows your Body Mass Index becomes elevated and your health score decreases. The more we

know about the metrics that are judging us the more we can intentionally counter them.

The ubiquity of surveillance coupled with its invisibility or rather seamless blending with reality deeply resonates with Benjamin’s observation that “the apparatus-free aspect of reality has...become artifice, and the vision of unmediated reality the Blue Flower in the land of technology” (Benjamin & Jennings, 2010, p. 28). A vision of unmediated reality is thus seen as an inaccessible, romanticized ideal as the Blue Flower represents “the unattainable object of the romantic quest, the incarnation of desire” (Hansen, 1987, p. 204). This does not mean that one must surrender to the idea of technological mediation and should abolish efforts to challenge the technological and political systems that drive mediation. Rather, Benjamin suggested, an open acknowledgment of our predicament, an awareness of the way that it ‘sees’ us, and an effort to mindfully attempt to craft our presence.

Mitra Azar’s (2018) work on algorithmic facial images is of particular relevance here. Azar has made a compelling argument that “when a selfie becomes mediated by new tracking technologies for security system and entrainment based on face-recognition algorithms, the selfie becomes an ‘Algorithmic Facial Image’” (Azar, 2018, p. 27). In the appropriation of the photograph from selfie to a facial image, Azar noticed an important change:

If in the early 2000s the selfie seemed to be characterized by a certain degree of (calculated) spontaneity, an analogically constructed liveness and a form of human agency, this new form of selfie is rather defined by trackability, its algorithmically constructed liveness, and its non-human agency. (Azar, 2018, pp. 27–28)

In this transition, the camera itself becomes in the words of Deleuze and Guattari a ‘faciality machine’ (Deleuze & Guattari, 1987 p. 199). The algorithmic machine that I am referring to in this project is indeed a faciality machine. What is notable here is the emergence of the selfie as a particular type of performance for the camera facing us rather than the world and the potentiality for the augmentation of this act when the visualization technology becomes understood as a faciality machine. In other words, we have already trained to perform a ‘selfie’ for the camera and are now in the moment of retraining once more—this time, in the context of algorithmic visuality.

Kate Crawford and Trevor Paglen’s project *Training Humans* highlights precisely the ways in which selfies, portraits, and state-issued identification have been harnessed in the training of facial recognition algorithms without the knowledge of the people in these photographs. *Training Humans* was “the first major photography exhibition devoted to training images: the collections of photos used by scientists to train AI systems how to ‘see’ and categorize the world” (Crawford &

Paglen, 2020). As the authors note, they are reintroducing into the gallery photographs that “aren’t really meant for humans [as] they’re in collections designed for machines” (Crawford & Paglen, 2019). Here Crawford and Paglen exposed the inner workings of algorithmic classification and, in a sense, acted as the experts who allowed audiences to understand and train for the new algorithmic machine. The exhibit provided historical context about the ways in which anthropometrics and biometrics have historically been deployed in the articulation of human typologies. They further displayed the images used to create algorithmic classifications uncovering the duality of the photograph as an honorific and repressive entity. The most powerful part of this project is the real-time visualization of the algorithmic decision-making process as it evaluates the gender, age, and emotion of the people it ‘sees’ (Crawford & Paglen, 2019). According to Crawford, they:

Wanted to engage directly the images that train AI systems, and to take those images seriously as a part of a rapidly evolving culture. They represent the new vernacular photography that drives machine vision. To see how this works, [they] analyzed hundreds of training sets to understand how these ‘engines of seeing’ operate. (Crawford & Paglen, 2020)

Furthermore, Crawford characterized this training process as two-pronged: as everyday photographs training algorithms and as algorithms training humans how to behave. *Training Humans*, alongside Crawford and Paglen’s *Excavating AI* project, raises an important question about the lack of awareness by the people in the photographs about the ways in which their faces are harnessed for algorithmic testing. Unlike Benjamin’s actor and much like his worker, those posing for a selfie or a digital image were often unaware of the algorithmic classificatory systems they helped shape and ultimately became trapped by: “Harvesting images en masse from image search engines like Google, ImageNet’s creators appropriated people’s selfies and vacation photos without their knowledge, and then labeled and repackaged them as the underlying data for much of an entire field” (Crawford & Paglen, n.d.). What Crawford and Paglen’s projects reveal is not only how the actor or worker is trained but also how the machine apparatus, the technology is ‘learning’ as well. In other words, the training goes both ways. The training of AI requires “vast amounts of data contained within datasets made up of many discrete images” (Crawford & Paglen, n.d.). The training of the human in front of the lens requires knowledge and intentionality.

Alan Sekula has eloquently argued that photographs have always participated in an honorific and repressive systems of representation as the portrait and the mugshot have been intimately connected since the invention of photography (Sekula, 1986, p. 10). This connection that as Sekula argues introduced “the panoptic

principle into daily life” (Sekula, 1986, p. 10) has been further amplified in the context of AI where the number of images analyzed is well into the several hundred million as seen by 2009’s ImageNet project (Deng et al., 2009). While the scope of “scraped” images is impressive, so is the extensive classificatory schema behind it. This classificatory schema, developed through ‘crowdsourcing’ on Amazon’s labor marketplace Mechanical Turk, is then reflected back to the unsuspected users of the digital world. As Crawford and Paglen note, here not only race, gender, and economic status are encoded to algorithmic data and back as cultural identity, but so are value judgments about people:

As we go further into the depths of ImageNet’s Person categories, the classifications of humans within it take a sharp and dark turn. There are categories for Bad Person, Call Girl, Drug Addict, Closet Queen, Convict, Crazy, Failure....There are many racist slurs and misogynistic terms. (Crawford & Paglen, n.d.)

The classification schema was developed to aid the recognition and sorting processes driven algorithms and benefits the owners of the technological apparatuses and not the humans who were ‘processed’ as training data. In *Training Humans*, they further provide an extensive genealogy specific to the ways in which algorithmic facial recognition participates in narratives of human classification. As such this project is a direct extension of what Sekula, as well as Crawford and Paglen, trace to be a genealogy of eugenics rooted in the 19th century phrenology and physiognomy work of Francis Galton, Alphonse Bertillon, and Cesare Lombroso (Crawford & Paglen, 2019, p. 21). The distillation of images into data for the purposes of algorithmic capitalist surveillance is yet the latest instance of the enmeshment of photography with eugenics. Crawford and Paglen’s project exemplifies par excellence the claim that Lea Laura Michelsen has aptly made, “Digital biometrics can be perceived as a physiognomic renaissance” (Michelsen, 2018, p. 37).

Art projects that enable the public to see how they are being judged by algorithms have been developed not only for art galleries but also through digital platforms with greater access. One example is Tijmen Schep’s *How Normal Am I* interactive documentary project (Schep, 2020). In it, the audience is asked to turn on their camera and is guided through a series of algorithmic decisions while Schep narrates the inner workings of facial recognition. He reveals the ways in which beauty is judged on platforms such as Tinder, where people with similar scores are considered to be a match, and unpacks how health insurance industries use facial recognition to predict BMI indexes and thus assess health risk. In this project, the audience is also given the opportunity to train for the algorithm: “By giving access to your webcam you can also experience how these AI systems rate your own face” (Schep, 2020). The experience is coupled with useful tips; for example, raising one’s eyebrow leads the

algorithms to assume a greater BMI index and thus the risk of obesity. Both *Training Humans* and *How Normal am I* allow for subjects in front of the camera to test their behavior and see the different outcomes live. They are given tips on how to perform and then are allowed to see if their behavior is gaged based on their expectations. The training in front of the camera is responsive and guided by experts who understand the inner workings of the algorithm. The training here begins in the context of art and raises awareness about the ways in which assessments are made about our conscious and unconscious behavior.

Understanding and regulating the processes of data gathering processes as well as algorithmic development practices are crucial components for the development of a more equitable algorithmic culture: A culture that asks how apparatuses of assessment are created and indeed can they move forward to challenge them and perhaps call for their abolishment. While structural resistance is absolutely vital, so is micro-level training on how we are being judged by facial recognition platforms. Politicized algorithmic art allows us to bring back intentionality and awareness in front of the camera and to practice the ways in which to carry and present ourselves in front of this new capitalist surveillance assemblage in a safe space. In other words, by engaging with projects that are critical of facial recognition, we can start to understand and adapt to the inner workings of this new modality of technological reproduction and also challenge the deployment of these technologies altogether. If we are going to live in an increasingly algorithmic world, we must adapt to it mindfully in the meantime and resist the entrenchment of technocratic political orders in the long term.

4. Disruptive Practices: Unleashing the Revolutionary Potentials of Art and Performativity

The rise of AI and facial recognition surveillance has yet again elicited questions about the ways in which the algorithms can be designed to be more accurate, less biased, subjected to legal systems, decoupled from authoritarian regimes, and last but not least individually resisted. For Benjamin, technological reproduction offered an escape from “enslavement” and this liberation was to come “only when humanity’s whole constitution has adapted itself to the new productive forces which the second technology has set free” (Benjamin, 2002, p. 108). This freedom to play once “liberated from drudgery” was seen as possible only “when the collective makes this technology it’s own” (Benjamin, 2002, p. 124). The discourse on technological liberation from chores for the sake of convenience and play still resonates today in discourses about how now computing and autonomous technology are allowing more playtime. This celebratory stance towards collective ownership of technology that takes at its heart the rejection of authenticity and ritual and the embrace of popular and replicable is challenged

by Theodor Adorno (n.d.) in a letter to Benjamin. Adorno rightfully insisted on considering the larger economic structure that makes mass art possible. In the contemporary context, visual technologies ranging from digital photography to algorithmic surveillance are not democratized but rather lay in the hands of few corporations. The reproducibility that they offer under the guise of play is articulated in terms that are useful for the machines themselves and the capitalist frameworks of alienation in which they operate. On the other hand, Benjamin sees the politics of art or further the politicizing of art as a powerful antidote to authoritarian and exploitative regimes (Benjamin & Jennings, 2010, pp. 12, 36).

The idea that art can be a powerful agent of change has been challenged by critics of state and capitalism surveillance. As Torin Monahan has aptly noted, in the age of increased surveillance, there has been a rise in anti-surveillance camouflage in the form of artistic projects and products centering on “masking of identity to undermine technological efforts to fix someone as unique entity apart from the crowd” (Monahan, 2015, p. 159). He has questioned the effectiveness of such projects:

Anti-surveillance camouflage of this sort flaunts the system, ostensibly allowing wearers to hide in plain sight—neither acquiescing to surveillance mandates nor becoming reclusive under their withering gaze. This is an aestheticization of resistance, a performance that generates media attention and scholarly interest without necessarily challenging the violent and discriminatory logics of surveillance societies. (Monahan, 2015, p. 160)

Monahan proceeded to situate this right to hide in relation to the surveillance practice of the state which has embraced the right to look and denied the right to look back. This position on the uselessness of art has been countered by a strong justification of the role of surveillance art in the larger cultural landscape. Monahan insists on the importance of challenging the institutional, economic, and legal systems in which algorithmic surveillance operates, and rightly so. However, art offers yet another track of resistance that does not assume the erasure of other oppositional positions, but rather amplifies the struggle against these normative technological apparatuses. As Elise Morrison has written:

Surveillance art, as a genre of political activism and performance, combats the common tendency within surveillance society to succumb to a kind of amnesia of convenience, an ambivalent state in which the majority of user-consumers are willing to forget or look past the risks of using surveillance technologies in prescribed ways because of perceived economic, political and social gains. (Morrison, 2015, p. 126)

The dialectic here is one that questions the role of the arts in conversations about technology and culture. I side

here with Morrison's sentiment that art allows for a critical framework through which naturalized relations can be brought back to a reflective practice. I think that the greatest contribution to the artistic projects described above is their contemplative nature or to come back to Benjamin's work—their intentionality in situating ourselves in the position of the aware film actor rather than the unaware mechanized worker.

Whereas artistic practice is already embedded in critical reflective practice, everyday posturing in front of the digital mobile camera is hardly so. With regards to art, Torin Monahan asked a poignant question: "By claiming what can be framed as a 'right to hide,' instead of a 'right to look,' what, exactly, does anti-surveillance camouflage perform" (Monahan, 2015, p. 166). In thinking about mass strategies for addressing algorithmic surveillance, I want to address both the potential role of training to look back at the camera as well as training to hide from the camera. Reflective posturing could be seen as an example of resisting surveillance capitalism through the paradigm of the right to hide. The activists have also been deploying facial recognition as an apparatus reinstating the 'right to look.' Among them is Christopher Howell who has turned the camera back to the Portland police officers "since they are not identifying themselves to the public and are committing crimes" (Howell, Strong, Ryan-Mosley, Cillekens, & Hao, 2020). Resistance to the technological panopticon created by facial recognition algorithms must be multi-fold and multi-directional. Through individual reflective practice based on awareness of the assessment mechanism behind the camera or through collective reflective action in turning the camera onto the surveyors themselves, intentional visibility might just be a power full for resisting the rise of both the surveillance state as well as surveillance capitalism.

5. Conclusion

As we move between a digital media world in which digital selves are articulated through algorithms for the purposes of advertising to an algorithmic culture where algorithms monitor and evaluate our conscious and unconscious behavior through thousands of cameras embedded in both public and private spaces, it is crucial to continue to explore modes of critique and resistance. Walter Benjamin's first and second versions of this famous essay *The Work of Art in the Age of Its Technological Reproducibility* offer an important apparatus for challenging algorithmic surveillance. Benjamin's assessment of the role of reproduction on one hand and training in front of the camera on the other offer important insights into our contemporary conditions. His writing on art and film in the context of fascism is indeed deeply relevant to an analysis of surveillance art in the context of a global proliferation of right-wing authoritarian regimes. Benjamin offers a powerful critique of the ways the camera reproduces not just art but also human behavior and one might say specters of the humans

themselves and in this process excises the original—be it again the artwork or the human caught in the reproduction loop. One of the mechanisms for challenging this technocratic framework that he offers is the emphasis on reflection and intention. This reflection process entails an intentional reversal of the basic assumptions that structure algorithmic technology and thus the introduction of deflected methods of resistance. Some of these deflected methods have been harnessed by contemporary artists as a critique of algorithmic culture. Just as algorithms look for individual data points, artists challenge our algorithmic aura. Just as the algorithm trains on humans, artists help humans in training for the algorithm. Until we can dismantle the contemporary algorithmic panopticon, a game of hide and deflect might be in order.

Conflict of Interests

The author declares no conflict of interests.

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Article

Mobile Journalists as Traceable Data Objects: Surveillance Capitalism and Responsible Innovation in Mobile Journalism

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Abstract

This article discusses how Shosana Zuboff’s critical theory of surveillance capitalism may help to understand and underpin responsible practice and innovation in mobile journalism. Zuboff conceptualizes surveillance capitalism as a new economic logic made possible by ICT and its architecture for extracting and trading data products of user behavior and preferences. Surveillance is, through these new technologies, built into the fabric of our economic system and, according to Zuboff, appears as deeply anti-democratic and a threat to human sovereignty, dignity, and autonomy. In Europe, the framework of responsible research and innovation is promoted as an approach and a meta-concept that should inform practice and policy for research and innovation to align with societal values and democratic principles. Within this approach, ICT is framed as a risk technology. As innovation in mobile journalism is inextricably tied to the technologies and infrastructure of smartphones and social media platforms, the apparent question would be how we can envision responsible innovation in this area. Zuboff provides a critical perspective to study how this architecture of surveillance impedes the practice of mobile journalism. While the wide adoption of smartphones as a key tool for both producing and consuming news has great potential for innovation, it can also feed behavioral data into the supply chain of surveillance capitalism. We discuss how potentially harmful implications can be met on an individual and organizational level to contribute to a more responsible adoption of mobile technologies in journalism.

Keywords

innovation; journalism; mobile journalism; mobile technology; responsible innovation; responsible research; risk technology; surveillance capitalism; Zuboff

Issue

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1. Introduction

Mojo is agile, it is affordable, it keeps a low profile, it is inspiring journalists around the globe to think outside the box. As such, it is the right tool to defend journalism in a world that finds itself in a prolonged state of emergency and will need to invent itself newly.

With these words, the German Konrad Adenauer Foundation (2020) introduced what they labeled the

world’s first virtual conference on mobile journalism. The aim of this foundation is to “promote and preserve free democracy and a social market economy” by engaging in the training of journalists toward “a free, ethical and responsible press” (Konrad Adenauer Foundation, 2020). The smartphone is promoted as an all-in-one device allowing journalists to create and edit photos, videos, audio, and graphics, which can then be directly uploaded to newsroom servers or disseminated to social media platforms.

Mobile journalism is a fast-growing field (Borum & Quinn, 2016; Duffy, 2011; Goggin, 2010; Perreault & Stanfield, 2018; Salzmann, Guribye, & Gynnild, 2020; Westlund & Quinn, 2018), and smartphone-based reporting is an emerging playground for media innovations (Palacios, Barbosa, da Silva, & da Cunha, 2016) that supposedly holds the potential to further democratize journalism (Borum, 2016; Duffy, 2011).

While low-cost, widespread mobile technologies have empowered journalists in their daily work (Belair-Gagnon, Agur, & Frisch, 2016; Molyneux, 2018; Westlund & Quinn, 2018), the same technologies can enable surveillance, control, and censorship (Pavlik, 2019). Smartphones are equipped with capabilities to collect comprehensive data traces from users that can be aggregated and triangulated into complex individual profiles (Christl, Kopp, & Riechert, 2017a; Christl & Spiekermann, 2016). From the perspective of Zuboff's surveillance capitalism, mobile technologies can be perceived as a centerpiece of a surveillance architecture that has been developed as part of a new arising economic logic (Zuboff, 2019). One of the key challenges in understanding the implications of surveillance capitalism for mobile journalism is that surveillance practices do not target journalists specifically, but are equally applied to all citizens that rely on new digital platforms and tools. Therefore, many of the consequences and the potential harm will not be exclusive to journalists. Journalists, however, are a risk group, and the risks are potentially higher for this group.

Zuboff's theory can serve as a lens through which one can understand the societal implications of an emerging economic logic based on advanced algorithms and the extensive exploitation of behavioral data. Nonetheless, it does not address, in a systematic manner, how these challenges can be resolved. Thus, the question arises: How can mobile journalism and innovation in this field be practiced responsibly in the context of convergent technologies and pervasive surveillance structures? In this article, we discuss whether the European policy strategy Responsible Research and Innovation (RRI) might be a suitable approach to address key issues related to the responsible adoption of mobile technology in journalism and to guide innovation in the field of mobile journalism.

The aim of this article is twofold. First, we reflect critically on how the theory of surveillance capitalism impedes the field of mobile journalism and how this architecture of surveillance might threaten media freedom, which might ultimately undermine fundamental democratic values. Second, we outline the European RRI approach as a framework for societal action and a way to evoke social engagement on challenges arising through the adoption and development of risk technologies. We first introduce Zuboff's theory on surveillance capitalism, followed by a discussion on mobile journalism from the perspective of Zuboff's theory, where we identify challenges of surveillance capitalism for journalistic practice and innovation. Next, we introduce the RRI approach, followed by outlining major implications for

mobile journalism on an individual and organizational level and how they might be responsibly approached.

2. Zuboff's Theory of Surveillance Capitalism

In her seminal book *In the Age of the Smart Machine: The Future of Work and Power*, Shoshana Zuboff (1988) investigated computer-mediated work in organizational work processes and identified what she outlined as the fundamental duality of information technology. Information technology, according to Zuboff, not only has the capacity to automate but also 'informate' by producing and generating new information and giving insights about processes and activities that were previously invisible or unavailable.

In Zuboff's (2019) recent book, she traced the development, strategies, and research ambitions of American technology companies like Google, Facebook, and Microsoft, which in her view served as 'petri dishes' to examine 'the DNA' of this new arising economic logic that she terms 'surveillance capitalism' (p. 24). Zuboff's (2019) theory is based on an extensive collection of empirical material and combines qualitative social science methods with historical and philosophical approaches.

To grasp the new surveillance paradigm, she developed a conceptual framework to describe this new economic logic and its broader societal consequences. In particular, Zuboff (2016, 2019) considers Google a pioneer of surveillance capitalism. Google discovered very early that they could capitalize on so-called data byproducts. These data byproducts generated traces and logs of users' interactions with Google's products, and services could be aggregated and analyzed not only to help the company provide better services, but also to, for example, offer tools for data analytics, as well as deliver targeted ads and what Zuboff terms 'behavioral products.' Thus, this raw data was seen as an important asset of great economic value. Zuboff calls these data byproducts 'behavioral surplus' (Zuboff, 2019, p. 8). These new data products can be applied for a multitude of purposes. In Zuboff's terminology, they are 'surveillance assets' (p. 81), based on the idea of human experience as free raw material that can be translated into behavioral data (p. 179) and used "to predict and modify human behavior to produce revenue and market control" (Zuboff, 2015, p. 75). The discovery of these new prediction products triggered the rise and institutionalization of a new economic logic that translates into a new widespread business model, leading to a more radical "parasitic and self-referential form" of capitalism (Zuboff, 2019, p. 9) that centers on this large-scale data collection and the commodification of personal data (Zuboff, 2016, 2019).

While the commodification of personal data and the prediction of human behavior were at first a means for targeted advertising, they later became a means for what Zuboff (2019) sees as the next level of a new 'prediction imperative' (Zuboff, 2019, p. 197) and referred

to as ‘economies of action’ (Zuboff, 2019, p. 293–299). The real-time data of human behavior could be analyzed instantly and used for “ubiquitous intervention, action, and control” (p. 293), subsequently leading to what she calls new means of ‘behavior modification’ (Zuboff, 2019, p. 293). Zuboff claims that people are unaware of the commodification of their data, and processes and established infrastructures are mostly invisible, difficult to trace, willingly obscured by surveillance capitalists themselves, and thriving on the public’s ignorance.

According to Zuboff, another characteristic that marks surveillance capitalism is what she calls ‘radical indifference’ (Zuboff, 2019, p. 376–377), where “content is judged by its volume, range, and depth of surplus as measured by the ‘anonymous’ equivalence of clicks, likes, and dwell times, despite the obvious fact that its profoundly dissimilar meanings originate in distinct human situations” (p. 505). In other words, the algorithmic logic of surveillance capitalism is indifferent about what users of services and products say, think, or do. What matters the most is that human interactions can be converted into data (Zuboff, 2015, p. 211–212), and the ultimate goal of the actors is to maximize traffic on their platforms so they can collect as much data as possible. The data representations of user behavior are, in a certain sense, indifferent whether they accurately mirror the objects represented. The representations and algorithmic analysis of the data, rather, take on a value and a life of their own, depending more on utility in this new economic logic (see also Nassehi, 2019).

Zuboff (2019) also points out how big corporations such as Google and Facebook have inserted themselves as intermediaries between media publishers and their audiences. Their algorithmically steered processes are, according to Zuboff, marked by a radical indifference of equivalence-steered and self-referential data algorithms, which she also calls “a new way of knowing” (p. 376) and describes as a form of “observation without witnesses” (p. 377). According to Zuboff (2019), this new logic can be observed in social media feeds and efforts of content standardization, ranking fake news stoically as proven scientifically or journalistically produced facts and figures. Journalism, in contrast, represents for Zuboff “the precise opposite of this logic” (p. 507), claiming that journalism is based on ‘organic reciprocity’ (p. 507) in its interactions with audiences. In other words, journalism is not a one-sided affair like the extraction of data that commodifies people’s behavior.

For Zuboff, the institutionalization of this new economic logic represents a fundamental change in basic assumptions from the 20th century industrial society, organized around the division of labor and work as a central force of production to a division of learning in the digital age of the 21st century (Zuboff, 2015, 2019). Surveillance capitalism, Zuboff argues, establishes a new and unprecedented ‘instrumentarian power’ (Zuboff, 2019, pp. 67, 376–379), reflected by emerging asymmetries and the concentration of knowledge

and rights. Companies like Google, Facebook, Amazon, and Microsoft have become what Zuboff calls “surveillance empires that exercise total control over the world’s information” (Zuboff, 2020), as they own the algorithms, research, and knowledge that form the backbone of their digital infrastructures and services.

Most prominently, Zuboff’s theory has been criticized by Morozov (2019), who regards her theory as a limited conception of digital economy blind to systemic power relationships and what he identifies as the most central challenge of capitalism. It obscures the fact the financial motives that drive companies’ data strategy and their hunt for behavioral surplus are long-term profits and competitiveness. In other words, capitalism is the root of the problem, and the collection of behavioral data is only a means to an end. Furthermore, he points out that:

The concept of surveillance capitalism shifts the locus of the inquiry, and the struggles it informs, from the justice of relations of production and distribution inside the digitized social factory to the ethics of exchange between companies and their users. (Morozov, 2019, p. 37)

According to Morozov (2019), Zuboff gives an incomplete picture of how value is created in the digital economy by only focusing on “consumer-facing operations rather than on how organizations interact within their business and government facing operations” (p. 28). Nevertheless, Morozov acknowledges Zuboff’s theory as “a strong analytical model that will inform all subsequent interpretations of the digital economy” (p. 24).

3. Journalism through the Lens of Surveillance Capitalism

In the perspective of Zuboff’s surveillance capitalism, mobile journalism might be perceived, along with any other human experiences and activities, as traceable and tradeable data objects and, as such, raw material for surveillance capitalism. First, journalists and their behavior can be traced and represented as data objects along with information such as name and social networks—easily extracted from, for example, a social media profile. This includes their interactions with sources and other people, movements, and activities (Callegaro & Yang, 2018; Swan, 2013). Furthermore, these sources can be used to triangulate metadata and algorithmic analyses for developing complex profiles of individuals and their behavioral patterns (Schermer, 2011).

A recent story from the German public broadcaster NDR exemplifies the potential of using such data for identifying individual profiles and options for buying such data to target groups of people, including journalists. In an undercover action, a group of investigative journalists acquired a comprehensive data packet about the online activities of three million German citizens

over one month. The data was provided for free by a data broker, and with this information, the journalists identified and reconstructed complete work profiles of other journalists, including their movements, e-mail communication, travel schedules, and browsing activities. The data package also contained sensitive information about several German media houses, such as business strategies, sales figures, and profiles of mid-level management employees (ARD Zapp, 2016; Norddeutscher Rundfunk, 2016).

Data traded in this way is usually claimed to be anonymous, but by triangulating, for example, geo-location data with publicly available data such as addresses, the data can be de-anonymized and used to create profiles of specific people or groups of people. This also was illustrated in a case from the Norwegian public broadcaster NRK (“My phone was spying on me,” 2020), where reporters investigated the dataflows and tracking activities of several Norwegian citizens based on their uses of mobile apps. The data was bought openly, and the investigation revealed a complex and invisible network of actors involved in the data analytics and data brokerage market.

While targeted surveillance, intimidation, and harassment of journalists as reprisals of their work has been occurring for many years, research on digital safety and security for journalists indicates that journalists are increasingly becoming vulnerable to attacks from state as well as non-state actors (Belair-Gagnon et al., 2016; Council of Europe, 2020; Crete-Nishihata et al., 2020; Marczak, Scott-Railton, Al-Jizawi, Anstis, & Deobert, 2020). In the last 10 years, at least 937 journalists were killed at work, according to Reporters Without Borders (2020). Many were deliberately murdered because they investigated topics such as corruption and organized crime. In the same period, an increasing number of cases demonstrate targeted uses of digital surveillance on journalists and newsrooms that put source protection and journalist safety at risk (Crete-Nishihata et al., 2020; Perlroth, 2013; Scott-Railton, Marczak, AbdulRazzak, Crete-Nishihata, & Deibert, 2017; Timberg, 2013; Wagstaff, 2014).

To understand the implications of surveillance capitalism for mobile journalism, the concept of dataveillance (Clarke, 1988; Van Dijck, 2014) can be useful. ‘Dataveillance’ is a form of surveillance based on mass data collection with “unstated preset purposes” (Van Dijck, 2014, p. 205) and is on the increase in many areas of society (Christl, 2014; Christl et al., 2017a; Crete-Nishihata et al., 2020; Degli Esposti, 2014; Zuboff, 2019). Dataveillance not only allows us to build profiles of individuals and their behavior, but also predicts future behavior (Schermer, 2011) and interferes in individual decision making, for example, through microtargeting (Christl, 2019).

Furthermore, trading these profiles as a commercial good gives access to sensitive information about individuals, groups of people, and organizations to a broad

range of third-party actors with diverging agendas and allows its utilization for malicious purposes (Christl et al., 2017a). Christl et al. (2017a) examined and documented the massive scale and scope of unrestrained commercial exploitation of personal data that this new economic logic of behavioral data exploits. Christl et al. (2017a, p. 5) concluded in their report:

Individuals can see only the tip of the data and profiling iceberg. Most of it occurs in the background and remains opaque; as a result, most consumers, as well as civil society, journalists, and policymakers, barely grasp the full extent and forms of corporate digital tracking and profiling.

4. Mobile Journalism as a Risk for Journalists and as a Supplier for Surveillance Capitalism

Forms of commercially motivated surveillance affect individuals and civil society (Christl, 2014; Christl et al., 2017a; Van Dijk, 2014; Zuboff, 2019). However, the risks and societal consequences related to trading behavioral data (Zuboff, 2016) are especially high for some groups. In democratic countries, journalistic institutions have invested heavily in further developing codes of ethics as responsible systems for self-regulation. Such codes of ethics complement the media regulations in various countries and are highly valued by practitioners. However, with technologies like the smartphone, journalists increasingly find themselves in a double bind of transparency; by using the smartphone as a work tool, journalists are often exposed to dataveillance themselves while contributing to the tracking of others. Christl and Spiekermann (2016, p. 47) point out that smartphones entail several specific risks regarding the privacy of users:

The information stored on such devices, including calls, text messages, contact lists, calendars, photos, videos, visited websites, the phone’s location, and motion behavior, provides detailed insights into the user’s personality and everyday life. It is not only information about friends and family that is stored on such a device, but also work, finance, and health contacts. Most of the time, mobile devices are connected to the Internet. Potentially, the integrated sensors can always be activated. Many users also store passwords on their smartphone, which provide access to personal user accounts such as email, social networks, and e-commerce.

Thus, we argue that the whole process of mobile journalism can be construed as a human activity to provide raw materials and behavioral surplus for data aggregation, analysis, and algorithmic profiling and therewith open up the possibilities of behaviorally modifying journalists, such as chilling effects (Büchi et al., 2020; Eide, 2019), digital nudging (Helbing, 2019; Huang, Chen, Hong, & Wu, 2018), search engine manipulation effects (Epstein,

Robertson, Lazer, & Wilson, 2017; Helbing, 2019), doxing (Crete-Nishihata et al., 2020), and micro-targeting (Christl, 2019).

Anyone relying on technologies and infrastructures optimized for data extraction and profiling can become radically transparent for a range of actors (Christl & Spiekermann, 2016). As discussed above, journalists have always been a risk group and a main target for surveillance (Crete-Nishihata et al., 2020; Thorsen, 2019; Waters, 2018). It is well known that a range of actors in different parts of the world, such as secret services, police authorities, and other players, seek to monitor journalists' interactions and to access data stored on their computers (Henrichsen, Betz, & Lisosky, 2015). After the Snowden revelations in 2013, the mass surveillance initiated by state actors and its implications for journalism have been broadly discussed (Bradshaw, 2017; Lashmar, 2018; Mills, 2019; Waters, 2018).

While Zuboff points to the need for social action to solve the challenges arising in the wake of surveillance capitalism, she does not go to any lengths to propose how this can be addressed in practice. In our critical discussion on how mobile journalism and innovation in this field can be practiced responsibly, we will therefore take a closer look at the research and innovation policy framework RRI as a potentially complementary approach.

5. RRI as a Framework for Societal Action

To address how innovation and practice in mobile journalism can be envisioned in a responsible manner, we find the European framework of RRI to be a promising approach. The RRI approach is a normative policy strategy that acknowledges the uncertainties linked to scientific progress and socio-technological innovations and outlines ICT as a field with transformational potential for society. The RRI aims to achieve ethically acceptable, societally desirable, and sustainable outcomes of research and innovation activities (Von Schomberg, 2013). To meet these goals, RRI emphasizes the importance of public engagement and the inclusion of all relevant stakeholders throughout all stages of the innovation and research process. In this way, all stakeholders ideally become mutually responsive during the process.

From a theoretical perspective, RRI is broadly understood as a form of 'meta-responsibility' or 'higher-level responsibility' (Stahl, 2013). Owen et al. (2013) suggest that RRI is "a collective commitment to take care of the future through collective stewardship of science and innovation at present" (p. 36). RRI is conceptualized through a procedural (implemented tools and methods) and a substantial dimension (addressed values and norms). Stilgoe, Owen, and Macnaghten (2013), Owen, Macnaghten, and Stilgoe (2012) and Owen et al. (2013) suggested integrating and combining elements of reflexivity, anticipation, deliberation, and responsibility. In recent years, the concept has been expanded by the dimensions of sustainability and care (Burget, Bardone,

& Pedaste, 2017). Other researchers have suggested integrating the dimensions of openness and transparency (Owen, Ladikas, & Forsberg, 2017) to ensure free and open access to relevant information. The RRI approach aims not only to inform academic research contexts but also innovation, technological development, and the adoption of technology in the private sector.

Critics of the RRI approach posit RRI is too firmly anchored in academic discussions and that it is unclear how to translate the ideas and normative principles of RRI into social realities and implement RRI tools and methods into day-to-day practices (Schuijff & Dijkstra, 2020). Other authors highlight the challenges and key problems related to governing especially ICT by pointing out that practical tools and methods of RRI often run into the fundamental uncertainty and the complex ethical challenges that are automatically linked to ICT development (Jirotko, Grimpe, Stahl, Eden, & Hartswood, 2017; Stahl, Eden, & Jirotko, 2013; Stahl, Timmermans, & Flick, 2017). Furthermore, there is little awareness about the RRI approach in the industry that manages the vast majority of innovation activities in society (Gurzawska, Mäkinen, & Brey, 2017).

6. Envisioning Responsible Practice and Innovation in Mobile Journalism

Among many journalism professionals, smartphones tend to be considered just another tool in the journalistic toolbox (Borum, 2016; Umair, 2016). Smartphones are equipped with risk technologies and include application areas such as sensor technologies, cameras, biometric sensing, ambient intelligence, and artificial intelligence. These risk technologies are specifically outlined and discussed by proponents of the RRI framework (Stahl et al., 2013, 2017). According to Zuboff (2019), the infrastructures for comprehensive data exploitation have secretly evolved based on keeping the public in the dark and the exclusion of relevant stakeholders, with little democratic legitimation. Consequently, the key technologies and the infrastructure of mobile journalism are building on what Von Schomberg (2013) called an 'irresponsible innovation' (p. 60) paving the way for what arguably can be seen in the context of mobile journalism as an *irresponsible adoption of irresponsible technology*. Although mobile technology has not been developed exclusively for journalism, journalists all over the world have adopted smartphones, exploring the boundaries of mobile technology for journalistic purposes (Salzmann et al., 2020).

Even though current surveillance infrastructures seem to present complex challenges that suggest rethinking journalistic practices thoroughly (not only for mobile journalists), a radical abandonment of smartphones in journalism appears to be an unlikely scenario, or as Christl et al. (2017a) put it: "To resist the power of this data ecosystem, opting out of pervasive tracking and profiling has essentially become synonymous with opting out of much of modern life" (p. 85). In that sense,

it is urgent for journalists, media organizations, and governments to scout sustainable and responsible solutions that might have the capacity to counterbalance these challenges.

In the following section, we outline possible implications for mobile journalism over two structural dimensions and suggest approaches that may contribute to a more responsible adoption of mobile technologies in journalism and mitigate the potential harm for journalists who use these technologies.

6.1. Implications for Mobile Journalism on an Individual Level

On an individual level, journalists can meet these challenges by taking precautionary steps to minimize involuntary, uncontrolled data extraction when using smartphones. Such steps and simple precautions are constantly taught and discussed at most journalistic conferences and gatherings. A simple first step of concern to most specialists in the field is the principle of dataflow minimization, termed *datengeiz* (data stinginess) by German-speaking privacy activists, urging journalists to develop a more conscious, critical, and cautious mindset toward their digital data routines. For example, journalists could limit the number of installed apps to a minimum and only use applications from trusted sources. It would also include trying to consciously bypass as far as possible their reliance on services, products, and infrastructures known for advanced tracking and profiling capabilities. The German journalist, activist, and scholar Moßbrucker (2019) emphasizes encrypted communication and the right to anonymity as a central task of 'journalists' digital self-defense.' He suggests that journalistic practice and technological innovations should encompass features of the 'darknet,' a collection of networks and technologies for sharing content (Biddle, England, Peinado, & Willman, 2003) attuned to privacy and anonymity that counters traceability and surveillance.

Moßbrucker (2019) argues that darknet features should become basic components of journalistic tools and could be transformed, with political and economic support, into a standard infrastructure for current communication tools. Such efforts could make the Internet in journalists' pockets safer. A growing number of journalistic websites offer adapted tools for the cyber security and digital safety of their sources. Encrypted platforms for sending files through Tor, the anonymous web browser, are widespread, as are encrypted messaging apps such as Signal or WIRE. An example is a popular platform like SecureDrop that allows secure communication between journalists and sources. It was developed by the Freedom of the Press Foundation. However, many digital defense strategies might turn out to be ad-hoc solutions. Digital tools applied by journalists to avoid surveillance do not necessarily fit well with the processes of journalism and needs of journalists (McGregor, Charters, Holliday, & Roesner, 2015). In the years ahead,

even closer cooperation with journalistic support organizations, such as foundations, labs, or professional associations, might be the way to go.

Following the RRI approach, an important contribution of individual journalists to mitigate the potential harms of mobile technology and exposure to behavioral data collection would be to raise the professional and public awareness of these issues.

Nevertheless, avoiding the use of these tools can be a burden for journalists and could be seen as a chilling effect. Furthermore, there are limits to what can be done on an individual level, as journalists are largely dependent on institutional support.

6.2. Implications for Mobile Journalism on an Organizational Level

Many media organizations are competing with surveillance capitalists such as Google and Facebook. They compete for the attention of their audiences and in the market of selling ads. They are also reliant on the services of these platforms to reach their audiences, and there are complex relationships between these actors (Fanta & Dachwitz, 2020; Lindén, 2020).

Furthermore, media organizations have a long tradition when it comes to collecting and trading audience information with their advertisers. They apply a range of surveillance tools for 'editorial analytics' to optimize newsroom workflows, increase audience engagement, and attract more audiences (Carroll, 2020; Cherubini & Nielsen, 2016). According to Christl et al. (2017b, p. 17), especially big media conglomerates "are deeply embedded in today's tracking and profiling ecosystems; moreover, they have often developed or acquired data and tracking capabilities themselves" (see also Adams, 2020; Carroll, 2020; Soe, Nordberg, Guribye, & Slavkovik, 2020). Zuboff's theory can serve as an eye opener that challenges media organizations to critically reflect on the long-term implications of the digital economy, their complex entanglement with competitors like Google, and their application of data harvesting technologies such as smartphones. To approach these challenges and counteract the data exploitation of journalists, the action steps of the RRI framework could be translated into activities with a critical focus on controversial aspects of privacy, autonomy, and security issues to foster a security culture in the organization (Crete-Nishihata et al., 2020).

Legacy media could, for instance, invest more resources into regular in-house training and programs for digital self-defense to bypass infrastructures optimized for behavioral data extraction or work more closely with foundations for journalism that often have more capacity and resources to focus on developing new routines or resources for protecting journalists from data exploitation and various forms of surveillance.

Ideally, to ensure the responsible adoption of mobile technologies, media organizations could apply the RRI concept of AREA (anticipate, reflect, engage, and act)

as guidelines for action. They could work to anticipate the outcome of organizational activities and investments in mobile journalism. They could collaboratively reflect on motivations, work practices, and results of organizations' mobile engagement. They also could engage with relevant stakeholders (for example, mobile journalists, cyber security experts, media lawyers and economists, privacy and data activists, mobile technology developers, data engineers, and audience representatives) to find responsible solutions that might serve society in the best way possible. In addition, they could act according to the insights of this deliberative and multi-perspective approach. While the RRI approach probably would imply high investments in the form of time, money, and social coordination, it seems to be appropriate for understanding and bypassing extensive surveillance structures related to mobile technology in the ecosystem in which it operates.

Nonetheless, such measures would be costly. As long as media organizations operate in a highly competitive market, they might not be in a position to give such measures priority. There might also be other organizational constraints, such as a lack of managerial understanding and inflexible IT policies that can counteract a security culture (Crete-Nishihata et al., 2020).

7. Conclusion

In this article, we have reflected critically on the field of mobile journalism in light of Zuboff's theory of surveillance capitalism. For Zuboff (2019), the technological capacities for surveillance and data exploitation have metamorphosed digital infrastructures into the backbone of an emerging new and more radical form for capitalism based on the exploitation of human behavior as an unlimited raw material. Zuboff warns that this new emerging economic logic leads to the concentration of knowledge in the hands of a few, giving them an unprecedented instrumentarian power that not only threatens individual autonomy, sovereignty, and dignity but also the very foundations of democracy. We argue that, from this perspective, mobile journalism surfaces as a traceable data object where mobile journalists represent only one defined risk group that has become radically transparent to third parties. The watchdogs are not only being watched; their actions are translated into analyzable data that can be sold on markets for behavioral prediction. These issues are surfacing as increasingly complex due to the vast systems of audience surveillance conducted by media organizations themselves.

By applying the RRI framework, we outlined possible implications for mobile journalism of this double bind on an individual and organizational level. RRI guidelines would suggest engaging relevant stakeholders in deliberative discussions and critical thinking on the role of journalism in society and for democracy in light of increasing surveillance and forms of dataveillance. In the case of mobile journalism, the relevant

stakeholders include journalists, media organizations, policy makers, journalism education, media researchers, and relevant foundations. A key goal would be to raise awareness of these issues between and across those stakeholders. Furthermore, regulatory frameworks that address surveillance and protect privacy of citizens is another path. In the European Union, regulatory work on e-privacy is already in the making. This work can pave the way for long-term support, both politically and financially, for the ethical design of platforms and tools for both citizens and mobile journalists. Nonetheless, this problem is not easily solved on a national level, as surveillance capitalists are multi-national corporations. In addition, as Morozov points out, the root of the problem might have to be addressed in relation to the economic system of capitalism itself.

Many of the potential harms, as pointed out in the introduction, will not be exclusive to mobile journalism, but will be the same for all citizens. As we have discussed in this article, journalists are a risk group, and the risks for society are potentially high.

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Article

Disenchanted Trust: Instrumental Reason, Algorithmic Governance, and China's Emerging Social Credit System

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Abstract

Digital technologies have provided governments across the world with new tools of political and social control. The development of algorithmic governance in China is particularly alarming, where plans have been released to develop a digital Social Credit System (SCS). Still in an exploratory stage, the SCS, as a collection of national and local pilots, is framed officially as an all-encompassing project aimed at building trust in society through the regulation of both economic and social behaviors. Grounded in the case of China's SCS, this article interrogates the application of algorithmic rating to expanding areas of everyday life through the lens of the Frankfurt School's critique of instrumental reason. It explores how the SCS reduces the moral and relational dimension of trust in social interactions, and how algorithmic technologies, thriving on a moral economy characterized by impersonality, impede the formation of trust and trustworthiness as moral virtues. The algorithmic rationality underlying the SCS undermines the ontology of relational trust, forecloses its transformative power, and disrupts social and civic interactions that are non-instrumental in nature. Re-reading and extending the Frankfurt School's theorization on reason and the technological society, especially the works of Horkheimer, Marcuse, and Habermas, this article reflects on the limitations of algorithmic technologies in social governance. A Critical Theory perspective awakens us to the importance of human reflexivity on the use and circumscription of algorithmic rating systems.

Keywords

algorithmic rationality; Frankfurt School; instrumental reason; Social Credit System; social governance; trust

Issue

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1. Introduction

The development of big data and algorithmic technologies has enabled governments across the world to fashion new modes of political and social control. An epitome of this emerging trend of algorithmic governance is China's plan to build a Social Credit System (SCS), which has evoked fear internationally of an Orwellian technodystopia. The system is intended to aggregate data on both natural and legal persons in order to monitor, evaluate, and modify their actions through a joint mechanism of reward and punishment. Instead of seeing the SCS as an exclusive symbol of Chinese authoritarianism, we should situate it in a global context of algorithmic governmentality while recognizing its embeddedness in local

political and cultural traditions. The use of algorithmic analysis in governmental practice is not unique to China, but is in place in Western countries as well, especially with respect to policing and criminal justice (e.g., Angwin, Larson, Mattu, & Kirchner, 2016; Dencik, Hintz, Redden, & Warne, 2018; Richardson, Schultz, & Crawford, 2019). A close look at the China case will inform larger discussion of algorithmic governance across the world. Framed by the Chinese government as an endeavor to build trust in society, the SCS represents the colonization of the everyday life by ascendant logics of quantification, measurability, and efficiency—or in short, the quantification of the social (Mau, 2019). But can trust be built through algorithmic quantification and top-down schemes of governance aimed to nudge, constrain, and manipulate

human behavior into compliance? Although a growing literature has empirically investigated the mechanics of the SCS in China, this fundamental theoretical question remains unanswered.

This article addresses this void and interrogates, more broadly, the increasing embrace of algorithmic rationality in social governance. I first sketch out the current shape of the SCS in China in relation to evolving discourses around it, and propose a conception of the SCS as a project of moral engineering with a focus on trust-building. Then, I centralize and delve into the moral and relational dimension of trust in social interactions. In the rest of the article, I draw on the Frankfurt theorists' critique of formalized or instrumental reason, particularly the works of Horkheimer, Marcuse, and Habermas, to elaborate on the ways in which the SCS—as an epitome of the quantification of the social—disenchants and flattens moral values such as trust and trustworthiness.

2. Beyond Surveillance: Social Credit System as Moral Engineering

China's SCS has attracted global attention since 2014, after the Party-state released the Planning Outline for the Establishment of a Social Credit System ("Establishment of a social credit system," 2015), which laid out goals to put the system in place by 2020. A simple Google search of China's SCS returns links to Western media coverage that compares it to the dystopian world depicted in the *Black Mirror* episode, "Nosedive" (Schur, Jones, & Wright, 2016), where people rate each other for every interaction, which impacts their socioeconomic statuses. A growing amount of research in this area has debunked these reductionist caricatures (e.g., Ahmed, 2019; Creemers, 2018; Ohlberg, Ahmed, & Lang, 2017), and has shown that, far from an established all-encompassing system that assigns everyone a single score, the current state of the SCS consists of dozens of government-led pilot projects at local or national levels and various commercial ones run by tech giants such as Alibaba and Tencent. At the national/central level, the National Development and Reform Commission, the Supreme People's Court, and the People's Bank of China, among others, have been taking the lead in initiating nationwide SCS pilots, including the formation of an interministerial joint conference, a national financial credit information database, and a portal called Credit China that publicizes SCS policies as well as blacklists and red lists. At the municipal and county levels, local governments have been experimenting with their own SCS systems, many of which are based on quantified scoring. Although these programs are led by the government, the collaboration between governmental and commercial actors have also been noteworthy, with the latter providing strong technological and infrastructural support. While commercial SCS experiments are more akin to loyalty programs (Creemers, 2018), those run by the government are more invasive and wider in scope.

One of the most notorious examples of government-led pilots is the case of Rongcheng, a county-level city in Shandong Province, where residents are assigned scores on a scale of 1,000 and classified into descending levels from A to D. The evaluation system covers a range of behaviors and activities: economic, social, civic, and moral. Misdemeanors, such as jaywalking, littering, and getting traffic tickets, lead to score deduction and punishment, while exemplary behaviors, such as caring for elderly parents, helping others, donating to charity, and volunteering for public programs, translate into score bumps and benefits (Mistreanu, 2018; Ohlberg et al., 2017). Benefits may come in the form of deposit waivers for bike rental, discounts on heating bills, or advantageous terms on bank loans (Mistreanu, 2018), while penalties include limited access to government benefits and restrictions on market entry (Creemers, 2018).

Admittedly, not all SCS pilots utilize quantified schemes; some renowned ones simply take the forms of blacklists and red lists, such as the judgement debtors list administered by the Chinese Supreme People's Court. However, there has been growing reliance on quantification across local trials. Liu (2019) documents that by mid-2019, 21 Chinese cities had enacted their own quantified SCS pilots, and 27 more cities were in the preparatory stage. Notable cases include Fuzhou's Jasmine (Moli) score that rates citizens on a 0–1,000 scale, and Suzhou's Osmanthus (Guihua) score that assigns citizens up to 200 points.

The SCS represents the Party-state's latest endeavor to modernize and automate its social governance. The root of this cybernetic mode of control can be traced all the way back to the 1970s and 1980s, when the Party leadership and intelligentsia began discussing the automation of social governance. The cybernetic imagination advanced by Qian Xuesen, China's Father of Rocketry, and Song Jian, a cybernetics expert, shaped former president Hu Jintao's concept of scientific development, where scientific and engineering approaches were imagined as solutions to problems in the social domain (Hoffman, 2017). In the early 1990s, the idea of building a credit system was broached in response to Chinese firms' debt default problem; in 2002, then-President Jiang Zemin voiced the demand for a SCS to regulate market behavior (Liang, Das, & Kostyuk, 2018). Early efforts in building the credit system focused primarily on the financial sector; the Planning Outline released in 2014, however, significantly extended the scope of the project to the social domain.

Western media coverage and some scholarship on the Chinese SCS heavily focus on the issue of surveillance, privacy, and political control; Liang et al. (2018), for instance, frame this project as a 'state surveillance infrastructure.' Yet surveillance is not the end, but a means through which the authorities bring the citizens' behaviors—potentially political but mostly civic—in line with the official ideologies and values. The 2014 Planning Outline clearly indicates the moral education component

of the SCS, which is aimed to cultivate a culture of trust and integrity. The SCS, in this sense, fits into the Party's long tradition of 'spiritual civilization' campaigns. Hence, I propose an alternative framework of the SCS as a project of moral engineering with emphasis on trust-building.

Some scholars, such as Lee (2014), characterize China as a low-trust society, where distrust of strangers is prevalent largely because the society is traditionally structured around familial or kinship ties. Moreover, the informal networks of trust were undermined through incidents of political turmoil, such as the Cultural Revolution. Post-reform China witnessed rapid economic growth along with unethical get-rich-quick schemes and the corruption of moral integrity. A slew of social issues has become disheartening over the past decades, such as food safety, corruption, fraud, tax evasion, incivility etc. Officially, the SCS has been framed as a mechanism for building social trust and a culture of integrity; it covers a range of relationships among the state, the corporate sector, and individual citizens. The 2014 Planning Outline lays out the goal to build a joint mechanism of reward and punishment, which "mak[es] it so that the trustworthy benefit at every turn and the untrustworthy can't move an inch" ("Establishment of a social credit system," 2015). Local pilots have also significantly focused on the cultivation of trustworthiness and civility, such as the Rongcheng case and, more recently, the controversial and short-lived Suzhou Civility Code pilot that encouraged citizens to sort their trash, follow traffic rules, and engage in volunteer services (Chiu, 2020). In this sense, the SCS is an extension of the Party-state's lasting scheme to cultivate its citizens' *suzhi* (human quality).

Public opinion in China has appeared to embrace the role of the SCS to enhance trust and civility in society. A nationwide survey on Chinese citizens' perception of the SCS revealed high levels of approval: 80% of the 2,209 respondents either somewhat or strongly approved the system (Kostka, 2019). Privacy infringement is not the dominant frame people use to interpret the SCS; rather, the initiative is often considered conducive to promoting honest dealings in society and economy (Kostka, 2019).

In this sense, the SCS can be construed as a project of moral engineering. Pre-digital or non-digital strategies in this regard include promoting model citizens, enacting the *dang'an* system with dossiers kept on individuals' trajectories (Jiang, 2020), and promulgating spiritual civilization campaigns such as 'Eight Virtues and Eight Shames.' Of course, the SCS, with the use of digital technologies, differs greatly from its antecedents in terms of its workings and underlying logic. Much of the extant literature on the SCS either tiptoes around or only scratches the surface of the issue of trust. This article seeks to fill this void by returning to basic questions on the ontology and ethics of trust in relation to the technologization of social governance.

3. Trust as a Moral Concept: Grounding Social Trust in Moral Philosophy

3.1. Trust as a Floating Signifier in Official Planning of the Social Credit System

The term 'trust' is recurring in the 2014 Planning Outline on the construction of the SCS. In some sense, it can be read as the authorities' modus operandi to utilize auratic terms such as 'trust' as a justificatory cover for political and ideological control. The notion of 'trust' is thus reduced to what Marcuse (1964/2002) calls a self-validating 'magic-ritual' formula hammered and re-hammered into people's minds—a mere governing device that precludes the development of meaning. There may be some level of sincerity in the authorities' intention to reshape the moral landscape of the society, but whenever trust is invoked, its content is taken for granted as a given that entails no explication.

In fact, trust is an exceedingly nebulous concept that can be defined from different perspectives. What complicates things even further is that the all-encompassing and slippery word for 'trust' in Chinese (*xin*) can, in other contexts, mean 'credit,' 'integrity,' 'confidence,' 'belief,' or 'faith.' There has been no clear analytic distinction made between these synonyms in the official discourse around the SCS. In fact, it is exactly by invoking the ambiguous notion of *xin* that the authorities manage to conflate the notion of trust with its numerous synonyms, thus quietly extending the scope of its control from market behavior to social and civic conduct. The 2014 Planning Outline envisions the SCS to be a panacea for problems in four different domains: administrative and government affairs, business and commercial activities, judicial affairs, and social interactions. In the document, the Chinese words *zhengxin* (financial credit) and *chengxin* (trustworthiness or integrity) are both used under the overarching rubric of 'social credit.' Moreover, input data in the design of local pilots often include variables from different sectors—administrative, judicial, economic, and social. While overdue loans or legal violations may lead to low scores, such deeds as donating blood and volunteering would be rewarded in local pilots conducted in cities such as Xiamen and Fuzhou (Lewis, 2019). The rewards and punishment also apply to a wide range of scenarios that impact people's life, such as housing, employment, medical care, and public services, among others. In one extreme case, a Chinese dating website boosted visibility of users with higher Sesame credit score—a commercial scoring system created by Alibaba—placing their profiles in prominent spots (Hatton, 2015).

What sets the SCS apart from Western credit scoring systems is the state's attempt to regulate not only economic activities but also social behaviors, and the overt top-down scheme of reward and punishment stretching into private domains of everyday life. In this process, trust becomes a floating signifier across different

sectors and contexts, whose meanings seem to be self-evident yet never clearly delineated. ‘Trustworthiness’ (as in social interactions) is conflated with ‘creditworthiness’ (as in market transactions) or even compliance with regulations (as in civil and judicial domains). Indifferent to the specific workings and meanings of trust in different contexts, the SCS is largely built on the rationale of pre-existing quantified ratings of creditworthiness. Yet is it sensible to quantify and rate trustworthiness, a moral virtue, based on a FICO-score-like model? This is a basic question too readily brushed aside.

Admittedly, even the financial credit rating *per se* is not free from associations with moral concepts such as honesty and integrity (Lauer, 2017); credit scores, when taken far beyond their original turf and used as proxies of other virtues in hiring and promotion processes, can yield damaging effects on one’s life (O’Neil, 2016). Nonetheless, credit scoring is widely accepted in many circumstances due to their efficiency in regulating economic and transactional activities within certain rule-bound contexts, typically marketplaces. Compared to the moralization of creditworthiness, the SCS’s logic of quantifying morality is equally, if not more, pernicious as it, by design, applies a marketplace-based governmentality to the non-economic realm—particularly the social, the civil, and the interpersonal. Trust in marketplace and business settings is oftentimes calculative—and perhaps rightfully so—because transactions within this context are heavily instrumental, whereas trust in wider social (and non-economic) interactions is relational, as it is anchored in “social relationships when there are strong beliefs about the goodwill, honesty, and good faith efforts of others” (Poppo, Zhou, & Li, 2016, p. 724). The muddling of calculative and relational dimensions of trust amounts to the confusion between what Habermas (1984) would call instrumental/strategic action and communicative action. While strategic action strives for influence and instrumental ends, communicative action seeks to reach genuine understanding (Habermas, 1984). To Habermas, the issue with technological modernization lies in the encroachment of technical efficiency in the realm of communicative action (Pippin, 1995). The urge to quantify trust in social interactions is reflective of this trend. Yet to see trust as a calculable matter fails to do justice to the rich moral connotations of relational trust, that is, a general belief in the integrity of others during social interactions.

3.2. Trust and Moral Autonomy

To ground relational trust in moral philosophy, I follow Seligman’s (1997) comparison of trust and its synonym ‘confidence.’ In part informed by Luhmann (1988), Seligman (1997) posits that confidence hinges on one’s perception of the reliability of a social system and its enforcement of role expectations; in other words, confidence is placed upon institutional authority, such as religion and kinship in traditional societies, and the market

or the state in modern societies (Lee, 2014). In contrast, trust emerges in response to “the breakup of primordial forms of social organization and the greater differentiation of social roles,” which results in more intersubjective negotiation and higher contingency (Lee, 2014, p. 5). To put it in a nutshell, when confidence in a system of social role expectations can no longer be taken for granted—and when the possibility of dissonance in role fulfilment arises—there emerges the need for trust as a form of social relations (Seligman, 1997). Seligman, following Luhmann, thus locates trust in the realm of interpersonal and social connections, or in the encounter between self and alter, recognizing the moral autonomy of both.

Moreover, Seligman stresses that trust, different from confidence, implies risk and uncertainty. Trust is incurred often when “the acts, character, or intentions of the other cannot be confirmed” (Seligman, 1997, p. 21). While trust involves uncertainty and vulnerability, confidence often pertains to the reliability of the other’s words, commitments, or acts based on past knowledge and future possibilities of sanctions (Seligman, 1997). Trust, in this sense, also differs from a contract. A contract explicitly lays out the agreed-upon terms and rules binding the involved parties, with the threat of sanctions, whereas trust operates upon the freedom from such formal agreement and deterrence. That is not to say that there is no obligation to be trustworthy, but this obligation “arises from moral agency and autonomy, from the freedom and responsibility, of the participants to the interaction” (Seligman, 1997, p. 6).

Trust in social interactions should then be construed not as an inert substance, but as a relational practice that involves moral agency and autonomy. To take Seligman’s framework further, I echo Flores and Solomon (1998) in locating trust within a “dynamic emotional relationship which entails responsibility...[and] a set of social practices, defined by our choices, to trust or not to trust” (p. 205). This kind of trust carries a moral valence.

Both trusting others and being trustworthy are moral virtues, because trust-giving requires the trustor’s benevolence to prevail over the unpredictability of others’ intentions and over potential risks, and being trustworthy entails the trustee’s responsibility to fulfill promises and expectations as well as to reciprocate the trustor’s kindness. Trust thus subsumes risks, enabling interactions that would otherwise be impossible. Of course, as a choice, to trust or not to trust is never guaranteed, and may involve some level of calculation. But trust in social interactions is never a mere function of such calculation. A person may choose to trust someone despite the low confidence in the latter’s ability to reciprocate. In the worst-case scenario, the trust relationship breaks down eventually; and the best outcome is that the trustee, moved by the trustor’s sincerity, manages to honor the trust relationship against all odds. Trust as such never preempts any possible trajectory and gives space to the moral agency of both parties involved.

As moral virtues, trust and trustworthiness in the realm of communicative action naturally resist quantification and datafication. The impulse to quantify trustworthiness through algorithms—and to use such quantification as the basis of trust-giving—is symptomatic of the deepening technologization of society and instrumentalization of reason. To critically examine the ascendant trend to quantify moral worth, we may revisit and extend the Frankfurt School scholars' trenchant critique of the technological society and formalistic rationality in mid-20th century. Informed by their theories, I discuss in the rest of the article how the algorithmic rationality (Lowrie, 2017) or algorithmic governmentality (Rouvroy, 2013) animating the SCS contradicts the ontology of relational trust and undermines its formation in social/civic interactions.

4. A Critical Theory Perspective on the Social Credit System and Trust-Building

4.1. From Instrumental Reason to Algorithmic Rationality

One of the main concerns of the first-generation Frankfurt theorists, especially Horkheimer and Marcuse, is the interplay between technology, rationality, and domination. They take issue with the ascendancy of late capitalism and techno-science as the twin forces of domination, which undergird a type of instrumental reason. Their discussion of instrumental reason and unreflective technical process is largely informed by Weber's (1921/1978) distinction between formal rationality and substantive rationality (Gunderson, 2015). Weber (1919/1946) traces in modern bureaucracies the displacement of traditional and value-laden understanding of the world with a technical and impersonal mode of thinking and behaving, oriented towards efficiency and instrumental goals; this type of formal-rational understanding disenchant the lifeworld and erodes traditional values. Weber's theory influenced Horkheimer's (1947/2004) notion of instrumental reason and Marcuse's (1964/2002) discussion of technological rationality.

Horkheimer (1947/2004) refers to the formal rationality as subjective reason/rationality. In *Eclipse of Reason*, he deals at length with the process whereby objective reason, characteristic of the pre-modern era, has been replaced by subjective reason in modern societies. With objective reason, one judges actions and objects as good or bad, according to their harmony (or the lack thereof) with the objective world as a reasonable system. The subjective reason, however, signifies the formalization and instrumentalization of reason and manifests itself in one's "ability to calculate probabilities and thereby to coordinate the right means with a given end" (Horkheimer, 1947/2004, p. 4). Subjective reason is formalized in that it is purged of moral and aesthetic reflections and concerned merely with "the adequacy of procedures for purposes more or less taken for granted" (Horkheimer,

1947/2004, p. 3), thus precluding deliberation on the meaning and merit of substantive goals; it is instrumentalized in that it is aimed only to attain subjective interests or self-preservation—the utmost 'reasonable' goal in modern societies. Subjective reason is incapable of evaluating the quality of an object or action in terms of good or bad, and is only interested in their utility.

Frankfurt theorists associate this type of instrumental rationality to modern science and technology, which are firmly grounded in positivism and naïve empiricism. As Horkheimer (1947/2004, p. 53) contends, the positivists reduce science to its empirical procedures, make it "absolute as truth," and rely on the scientific successes to justify their methods. Positivism separates fact from value and, when extended to the social domain, leads to the reification of life and perception and the erosion of human agency.

In the same vein, Marcuse (1964/2002) discusses how the operational thinking of positivist science treats any concept as no more than a set of operations; and how, on a societal level, the metaphysical conception of subjectivity is replaced by what he calls 'a one-dimensional society,' where people's thoughts and behaviors are molded in a way that conforms to the dominant power in society with the aid of unreflective technological progress. To Marcuse (1964/2002), science and technology in late capitalist societies are not neutral, because, as a socio-historical project, they operate in a given universe of discourse and action, and are already structured in a particular way. Domination in modern society, he argues, not only perpetuates itself *through* technology but *as* technology, in the sense that technology at once legitimates and glosses over the dominant power with its aura of objectivity. Both Horkheimer and Marcuse point to the paradox where rationality progresses into irrationality.

Central to the workings of modern science and technology is the logic of quantification and calculability. Not only is there a latent link among quantification/calculation, knowability, and domination in theory, but in praxis, there has been a long history in which bureaucrats and technocrats have deployed statistical and mathematical tools for social governance in early modern societies (e.g., Desrosières, 1998; Foucault, 2007; Porter, 1996). With the increasing mechanization of governance embraced by bureaucratic institutions, numbers have been relied on as a vital means of classification and control.

Frankfurt theorists trenchantly critique the expansion of this logic of quantification and calculability. Obsession with calculability, according to Horkheimer (1947/2004), supplants meanings with function or effect. The only 'reasonable' words are those that can be technically calculated for possibilities. Moral judgment about good or bad, in their unverifiable forms, are deemed useless. To make these evaluative criteria 'reasonable,' scientific operationalization is entailed; that is how the incalculable enters into the scientific horizon—"through a series of reductions" (Marcuse, 1964/2002, p. 142).

The quantification of qualities, Marcuse (1964/2002) argues, constitutes a particular way of seeing, anticipating, and projecting, one that separates the reality from all inherent ends and paves the way for domination. Under the logic of quantification, values and qualities “lose their mysterious and uncontrollable character” and “appear as calculable manifestations of (scientific) rationality” (Marcuse, 1964/2002, p. 172): They are mutilated and reduced to their behavioral translation.

The algorithmic rationality that animates the SCS is an extension of the instrumental or technological rationality in Frankfurt theorists’ critiques. Nonetheless, algorithmic rationality also differs from traditional scientific rationality and signifies a novel epistemic paradigm. While the sine qua non of traditional scientific rationality has been the work of proof (Lakatos, 1976), the goal of data-driven algorithms is not to prove anything, but to achieve feasibility, practicality, and efficiency (Lowrie, 2017). Algorithmic processes bypass the systems of verification associated with traditional science that “usually appear essential to attest to the robustness, truth, validity or legitimacy of claims and hypotheses formulated about reality” (Rouvroy, 2013, p. 151). Algorithmic analysis is not about causes, but rather about correlations and probabilities based on patterns of data.

The workings of algorithms are undergirded by a type of anticipatory rationality (Amoore, 2013; Gillespie, 2014; Hong & Szpunar, 2019), aimed at predicting and preempting possible futures. It “separates the individuals from their possibility of not actualizing what they are capable [of], or their possibility of not being subjected to what they are likely to be subjected to” (Rouvroy & Stiegler, 2016, pp. 10–11). In this way, the preemptive logic acts on the present while also shaping the future, actualizing some potentialities while usurping others. Yet this process is smoothed over by the cold charisma of digital technologies that conjures up an aura of objectivity and impartiality (boyd & Crawford, 2012; Gillespie, 2014). Although algorithms are often interconnected with human experts, they are also expected to act on their own and thus possess their own agency and authority. This is reminiscent of Horkheimer’s (1947/2004, p. 87) diagnosis that “the machine has dropped the driver.”

The Frankfurt School offers a broader historical framework for the reflection of algorithmic rationality that progresses from older forms of scientific and technological rationality. It shows that the progression of technological rationality is not inevitable but historically contingent, shaped by shifting configurations of political and economic interests. What is hinted at but underexplored in their theorization is that such a shift to instrumental reason is as philosophical and epistemological as it is moral. The rejection of an objective moral order itself presupposes a certain view on morality or a certain moral economy—to borrow Daston’s (1995) term, namely a system of values carrying affective and moral valences. Objectivity and impartiality are part and parcel of the moral economy on which instrumental rea-

son thrives. In the following, I shall extend the Frankfurt School’s theory on instrumental reason through the lens of moral economy, and apply it to the case of quantified SCS pilots. I argue that algorithmic scoring of trustworthiness defeats the purpose of moral engineering as it undermines the ontology of relational trust by authorizing a moral economy antithetical to the workings of trust in social and civic relationships.

4.2. Disenchanting Trust: The Paradox of Moral Engineering

As an embodiment of the formalization of reason, the quantified SCS pilots seeks to transmute trustworthiness into a calculative and knowable matter represented by standardized numerical values. Admittedly, in certain rule-bound contexts such as a marketplace, technologies of quantification have some merits in mediating exchanges and transactions. Porter (1996), for instance, argues that quantification as “a technology of distance” is suited for communication extending beyond the boundaries of locality and community (p. ix); it facilitates intellectual exchanges and economic transactions since numbers render “dissimilar desires, needs, and expectations” commensurable (p. 86). It is worth noting that Porter’s focus rests on the tension between human expertise and mechanical objectivity in professional and scientific fields (e.g., actuarial science, accounting, engineering, medicine) instead of intersubjective encounters in the private domain. In fact, technologies of quantification were developed to replace personal trust in situations where institutional authority was weak (Daston, 1995; Porter, 1996). In this sense, the rise of technologies of quantification is symptomatic of the declining personal trust rather than a solution to restoring it. Likewise, the quantified SCS systems in China could be understood as a symptom of the declining moral authority of the communist ideology.

In the present day, while quantification of trustworthiness in transactional relationships (e.g., rating of vendors on Amazon and ratings of drivers on Uber) minimizes risks and transaction costs, its application to trust formation in non-instrumental interactions is problematic. The all-encompassing design of the SCS ignores such contextual differences. Notwithstanding its moralizing framing, the SCS as a project of moral engineering is self-defeating for various reasons. Since oft-mentioned issues of privacy infringement, opacity, inaccuracy, and bias have been thoroughly explored in the works on politics of algorithms, they will not be belabored here. Instead, my focus is placed upon how quantified SCS systems impede the formation of relational trust.

First, as discussed above, relational trust is best construed as a moral virtue at the discretion of individuals, but the quantified SCS pilots contradict its ontology. The technological quantification of trust relies on a moral economy of impersonality and impartiality, particularly “the reining in of judgment, the submission to rules, the reduction of meanings” (Daston, 1995, p. 19). It is

precisely a moral economy inhospitable to the formation of relational trust, which entails the exercise, rather than the withholding, of judgment. In the moral economy characterized by impersonality and impartiality, individuals are treated as mere technical objects rather than “ethical or aesthetic or political agent[s]” (Marcuse, 1964/2002, p. 150). They become ‘one-dimensional’ not only in Marcuse’s sense of the word—as their critical consciousness is whittled away—but also because they are collapsed into one-dimensional digital profiles, into digits and numbers. Accordingly, such systems shift attention from human relationships to technical efficacy, and thereby relegate trust to mere confidence in technologies. I have discussed above the distinction between trust and confidence, and how the official framing of the SCS strategically muddles this distinction. The confusion of these two concepts is, in some sense, a result of the increasing technologization of society at large. O’Reilly (2013), for instance, touts the benefits of algorithmic regulation, including the affordance of data-driven reputation systems, which he believes could “improve the outcomes for citizens with less effort by overworked regulators” (p. 294). Technologies are imagined as solutions for social problems. This type of ‘solutionism’ (Morozow, 2014) resonates with the elitist cybernetic thinking in China and with the project of the SCS. It appears sensible that issues of trust in a technological society would be readily resolved through technological means. However, as Nissenbaum (1999) cautions, the attempt to attain trust through technical means (e.g., cybersecurity measures) is misguided, since when we seek to attain security, we are usurping the role of trust. She cites evidence showing that the extrinsic constraints, such as surveillance, could ultimately diminish trust because intrinsic motivation is stifled.

The reduction of trust to confidence in technologies prompts tactical maneuvers such as gaming. Instead of empowering individuals to build and exercise trust, the scoring systems nudge them to gain more points. Individuals only need to come up with whatever methods to increase the score—or to coordinate input variables with expected output. Whether these methods are morally good or not becomes irrelevant. Individuals no longer need to interact with others to determine trustworthiness and the quality of trust relationships; rather, they are prompted to interact more frequently with algorithms to monitor their own standings. This transference of evaluation from human reason to algorithmic rationality is a contemporary manifestation of the formalized/instrumental reason, a type of rationality only concerned with the coordination of effective means with taken-for-granted ends.

Second, the technological quantification of trust, by actualizing certain possibilities while preempting others based on cost-benefit analysis, forecloses the transformative power of trust. Trust is precious in social relationships because it subsumes risks and enables human interactions that would be otherwise impossi-

ble. Although it does not preclude the possible breakdown of a given relationship, it opens up possibilities for the enhancement of human bonds and the nourishment of moral characters. With the development of cold and authoritative algorithms, such an unrealized space of possibilities is converted into a verifiable temporal sequence (Reigeluth, 2014). Through the reduction of risk and uncertainty, algorithmic analysis of trustworthiness inhibits, rather than enables, risk-taking behavior and preempts its potentialities to generate favorable outcomes. Moreover, the unreflective use of data about individuals’ past behaviors to extrapolate their future trajectories unfairly assumes the permanence of their propensities while ignoring their potential to transform themselves for the better, hence the perpetuation of their undesirability. And it has been noted that the SCS pilots lack uniform mechanisms for credit repair for low scorers (Ohlberg et al., 2017). Some who commit misdemeanors may have undergone extenuating situations to which the one-dimensional scoring system is indifferent. They may be helped through others’ willingness to engage them instead of further punishment. The joint reward and punishment mechanism envisioned in the planning of the SCS risks duplicating punishment across a range of unrelated domains and perpetuating the vicious cycle that entraps low scorers. The preemptive logic of algorithmic analysis annuls the transformative agency of individuals in changing both others and themselves; it contradicts the very end of moral engineering, which is to cultivate subjects into better citizens.

Third, further disenchanting the moral concept of trust is the SCS’s conflation of economic and social behaviors and its confusion of financial creditworthiness with general trustworthiness. This tendency reflects a general process of the economization of society (Mau, 2019), where economic logics carry over into non-economic spheres. Intentionally extending the model of financial credit rating to non-economic spheres makes it so that ratings are no longer bounded within a particular marketplace, platform, or context; nor are they restricted to rational-economic interactions, but spill over indiscriminately to any spheres of life, giving rise to the reification of values. Trustworthiness is not only rendered calculable under the economic rationale, but is incentivized with material rewards as well. In Shanghai, for instance, a government-run social credit initiative offers trustworthy youths one-year access to rent-free apartments to reward their commitment to volunteer work (Yu, Liu, & He, 2018). Yet the true aura of trustworthiness and integrity as moral characters lies precisely in their independence from the economic and instrumental logics and from external incentives. The attempts to tether non-instrumental acts with material ends erode the intrinsic authority of moral norms.

Last but not least, in the case of SCS, algorithms that represent the will of the state loom above individuals in social interactions as a mighty third party, disrupting the trust relationship as a ‘moral party of two,’

to borrow Bauman's (1993) term (see also Lee, 2014). Admittedly, since the socialist era, the Party-state has sought to regulate the private life of citizens through various means and organizations (e.g., neighborhood committees). The use of quantified SCS systems to intervene in communal or even familial relationships as well as stranger sociality is an extension of this tradition. In the Rongcheng SCS pilot, for instance, deeds worthy of reward even include caring for elderly parents (Ohlberg et al., 2017). Mediated through algorithmic technologies, regulation of such private behavior operates quietly in the background as if bypassing the political authority. However, as the Frankfurt theorists caution, technologies are deeply connected with political power. The SCS seeks to bring individuals into compliance with the hegemonic values defined and promoted by the Party-state. Yet this technologically enhanced attempt to engineer morality and civility is self-defeating because it erodes the very foundation on which moral and civic norms rest.

Looking at the state-led 'spiritual civilization' campaigns in the 20th century China, Lee (2014) argues that the state management of social interactions, especially stranger sociality, intervenes in and disrupts the moral encounter where the self is supposed to assume moral responsibility in their direct dealings with others. Invoking Bauman's view (1993) on 'the moral party of two,' Lee (2014, p. 20) argues that a moral relation is "an affair of two, which cannot open up to a third party or an authority figure." Therefore, Lee (2014) argues that morality cannot be entrusted to the state or the market but should be cultivated via a robust civil society. Extending Lee's conception of moral relations as uncodifiable, I contend that trustworthiness and civility will not thrive under the weight of state-imposed and technologically mediated monitoring and nudging. Although trust, trustworthiness, and civility may be induced through top-down interventions such as the promulgation of norms and moral education (Luhmann, 1979; Nissenbaum, 1999), technologies alone will not solve the core issue of cultivating a social climate amenable to trust formation. To build a culture of integrity, space should be carved out for individuals to practice trust and build trust relations or civic bonds with others in everyday settings through trial and error, instead of falling back on a mighty third party for a confidence rating. Assuming the moral engineering project is sincerely meant to cultivate a more civilized citizenry, it ought to be, at the very least, decoupled from practices of law enforcement and market regulation, which are currently lumped together under the overarching rubric of the SCS.

5. Conclusions

This article examines China's emerging SCS as a project of moral engineering through the lens of Critical Theory, addressing the fundamental theoretical question as to whether the SCS could, as the official discourse proposes, provide a solution to the moral crisis in the rapidly

developing society. The quantified SCS pilots conflate economic and social behaviors and rely on algorithmic rationality for the evaluation of one's trustworthiness, disregarding the meanings and workings of trust and trustworthiness in different contexts (e.g., marketplaces vs. communities). The community-based relational trust is crudely reduced to calculative trust; efficiency and impersonality are privileged over subjective discretion and autonomy. Such tendencies are symptomatic of the increasing technologization of governance in modern societies. However, trust in social and civic interactions needs to be cultivated and practiced through one's encounters with others; and trustworthiness is not to be standardized and flattened into algorithmically generated numerical values.

Trust entails risk, uncertainty, responsibility, moral autonomy, and possibilities without guarantee, whereas these are precisely the elements that the algorithmic rationality is aimed to foreclose. To build trust, we need a different logic than instrumentality—a mode of thought that militates against naive operationalism and ubiquitous quantification (Marcuse, 1964/2002). We need to put trust back into moral relations between individuals, with their moral autonomy restored so that they can make evaluations with their individual reason, emotion, and judgment. It is misleading to believe that, in the case of trust-building, technological rationality is superior to traditional moral education, even though it may appear more efficient. In fact, it is precisely such efficiency that undermines the very cause of trust building.

Of course, it would be unhelpful and naïve to advocate a romantic return to the pre-modern era; nor is it the intention of the Frankfurt theorists. Instead, they are envisioning possibilities to reconstruct technologies in order to contribute to human freedom and possibilities. This requires a shift away from the unreflective positive thinking to a critical consciousness. Hence, instead of doing without technologies, we ought to reflect on when (and how) to incorporate technologies into human decision-making, and when (and how) to resist technological colonization of everyday life. We ought to contemplate the meanings of moral values as well as the quality of our goals rather than merely the efficacy of technological means. A critical rethinking of ethical issues around algorithms and governance through the case of China's emerging SCS also provides insights into existing practices of credit/reputation rating, user profiling, and algorithmic governance in Western societies. Re-reading Critical Theory in the digital age heightens our vigilance in the application of rating systems to expanding areas of everyday life, and our reflexivity on the use and circumscription of these systems.

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Conflict of Interests

The author declares no conflict of interests.

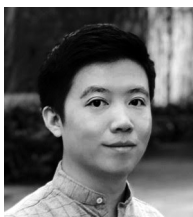
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Article

Framing Nuclearity: Online Media Discourses in Lithuania

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Abstract

This article refers to the concept of nuclearity as a broader technopolitical phenomenon that implies a political and cultural configuration of technical and scientific matters. The nuclear media discourses become a site of tensions, struggles, and power relations between various institutions, social groups, and agents who seek to frame nuclear issues. The Bourdieusian concept of a field as a domain of social interaction is employed by the authors of this article seeking to reveal interactions and power configurations within and between several fields: journalism and media, economy, politics, and cultural production fields (cinematography, literature, and art). Commercial and political pressures on media raise a question about the autonomy of this field. Media coverage of nuclear issues in Lithuania during the period 2018–2020, includes media framing produced by different sponsors of the nuclear media discourses and agents from the above-mentioned fields of journalism, nuclear industry, politics, cinematography or arts. The media coverage includes the news and press releases produced within PR and public communication of the atomic energy industry by representing the decommissioning of the Ignalina Nuclear Power Plant, articles written by journalists about the atomic city Visaginas, and challenges faced by the local community due to the closure of the Ignalina Nuclear Power Plant. The nuclear discourse includes debates by politicians around the topic of the lack of safety of the construction of the Astravyets Nuclear Power Plant in Belarus, and media coverage of the HBO series *Chernobyl* representing a strong antinuclear narrative by portraying the Chernobyl disaster crisis and expressing strong criticism of communism. The authors of this article carried out a qualitative content analysis of media coverage on nuclear issues and revealed features of the discourse: interpretative packages, frames, framing devices (Gamson & Modigliani, 1989), and dominating actors and institutions supporting the discourse.

Keywords

Astravyets nuclear power plant; Chernobyl; framing theory; Ignalina nuclear power plant; nuclear culture; nuclear imagery; nuclear media discourses; nuclearity; Visaginas

Issue

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1. Introduction

The article analyses the nuclear media discourses that proliferated on four news portals in Lithuania from 2018–2020. During this period, the debate on nuclear energy intensified around several topics. In recent years, nuclear discourse has been developed around the issue of the decommissioning of the Ignalina Nuclear Power

Plant (INPP), the only Lithuanian nuclear facility. This nuclear power plant with an RMBK-style reactor began operating in 1983. The INPP units were shut down in 2004 and 2009, while the dismantling process will last until 2038. The decision to close INPP was a precondition for Lithuania to enter the EU. The nuclear facility with RBMK-1500 reactors (the same as in Chernobyl) in Lithuania was considered by international experts

to be unsafe due to potential nuclear accident risks. In 2012, during a referendum on the construction of a new power plant, citizens did not support the idea of building a new nuclear power plant (NPP). The closure of the INPP has affected the situation of the 'atomic' town Visaginas which was established to accommodate atomic industry specialists and their families. The city comprises an exceptional multi-ethnic background for Lithuania—in the 1970s, nuclear industry experts, engineers, and construction workers from other republics of the Soviet Union were sent to Lithuania to establish the atomic industry. Following the closure of the INPP and the commencement of the dismantling process, Visaginas and its inhabitants have undergone a painful change of place identity; from mono industrial atomic town to the post-industrial and post-nuclear stage.

During the period of analysis which is the concern of this article, 2018–2020, new topics have appeared in the media discourse: media coverage of the Chernobyl accident and the HBO miniseries *Chernobyl*, which was filmed in Lithuania and the territory of INPP, and the growing political discourse on the lack of safety of the Astravyets NPP (ANPP) in Belarus on the border with Lithuania. The emergence of these four major topics evokes a discussion of how media framing takes place by involving nuclear media discourse sponsors from different social and professional fields: media and journalism, nuclear industry, politics, cinematography, and art. Nuclear discourses are interpreted and conceptualized in this study by using theories describing the phenomenon of nuclearity (Hecht, 2009, 2012). Additionally, inspiring insights are gained from Bourdieu's Field Theory (Bourdieu, 1993, 1996, 1998), which explains the distribution of power in various social spheres and fields, their peculiarities and interactions.

This peculiarity of media coverage raises the question of how the properties of the fields (nuclear industry as a specific economy, politics, media, cinematography, television) determine the specific traits of the nuclear discourses they produce. A study of nuclear media discourses falls within the realm of critical theory when discussing how social actors and institutions with greater power construct dominant discourses and how some participants with less power remain invisible and voiceless. It is important to identify the key actors in the nuclear discourse and the narratives they produce. At the same time, the very concept of nuclearity is scrutinized from a critical perspective, revealing how processes in the nuclear energy industry deal with the configuration of power.

2. Nuclearity, Nuclear Media Discourses and Bourdieu's Field Theory

In our study, we refer to the notion of nuclear media discourses (Entman & Rojecki, 1993; Gamson & Modigliani, 1989) as a form of framing and social construction applied to representations of nuclear issues. Media

discourses contribute to constructing the meaning of nuclear issues by providing interpretative packages utilizing frames as central organizing ideas (Gamson & Modigliani, 1989). Gamson and Modigliani (1989) determined the historically competing packages on nuclear issues—the pro-nuclear frame of *progress* as the society's commitment to technological development and economic growth, counterthemes of *runaway* and *soft paths, not cost-effective*, the ambivalent frame of *devil's bargain*. Other authors identified themes of technological and social progress, economic growth, political aspects, environmental concern, conflict, etc. (Zukas, 2018). Framing in media is influenced by social norms and values, organizational pressures and constraints, the pressure of interest groups, journalist practice and political orientations (Scheufele, 2000, as cited in Mercado-Sáez, Marco-Crespo, & Álvarez-Villa, 2019, p. 4). Nuclear issue-specific frames are promoted by sponsors engaged in the production of meaning and facilitating the articulation and spread of the interpretative packages through advocacy, public relations, advertising, and other tangible activities: interviews with journalists, articles, etc. (Gamson & Modigliani, 1989). Studies of media coverage on nuclear issues in different countries (Balkan-Sahin, 2019; Mercado-Sáez et al., 2019) reveal how powerful stakeholders and interest groups (politicians, government and other officials, nuclear industry companies) become the sponsors of pronuclear discourses and express their political and economic interests in the media. Stakeholders from environmental movements (citizens, organizations) express environmental concerns on nuclear issues in media discourse. As research on nuclear media discourse demonstrates, politicians and government officials tend to dominate coverage of the issue while environmental activist sources are less referenced. In many countries, the anti-nuclear discourse remains marginal.

One more important element distinguished by scholars is media norms and practices in which journalists and media companies play a prominent role; they become an important medium between sponsors of discourses and audiences.

Gamson and Modigliani (1989), while discussing how issue cultures are produced, point out the main determinants of this process: cultural resonances (larger cultural themes and support of broader cultural discourse), the activity of sponsors, and media practices (journalistic working norms and practices). In some cases, journalists actively participate by contributing their own frames and inventing their own catchphrases. Zukas (2018) notes that journalists choose rather the role of a messenger than an active producer of the nuclear discourse by applying certain strategies: obtaining information from political and government officials and the energy industry, citing sources from experts holding official titles and degrees and fall under the influence of strategic communication and public relations of nuclear companies. Peculiarities of framing are related to the nature

of journalism as a field. The Bourdieusian concept of a field provides a conceptualization of journalism as a field of power, a domain of social interaction and social practice that is co-constituted with social structures (Bourdieu, 1998). The theoretical framework provided by Bourdieu enables us to discern interactions and power configurations within and between several fields—journalism and media, economy, politics, civic society—and could enable a greater understanding of how nuclear discourses are constructed. On the one hand, the journalistic field is defined as relatively independent from politics and the economy and has its own logic, on the other hand, commercial and political pressures on the media raise a question about the autonomy of this domain, especially under the conditions of growing marketization of media (Brown, 2013). Analysis of various fields (politics, journalism, nuclear industry) reveals the main participants in the fields (journalists, experts, academics, intellectuals) and the nature of knowledge and practices they exercise in the field. In the shift to online journalism, journalism is undergoing a change as dependency on the market and subsidies from stakeholders is growing. Journalists acquire new professional roles, norms, practices, and new routines have been emerging (Zukas, 2018).

The authors describing nuclear energy point to the concept of nuclearity which embraces a broader area of nuclear matters: human-made isotopes, nuclear industry, a nuclear state, nuclear citizenship, and nuclear discourse (Hecht, 2009, 2012). The field of nuclear industry is not simply an ordinary and banal industry; it is a broader technopolitical phenomenon that implies a political and cultural configuration of technical and scientific matters. Thus, the concept of nuclearity reflects the interconnection of different fields: science and technologies, industry, politics, and cultural production (including media), medical and health care. Nuclearity is described as a techno-political regime dependent upon power relations in national politics and transnational networks.

According to Hecht (2012), nuclearity is related to nuclear exceptionalism—the implication that nuclear matters are unique, different from ordinary (*non-nuclear*) matters. It is related to a specific concentration of power and prestige in the field of nuclear research and industry. Nuclear exceptionalism is promoted in a broader cultural discourse. Since the 1950s, utopian dreams, atomic fantasies, and promises related to limitless and cheap electricity and visionary images of a better life have been disseminated (Hecht, 2012). The nuclear cultural discourse included four dominating ‘master tropes’—mystery, secrecy, potency, and entelechy (Kinsella, 2005). Mystification of nuclear science, theology, and hierarchy turned nuclear energy experts and specialists into ‘nuclear priests.’ According to Anshelm (2010), nuclear scientists are depicted as magicians and wizards whose work is a kind of ‘witchcraft,’ ‘atomic enchantment’ at the nuclear reactor as a ‘witch oven.’ These dominating themes supported nuclear

exceptionalism when nuclear was associated with something ontologically unique. At the same time, dominating themes of nuclear cultural discourse reveal the complexity of the interconnection of nuclear industry, science and technologies, politics, and culture works and how cultural production fields support the functioning of nuclearity as a techno-political regime.

Furthermore, because of the secrecy it entails, the nuclear energy industry is not a banal economy. The historic roots of secrecy can be traced to nuclear research around the creation of the atomic bomb and military use of nuclear energy. The mysterious and secret nature of the nuclear work created nuclear superiority and exceptionalism by substantiating the observation that “hierarchical structures that emerge under the nuclear sign privilege closed communities of technical, military, and government insiders” (Kinsella, 2005, p. 55). According to Kinsella (2005), nuclear science and technologies are widely portrayed as intellectually challenging and therefore cannot easily be grasped by ordinary people. Mystery and secrecy created a boundary between nuclear experts as representatives of the ‘hard sciences’ and the public, hence limiting public knowledge and disempowering the public by excluding them from decision making in the nuclear domain (Kinsella, 2005).

Nuclear disasters in Three Mile Island (1969), Chernobyl (1986), and Fukushima (2011) revealed the potential risks involved with the nuclear energy industry. Awareness of the risks posed by unsafe nuclear reactors has ushered in a new period of nuclear industry development. In the 1980s and 1990s, anti-nuclear attitudes intensified in many countries. New nuclear safety culture was introduced by raising and implementing new requirements and standards of safety and ensuring transparency and openness to the public. A broader cultural discourse turned from promoting an optimistic and utopian narrative on the future of nuclear energy to a pessimistic and even dystopian vision of the nuclear future. Many countries decided to curtail the role of the nuclear energy industry in national energy landscapes due to negative public opinion and the increased costs of the nuclear industry.

On the one hand, the accessibility of the nuclear industry to the public has been strengthened through public communication, the promotion of educational programs, and providing tours at the sites of nuclear reactors. On the other hand, it has been revealed that the nuclear industry employs communication strategies to convince the public of safety, reliability, and high professional standards. Authors analysing the discourse of public communication, tourism, memory work and heritagization produced by nuclear energy industry, point out a peculiarity of this discourse: A strong pro-nuclear narrative around the necessity of nuclear industry and safety, intending to shape a positive image of the industry, with an avoidance and reluctance to reveal potential risks posed by the industry and to mention nuclear incidents and catastrophes that have occurred

at the nuclear energy sites (Storm, Krohn Andersson, & Rindzevičiūtė, 2019). Stories of disastrous pasts are not told at the nuclear energy communication and memory sites—these narratives occupy other heritage arenas (Storm et al., 2019). Anti-nuclear attitudes and a discursively proclaimed safety myth are presented in museums, memorials, cinematography, literature, and arts. These cultural production sub-fields follow their own logic and are relatively independent of nuclear industry and the political field which usually supports nuclear energy and a pro-nuclear stance. At the same time, due to growing pressures from the economic and political field and increasing dependence on the market and subsidies from stakeholders, journalism, and the media domain have become a site of public relations for nuclear industry companies and strategic communication for state institutions (Zukas, 2018).

Discourses on nuclear matters in the cultural production field have specific features. Bourdieu provides a view of the broad field of cultural production and describes its sub-fields: television, journalism, literature, cinematography, arts (Bourdieu, 1993, 1996, 1998; Hesmondhalgh, 2006). According to Bourdieu, these areas are considered to be of the same nature, but there are some differences between them. Cochrane (2013) points out that cinematography differs from literature because emotion and sensation in cinematography are stronger in film viewing than in literature.

The miniseries *Chernobyl* exemplifies an overlapping of several cultural production sub-fields—television as mass production, cinematography as art, and literature. Additionally, film marketing in the media enhances the cultural consumption of the series. This field of cultural production is under heavy pressure from the economic field. These commercial television channels are watched by millions of viewers in the US, the United Kingdom, and around the world. At the same time, HBO represents a hybrid field where several sub-fields—television, cinematography, and digital space—interconnect. This series has been produced on television for mass consumption.

Applying the Bourdieusian framework of the field to the analysis of cinematography, this art form is regarded as a habitus and social practice of embodied spectatorship with several elements—the film on the screen, the viewing body, and the space of viewing (Cochrane, 2013). The nature of spatiality in cinema and the development of specific practices of spectatorship and viewing, which is the nature of cinematic pleasure, defines the particularity of the sub-field. Practices of spectatorship are an expression and constitution of the collective public identity of the audience (Cochrane, 2013). At the same time, cinematography is a form of art and produces artistic expressive forms that evoke feelings through image, sound, and symbols. Although the *Chernobyl* series addresses historical events and refers to archival materials, the film itself as a work of art is an artistic interpretation. The production company of the series provided an interpretation of Alexievich's book *Voices*

from Chernobyl. The story of *Chernobyl* deals with the presentation of reality (historical facts) and at the same time, it is a drama aimed to evoke strong emotions (fear, beauty, sorrow) and aesthetic sensations. The TV series *Chernobyl* is created in the highly market-dependent HBO television field, which operates separately from the economic field of the nuclear industry. This independence made it possible to make a shocking film about the worst nuclear accident in history that shattered the safety myth of the entire nuclear industry and revealed potential risks and the devastating effects of nuclear energy on human health and the natural environment.

The main criticism in the series is aimed at the Soviet nuclear energy industry as a peculiar technopolitical regime that existed in the Soviet Union. Under this regime, technologies and nuclear facilities, and specific organizational nuclear culture with systemic defects in nuclear energy were combined with specific political governance of the industry (including secrecy and bureaucracy). Even though the series does not express criticism of other national technopolitical nuclear regimes and direct disapproval of the American nuclear industry (in this context it is worthy to mention that the United States is the largest producer of nuclear power in the world), there is no denying that the *Chernobyl* series contributes to a broader anti-nuclear cultural discourse which makes an indirect impact on fields dealing with the nuclear industry by fashioning the attitudes of common citizens to nuclear energy. The series becomes an attempt to contribute to the new politics of representation by challenging gender-related stereotypes and gender inequality in the cultural production sector. By introducing the character of Ulana Khomyuk, a woman nuclear physicist, the authors of *Chernobyl* seek to counter a traditional distribution of power in nuclear science and industry where women are underrepresented in the male-dominated field. Due to the relative independence of the cultural production field and a different level of exposure to the pressures of the market and politics, some peculiarities could be detected in different national and historical contexts. Therefore, an empirical study of nuclear media discourses in Lithuania delving into the interaction of the fields of nuclear industry, politics, and cultural production (including media) could contribute to a better understanding of how power configurations are produced.

3. Methodology

The four Lithuanian online news portals which have the biggest audience of readers were empirically analysed. Three of them are commercial daily news websites (*delfi.lt*; *lrytas.lt* and *15min.lt*) and the fourth one is a news portal by the national broadcaster (*lrt.lt*).

By applying data scraping methods (Karthikeyan, Sekaran, Ranjith, & Balajee, 2019), the authors of the article created a unique tool of article collection by using R language. Articles were collected from the news

portals by using keywords ‘Visaginas city,’ ‘Ignalina NPP,’ ‘Astravyets NPP,’ ‘Chernobyl.’ The articles were collected for the years 2018–2020. A total number of 3,451 articles were explored. The keyword ‘Astravyets NPP’ was found in 1529 cases, ‘Chernobyl’ in 831 cases, ‘Ignalina NPP’ in 658 cases, and ‘Visaginas city’ in 433 cases (Figure 1).

The qualitative content analysis of media articles for revealing nuclear media packages was employed by referring to framing devices (Gamson & Lasch, 1983; Gamson & Modigliani, 1989): metaphors, exemplars (i.e., historical examples from which lessons are drawn), catchphrases, depictions, and visual images, roots, consequences, and moral appeals. The articles were analysed factoring in: the date when the article was uploaded online, the leads (first two paragraphs of the article), the author(s) of the article, selection of quotes, and concluding statements or paragraphs of the articles.

4. Findings: Nuclear Online Mass Media Discourses

In this section we discuss four different nuclear media packages.

4.1. Media Package ‘Safe Nuclear Technologies under Political Governance’

The study established the media package with a frame representing the nuclear sector as an exceptional (not banal) nuclear industry fulfilling commitments to the international standards of safety. The exemplar of this package is the national nuclear industry. This package is promoted by public officials, governmental organizations, politicians, and official representatives of the NPP.

Since 2009, after the second unit of INPP was closed, power has not been further generated by nuclear energy in Lithuania, and this energy industry branch is no longer part of the energy landscape. The necessary funding for decommissioning and nuclear waste management comes from the EU and is affirmed during the highest level of political negotiations, where Lithuanian politicians negotiate with the EU on the amount of support for INPP closure work. ‘Tensions are raging’ in the President’s negotiations with members of the EU parliament pertaining to the allowance allocated to Lithuania.

This media package frames Lithuanian nuclear industry as safe, clean and professionally managed. The central idea (frames) recognized in the media, reveals the features of the Lithuanian nuclear energy facility. Previously part of the Soviet nuclear energy program, it now belongs to a technopolitical regime which has undergone fundamental changes in the last three decades since Lithuania regained its independence in 1990 and joined the EU in 2004. INPP with an unsafe RMBK reactor is being dismantled following the international EU regulations and directives on nuclear safety, and nuclear safety culture has changed.

A general attitude is being formed that advocates that all problems related to dismantling and nuclear waste management are safely solved technologically and carried out professionally. Environmental concerns and possible human health risks posed by nuclear waste are not mentioned: The media coverage focuses rather on the general description of dismantling, repository construction, and financing issues, without going into too much technical detail and without discussing the potential risks of nuclear waste for the current and future generations;

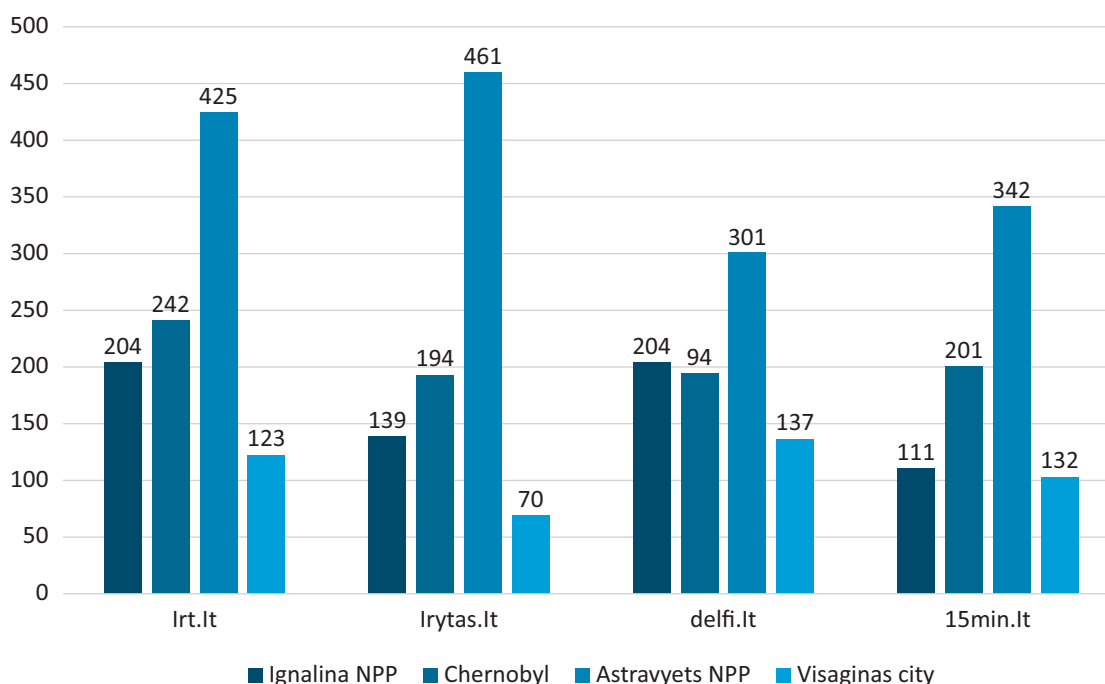


Figure 1. Number of articles examined during the period 2018–2020, all keywords.

there is no discussion or reminder that radioactive waste will be present in the country for thousands of years. This is explained by the fact that the closure of INPP already presupposes the elimination of risks caused by nuclear energy. At the same time, the marginality of this discourse can be related to the fact that INPP decommissioning and nuclear waste management is performed by using the most advanced, safety-enhancing modern technologies, following international recommendations and standards for nuclear safety, employing professional INPP staff and nuclear experts.

INPP communication seeks to minimize the correlation with the Chernobyl nuclear accident. It reflects the general tendency of the entire nuclear industry public communication to avoid associations with unsafety. There are no other participants (environmental organizations, NGOs) in the nuclear media discourse who would express environmental concerns.

It should be noted that most of the articles written by journalists on this topic are based on press releases from the authorities and political parties or press conferences. Information on the progress, reliability and professionalism of the performed work is provided by the official reports of the INPP Communication Department and the Ministry of Energy supervising the work of this state enterprise. The strong reliance on press releases provided by official sources reveals that agency is possessed mostly by public authorities and the state-owned nuclear company. Texts in this media package are short, formal, and expressionless; they lack metaphors, catchphrases, and visual symbols. Only occasionally are other participants, who do not directly formally represent the nuclear energy and political field, invited by journalists to contribute to the discourse. In such situations, interviews with nuclear experts reveal more technical details of dismantling and repository preparation, as scientists assess and analyse risks.

In some cases, journalists, when presenting the ongoing dismantling of INPP and the stages of construction of storage facilities for nuclear fuel waste, challenge official narratives and point out again the inherent unsafety of the constructions of INPP reactors which are similar to those of the Chernobyl reactor. Articles prepared by the INPP Communication Department about the great interest in the NPP and the influx of visitors after the release of the HBO series appeared in the media, but this communication did not touch upon the INPP relationship with the Chernobyl NPP (CNPP) and the similarities to the dismantled INPP RMBK type reactor.

Still, this interpretative package emphasizes that all aspects related to the potential damage caused by nuclear waste to humans and the environment as well as potential imperfections in modern science and technology, deficiencies in nuclear knowledge and science, and in the expertise of nuclear industry experts, are unquestionable and undoubted. The package incorporates a theme around belief in technological progress and advances in nuclear science and technology.

4.2. Media Package ‘Unsafe Nuclear Technopolitical Regimes’

This package is exemplified by the topic of discussion around the issue of the ANPP under construction in Belarus. Political framing of the nuclear project at ANPP is found in Lithuanian media with reference to unsafety. The political actions of the Lithuanian government are presented and the official position is expressed both to the government of Belarus and to the international organizations that oversee the safety of nuclear industry. The media constantly publishes notifications about the preparations for launching the NPP in Belarus—informs about the launching stages and regularly discusses potential threats.

Media airs the position of the political entity Anti-Astravyets Movement, initiated by members of different parties, whose strategy was to present a petition to the European Parliament about the suspension of the ANPP and the ban on the import of electricity generated by this power plant into the EU associated countries, as well as an acceleration of the synchronization of the Baltic electricity grids with the EU network. Since 2016, Lithuania has been attempting to reach a consensus with neighbouring countries (Latvia, Poland) on a common political strategy concerning ANPP due to the potentially hazardous nature of this project. Top-level politicians and representatives of ministries are proactively involved in shaping the nuclear discourse. The Lithuanian President is mentioned as participating in various discussions around agreements with the EU countries, meetings with the National Defence Council, conversations with the Presidents of the Baltic States and with Nobel Laureate S. Alexievich.

Political field agents (politicians, leaders of parties, prominent political figures) highlight unsafety issues in various genres of media content—press releases, expressions of opinion, discussion with politicians or ministries. When using the highest political discourse and organizing international pressure and resistance to the construction and operation of the nuclear facility in Belarus, Lithuanian politicians in the political field as well as in the media, name, and comment on the technical unsafe parameters of the NPP, including the risky location—impermissible proximity to large residential areas (less than 50km to Lithuania’s capital Vilnius). The main visual representations involve images depicting a modern NPP building with two cooling towers. There are several variations of the same image with cooling towers in the background: in some photographs, the foreground depicts agricultural fields with hay bales, elsewhere with combine harvesters, or with an old wooden well, or a peasant driving a cart horse. These images imply the impermissible proximity of the nuclear facility to villages with rural activities. Some of these images express a hidden mocking message about the incompatibility of ambition to reconcile modern nuclear energy facility and backward rural life and ‘technologies’ (a cart horse, a wooden well).

One more important aspect highlighted by many politicians is that the nuclear project in Belarus is constructed by the Russian company Rosatom and financed by Russia ('Putin' and 'Kremlin'). Consequently, besides economic incentives, the project is perceived as having a political underpinning with the strong impact of 'Russia's Hand.' In the discussion about the unsafety of the ANPP, an economic topic also surfaces: Lithuania takes the position that the NPP is an unsafe project, therefore it refuses to buy energy from ANPP and urges other EU countries (especially neighbouring Latvia) to do the same. Thus, technological safety and security arguments reveal that it is not a banal economy based on economic benefits. The press has consistently emphasized that the potential economic benefits of electricity from a NPP for thousands of people cannot outweigh the risks and harm to human health and the environment. This idea is expressed by the use of catchphrases such as "our neighbours get cheap electricity; we get iodine pills" (Martikonis, 2020).

When speaking about ANPP, media coverage on nuclear power unsafety is related to environmental and health risks framing, which is created and formed by those involved in the discourse. Lithuanian politicians, when criticizing the ANPP, emphasize the unsafety of this nuclear facility and the non-compliance of technical parameters with international safety standards. It is noted that the constant technical incidents at the ANPP under construction just 50km from Vilnius raise serious doubts about the work quality in the project under development. The enterprise is described as potentially posing a hazardous threat to human health. The ANPP is deemed a mistake, insecure, and a serious threat to Lithuania. Such depictions as 'ticking bomb,' 'awakening monster,' 'atomic jumbo on clay feet' are applied. Journalists give advice on where to buy potassium iodide tablets and how these tablets will be delivered to border residents (the medicines should be taken in the event of a radiation leak or other serious incident at the ANPP). The Chernobyl experience and the irreversible health effects of radiation are recalled in terms of the potential danger posed by the ANPP. Vivid statements and catch-phrases by prominent politicians and public figures about a possible accident at the ANPP are quoted: "Astravyets will shake, and neither my children nor my home will remain" (Oželytė, 2020). It should be noted that this discourse was developed during the screening of the series *Chernobyl* (May and June 2019), and thereafter, (in 2020), 'stirred' the general discourse about nuclear disasters and their consequences in Lithuania. It explains why iconographic images of the Chernobyl disaster are displayed in the news portals. One of the memorable images of the nuclear disaster used in the media coverage on the ANPP is taken from *Chernobyl*—a clean-up worker wearing protective overalls and a mask—is depicted in the articles on the ANPP. In the context of ANPP reports, the importance of measuring radiation levels, conducting research, and analysing the effects of radiation on the human body is highlighted in the media.

4.3. Media Package 'Disastrous Nuclearity' with an Example of Chernobyl

The HBO series *Chernobyl* screened in 2019 evoked wide media discourse in Lithuania about the disastrous nature of nuclearity, the high risk posed by the nuclear energy industry and the hazardous effects of radioactive contamination on human health and the environment. The Chernobyl accident becomes a signifier of a specific Soviet techno-political regime. The predominant subject matter of interviews, stories, opinions, and testimonies in Lithuanian news portals is a criticism of the Soviet regime and the Soviet government for lying and concealing information about the accident. Lithuanian citizens themselves as well as news portals readers have authentic experiences of the Chernobyl accident, and how they survived being in the territory exposed to radioactive contamination both during and after the accident.

Thus, the series' strong criticism of the Soviet regime for the management of nuclear energy, which led to the catastrophe, and the manner in which the consequences of the catastrophe were handled, is gaining a unique dynamic in Lithuania. Journalists find spectacular metaphors and depictions to describe Chernobyl as a 'death machine' and 'cosmic disaster' that coincided with a 'social cataclysm' (Lukaševičius, 2019). This media coverage of the *Chernobyl* series and of the nuclear accident in Chernobyl itself has become a kind of memory work exercise, when Lithuanians, invited and encouraged by journalists, share memories and recall the Soviet past, sharply criticizing the Soviet regime and Soviet nuclear energy industry. In addition to authentic experiences of Lithuanian residents who participated in the emergency response and suffered critical damage to their health, media coverage presents a great deal of material with stories and testimonies by clean-up workers, their families, and other citizens from Ukraine, Russia, Belarus. These authentic testimonies of the participants of the Chernobyl accident are procured by Lithuanian journalists from the portals of other countries (e.g., foreign journalists working in Ukraine, articles from Russia, Ukrainian online portals) and reprinted in Lithuania. In addition, journalists refer to various scientific, popular sources about Chernobyl (facts about the number of victims, details of clean-up operation, etc.). One of the impressive metaphors employed by media coverage is a story about the statue of Prometheus erected in 'atomgrad' Pripjat—a town near CNPP. Before the Chernobyl disaster, this monument was meant to symbolize nuclear energy (Prometheus fire) bringing prosperity to humankind. However, ironically, following the disaster, this statue metamorphosed into a symbol of divine punishment for the use of nuclear energy (in the ancient myth Prometheus was punished by Zeus for the stolen fire). Among visual representations of this package are iconic images of fire-damaged Chernobyl INPP, the abandoned ghost town of Pripjat with empty streets and dwellings, and artifacts left by residents (toys, household

items, dosimeters), and clean-up workers in gas masks and protective clothing. Unlike the interpretations of the Chernobyl events presented in the HBO series, the Lithuanian press does not develop a heroic narrative, memories of the events do not depict the heroism of the clean-up workers. In the Lithuanian media, the reconstructions of the past are dominated by the motives of either the existential survival of the nuclear catastrophe or suffering experienced under the regime, as well as the condemnation of and accusations against the Soviet government. This Chernobyl theme includes the presentation of documented history. For example, S. Ploky's book *Chernobyl: History of the Nuclear Catastrophe* reveals the flaws of the Soviet nuclear industry, linking the disaster to the authoritarian nature of the regime, control of scientists, the pursuit of economic goals at the expense of safety and human lives and the concealment of information (Brown, 2019). At the same time as the HBO series *Chernobyl* was under discussion, the book *Chernobyl Prayer* by S. Alexievich was published in Lithuania and introduced in the media. Another book widely discussed in the media in connection with the series is *Chernobyl: 01:23:40* by A. Leatherbarrow, which emphasizes the consequences of the catastrophe, and the fates of the people who participated in clean-up operation.

4.4. The Cultural Production Field in Creating the Interpretative Package 'Nuclear Culture'

This media package is 'sponsored' by actors from the cultural production field, when journalists draw on nuclear imagery as a part of nuclear culture and interact with creative workers, artists, and citizens by introducing them in media artistic projects about nuclearity. The *Chernobyl* series is an outstanding art project around nuclearity which was filmed in Lithuania and at the INPP. The media present the process of filming including the INPP staff, and the local creative team, photos of actors, the filming of scenes, and their location.

The series was filmed in a Soviet-built district in Vilnius, depicting the CNPP atomic town Pripyat, while scenes depicting the CNPP were filmed on the site of the INPP.

The press discusses how these filming locations in Vilnius and Kaunas have become places visited by tourists. The INPP is fairly widely presented in the media as a site of nuclear tourism—an influx of tourists from Lithuania and abroad has been reported after the screening of the HBO mini-series *Chernobyl*. The press states that "two worlds met at the Ignalina Nuclear Power Plant—cinema and a site of strategic importance because of the dangers of radiation" (Špokas, 2019). A further nuclear and cinematographic tourism destination discussed in the media is the premises of the INPP training console, where scenes of the accident occurring in the infamous control room of CNPP were filmed in the HBO series *Chernobyl*. At the same time, one of the arti-

cles describes a new nuclear tourism entertainment in the Chernobyl zone. The media coverage has become a peculiar promotion of nuclear tourism in the territories related to the nuclear accident—the Chernobyl Exclusion Zone and places in Lithuania that are associated with Chernobyl.

Another group of projects include exhibitions, performances, music festivals, and books published in Lithuania, which introduce the changing identity of the atomic city Visaginas. Most artistic projects concern not only nuclear energy but also emphasize INPP as a part of the Soviet nuclear industry; sometimes appealing to life in Soviet times with perceptible elements of nostalgia, which is significantly different from the dominant memory politics, i.e., exceptionally negative or tending to sink into oblivion. An example may be the art project *Atomic Identity* (author N. Rekašiūtė), where a photo exhibition and performance in a Soviet-type flat conveys everyday Soviet life. The tourist route around Visaginas city which includes Soviet architecture, presents the exceptional architectural and urban features characteristic of the Soviet nuclear mono-industrial city. Extensive media coverage of this topic emphasizes the difficult social situation following the closure of INPP when the city loses its main economic source and is experiencing an economic and social downturn. This discourse can be interpreted, on the one hand, as a concern, a conscious and unconscious attempt to draw the attention of the society to the difficult situation of the city; on the other hand, such negative representations further marginalize the city community as a result of the stereotyping process, when the city is portrayed as a place of economic, social, and moral decline.

5. Discussion and conclusions

Media discourse in Lithuania has become a process of collective sensemaking when, with reference to Gamson and Modigliani (1989), diverse groups of strategic actors present their position on nuclear issues by promoting different interpretative packages. The four frames identified in the study of online news media reveal the role of sponsors of nuclear discourse who come from particular social and professional fields (nuclear industry, politics, nuclear science, economy, cultural production, etc.). The interconnection of these different areas and fields reflects multiple facets of the phenomenon of nuclearity described by Hecht (2009, 2012; see Figure 2).

Bourdieu's concept of the field enables the evaluation of the role of sponsors of nuclear discourse in the media from the perspective of the logic of the field they represent. Moreover, field theory enables recognition of the way in which diverse sponsors of the nuclear discourse frame nuclearity. Three interpretative packages on (un)safety in nuclear industry and disastrous nuclearity (in the cases of NPPs in Lithuania (INPP), Belarus (ANPPs), former USSR (CNPP) recognized in the research, manifest the ideas of Bourdieu on politics as a field of

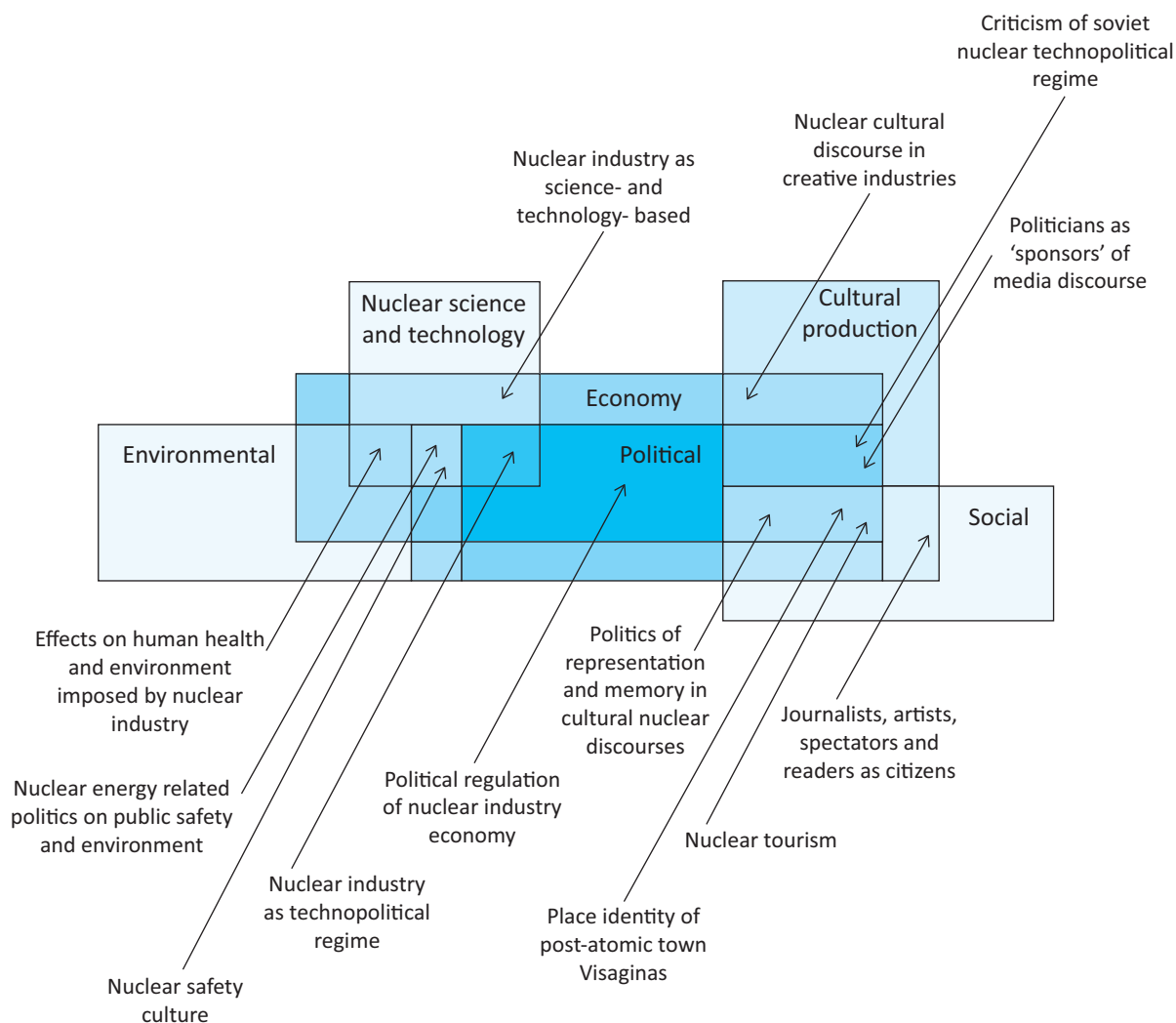


Figure 2. Main interacting fields involved into construction of nuclear media discourses: Findings of analysis of Lithuanian online media portals in 2018–2020.

power and Hecht’s conceptualization of nuclear exceptionalism, where nuclear industry is defined as exceptional (not banal) economy under the power of hierarchical structures. The media field, which is under the influence of the political field, as well as strategic communication and public relations departments of nuclear companies (Zukas, 2018), assist in the construction of the nuclear discourse corresponding to the general intentions of the nuclear industry and the political field that protects it. These three frames demonstrate features of different technopolitical regimes, when nuclear industry, technologies, safety standards, emergency and crisis management during a nuclear disaster are handled within a particular political and ideological regime, with specific governance and nuclear citizenship and include a particular approach toward the environment and citizen health. Frames including media coverage of NPPs in Lithuania (INPP) and Belarus (ANPPs) are promoted by public officials and politicians, who become main sponsors of the nuclear discourse expressing strong agency in providing journalists and media companies with informa-

tion and opinion on safety standards and international political events, providing ideological and political evaluation of the situation. These sponsors provide press releases, organize press conferences, give interviews and write opinion articles. Together with journalists, they co-create texts by using various framing devices (exemplars, metaphors, catch phrases).

The official institutions in charge of nuclear energy in Lithuania, and INPP itself, inform the public in media and organize tourist excursions to the site of the nuclear facility. This study highlighted the general features of INPP’s communication on decommissioning and nuclear waste management: The general public is informed about the safety of the work performed, the professionalism of the NPP employees, and technological reliability. Actually, such information reflects the real features of nuclear safety culture, following the international safety standards and ensuring transparency. However, it should be noted that the media does not comment in detail on the technical solutions for dismantling and nuclear waste management.

The ‘unsafety’ frame, relying on the ANPP case, is closely related to another frame of ‘Disastrous Nuclearity,’ exemplified in the case of media coverage on the Chernobyl disaster and the HBO series *Chernobyl*. While speaking about the unsafety of ANPPs in Belarus, politicians excite the nuclear imagination of readers and citizens by referring to the Chernobyl nuclear imagery created in the cinematography, media or literature, and employ particular framing devices with the help of journalists. Politicians seek to mobilise citizenry for actions through nuclear discourse—to ensure citizen support for the political actions at the national and international level. Nuclear media discourse continues to reflect some features of nuclear exceptionalism: This technology-based industry with specific economic and safety standards is represented in media as an exclusive area of competence for nuclear experts, high ranking politicians, and public officials.

Two other interpretative packages—on Chernobyl (‘Disastrous Nuclearity’ and ‘Nuclear Culture’)—delineate the role of other key actors and sponsors: journalists, creative industries workers, citizens, artists, and tourism providers. These interpretative packages illustrate another essential element of nuclearity: broader cultural discourse. These frames have unveiled the strong role and considerable weight of cinematography, arts, and literature fields in constructing media nuclear discourses.

The presentation and discussion of the series and literary works on Chernobyl not only reconstructed the course of Chernobyl as the biggest nuclear accident and divulged the consequences, but also strengthened the understanding of the Soviet legacy of Lithuanian nuclear energy, stressing that filming the series in INPP territory is related to the similarities of Chernobyl and Ignalina Soviet design RMBK reactors. At the same time, the participation of the INPP in both filming the series and nuclear tourism have become an example of nuclear industry collaborating with creative industry and reflected the nature of a new understanding of nuclearity, involving cultural discourse and nuclear imagery. Through raising public awareness, public communication, and tourism, the nuclear industry has been moving from the paradigm of secrecy, mystery, ‘witchcraft’ and nuclear exceptionalism (Anshelm, 2010; Hecht, 2009, 2012; Kinsella, 2005) to banalisation of the nuclear energy by making it more familiar, ‘domestic’ and commonplace (Sastre-Juan & Valentines-Alvarez, 2019). The social field related to the nuclear industry—the community of the atomic town Visaginas and the search for a new identity—is a part of the frame on the cultural and social facets of nuclearity. However, in the general framing of nuclearity, this narrative occupies a much smaller part of the media discourse. It illustrates the lesser power of this social field and its members. It is worth noting that in the general context of nuclear discourse, social issues carry less weight than political and economic industrial issues, which are dictated by the

fields of power—politics and nuclear industry. These two frames include the extensive presentation and, discussion of nuclearity in the HBO series as well as literary and artistic works about Chernobyl. Journalists, artists, cultural actors, and tourism developers involve citizens in memory work on the Chernobyl accident and contribute in a specific way to the development of nuclear citizenship and nuclear belonging in the media. Memories of Chernobyl highlighted the cultural and political identity of Lithuanian citizens—a negative attitude towards the Soviet regime and its controlled nuclear industry, where the Chernobyl accident was considered a significant dramatic event in this industry branch, in which citizens participated involuntarily and the negative consequences of which are still being experienced. These ideas, attitudes and experiences of negative nuclear citizenship resonate with the political field-constructed discourse on ANPP, where politicians create representations of another country’s nuclear unsafety and construct negative attitudes and perceptions of citizens about possible risks of nuclear contamination in Lithuania due to a possible nuclear accident at ANPP.

Artistic projects (theatre and art performances, photograph exhibitions, etc.) presented in the media around the nuclear city of Visaginas play an important role in involving the local community, giving it a voice, and assisting in the negotiation of a new post-nuclear and post-industrial identity. Nuclear discourse participants (politicians, nuclear industry, media, art representatives, and citizens) construct nuclear media discourse with differing amounts of media participation—some participants are more visible (politicians, nuclear industry) and certain frames are more pronounced, while other participants express less agency (i.e., the atomic city community) and topics are less elaborate. A special role of the cultural production field (cinematography, literature, and arts) emerged, in which a broader cultural nuclear discourse, which includes an anti-nuclear stance, is being developed in fields relatively independent from politics and the nuclear industry, which involve citizens, and creates a space for the expression of their agency, civic participation, and existential experiences.

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Conflict of Interests

The authors declare no conflict of interests.

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