"Fridays Are Racist":
Evaluating Social Media Engagement From a Virtue Ethics Framework

Lana Medina, Penn State University, USA*

iD https://orcid.org/0009-0008-8482-8679

ABSTRACT

Social media platforms have become a threat to democracy and human flourishing. Critics have previously expressed alarm that our ever-increasing technological habits are negatively influencing human values and virtues. This research explores how the engagement design of social media sites is a morally questionable metric for social media 'success'. Using a virtue ethics framework in relation to technology ethics research, as well as drawing from the work of Ellul (1962) and technology philosophers, this paper emphasizes the need for perspective and civility in engagement and argues for solutions that withdraw from an engagement design built on efficiency and financial gain. Proposed solutions include global change in the form of 1) altered weights for algorithmic prioritization (e.g., promoting diverse topics and reducing tribalist engagement), 2) returning autonomy to users (compared to corporate control), and 3) global legislation (i.e., the European Union's DSA).

KEYWORDS

Algorithms, Autonomy, Civic Virtue, Ellul, Engagement, Global Regulation, Media Ethics, Platforms, Social Media, Virtue Ethics

INTRODUCTION

In a social media "roast," comedian Ronny Chieng mocked Daily Show host Trevor Noah for his positive Tweet: "Happy Friday to all of my followers!" Chieng argued in false outrage that Twitter is not intended for kindness and friendly messages, but for hate (Noah, 2022). As Chieng went on to explain, "You've gotta be controversial…you should say something like, 'Fridays are racist!'". By the culmination of the banter, Chieng concluded their argument was engagement. Although intended humorously, Chieng's poignant observation about Twitter (and other social media platforms) strikes to the core of the controversy behind engagement.

Critics have previously expressed alarm that ever-increasing technological habits are negatively influencing human values and virtues (Vallor, 2016). Several scholars have pointed to the negative effects of social networking sites, including aspects of depression and low self-esteem (Pantic, 2014), decreased exposure to counter-attitudinal viewpoint and increased polarizing beliefs (Levy, 2021), and

*Corresponding Author

lack of moral autonomy through manipulated engagement design (Bowen, 2013). Saura et al. (2021) analyzed how the engagement design of social media sites "can generate addiction and modification of user behavior and feelings" (p. 271). However, past research stopped short of critiquing engagement as a morally questionable metric for social media "success." In this study, the author sought to explore the problems associated with engagement and suggest potential solutions.

Benefits vs. Concerns

Scholars have identified positive aspects of social media use. In a meta-analytic review of research involving social media use and civic engagement, Skoric et al. (2016) identified positive relationships of social media use, including expressive (i.e., expressing oneself and articulating ideas, opinions, and thoughts), informational (i.e., seeking, gathering, and sharing news and community/political information), and relational (i.e., using social media to strengthen relationships with others) forms. Conversely, Skoric et al. found negative relationships between civic engagement and social media use that focused on identity (i.e., using social media to create one's identity, gain recognition, and increase status) and entertainment purposes. Early research indicated how social media platforms were providing opportunities for both intensifying relationships and expanding social connections, as well as increased civic engagement and political participation (Gil de Zúñiga et al., 2012).

Furthermore, not all engagement relies on negative emotional reactions, such as outrage and disgust. In an online experiment regarding emotions in relation to viral video advertisements, the authors explained how feelings of awe and affective emotions prompted viral sharing, leading to expressions of emotional connection and generosity (Nikolinakou & King, 2018). Spring et al. (2018) emphasized the benefits of moral outrage as a community motivator on social media.

However, none of these benefits offset the *incivility*, perpetuated through a language of outrage, polarizing viewpoints, confrontational, and negative emotional rhetoric, that the nature of social media engagement augments to greater visibility. Political mudslinging and sensational rhetoric have been favored of cable news and talk radio shows; however, these shows primarily relied on word-of-mouth, repeat followers, and advertisements to gain traction. The motivation behind engagement is the same: Sensational comments and headlines, personality-centered mode of "talking at" someone, rather than "talking to," and one-sided ideological viewpoints (Berry & Sobieraj, 2014).

Due to this algorithmic design, users may be locked into bubbles based on the actions of one's social network. If a user's social network includes people who engage and share news, they are more likely to view this information (i.e., incidental news exposure); if a user's social network includes people who disseminate one-sided information and that user engages, their feed is more likely to be flooded with similar post types.

What Counts as "Engagement?"

Scholars have identified three dimensions of consumer engagement: Cognitive, affective, and behavioral (Cao et al., 2021). Cognitive engagement refers to concentrated attention and absorption, affective engagement involves emotional response, and behavioral engagement connotes behavioral actions, such as sharing and learning (similar to the social media analytics data used to measure success in social media engagement) (Pentina et al., 2018).

In a review of social media scholarship, Saura et al. (2021) developed a taxonomy of performance and design metrics. For user engagement, the list included:

1. How long social media users look at a picture or video.
2. The average time users are connected to a social media site per visit.
3. The number of pages that users see in one visit to social media platforms.
4. The number of interactions (e.g., likes, reactions, shares, and comments).
5. User sentiments through sentiment analysis algorithms.
6. Recent searches (i.e., what users want to see in their feed).

7. Top searches (i.e., recurrent interest).
8. Personality type (based on whether users tend to access social media platforms for short sessions or lengthy visits).
9. Clicks (to indicate a user's ability to interact).
10. Number of times visiting a social media platform without interactions (i.e., how little they interact).

Each of these metrics are amalgamated into social media engagement (Saura et al., 2021).

Goal of Social Media

Although social media networks provide alternative viewpoints and can promote grassroots efforts, KhosraviNik (2017) explained the goal of social media companies is to increase consumption. If social media networks are advertising platforms in which the audience is the commodity, then, for companies to garner as much capital as possible, they need engagement (Schechner & Woo, 2021; Smythe, 1981). The social media environment allows users to be the consumers, producers, and distributors of information, but the manipulation built into the algorithmic design or social media architecture "encourages like-mindedness and intensification of feelings and beliefs with little or no critical scrutiny" (KhosraviNik, 2017, p. 64). Although this is cause for alarm, there is little to no motivation for social network companies to alter this design, because any type of use, interaction, sharing, linking, and overall engagement is "trade currency," all contributing to the commercial gain. KhosraviNik (2017) argued this is successful because social media platforms like Facebook work based on relevance, not significance.

In this architectural design, engagement leads to more exposure and prioritizes individuals' own interests and beliefs. As KhosraviNik (2017) described, many social media algorithms work by a type of "snowballing;" once a post or news story or organization message passes an unknown metric of reach, it becomes available to an even greater number of people. Based on this design, it should be up to individual users to heighten certain content. Individual preference is one of the metrics that boosts post visibility. However, it is not agency that matters, but the structure of social networks (Qi, 2022). As KhosraviNik (2017) explained, "social media could actually function as spaces for democratic practice, but the market logic and dominance of commercial rationality has diminished this potential and in many cases destroyed this capacity" (p. 65).

Method

Overwhelmingly, the current metric of social media engagement is creating an environment sowed with division, discord, and incivility. To prevent the ongoing spread of hate speech, social media needs to alter the metric that measures success in engagement, and, instead, engage users by promoting kindness, caring, civility, and other perspectives. Gehner and Oughton (2016) suggested a need for a "code of engagement" (p. 192) that highlighted ethical values, including justice, integrity, and respect, to prevent future problems with social media engagement. In this paper, the author proposes a return to these values through a virtue ethics framework, by utilizing Vallor's (2016) technomoral virtues and Ellul's (1962) "ethics of nonpower, of freedom, of conflicts, and of transgression" (p. 9) in response to the domination of technique.

Virtue Ethics Scholarship

Two of the central aspects of social media are the nature of self and that of relationships, including personal, professional, global, and local. For this reason, the author turns to virtue ethics, which is particularly appropriate for analyzing social media (Ess, 2013). The underlying premise behind virtue ethics is human beings behaving and acting in a manner with the ultimate motivating goal of what Aristotle called *eudaimonia*, loosely translated to mean happiness or human flourishing (Ess, 2013). To achieve *eudaimonia*, individuals need to strive to behave/act virtuously; this is attainable

due to their capacity for practical reason, in which they as enlightened individuals consider their surroundings and situations and decide what would be the best course of judgment and action to do the right thing for themselves and others. Aristotle argued that, to fulfill their ambition of human flourishing, individuals need to cultivate certain moral virtues, such as courage, patience, honesty, and justice, with practical wisdom culminating through practice and perseverance (Vallor, 2016).

Vallor (2016) analyzed moral virtues exemplified by Aristotle, Buddhism, and Confucian practices, and developed her own taxonomy of 12 technomoral virtues. Considering the abovementioned two primary aspects of social media engagement (i.e., nature of self and relationships with others), in this paper the author argues for increased focus on five of Vallor's technomoral virtues: Self-control (as to nature of self and relationships with others), justice (as to nature of self and relationships with others), care (as to, relationships), civility (as to relationships), and perspective (as to nature of the self). Psychologists have raised alarms regarding the lack of self-control users exhibit on social media, in terms of addiction and response to others (Reinecke et al., 2021). Both civility and justice have the potential for a positive environment on social media platforms, but the engagement design only promotes these virtues for individuals predisposed to be interested; for other topics, the engagement design selfishly subdues. A "digital ethics of care" (O'Reilly et al., 2021) can be encouraged on social media platforms, but the engagement design can also suppress elements of caring. Furthermore, that same design encourages a self-focused or like-minded perspective, despite the proliferation of global voices, instead of a moral perspective.

Virtue ethics is an appropriate theoretical outlook for exploring the technological design of platforms. The shifting dynamics of social media engagement make virtue ethics more prudent than say a fixed deontological outlook or an outcome-based (consequentialist) approach, such as utilitarianism. Utilitarians argue that, in an ethical dilemma, individuals ought to choose whichever action "maximizes utility" or produces the greatest amount of happiness for the greatest number of people (Bentham, 1996, p. 225). A common challenge to utilitarianism is how the principle of greatest happiness can be used to justify intuitively wrong actions (e.g., killing one person to save the lives of many) (Dilek, 2021). When faced with ethical dilemmas of social media engagement (and other emerging technologies) that tend to often have unforeseeable consequences, utilitarianism's moral calculus becomes untenable (Vallor, 2016). In contrast, deontological theories weigh morality by the agentic role, such that certain moral principles are right no matter the good caused by the outcome. Immanuel Kant's (1996) deontology argued in favor of a categorical imperative, that is, an objective and unconditional principle that rationalizes moral action based on whether the action should be universalized. However, Kant's universalizability principle, which is grounded in practical reason, is insufficient for two key reasons: (1) A "present-oriented" ethics (Jonas, 1984) that fails to consider the future impact of moral decisions (Beiner, 2017), and (2) the emotional, relational, and situational considerations applicable to social media design (Vallor, 2016).

Whereas, virtue ethics is guided by the goal of human flourishing, or *eudaimonia*; even if there is no universal acknowledgment of what is considered virtues and vices in mediated technologies, there is still overlap in consensus (Bermúdez, 2017; Cornwell, 2020; D'Olimpio, 2021). The moral effects of a given technology may rely on users' preexisting moral character; however, the structure of the technology itself can still promote or impede virtuous behavior (Vallor, 2016). When research evaluates how the mediated communication of social media alters traditional interpersonal communication, it becomes integral to question what happens to those normative virtues of self-control, care, civility, justice, and perspective.

Self-Control

Baumeister and Juola Exline (1999) referred to self-control in analogy as the "moral muscle" (p. 1165), and sustained that human beings require self-control to restrict self-interest for the sake of other virtuous behavior and actions. The failure of self-control leads to vice; conversely, the cultivated exercise of self-control, through both responsible decisions and active endeavor, contributes to overall

virtue. Kant also prioritized self-control, describing in his *Anthropology* how reason leads to "the necessary control" (Kant, 1996, p. 158). In his *Eudemian Ethics*, Aristotle discusses self-control (*enkrateia*) and its lack (*akrasia*) as voluntary, arguing that both are motivated by impulse and not force. "The one who lacks self-control does not do what he wishes, since to be uncontrolled is to act, because of appetite, contrary to what one thinks is best" (Aristotle, 1998, p. 27).

In response to the debated nature of self-control, Vallor (2016) defines it in two ways: the ability of humans to practice moral self-restraint and the cultivation of desires that lead to temperance. One of the conundrums with social media is the immense increase in content; with social media, it's not a matter of choosing between a few objects, but individual attentions leaping from one post, link, image or video to another at near lightning speed (Bermúdez, 2017). Worden (2019) argues that individual users need to practice self-control (along with other virtues) in their online interactions to engage in civic and political discourse on social media.

Vallor's definition entails making wise and value-laden choices online; however, there are two aspects directly related to social media engagement. First, even though social media engagement prioritizes our interests, or at least an algorithmically defined interest, in order to engage user attention, individuals maintain a role in that algorithm: without individual choice to engage with content (i.e., like, share/re-tweet, comment, etc.), the algorithm has less information to decide content importance. Second, individual users still retain moral agency to make virtuous and responsible decisions exhibiting self-control in the face of outrage comments that metrics for social media engagement have been shown to boost.

Kozyreva et al. (2020) identified four digital challenges to autonomy and informed choice, reasoning and discernment of truth, and attention and cognitive control: (1) persuasive and manipulative architectures (social media engagement design), (2) AI-assisted information architectures (e.g., algorithmic filtering, personalized targeted advertising), (3) false and misleading information, and (4) distracting environments. In response, they suggested self-nudging by adjusting default settings (i.e., privacy settings, altering settings for personalized ads) and with the help of other technology (i.e., technology that blocks notifications and other technology). However, these nudges are solely dependent on user efforts.

In social media engagement, nudges (in the form of notifications) are built into the system, persuasively influencing user behavior and actions. As Hertwig and Ryall (2020) point out, these nudges "enlist cognitive biases or motivational deficits) to steer individuals' behavior in a desired direction" (p. 1384). Scholars have investigated and proposed nudging as a tool toward improving accuracy in social media (Pennycook & Rand, 2021), tested the success of informing versus nudging in environmental and climate change policy (Ölander & Thøgersen, 2014), and nudging in disaster communication on social media (Mirbabaie et al., 2021). Bhuiyan et al. (2018) designed and tested a tool called 'FeedReflect' to nudge users into making credibility assessments on Twitter.

Instead of using this nudge mentality to cognitively engage and manipulate users in a manner that contributes to negative and hateful rhetoric, nudges could provide a reminder to users when they're posting negative comments, or sharing questionable, inaccurate or negative information. However, as Jung and Mellers (2016) show, people can respond negatively and positively to nudges, depending on both individual dispositions and the type of nudge. Although more manipulative nudges that are based on behavior tended to be viewed with disfavor, participants in the study raised less concerns about more information-based and educational nudges to "make people more aware and presumably more thoughtful about their decisions" (Jung & Mellers, 2016, p. 63).

Civility

This type of nudge could also contribute to another technomoral virtue Vallor (2016) includes: civility. The virtue civility dates to Aristotle's account of civic friendship, which he details in Book VIII of his Nicomachean Ethics, describing several aspects of friendship, including how true friendship is without qualifications, not for the sake of utility or self-interests; furthermore, friendship involving

superiority or complaints is not friendship at all (Aristotle, 1998). Vaccarrezza and Croce (2021) described a neo-Aristotelian resurgence into civility, citing a reason of recent trends of polarizing incivility and threats to democracy.

In other neo-Aristotelian accounts of civic virtue, Curren and Dorn (2018) described three aspects: 1) Civic intelligence (i.e., developing good judgment in civic education and utilizing it for public discussion), 2) civic friendship (i.e., displaying kindness and good will toward other citizens, even with differing viewpoints), and 3) civic competence (i.e., human beings' abilities and endeavors that contribute to improving their civic environment). If this definition was applied in social media engagement, civic intelligence could involve cultivating useful knowledge about civic matters and using that information to increase good dialogue online. With civic friendship, this would be directly relevant for the increasing prevalence of polarizing viewpoints on social media, but, instead of outrage responses, civic friendship would encourage absorbing other viewpoints and countering with intellectual but civil responses. Finally, civic competence would refer to how social media (and metrics of engagement) could provide (and sometimes does) provide users with the opportunity to become involved in community projects, such as protests for equality (e.g., Black Lives Matter protests).

In recent years, a surge of incivility has been emphasized as a public danger, including calls for increased civility and concern over a lack of civil discourse in politics and on social media platforms. Thiranagama et al. (2018) took an anthropological viewpoint, referring to incivility during former President Trump's election and aftermath, and the lack of respect and kindness directed towards difference (e.g., people of color, Mexicans, Muslims, and womeners). Peterson (2019) differentiated between everyday civility (i.e., general politeness, courtesy, and manners) and political civility (i.e., citizen communication and exchange of ideas in a public arena, in-person or virtual). In this, everyday civility is a prerequisite to political civility; the latter involves both how individuals interact and conduct themselves with others, but also that political civility "fosters mutual fellow-feeling and well-wishing between citizens" (Peterson, 2019, p. 8).

Given the changing digital culture, Vallor (2016) defined a technomoral civility as:

A sincere disposition to live well with one's fellow citizens of a globally networked information society: To collectively and wisely deliberate about matters of local, national, and global policy and political action; to communicate, entertain, and defend our distinct conceptions of the good life; and to work cooperatively towards those goods of technosocial life. (p. 141)

Utilizing Vallor's (2016) technomoral virtues, Cruz and Plaisance (2021) analyzed civility (and incivility) in relation to online activism. As the author described above, social media can provide opportunities for civic communication and collaboration, in which users can become mobilized in common causes for the betterment of humankind. However, the anonymity afforded by social media can create a dehumanizing aspect and stoke fire for negative rhetoric, bullying, and harassment that may have been avoided in a public venue (Cruz & Plaisance, 2021).

The type of nudging the author described earlier could influence more civic-minded dialogue on social media. As the author previously mentioned, nudging can be viewed as a form of manipulation to users with negative reactions. Furthermore, such civic-minded dialogue is not merely the absence of incivility, but also discourse that features constructive arguments and deliberation.

In an experiment testing the layout of comment sections on news stories, Bossens et al. (2021) developed a new comment section design that acted as a conversational prompt, requesting individuals to comment on a certain statement or question, and then interface elements (i.e., opinion buttons or text box prompt) to encourage interaction. In an experiment, the authors found positive results on civility with the conversational prompt (in both controversial and less controversial news); however, the interaction tools were less successful in encouraging dialogue. In another experiment, Grevet (2016) tested a prototype that highlighted positive social media posts and hid less civil posts from

users. Results indicated that participants responded favorably to this technique of highlighting civil communication.

However, since this would likely receive backlash from both social media companies and users for manipulation and loss of autonomy, an alternative is a cognitively inspired technological intervention (Kozyreva et al., 2020), such as the one Norwegian broadcaster NRK tested: Before viewers could comment on a news article, they were required to respond to a comprehension quiz, an effort to promote deliberation before commenting (Kozyreva et al.,, 2020).

Perspective

Unlike other moral values in virtue ethics, perspective has less of a direct written link to Aristotle. Vallor (2016) argued it is implied within Aristotle's practical wisdom, Confucian "intelligent awareness," and the Buddhist concept of wisdom, because wisdom without perspective would be lacking a complete understanding.

Bommarito (2014) described two aspects of a moral perspective: A scale representing individuals' desires and values 1) in relation to other desires and values as a whole, and 2) in proportion to the context. He explained that a moral perspective is not the same as an individual's own perspective, but a familiar attitude in social media communication in which dialogue is more often monologues. This distinction is meaningful in social media communication, which is often replete with political polarizing discourse and the inability to take perspective of the conversation or topic in relation to other issues and values.

Moral perspective is a necessary value in social media engagement. The current metric of success relies upon divisive commentary, emotional outbursts, and engaging repartee to stoke the flames of discord. To be clear, this occurs in everyday human relations. In social media communication, when individuals can consider their anger and outrage in a larger context, they can avoid magnifying the depth of their emotion. As such, perspective stimulates reason, allowing individuals to consider their desires, values, and motivation in relation to other information or phenomenon. When individuals and groups react strongly to issues, moral perspective helps understand "the relative importance of competing values and desires" (Vallor, 2016, p. 149), also in relation to context.

Vallor (2016) defined her technomoral perspective as "a reliable disposition to attend to, discern, and understand moral phenomena as meaningful parts of a moral whole" (p. 149). In this definition, a universal moral perspective would not be completely free of personal bias, but would view the situation in relation to a greater context or in proportion to other more essential beliefs.

John Stuart Mill (1975) once said:

If the opinion is right, they are deprived of the opportunity of exchanging error for truth; if wrong, they lose what is almost as great a benefit, the clearer perception and livelier impression of truth produced by its collision with error. (p. 21)

This is an argument for civic communication, in that exposure to different perspectives provides individuals with the opportunity to be enriched by deliberation, reflection, and greater understanding. It is also an argument for moral perspective; without perspective, civic deliberation can fall wayward into the realm of polarized disputes, as individuals are not merely focused on their own perspective, but are unable to view the debated topic in context. How wise people would all be with a panoptic-like lens into the world! Except therein lies the mistake: Even with greater knowledge (which the Internet and social media provides with hidden costs), individuals' perspective of the world is still their own perspective.

Arendt (1968) argued for conflicting perspectives:

The more people's standpoints I have present in my mind while I am pondering a given issue, and the better I can imagine how I would feel and think if I were in their place, the stronger will be my capacity for representative thinking and the more valid my final conclusions. (p. 241)

In social media communication, users are exposed to conflicting ideas, but only if they have previously "engaged" with that content. For example: a Facebook user grows frustrated by an antivaccine proponent who is disseminating information from only conservative and religious news. This user can either choose to respond back with anger and frustration, opt for peace and ignore the individual, or comment back with a differing viewpoint. In the first option, they will continue to engage, but the communication will leave both parties on opposing sides. Furthermore, depending on the level of outrage, other friends may take sides and if engagement reaches a substantial level, the content will be boosted for others as well. In the second option, the Facebook user will eventually stop being privy to that information because the algorithm will recognize a lack of engagement (or they may go so far to actively block or unfriend that person for opposing viewpoints, a process to which Worden (2019) refers as "epistemic sorting"). In the third option, there is opportunity for a more meaningful exchange of ideas, but the positive dialogue will garner little attention beyond those two parties.

What role does social media engagement perform in cross-cutting debate, or enhancing a user's desire to disengage and avoid disconfirming beliefs? Worden (2019) argued that information exchange is indeed a social benefit to creating diverse perspectives and civic communication; furthermore, knowledge exchange can provide individual users with greater overall perspective. Through a neo-Aristotelian virtue framework, this research explores how social media engagement cultivates an environment in which individuals cannot become fully virtuous, because the very nature of engagement is deleterious to enhancing a greater perspective.

To alter this one-sided design, one option is to prioritize relevancy over outrage. Facebook, for example, once offered two options on its news feed (now renamed "Feed"): "Top News" and "Most Recent." The first was an algorithmically organized aggregation of what users were likely to engage with, and the latter provided all friend/followers content in real-time (Bucher, 2012). More than a decade later, the "Most Recent" option has all but vanished; it is now titled "Recent & Favorites," but will take some effort to locate to reinstate (once users log out, Facebook reverts back to their own algorithmic preference) (Kalyanpur, 2021). According to Bucher (2012), Facebook's logic behind the algorithms was to "establish relevancy" (p. 1167), which, she then points out, actually means "interesting."

Instead, how could social media platforms such as Facebook prioritize relevant but diverse content, offering a wide range of information to users? This is not just about altering social media algorithms, but altering what the author defines as "engagement." Personalized targeting has transformed Facebook into something more akin to an advertising platform than a social networking one, in which users are the audience commodity (Smythe, 1981; Zuboff, 2019). Given the financial support of this model, personalized targeting seems unlikely to vanish; instead, it should be reconceptualized for virtuous means. One potential would be to prioritize information relevant to individuals' everyday lives. Instead of targeting based on the current social media engagement metric of comments, likes, and shares, social media algorithms could target based on relevant news content, community events, social justice values, global issues, and other content that would enhance greater perspective for users.

Care

In his *Nichomachean Ethics*, Aristotle (1998) expounded on the virtues of good friendship, delineating between the friend for utility or selfish purpose, and the friendship that exists as a mutual caring. Aristotle explicated a virtuous friendship in the form of doing good things for the sake of a friend, enjoying the friend's company, making similar choices, and finding similar things to be pleasant or painful. As Miller (1981) described, "in genuine friendship, each cares for the other for his own

sake, not for the sake of the goods that can be extracted from him" (p. 325). Curzer (2007) went so far as to assert that Aristotle is the founder of care ethics, accentuating his distinguishment between "care-duties" and "justice-duties." Care as a virtue is also connected with care ethics, which emerged with Gilligan's (1982) book, explaining differences between how men and women respond to ethical dilemmas, as well as Noddings's (1984) work, culminating in an ethical theory that focuses on how interpersonal relationships and caring as a virtue shapes moral values and ethical decisions (Ess, 2013).

The technomoral care is defined as "a skillful, attentive, responsible, and emotionally responsive disposition to personally meet the needs of those with whom we share our technosocial environment" (Vallor, 2016, p. 138). Vallor (2016) raised the concern that current development of new technology means individuals have eliminated forms of caring. When robots can perform labors of caring, does that potentially reduce individuals' ability to care? Ellul (1962) warned against people's reliance on the overly efficient "*la technique*." In his *Nichomachean Ethics*, Aristotle (1998) emphasized the practice of virtue, and that individuals cultivate moral virtues over time. It would be a foolish and hyperbolic argument that technology eliminates humanity's ability to care, but there is a reasonable concern that, if individuals are practicing the virtue of caring less due to technology, what impact could that have on theirr potential to flourish as virtuous beings?

During the COVID-19 health pandemic, articles and posts regarding vaccination rates, COVID-19 information (and misinformation), quarantine locations, and other health-related news flooded the Internet and social media platforms (Ben Messaoud, 2021; Cinelli et al., 2020). One research article investigating the sharing of medical information and whose part of the title was *Sharing Is Caring*" (Rashid et al., 2022), indicated that social media engagement may prioritize the opposite of caring: Negative rhetoric, outrage comments, and polarizing viewpoints.

This is not to say communication on social media does not portray caring, such as when individuals reach out to friends and family in posts or messages to ask how they are or share support/affection in other forms of communication online. Social media platforms have the potential for democratic and civil discourse, and a format for both caring and social justice. Sander-Staudt (2018) described some of the positive uses (i.e., social media platforms as a form of long-distance and more instantaneous communication among family and more reflective caring toward others). She warned that social media and the Internet are "but shallow means for the emotional fulfillment of manufactured desires to purchase, expound, commune, and respond" (p. 209).

If individuals take the argument that both potential for moral virtues and vices exist within social media engagement, how do they emphasize those moral virtues and deemphasize the vices? In relation to news content, Jones (2021) proposed the need for a journalistic ethic of care. He argued that journalism's watchdog role is lacking when they ignore the subject, suggesting instead that both journalists and media users self-reflect and question whether news content contributes to a caring demeanor and empathy for others, or if the information is promoted "at the public's expense" (p. 82).

Another potential option would be to prioritize community connections and messages. Over the years, Facebook has adjusted their algorithms to prioritize information from friends and family over public content (Bucher, 2018); however, this may not be the best solution. Although friends and family relationships are integral to caring as a moral virtue, Facebook's design in which individuals post their thoughts and feelings is a monologic design; whereas public information (i.e., community groups and news organization pages) has potential for more dialogue, a feature sorely lacking in the self-focused platform design. The design change is built upon engagement, that is, Facebook's efforts to engage individuals because their attention span is a wealthy commodity. In order to reverse this trend, engagement should prioritize a mixture of public and private information. The "friendships" Facebook appears to prioritize are not the same friendships Aristotle described, but a monologic ideal.

Justice

In the *Republic*, Plato included justice as one of four cardinal virtues, and he associated justice with its connection to happiness. Aristotle wrote extensively about justice as a virtue of character. In his

Nichomachean Ethics, Aristotle (1998) described two types of justice: A "distributive justice" (p. 145) and a justice in rectification, both of which are proportional to the relationship. This emphasis on a deserved or fair justice leads to the first half of Vallor's (2016) definition of a technomoral justice: "A reliable disposition to seek a *fair and equitable* distribution of the benefits and risks of emerging technologies" (p. 128) (emphasis added). The second half focuses more on the how technology impacts individuals, and Vallor's argument for the necessity of a technomoral justice is indicated by the absence of it: When technology flourishes with little to no regulation or equitable distribution, the class divide increases and causes a "destabilizing social phenomenon" (p. 238). Hursthouse (1990) echoed this idea of a "just society" (p. 236) with different language, that, to achieve *eudaimonia*, human beings require certain essential things. This justice demands fairness, responsibility, and upholding values that contribute to an equitable society.

Foot (2002) described justice as "corrective" because it is the result when temptations are avoided: "If people cared about the rights of others as they care about their own rights, no virtue of justice would be needed to look after the matter" (p. 9). Vallor (2016) indicated that social media creates a negative environment for recognizing and responding to injustice. The injustice in controversial issues (i.e., race, gender, and class) is prominent on social media platforms, but the engagement design often highlights the social justice issue "if an individual is already predisposed toward an interest" or makes it easy to hide away.

Research on civic participation and knowledge on social media supports this concern. In a study using survey data during the 2018 U.S. midterm election, the results evidenced that individuals relying on social media for news tended to believe they were well-informed (subjective knowledge), but their actual political knowledge was substantially less than expected (Lee et al., 2022). The racial and social justice issue "Black Lives Matter" is an exemplar of how social media can provide a communication and advocacy platform to influence community involvement and encourage dialogue with officials. One study indicated that social media may provide a gateway for the marginalized to speak up regarding issues of justice; however, the demographics behind those involved indicate that social media is limiting engagement to predominantly "youth and Black" (Freelon et al., 2016, p. 20). With one question, Worden (2019) hinted at the underlying problem: "I may attempt to speak my mind courageously to articulate my idea of justice, but, if my opinion reaches only those who hold similar beliefs to my own, how have I contributed to civic flourishing?" (p. 239).

Another aspect is a type of "do-it-yourself" justice, in which social media users take it upon themselves to dispense justice in matters of what appears to be unfair behavior and actions online. Fritz (2021) examined this issue through the lens of online shaming and public moral disapproval and how stories of online bullying point to alarming trends of Internet and social media users distributing their own version of justice. One such example Fritz (2021) described is that of Lindsay Stone, a woman who posted a photo of herself apparently shouting and using a negative symbol outside Arlington National Cemetery, right next to a sign that called for "silence and respect." The viral attention culminated in widespread moral disapproval. Fritz (2021) argued the line is crossed "when a practice tends to create avoidable psychological harm, and to do so in a way that predictably tends to isolate or alienate people from their moral communities" (p. 689). Fricker (2013) argued these practices fall under "discriminatory epistemic injustices," and this increasing social injustice on social media is overpowering marginalized voices and allowing misinformation to flourish, or, as Zuboff (2021) described, has created a system by which "epistemic chaos caused by the profit-driven algorithmic amplification" (p.) can thrive.

This issue of justice in social media engagement has strong associations with the virtues of civility and perspective. The merits of nudging and relevancy designs to alter engagement to promote more virtuous behavior and actions would include benefits to justice as a virtue. With the first aspect of justice (i.e., virtue of civility), tools for increasing civility and civic engagement, such as prioritizing relevancy content, can help increase awareness of justice issues. However, convincing users to engage in civic issues and social justice is not realistic; instead, social media engagement should create a more

cohesive online environment that does not make it as easy to avoid social justice. The microblogging platform Tumblr appeared to have created a community for social justice issues, but, after years of company buyouts and bot accounts flooding the platform with pornography, Tumblr has become less prominent (Sarappo, 2018).

Regarding the second aspect of justice (i.e., virtue of perspective), one potential solution is more regulations. Facebook, Twitter, and other social media follow their own ethical guidelines and allow individual users to flag inappropriate content. However, if Elon Musk's purchase of Twitter is any indication, Americans react strongly when they believe their freedom of speech is threatened (Mac et al., 2022). A better option would be to alter the engagement design to deprioritize hate speech, injustice, and online shaming, and boost positive and inclusive messages.

DISCUSSION

These suggestions propose altering the design of social media engagement to create a more civic online space for human communication; however, there is danger in relying on technology to solve the problem of technology. Ellul (1962) suggested an ethic of nonpower, which does not mean avoiding technique, but, instead, setting limits. At an individual level, in relation to Vallor's (2016) technomoral virtues, this could mean limiting social media use. However, an ethic of nonpower is also about turning away and saying no to efficiency, a technique Williams (2021) described in response to persuasive technologies. Williams specifically refers to the loss of autonomy, through both attention capturing means (also called "attention economy," Bhargava & Velasquez, 2021) and manipulative technology that persuades users to act in a certain way (Botes, 2023). Social media engagement is a design built off efficiency and financial greed; audience consumption is one of the metrics of success, and algorithms are designed to personally target and influence individual attention. O'Reilly et al. (2024) explained that platforms "control and monetize the *attention* of users" (p. 1), and, since attention is a limited commodity, platforms and third-party providers stoop to increasingly manipulative means to allocate attention. An ethic of nonpower would advocate a social media engagement design that 1) prioritizes community engagement and 2) boosts content that is not targeted to individuals' prior engagement and interest, but content that is relevant to them as human beings.

Such an engagement design does not have to be less effective. Holtz et al. (2020) demonstrated how a relevancy algorithm could work in an experiment testing a personalized recommendations system on the music listening platform Spotify. In the experiment, the treatment group of users were provided with a list of "Podcasts to Try" as recommendations based on demographics and music listening history; the control condition received recommendation with popular podcasts. Results indicated that even relevancy was not enough to increase diverse user engagement.

Another example of nonpower could be reducing the visibility of the metrics of engagement (i.e., likes, shares, and comments). Past research indicated that engagement reach can serve as a heuristic cue, a form of, other people care, so people should care, too (Munaro et al., 2021). Haidt and Rose-Stockwell (2019) echoed this mentality of "demetrification" and allowing for users to judge the merits of content on their own, without a public score card. Research investigating how social media users respond to real and fake news indicated that engagement can be driven by both emotions related to the type of content and engagement cues, such as number of likes and shares (Molina et al., 2022).

Scholarly attention regarding the negative aspects of social media engagement and the deleterious effects on user behavior is increasing, although it does not appear to have reached the point of what Ellul (1962) would refer to as conflicts. As Ellul (1962) described, in "human groups in which tension and conflicts disappear are groups that become ossified, lose their ability to change and to resist aggression, as well as to develop" (p. 12). In digital technologies, especially social media platforms, this tension manifests "between liberal and communitarian visions of the good life" (Vallor, 2021, p. 28). Liberal philosophies often entail arguments for personal freedom, private property, and appropriate state power; whereas communitarians argue that the potential for individual flourishing

is inseparable from community life. Vallor (2021) suggested that virtue ethics resolves this tension through practical wisdom (*phronēsis*). For example, if the harmful engagement design of social media can be related to another harm (i.e., drug addiction), then it is possible to develop intuitive moral rules in response. Since various medications are now regulated to reduce addiction, it should follow that platform regulations to reduce manipulative designs are logically coherent.

Brey (2017) argued for several ethical approaches in response to emerging technologies: (1) Generic, (2) anticipatory, (3) ethical risk analysis, (4) experimental, and (5) participatory and deliberative. The author of this paper believes the latter would be the most fitting. A participatory and deliberative ethical approach would include the "opinions, viewpoints, and moral intuitions and judgments of different people in a way that could enrich ethical assessments" (Brey, 2017, p. 182). The engagement design of social media platforms is dynamic, due to a myriad of pressures from regulatory bodies, advertisers, and platform owners. A participatory and deliberative approach would combine those stakeholders and the public – a group often removed from the process (MacCarthy, 2020).

In this essay, several potential avenues of change have been suggested. First, a mechanism of nudges could potentially counteract some of the harmful impacts behind the social media engagement design by flagging questionable comments individuals are composing and posing a question to users asking whether they are sure they want to post this, or by recognizing less accurate information being disseminated and nudging users with more verifiable sources. Nudges could also offset polarizing viewpoints by providing alternative perspectives. However, concerns for user autonomy require that nudges be developed through a rational means that is detectable by users and available for inspection (i.e., transparent) (Ienca & Vayena, 2021). Following a participatory and deliberative approach, nudges must be understood by the average user, thus mitigating design problems that mislead or confuse agents from their capacity to make reasoned decisions. One example of a transparent nudge could be an education-type nudge that provides news or background information to information users are consuming on social media. Another example is a credibility assessment tool, called NudgeCred, that directs users to notice news source authority, which then empowers users to recognize differences between accurate and misleading information (Bhuiyan et al., 2021).

Another potential would be to prioritize relevancy over the current engagement metrics; however, as seen with the Spotify experiment, relevancy alone may not be enough to offset echo chambers and filter bubbles on social media platforms. Instead, a mixture of prioritizing relevancy, as well as a combination of public and private information, is needed. For example, when Facebook announced changes to their algorithm function such that users would see more friends and less public pages (i.e., news content), this created a potentially less well-informed social environment (Kalyanpur, 2021).

Furthermore, while there is a flagging feature on some social media platforms, there should be increased monitoring for hate speech, outrage language, and online bullying. Social media platforms were lauded as a democratizing avenue that removed gatekeepers. As Sullivan and Alfano (2021) described, an open platform design provides the opportunity for diverse and historically underserved groups to share content and raise awareness about crucial issues. However, a lack of "epistemic oversight" (Sullivan & Alfano, 2021, p. 91) has increased the prevalence of false and misleading information, and, as such, a virtuous society requires that individuals monitor the flow of information for reliability. Past research indicated the success of badges or other reward incentives (Anderson et al., 2013), which could "steer" user behavior to increasingly flag such content. However, this reliance on individuals risks collective harm caused by bad actors. Following a participatory and deliberative approach, flagging efforts should entail a combination of individual, platform, and regulatory efforts. In such a case, individuals would retain the ability to flag harmful and inaccurate content, platforms would retain the ability to remove content until reviewed, and global regulation is recommended to assist with monitoring efforts.

A final option could be to emphasize community-engaging content, either by boosting the information in user's feeds or providing some type of heuristic cue (i.e., highlighted color or arrow function) indicating positive and beneficial information. However, for this type of design to be successful, and to retain user autonomy, users should be aware of the design.

As privately regulated platforms, social media companies have little obvious incentive to alter the design, one that could potentially cost them engagement (and, therefore, money). However, red flags raised regarding the negative consequences of the current design are beginning to make headlines. In 2021, the Social Media Summit at MIT brought globally diverse experts to focus on problems, including platform transparency, lack of regulation and competition, algorithmic design that leads to bias, racism, and polarization, and how "free speech" often gives way to harmful speech. Experts advocated for a more "humanizing design" (Klein, 2021, p. 10), including the use of nudges and creating independent panels.

In a U.S. Senate hearing, Meta's owner Mark Zuckerberg and then-Twitter CEO Jack Dorsey previously argued that social media companies should not be held responsible for what is posted or disseminated on their platforms, because they do not create the content, but are merely providing a platform to allow people a voice (Canales, 2020). However, the platform argument falls short because of the technological design of social media engagement that prioritizes negative content, actively nudges users of engaging and often divisive content, and promotes a digital environment of incivility and false information.

CONCLUSION

In this paper, the author suggested the importance of utilizing a virtue ethics framework to address the ethical challenges of social media platform engagement design. As Vallor (2021) denoted, Aristotle's practical wisdom provides virtue ethics theory with the means to "respond well to novel moral circumstances" (p. 34), and, as such, it is possible to consider the unique problems of engagement and reason through solutions that provide users with the greatest opportunity to flourish online in a community environment. The world is taking notice of problems inherent in the social media engagement design, and it would behoove social media companies to respond or consider potential regulations to limit the overencompassing power of damaging platforms.

Limitations

This research has several limitations. First, there needs to be experimental research testing how users would respond to these suggestions of altering the engagement design of social media. Moreover, this research focused on engagement from the platform and organizational level, and less toward improving virtuous behavior at the individual level. As argued, the design is creating a negative environment and enhancing less virtuous behavior, and a platform-level response is warranted, but the promotion of a virtuous character cannot ignore the individual aspect. This conundrum is seen with the virtue of perspective; suggestions based on offering more diverse perspectives and providing a more well-rounded social media environment can only create the setting. There is no mechanism that would force an individual to actively engage in perspective-taking; instead, it is only possible to encourage the moral virtue of perspective.

Overwhelmingly, the social media environment requires a new measure of success in engagement, that is, a new "code of engagement" (Gehner & Oughton, 2016, p. 192), that prioritizes virtues of civility, self-control, care, perspective, and justice. The culmination of these technomoral virtues would hopefully improve the appreciation of human diversity, the ability to work through controversy in a more civil manner, increased civic participation, social responsibility, and more informed perspectives; in short, indications of a flourishing life.

CONFLICTS OF INTEREST

We wish to confirm that there are no known conflicts of interest associated with this publication and there has been no significant financial support for this work that could have influenced its outcome.

CORRESPONDING AUTHOR

Correspondence should be addressed to Lana Medina; lcm5510@psu.edu

REFERENCES

Anderson, A., Huttenlocher, D., Kleinberg, J., & Leskovec, J. (2013). Steering user behavior with badges. In *Proceedings of the 22nd International Conference on World Wide Web* (pp. 95—106). doi:10.1145/2488388.2488398

Arendt, H. (1968). *Between past and future*. Viking Press.

Aristotle, . (1998). *The nicomachean ethics* (D. Ross, Trans.). Oxford University Press.

Baumeister, R. F., & Juola Exline, J. (1999). Virtue, personality, and social relations: Self-control as the moral muscle. *Journal of Personality*, *67*(6), 1165–1194. doi:10.1111/1467-6494.00086 PMID:10637991

Beiner, R. (2017). Ethics and technology: Hans Jonas' theory of responsibility. In Democratic theory and technological society (pp. 336—354). Routledge.

Ben Messaoud, M. (2021). Social media and the COVID-19 pandemic: The dilemma of fake news clutter vs. Social responsibility. *Journal of Arab & Muslim Media Research*, *14*(1), 25–45. doi:10.1386/jammr_00023_1

Bentham, J. (1996). *The collected works of Jeremy Bentham: An introduction to the principles of morals and legislation*. Clarendon Press.

Berezan, O., Krishen, A. S., Agarwal, S., & Kachroo, P. (2018). The pursuit of virtual happiness: Exploring the social media experience across generations. *Journal of Business Research*, *89*, 455–461. doi:10.1016/j.jbusres.2017.11.038

Bermúdez, J. P. (2017). Social media and self-control: The vices and virtues of attention. In C. G. Prado (Ed.), *Social media and your brain: Web-based communication is changing how we think and express ourselves* (pp. 57–74). Praeger.

Berry, J. M., & Sobieraj, S. (2014). *The outrage industry: Political opinion media and the new incivility*. Oxford University Press.

Bhargava, V. R., & Velasquez, M. (2021). Ethics of the attention economy: The problem of social media addiction. *Business Ethics Quarterly*, *31*(3), 321–359. doi:10.1017/beq.2020.32

Bhuiyan, M. M., Horning, M., Lee, S. W., & Mitra, T. (2021). Nudgecred: Supporting news credibility assessment on social media through nudges. In *Proceedings of the ACM on Human-Computer Interaction, 5*(CSCW2), 1—30. doi:10.1145/3479571

Bhuiyan, M. M., Zhang, K., Vick, K., Horning, M., & Mitra, T. (2018). FeedReflect: A tool for nudging users to assess news credibility on Twitter. In *Proceedings of the Companion of the 2018 ACM Conference on Computer Supported Cooperative Work and Social Computing* (pp. 205–208). doi:10.1145/3272973.3274056

Bommarito, N. (2014). Patience and perspective. *Philosophy East & West*, *64*(2), 269–286. doi:10.1353/pew.2014.0021

Bossens, E., Storms, E., & Geerts, D. (2021). *Improving the debate: Interface elements that enhance civility and relevance in online news comments*. 433–450.

Botes, M. (2023). Autonomy and the social dilemma of online manipulative behavior. *AI and Ethics*, *3*(1), 315–323. doi:10.1007/s43681-022-00157-5

Bowen, S. A. (2013). Using classic social media cases to distill ethical guidelines for digital engagement. *Journal of Mass Media Ethics*, *28*(2), 119–133. doi:10.1080/08900523.2013.793523

Brey, P. (2017). Ethics of emerging technology. In *The ethics of technology: Methods and approaches* (pp. 175–191). Rowman & Littlefield.

Bucher, T. (2012). Want to be on the top? Algorithmic power and the threat of invisibility on Facebook. *New Media & Society*, *14*(7), 1164–1180. doi:10.1177/1461444812440159

Bucher, T. (2018). *If... then: Algorithmic power and politics*. Oxford University Press. doi:10.1093/oso/9780190493028.001.0001

Canales, K. (2020, November 17). Mark Zuckerberg says Facebook should be liable for "some content," but the social giant and other platforms still shouldn't be regulated as publishers or telecom firms. *Business Insider*. https://www.businessinsider.com/zuckerberg-facebook-should-be-liable-some-content-2020-11

Cao, D., Meadows, M., Wong, D., & Xia, S. (2021). Understanding consumers' social media engagement behaviour: An examination of the moderation effect of social media context. *Journal of Business Research*, *122*, 835–846. doi:10.1016/j.jbusres.2020.06.025

Cinelli, M., Quattrociocchi, W., Galeazzi, A., Valensise, C. M., Brugnoli, E., Schmidt, A. L., Zola, P., Zollo, F., & Scala, A. (2020). The COVID-19 social media infodemic. *Scientific Reports*, *10*(1), 1–10. doi:10.1038/s41598-020-73510-5 PMID:33024152

Cornwell, W. (2020). Virtue ethics, technology, and sustainability. In A. Al-Masri, & Y. Al-Assaf (Eds.), Sustainable development and social responsibility—Volume 2 (pp.). Springer, Cham. doi:10.1007/978-3-030-32902-0_42

Cruz, J., & Plaisance, P. L. (2021). Virtue ethics and a technomoral framework for online activism. *International Journal of Communication*, ●●●, 1330.

Curren, R. R., & Dorn, C. (2018). *Patriotic education in a global age*. The University of Chicago Press. doi:10.7208/chicago/9780226552422.001.0001

Curzer, H. J. (2007). Aristotle: Founder of the ethics of care. *The Journal of Value Inquiry*, *41*(2–4), 221–243. doi:10.1007/s10790-007-9088-2

D'Olimpio, L. (2021). Critical perspectivism: Educating for a moral response to media. *Journal of Moral Education*, *50*(1), 92–103. doi:10.1080/03057240.2020.1772213

Dilek, A. R. (2021). The critique of Mill's utilitarianism concerning virtue. *Humanitas-Uluslararası Sosyal Bilimler Dergisi*, *9*(17), 45–58. doi:10.20304/humanitas.823402

Ellul, J. (1962). The technological order. *Technology and Culture*, *3*(4), 394–421. doi:10.2307/3100993

Ess, C. (2013). Digital media ethics. *Polity*.

Foot, P. (2002). *Virtues and vices and other essays in moral philosophy*. Oxford University Press on Demand. doi:10.1093/0199252866.001.0001

Freelon, D., McIlwain, C. D., & Clark, M. (2016). (Forthcoming). *Beyond the hashtags: #Ferguson, #Blacklivesmatter, and the online struggle for offline justice*. Center for Media & Social Impact. *American University*.

Fricker, M. (2013). Epistemic justice as a condition of political freedom? *Synthese*, *190*(7), 1317–1332. doi:10.1007/s11229-012-0227-3

Fritz, J. (2021). Online shaming and the ethics of public disapproval. *Journal of Applied Philosophy*, *38*(4), 686–701. doi:10.1111/japp.12510

Gehner, M., & Oughton, D. (2016). Ethical challenges in social media engagement and research: Considerations for code of engagement practices. *Journal of Radiological Protection*, *36*(2), S187–S192. doi:10.1088/0952-4746/36/2/S187 PMID:27270048

Gil de Zúñiga, H., Jung, N., & Valenzuela, S. (2012). Social media use for news and individuals' social capital, civic engagement, and political participation. *Journal of Computer-Mediated Communication*, *17*(3), 319–336. doi:10.1111/j.1083-6101.2012.01574.x

Gilligan, C. (1982). *In a different voice: Psychological theory and women's development*. Harvard University Press.

Grevet, C. (2016). *Being nice on the Internet: Designing for the coexistence of diverse opinions online*.

Haidt, S., & Rose-Stockwell, T. (2019, December). The dark psychology of social networks. https://www.theatlantic.com/magazine/archive/2019/12/social-media-democracy/600763/

Hertwig, R., & Ryall, M. D. (2020). Nudge versus boost: Agency dynamics under libertarian paternalism. *Economic Journal (London)*, *130*(629), 1384–1415. doi:10.1093/ej/uez054

Holtz, D., Carterette, B., Chandar, P., Nazari, Z., Cramer, H., & Aral, S. (2020). The engagement-diversity connection: Evidence from a field experiment on Spotify. In *Proceedings of the 21st ACM Conference on Economics and Computation* (pp. 75–76). doi:10.1145/3391403.3399532

Hursthouse, R. (1990). After Hume's justice. [JSTOR.]. *Proceedings of the Aristotelian Society*, *91*(1), 229–245. doi:10.1093/aristotelian/91.1.229

Ienca, M., & Vayena, E. (2021). Digital nudging: Exploring the ethical boundaries. In *The Oxford handbook of digital ethics* (pp. 356–377). Oxford University Press.

Jonas, H. (1984). *The imperative of responsibility: In search of an ethics for the technological age*. University of Chicago Press.

Jones, J. (2021). Caring with the public: An integration of feminist moral, environmental, and political philosophy in journalism ethics. *Journal of Media Ethics, 36*(2), 74—-84. 10.1080/23736992.2021.1926255

Jung, J. Y., & Mellers, B. A. (2016). American attitudes toward nudges. *Judgment and Decision Making*, *11*(1), 62–74. doi:10.1017/S1930297500007592

Kalyanpur, S. (2021, May 6). What happened to most recent on Facebook? How to find the feature on the app? *Republic World*. https://www.republicworld.com/technology-news/apps/what-happened-to-most-recent-on-facebook-how-to-find-the-feature-on-the-app.html

Kant, I. (1996). *Anthropology from a pragmatic point of view*. Southern Illinois University Press.

Khosravinik, M.KhosraviNik. (2017). Right wing populism in the West: Social media discourse and echo chambers. *Insight Turkey*, *19*(3), 53–68. doi:10.25253/99.2017193.04

Klein, P. (2021). *Social media at a crossroads: 25 solutions from the Social Media Summit @ MIT*. MIT Initiative on the Digital Economy. https://ide.mit.edu/wp-content/uploads/2021/10/The-SMS@MIT-Report.pdf?x57209

Kozyreva, A., Lewandowsky, S., & Hertwig, R. (2020). Citizens versus the Internet: Confronting digital challenges with cognitive tools. *Psychological Science in the Public Interest*, *21*(3), 103–156. doi:10.1177/1529100620946707 PMID:33325331

Lee, S., Diehl, T., & Valenzuela, S. (2022). Rethinking the virtuous circle hypothesis on social media: Subjective versus objective knowledge and political participation. *Human Communication Research*, *48*(1), 57–87. doi:10.1093/hcr/hqab014

Levy, R. (2021). Social media, news consumption, and polarization: Evidence from a field experiment. *The American Economic Review*, *111*(3), 831–870. doi:10.1257/aer.20191777

Mac, R., Metz, C., & Conger, K. (2022, May 3). "I don't really have a business plan:" How Elon Musk wings it. *The New York Times*. https://www.nytimes.com/2022/05/03/technology/elon-musk-twitter-plan.html

MacCarthy, M. (2020). *Transparency requirements for digital social media platforms: Recommendations for policy makers and industry*. Transatlantic Working Group.

Mill, J. S. (1975). *On liberty (1859)*.

Miller, R. W. (1981). Marx and Aristotle: A kind of consequentialism. *Canadian Journal of Philosophy*, *11*, 323–352. doi:10.1080/00455091.1981.10715777

Mirbabaie, M., Ehnis, C., Stieglitz, S., Bunker, D., & Rose, T. (2021). Digital nudging in social media disaster communication. *Information Systems Frontiers*, *23*(5), 1097–1113. doi:10.1007/s10796-020-10062-z

Molina, M. D., Wang, J., Sundar, S. S., Le, T., & DiRusso, C. (2022). Reading, commenting, and sharing of fake news: How online bandwagons and bots dictate user engagement. *Communication Research*, ●●●, 00936502211073398.

Monchinski, T. (2010). *Chapter three: The ethic of care* (Vol. 382). Counterpoints.

Munaro, A. C., Hübner Barcelos, R., Francisco Maffezzolli, E. C., Santos Rodrigues, J. P., & Cabrera Paraiso, E. (2021). To engage or not engage? The features of video content on YouTube affecting digital consumer engagement. *Journal of Consumer Behaviour*, *20*(5), 1336–1352. doi:10.1002/cb.1939

Nikolinakou, A., & King, K. W. (2018). Viral video ads: Emotional triggers and social media virality. *Psychology and Marketing*, *35*(10), 715–726. doi:10.1002/mar.21129

Noah, T. (2022, April 18). *Ronny Chieng roasts Trevor Noah's old tweets*. The Daily Show. https://www.instagram.com/reel/CcglK3flizj/?igshid=YmMyMTA2M2Y=

Noddings, N. (1984). *Caring, a feminine approach to ethics and moral education*. University of California Press.

O'Reilly, M., Levine, D., & Law, E. (2021). Applying a "digital ethics of care" philosophy to understand adolescents' sense of responsibility on social media. *Pastoral Care in Education*, *39*(2), 91–107. doi:10.1080/02643944.2020.1774635

O'Reilly, T., Strauss, I., & Mazzucato, M. (2024). Algorithmic attention rents: A theory of digital platform market power. *Data & Policy*, *6*, e6. doi:10.1017/dap.2024.1

Ölander, F., & Thøgersen, J. (2014). Informing versus nudging in environmental policy. *Journal of Consumer Policy*, *37*(3), 341–356. doi:10.1007/s10603-014-9256-2

Pantic, I. (2014). Online social networking and mental health. *Cyberpsychology, Behavior, and Social Networking*, *17*(10), 652–657. doi:10.1089/cyber.2014.0070 PMID:25192305

Pennycook, G., & Rand, D. (2021). *Nudging social media sharing towards accuracy*.

Pentina, I., Guilloux, V., & Micu, A. C. (2018). Exploring social media engagement behaviors in the context of luxury brands. *Journal of Advertising*, *47*(1), 55–69. doi:10.1080/00913367.2017.1405756

Peterson, A. (2019). *Civility and democratic education*. Springer Singapore. doi:10.1007/978-981-15-1014-4

Qi, X. (2022). Social networks as contexts for engagement and initiative: An empirical investigation. *Current Sociology*, *70*(3), 436–453. doi:10.1177/00113921211012741

Rashid, M. A., Yip, S. W. L., Gill, D., & Arfeen, Z. (2022). Sharing is caring: An analysis of #FOAMed Twitter posts during the COVID-19 pandemic. *Postgraduate Medical Journal*, *98*(1157), 199–204. doi:10.1136/postgradmedj-2020-139267 PMID:33318145

Reinecke, L., Gilbert, A., & Eden, A. (2021). Self-regulation as a key boundary condition in the relationship between social media use and well-being. *Current Opinion in Psychology*. PMID:35085935

Sander-Staudt, M. (2018). Communication and Media Ethics (P. Lee Plaisance, Ed.; pp. 191–214). De Gruyter Mouton. doi:10.1515/9783110466034-011

Sarappo, E. (2018, December 13). How Tumblr taught social justice to a generation of teenagers. *Pacific Standard*. https://psmag.com/social-justice/how-tumblr-taught-social-justice-to-a-generation-of-teenagers

Saura, J. R., Palacios-Marqués, D., & Iturricha-Fernández, A. (2021). Ethical design in social media: Assessing the main performance measurements of user online behavior modification. *Journal of Business Research*, *129*, 271–281. doi:10.1016/j.jbusres.2021.03.001

Schechner, S., & Woo, S. (2021, October 25). Facebook whistleblower Frances Haugen calls for new tech laws in Europe. *The Wall Street Journal*. https://www.wsj.com/articles/facebook-whistleblower-frances-haugen-calls-for-new-tech-laws-in-europe-11635176350

Skoric, M. M., Zhu, Q., Goh, D., & Pang, N. (2016). Social media and citizen engagement: A meta-analytic review. *New Media & Society*, *18*(9), 1817–1839. doi:10.1177/1461444815616221

Smythe, D. W. (1981). *Dependency road: Communications, capitalism, consciousness, and Canada*. Ablex Publishing Corporation.

Spring, V. L., Cameron, C. D., & Cikara, M. (2018). The upside of outrage. *Trends in Cognitive Sciences*, *22*(12), 1067–1069. doi:10.1016/j.tics.2018.09.006 PMID:30340984

Sullivan, E., & Alfano, M. (2021). A normative framework for sharing information online. In *The Oxford handbook of digital ethics* (pp. 85–102). Oxford University Press. doi:10.1093/oxfordhb/9780198857815.013.5

Swierstra, T. (2015). Identifying the normative challenges posed by technology's "soft" impacts. *Etikk i praksis-Nordic Journal of Applied Ethics*, (1), 5—20.

Thiranagama, S., Kelly, T., & Forment, C. (2018). Introduction: Whose civility? *Anthropological Theory*, *18*(2–3), 153–174. doi:10.1177/1463499618780870

Vaccarezza, M. S., & Croce, M. (2021). Civility in the post-truth age: An Aristotelian account. *Humana. Mente Journal of Philosophical Studies*, *39*(39), 127–150.

Vallor, S. (2016). *Technology and the virtues: A philosophical guide to a future worth wanting*. Oxford University Press. doi:10.1093/acprof:oso/9780190498511.001.0001

Vallor, S. (2021). Virtues in the digital age. In *The Oxford handbook of digital ethics* (pp. 20–42). Oxford University Press.

Vignoles, V. L., Regalia, C., Manzi, C., Golledge, J., & Scabini, E. (2006). Beyond self-esteem: Influence of multiple motives on identity construction. *Journal of Personality and Social Psychology*, *90*(2), 308–333. doi:10.1037/0022-3514.90.2.308 PMID:16536653

Williams, J. (2021). Ethical dimensions of persuasive technology. In *The Oxford handbook of digital ethics* (pp. 281–291). Oxford University Press.

Worden, K. J. (2019). Disengagement in the digital age: A virtue ethical approach to epistemic sorting on social media. *Moral Philosophy and Politics*, *6*(2), 235–259. doi:10.1515/mopp-2018-0066

Zuboff, S. (2019). Surveillance capitalism and the challenge of collective action. *28*(1), 10–29.

Zuboff, S. (2021, January 29). The coup we are not talking about. *The New York Times*. https://www.nytimes.com/2021/01/29/opinion/sunday/facebook-surveillance-society-technology.html?searchResultPosition=1

Lana Medina is a PhD candidate researching media ethics, technology ethics, moral psychology, broadcast journalism, and social media news production and dissemination.