

EHSAN ARZROOMCHILAR

SOCIAL MEDIA AND RELIGIOSITY  
A (POST)PHENOMENOLOGICAL ACCOUNT

**Ehsan Arzroomchilar**

University of South Bohemia, Faculty of Theology, České Budějovice, Czech Republic.

**Email:** arzroe00@tf.jcu.cz

**Abstract:** As access to the internet continues to grow, so do concerns about its effects on individuals. This digital revolution is not without its religious implications, and it appears that opinions are divided on how religiosity is being affected. On the one hand, it is possible that the emergence of virtual Islam could lead to an increase in extremism. On the other hand, with more exposure to diverse perspectives, religious tolerance may be bolstered. This article examines the potential effects of the internet and social media on religious thought, drawing upon insights from the contemporary philosophy of technology, specifically postphenomenology. In this framework, technology is seen as an active agent, influencing both the subject and the object. Additionally, this article seeks to explain the logic underlying the conflicting views in the literature.

**Key words:** Postphenomenology, Cyberspace, Social media, Radicalism, Techno-radicalism, Religion.

## 1. Introduction

Internet and online communicative platforms seem to be changing the Islamic thought perspective. Thanks to internet literacy and the reduction of the digital divide, now most of the average civilians in Muslim-majority countries have access to the online sphere. Such a proliferation may seem like a blessing as it may, among others, spread tolerance at the grassroots due to the exposure to diverse views. Moreover, the already-marginalized religious voices may extend their outreach and garner accordingly audiences through cyberspace. Marginalization of voices may have occurred due either to monopolization imposed by senior *Olamās* (e.g., Mujtahids, Muftis, Sheikhs, and the like), or oppression of the ruling political system. In either case, giving voice to a diverging range of individuals and organizations might read as a democratization of religious thought. The list of advantages for Muslims brought about by the internet may continuously go on. These opportunities, however, might blind one to notice also the side effects resulting from the aforesaid virtual life, i.e., unpredicted effects which might turn out to be problematic.

To begin, one can see how the internet and social media dramatically change the status of authorities. Prior to the advent of the internet, specific dynamics were operating within scholarly life. One had to go through certain training to make a name and draw the public's attention. For example, in the traditional Islamic seminaries, one was expected to practice hard for quite some years, under the supervision of senior *Olamās*, to turn ultimately into a competent *Mujtahid*. Along with expert knowledge, furthermore, one had to also develop a virtuous character to be credited as a religious authority. One couldn't be considered a *Mujtahid* unless she had been acknowledged by at least one widely recognized senior *Mujtahid*. Yet there was a long way ahead thereafter to become an authorized *marji' taqlid* to attract emulators (*Muqallids*).

Internet and social media platforms however provide an alternative path now, it appears; a shortcut. Thanks to the equality awarded by cyberspace, one may solicit an audience across the globe without necessarily having developed the relevant expertise as well as the required moral trait. Anyone can, in principle, possess the same chance to have a website, Twitter feed, Instagram page, YouTube channel, or any other online avenue to expand her reach. More important is the dominant pattern here which, far beyond the authenticity of the content or competence of the author, is the logic of a global capitalist market. One can acquire more share of this marketplace in this sense if one has already developed the required marketing skills. Crucial is the number of 'likes', 'retweets', 'comments', 'views', and all the marketing tricks prevalent on the internet in general and social media in particular. As Bunt notes 'an

ability to work within the frameworks of technology can be as important as familiarity with religious sources. Indeed, the former may be more prominent than the latter' in some contexts (Bunt 2018, 102).

Such a replacement in the underlying logic has huge implications for religious thought, as one might guess. 'Sheikh or Mullah celebrities' are quite discernible nowadays within different Islamic societies. In Iran, for example, a significant portion of the marketplace is devoted to such religious celebrities, as on Instagram, for instance, which is the dominant social media at the moment, Alireza Panahian and Hasan Aghamiri, both being middle-ranked clerics, have 1.2 M and 3.5 M followers respectively. In contrast, Hossein Vahid Khorasani and Mousa Shubairi Zanjani, who arguably are among the high-ranked *marji' taqlids*, possess 90K and 14.5K followers respectively. In Iraq alike, Ali al-Sistani, who counts undoubtedly as the most prominent *Shia* figure, has 79K followers, whereas Ali al-Tolqanee, a middle-ranked 37-years-old cleric, is followed by 5.4M users. Cyberspace, in this sense, seems to restructure the traditional religious sources by introducing an unprecedented route to success.

Next to religious authority, even the authority of science, too, is being affected. During the last decade, the so-called Islamic/traditional medicine has gained currency in countries like Iran. Although currently there is no reliable evidence to ensure the role of the internet and social media in such a rapid growth one may attribute such a rise, in part, to the propaganda of such views on the internet. Hossein Ravazadeh, a layperson, is one of the forerunners of this growing field and is followed by 200K on Instagram. Also Abbas Tabrizian, as a middle-ranked cleric, is followed by 102K persons. Anecdotal observations imply that Islamic/traditional medicine is even penetrating the middle class, despite not having been approved by most of the senior *Mujtahids*. Teachings of such a perspective go far beyond merely taking a stance against genetically modified crops, by rejecting, more or less, most of the practices of modern medicine. They prescribe, among others, Cupping therapy (Ahmedi and Siddiqui 2012), as a procedure to develop resilience against a range of diseases. Also for healing, they prescribe a certain medicine whose origin, they date back to the seventh *Shia* Imam, *Musa al-Kadhim*. They prescribe the foresaid approach even against Covid-19 while dissuading people to receive vaccination or the relevant treatment.

All this implies that cyberspace is a pivotal game-changer within Islamic discourse where traditional authorities are gradually being diminished or even replaced with new ones. The output of this kind of religiosity brought about by social media and the characteristics of Muslim digital natives remains to be explored. Above all, more empirical surveys are required to make a good sense of such an internet-mediated Islam. However, there seems to be already a growing body of literature exploring the impacts of social media on religiosity. Surprisingly, nevertheless, the existing literature suggests diverging observations. On the one hand, some

have argued that thanks to exposure to a diverse range of perspectives, internet usage transforms individuals to be less strict and more tolerant (McClure 2016). This cluster of findings suggests further a serious decline of affiliated religiosity in favour of the number of 'nones', i.e., those who are not affiliated with any specific historical religion even though they may embrace spirituality (Ammerman 2013; Baker and Smith 2009; Besecke 2013; Kosmin and Keysar 2008; Putnam and Campbell 2012; Mercadante 2014; Schmidt 2012; McClure 2020; Woodhead 2017). McClure (2016), for example, observes that those who spend more time on social networking sites are more likely to customize their beliefs in a 'syncretistic fashion' and may endorse 'practicing multiple religions simultaneously'.

On the other hand, however, there is an intuition that the internet in general, and social media in particular, may cause religious radicalism to grow (Carter et al. 2014; Sageman 2008; Sunstein 2007; Pariser 2011; 2012; Seib and Janbek 2010). The latter type of literature foreshadows that the internet has become a venue for the self-radicalization of civilians on the ground of a new interpretation of jihad that goes beyond the control and confines of the traditional sources of Islamic knowledge, such as mosques and imams. Evidence for this is the observation that the internet and social media are an integral part of jihadi activities of groups like ISIS and al-Qaeda through a wide range of activities, like recruitment, dissemination of fanatic views, recruitment, self-promotion, live streaming violence, online training, campaigning, and the like (Bunt 2018). Social media then have become increasingly integrated into jihad campaigns (Bunt 2018, 103).

I think to account for the foregoing divergence of views concerning the impacts of the internet on religiosity we need first of all a theoretical framework. The phenomenon of the internet-mediated Muslim identity is a multifaceted phenomenon that cannot be fully apprehended merely by empirical approaches. Theoretical engagement, next to empirical inquiries, is needed also to lay bare the ways the virtual world affects individuals. Moreover, to counter radicalism, insights into the nature of technology, and in our case, social media, would be required. The current global religious radicalism is an unprecedented phenomenon, never possible before the advent of the existing communicative tools. An indication of it is the fact that not only many of ISIS's members are recruited from non-Muslim countries in the west, but some have argued that such radicalism is not motivated merely by religious motives. Oliver Roy (2017) for instance observes that many 'choose to Islamise their own radicalization but none of them was a Salafi or a Muslim fundamentalist before going into terrorism'.

Therefore, to explain in general the impacts of social media on religiosity, and in particular to account for the diverging views within the existing literature, I suggest, technology should be granted an active role.

If technologies involved, i.e., social media in our case, go beyond their instrumentality and affect subsequently the subjectivity of the users, it follows that technology is not just a simple tool. Contemporary philosophy of technology has witnessed a shift from *instrumentalist* accounts of technology to a new paradigm wherein the latter is taken to be an active player. Among others, postphenomenology is capable to provide a remarkable account of how technology affects the immediate users. With its *phenomenological* approach, postphenomenology tries to describe the changes both the subject and the object undergo when a technology is in play. In the rest of the article, I will try to depict a postphenomenological account of the role of social media in the phenomenon of Islamic radicalism. Along this route, I will also try to explain why there seems to be a conflict, as said, in views associated with the impacts of social media on religiosity. Before drawing the portrait, however, a brief overview of postphenomenology is in order. In the next section I will provide a brief - and certainly not thorough - overview to introduce the relevant notions of postphenomenology. In the third section I will apply the framework to the phenomenon of religious radicalism. Moreover, I will try here to justify the existence of conflicting views. In the last section I will attempt to formulate a few concluding remarks.

## 2. Postphenomenology; an Overview

Postphenomenology emerged as a movement to study the role technology plays in what human experiences and does (Ihde 1990; 1993; 2007; 2009; 2016; Rosenberger and Verbeek 2015; Verbeek 2005; 2011). Technology is not a neutral tool fulfilling solely its primarily envisioned function, according to postphenomenology. Rather it exceeds the mere instrumentality and starts *mediating* both the subject and the object. My credit card, for instance, is initially designed to ease the process of payment. But soon after introduction it goes beyond its proper function and reconfigures both the owner's subjectivity as well as the appeared surroundings in her consciousness. There are empirical findings that card payment cultivates consumerist behaviour within the owner (Chatterjee and Rose 2012; Lo & Harvey 2011; Soetevent 2011). The reason lies, it seems, in the fact that due to the physical characteristics of the cards (e.g., no change during payment) it withdraws from the attention of the user and leads her, subsequently, to overspend. This fashion of mediation stands in contrast with the way cash, i.e., coins and notes, mediates individuals. In the latter case, visible characteristics of the money (e.g., numbers inscribed on notes and coins, changes in the number and weight) don't let the attention of users move away from the money which is being

spent and this gives rise accordingly to a conservative behaviour while purchasing. Artefacts, according to postphenomenology, mediate the way we experience, live, and get things done, that is to say, artefacts actively reconfigure both subjectivity and objectivity. An extensive overview of postphenomenology is beyond the purview of this writing. To make my point though I need to throw light on the relevant pieces of the postphenomenology framework in brief.

The most prominent term of postphenomenology, as already highlighted, is that of *mediation*. Mediation alludes to the reconfiguration of both subject and object where a technology is involved. As the case of bank cards exemplified, once a technology is involved, both the user and the perceived world start to be reorganized. In this way, the mediating role of technology may be conceptualized in terms of reshaping both the subject and the object. The latter point implies also a further principle according to which every technology is *idiosyncratic* in its mediating role in the sense that each technology should be explored in its specificity. The specificity of mediation may acquire even deeper meaning when the next tenet of postphenomenology is laid bare, and that is, the notion of *multistability*.

Based on the notion of multistability, not only every technology creates its own specific mediation, but also it creates varying types of mediation within different contexts. It means that technology has different meanings, different roles, and accordingly different *stabilities* across different contexts. The mediation of technology depends, in part, on the way it is appropriated and utilized in a given situation. This multitude of roles might be the ground of why the internet may create in principle divergent, even opposing, effects on religiosity. In this sense, the way cyberspace mediates individuals depends on the way the latter domesticize the internet. It means that the mediation of social media cannot be monolithic and uniform across all situations and one needs also to take into account the way social media are utilized. Internet thus can promote both tolerance and fanaticism depending on the manner it is stabilized. Later I will have more to say in this regard but now I turn to a further teaching associated with postphenomenology.

For postphenomenology *relations* are of prime significance, and as elaborated, the way both object and subject, along with their relations with technology, undergo changes is the major concern of postphenomenology. Don Ihde, the founder of the movement, has classified various types of relationships with technology that users may develop. Out of all, one particular kind of relationship is of crucial significance for my purpose; *embodiment relationship*. Sometimes one relates to a technology in a way as though one has embodied the technology. In this sense, technology might be described as an extension of one's body. The iconic example here is Merleau Ponty's blind person with her cane. A cane for the blind person is not simply an object among

other objects. Rather it is, part of her sensorial system as though, that is to say, the stick is incorporated into her bodily sensorial system. She perceives the world around her *through* the cane. She feels the surroundings with her cane, pretty much similar to the way we feel the world with our natural senses. In this sense, once a technology is embodied, it evades the attention of the immediate user. When I wear my eyeglasses for instance they barely draw my attention except when they are smudged or malfunctioning. I don't look *into* them, but rather look *through* them into the world. Eyeglasses are, as it were, part of my bodily sensorial system, that is, part of my body.

One intimate notion here is that of *transparency*. It refers to the ability of an artefact in withdrawing into the background of attention. The less attention an artefact draws, the more transparent it is. Transparency however may not occur straightforwardly, as it needs a process of *habituation*. In the early days of wearing my eyeglasses, I would be uncomfortable with them, feeling them accordingly on my nose. Yet gradually I would grow the required habituation and my body would incorporate them as if they were part of my body. If something went wrong, as when my eyeglasses were too heavy on my nose, they would probably remain *opaque* without receding into the background of my attention. Transparency then is a necessary stage for holding an embodiment relationship with technology.

Furthermore, within the postphenomenology tradition, a distinction usually is made between the *hermeneutic* aspect of mediation and the *existential* aspect of that. While the former, as the name suggests, refers to the mediating effect of technology on the perception of individuals, the latter concerns the behavioural dimension of mediation. In other words, technology mediates both the way the world is present within one's consciousness (hermeneutic side of mediation) and the way one is present within the world (existential side). I will elaborate on the distinction further while I am dealing with the case of radicalism in the next section.

Finally, the last relevant notion here is the intuition that mediation always comes through a certain structure. Technology augments aspects of the world and reduces other dimensions in turn. While I am looking at a landscape through a binocular camera, for instance, I may focus on the scene in a way never possible before through naked eyes, and in this sense, the respective technology is enhancing a segment of reality for me here. At the very same time, however, the rest of the world is diminished because it is cut out of my visual field. In all cases of mediation, according to postphenomenology, we will be encountered such an *amplification/reduction* dichotomy. An alternative way to put this is to say that technology is not without cost. While enabling us in some facets it has also debilitating effects on other sides at the same time. Technology therefore is not faithful to reality and delivers a distorted picture of the world.

In this section, I provided an overview, however brief and quick, of teachings of postphenomenology. In the following section, I will put the foregoing insights into practice and account for the role of cyberspace in triggering the phenomenon of religious radicalism. My focus will be predominantly on social media networking sites.

### 3. A (Post)Phenomenological Analysis of Techno-radicalism

Radical groups like ISIS and al-Qaeda employ cyberspace to carry out their goals, such as propaganda (Kramer 2000; Saltman and Winter 2014; Piwko 2021), recruitment of members or sympathizers (Klausen 2015), training (Brantly 2017; Klausen 2015), financing (Conway 2003; 2017) and online live streaming of their violent activities (Awan 2017; Bunt 2018; Taylor et al. 2014). To realize the extensive use of cyberspace by radical groups it suffices to notice that in 2016 twitter suspended almost a quarter of a million accounts linked to the Islamic State (Guardian 2016). But as mentioned, and will be elaborated further, cyberspace means more than simply *instrumentally using social media*.

One prominent principle within postphenomenology's framework, as pointed out, is that technology is not simply a matter of operating an innocent tool. Once a technology has been employed the subjectivity of the immediate user would undergo dramatic reconfiguration. In this sense, technology can change the way we think, behave, and relate to one another (Boyd 2008; Carr 2010; Dill 2012; Dreyfus 2008; Ihde 1990; 1993; 2007; Kross et al. 2013; Sunstein 2007; Wang et al. 2012; Warschauer 2003; Verbeek 2005; 2011) The question then is how cyberspace and social media platforms may radicalize the human subjectivity. To answer, postphenomenology's arsenal is fairly rich, as outlined in the preceding section. Here, my focus is primarily on social media platforms, and I will try to draw a preliminary sketch to show how such platforms are likely to radicalize civilians.

From the outset, one needs to recall the postphenomenological insight that social media, pretty much like any other technology, are multistable. One can imagine various stabilities of the same platform, and a fluidity of the respective mediation accordingly. It means that the resultant subjectivity brought about by social media heavily hinges upon the way the latter are appropriated. It is no surprise then to identify seemingly opposing outcomes. On the one hand, social media can cultivate tolerance within someone due to exposure to diversified lifestyles. On the other hand, however, one may restrict herself from being encountered with diverging views, and this might subsequently fuel fanaticism in her. In this sense, postphenomenology takes the subjectivity of users to be



formed within its relationships with technology. There is no essence, that is, a pre-given identity, taken for granted here. Instead, individuals come to develop a particular identity along their relations with the world, among other things technology. Such an *anti-essentialist* approach to the subject, object, and technology has enormous implications.

One immediate corollary relevant to our case is that all those studies which tend to ascribe a monolithic and uniform outcome to internet usage suffer from imprecision and oversimplification. Technology cannot play the same mediating role across all contexts, because it manifests various characters across different relations, that is, technology does not have any immutable essence. Postphenomenology adopts a *relational ontology* instead of an essentialist vision. Hence, to unfold the mediation brought about by cyberspace one needs to situate the latter in a context. The manner social media platforms are appropriated, or put simply, the relationship one bears with them, is of substantial importance here. Radicals, as I elaborate shortly, tame social media in a certain way, as it diverges, to a large degree, from the typical usages.

Now, how social media are utilized by radicals? To lay bare, we need first to articulate how the virtual world differs from the real one. I think all differences between the real world and cyberspace, at least as far as the concern is radicalism, boils down to two varying, yet relevant, grounds. Let me go into both in detail.

1. Cyberspace gives, in principle, the same voice to all individuals. With this, as highlighted earlier, comes a variety of consequences. Here are two of them: Firstly, one can identify how the traditional hierarchy of authorities becomes declined with such an equal opportunity for self-expression. Anyone can reach the audience through cyberspace with, in principle, the same chance of succession. This, in turn, would give rise to a new order. While within seminaries, there has been traditionally a categorical structure and hierarchy through which one would have been required to ascent, if one wished to be a competent religious authority, cyberspace introduces an alternative path one may seize, without necessarily developing the relevant skills. This new route, crucially, follows a capitalist logic, where one can garner more audiences if one skilfully promotes her commodity. There is barely any stress on the authenticity of the online materials here. The introduction of an alternative into the religious context, although not necessarily ruling out the traditional authorities altogether, would significantly reduce the latter's share of the marketplace. Such a disruptive reorganization in turn might create chaos out of which any kind of output can spring. Those who were well-versed in marketing would be in a better position to sell their product. Radical voices, therefore, usually with good knowledge and expertise in marketing, may benefit from such chaos, and disseminating extremist views directs society into fanatic attitudes. This is why groups

like ISIS and al-Qaeda make a considerable effort to present themselves online (Bunt 2018).

Secondly, on the side of the audiences too, the virtual world makes significant differences. To the users of cyberspace, phenomenologically speaking, all websites, Twitter feeds, or Facebook pages, seem to be on par in the first place. In this sense, there arises an asymmetry between the cyber world and the actual one in terms of the logic of gaining knowledge. While in the course of real life to acquire knowledge, most often, one starts from the author (which she takes to be an authentic source) and then comes to the content, in the cyber world things go the opposite way. Thanks to the existing search algorithms, one can have access to the content first, and then, if at all, to the author. Put differently, to seek knowledge or information we usually look initially for a competent source (book, individual, institution) and then draw the relevant content from it. This move from a reliable author to the content would omit, to a considerable extent, errors as well as misinformation. In the cyber world, in contrast, the direction of the arrow is quite the reverse. Here, we may directly browse through the content (the information or knowledge) without necessarily being sensitive to the authenticity of the author. Needless to say, the result of our search, would heavily depend upon the keywords which we have chosen. Such a *bottom-up approach* to seeking knowledge, made possible by cyberspace, may create a plethora of problems subsequently. Fake news, misinformation, and even disinformation are the most frequent outcomes of such an approach to knowledge gaining.

2. A second point of divergence between the real world and cyberspace is, I believe, the specific algorithm of tasking of social media platforms as well as particular features embedded in them; ranging from the capacity of ‘customization and personalization’ of the content and the legitimacy of ‘multiple’ profiles to ‘anonymity’ of the accounts. Here lies the key to how the foregoing chaos (discussed in section 1) might be directed along a way of radicalization. Let me dwell on this point and account for how the inherent characteristics of the existing social media may nurture radicalism.

Thanks to the advancements of AI-based algorithms, we are growingly witnessing the possibility of customer-tailored content. The algorithms driving social media can forestall and suggest *in advance* what people might wish to see or hear. We may cut out accordingly all the material which might seem unpleasant *before* really being confronted with them. Even by random and blind surfing on platforms like YouTube, we would barely encounter diverse materials, because the working AI-based algorithm adjusts the result on the ground of our previous activities.

Now, such a condition may turn out to be fertile soil for the growth of fanaticism. Social media networking sites help the creation of a secluded realm that might later be conflated with the real world. Radical leaders

this way can recruit a group of like-minded members and then lead them along a way of radicalization, by the help of tailoring the content. As Sunstein notes cyberspace is the main player in the creation of what he calls *echo chambers*. An echo chamber refers to a situation where some like-minded individuals come together and after a while of discussion and socialization, they adopt more extreme views than before (Sunstein 2007, 61). Since individuals here have already depleted their world from diverging views the only voice they would hear is the echo of their own voice. Consequently, after a while of living in such a fabricated environment, they might gradually start forming radical views.

Not only customization, but censorship may also come as help to block alternative voices and accordingly promulgate fanaticism. All this may contribute to the creation of a fake world where all inhabitants are homogeneous. In time, once the habituation of living within this world grows, members may take their contrived world as the real one. This way, people can inhabit a parallel world, where most of the people are on the same page, and just a minority might diverge. This inverted world complies precisely with the general pattern of technological mediation, which according to postphenomenology is a structure of amplification/reduction. In this sense, social media apps may markedly contribute to the creation of a uniform and homogeneous world, by reducing, or even expelling, the diverging aspects of the world.

There are also additional factors operational in the existing social media to boost the effect of echo chambers and the amplification/reduction make-up of their mediation. Individuals are permitted usually to possess several accounts on most platforms. This might be a further appeal for consolidation of radical groups. By multiplying the number of accounts, they can pretend to be outnumbering the competing views. This might be an effective way to seem more potent than in reality to both insiders and outsiders. In this vein, Klausen (2015) observes that Twitter has been used by ISIS as a means to generate an 'illusion' that the group is much more powerful than its reality.

One requirement for the creation of the said inverted world is a certain level of transparency of the technologies involved. As postphenomenology clarifies, technology's interface itself should not preoccupy the users' attention. It needs rather be sufficiently embodied to fully carry out the respective mediating role. A full-blown embodiment relationship with technology requires a certain level of transparency in this sense. All technologies involved, ranging from the devices on which social media apps are installed to the applications themselves should become transparent first. If they were opaque, i.e., consuming the attention of users, they would impede the emergence of the parallel world for the novices. Transparency of the operating technologies and holding an *embodiment* relationship with them, where individuals come to see the world *through* them, and not simply *with* them, requires habituation and

relevant bodily comportment in turn. If one is not well accustomed to such technologies, say an elderly individual not so skilled, one will not be sufficiently affected by the mediation of social media.

Now, this inverted world appearing within radicals' consciousness may be associated with the hermeneutic side of the mediation of social media. But as noted earlier, we may also track the effects of social media on the behaviours of the users, i.e., existential dimension. Here we can think of the actions that a user is invited to take as following the norms embedded in a specific app. For example, after signing up on a social media platform, like Instagram, the user is encouraged to follow other profiles. It seems difficult to resist such an invitation. Moreover, the accounts which are suggested to follow by Instagram itself are selected through a certain dynamic that is based on, among others, the existing contact list of one, or on the similarity of profiles or common friends. This, clearly, is the starting point to falling into an echo chamber. Another way of steering users' behaviour on Instagram is to suggest uploading a photo for the profile, favourably one's own photo. The list of such proceedings may still go on, and more important the consequences of each. Furthermore, after a while of socializing on a platform with like-minded friends the user might be inclined to take fanatic actions. Due to living in an echo chamber, one may develop a tendency for example to take violent actions, as is prevalent in the case of web-driven lone-wolf attacks. All this implies, once again, that, social media, can mediate both the perception and behaviour of individuals.

In sum, radical groups domesticize social media platforms according to their own worldview, culture, needs, and visions. Whatever westerners usually take social media to be, does not necessarily apply in the case of fanatic individuals in other cultures. In the case of extremists, social media are not just communicative tools, rather they are *weapons* that can be used against infidelity and unbelief. Radicals use digital media as 'wars' to win the hearts and minds of people (Huda 2019). Such an inclination for weaponizing communicative technologies is evident even from original quotes of some extremist leaders like Ayman al-Zawahiri (2nd General Emir of Al-Qaeda) who openly declared media to be an inclusive part of the battlefield (Carter et al. 2014).

#### 4. Discussion and Closing Remarks

A recent initiative to counter radicalism, called the Christchurch Call, led by New Zealand's prime minister Jacinda Ardern and French president Emmanuel Macron, aims to encourage all major tech companies to eliminate any form of terrorism and violent extremist content online (Roy 2019). My contention in this paper was that radicalism is not just a matter of radical *content*. There is also something inherent in the technology itself, in this case, social media platforms, which plays a role. Technology,

far beyond being neutral, reshapes human habits, behaviour, perception, and morality. Cyberspace, moreover, is changing the existing societal ordering. Religious thought, as a result, cannot remain untouched in the wake of cyberspace. As Turkle notes 'as we text, tweet, e-mail, and spend time on Facebook, technology is not just doing things for us, but to us, changing the way we view ourselves and our relationships' (2011, 28).

The impacts of cyberspace on religiosity, however, cannot be invariably uniform across all societies, I argued. It rather depends on, yet not determined by, the contextual factors wherein cyberspace is being put into use. Technology in general, and cyberspace in particular, does not possess any essence out of which the same effect, irrespective of the context, pops up. The impacts of technology exhaustively consist in its relations. Social media, from a religious point of view, may trigger diverse sentiments then; ranging from tolerance and pluralism to conservatism and radicalism. And this is the logic behind the conflicting observations within the literature, I assume. As said, on the one hand, there is evidence implying that social media decrease affiliated religiosity, and this way they might boost the level of tolerance. On the other hand, however, there is literature claiming that social media might radicalize civilians. To explain this contrast one may say that the rich get richer and the poor get poorer in the wake of using social media. In this sense, it might be reckoned that social media turn ideological minds into more ideological and open minds into more tolerant ones on the ground of their divergent manner of adoption of technology.

Next, I accounted for the dynamic of the growth of radicalism, as an urgent threat, drawing on postphenomenology. As elaborated, thanks to the introduction of a shortcut to the traditional religious authorities, cyberspace, it appears, creates chaos out of which a wide range of outcomes may emerge. Put differently, once the dominant authorities lose their power and new guiding rules appear, a status of unpredictability will come along. One likely outcome of such a disorder, as argued, is radicalism. The latter has a great potential to materialize because of the specific algorithm operational in cyberspace in general, and social media platforms in particular, as illustrated. The resulting echo chambers due to the creation of a fake world would be a fertile field where the threat of radicalism significantly mounts.

If we wish to counter radicalism and the potential future lone wolf attacks, we need not only to take into account the intellectual roots of radicalism, say, through the dissemination of 'counternarratives', but, importantly, we should also call for attention to the technical dimensions. If technology may influence the subjectivity of the users, then it needs to be deemed as an active agent, rather than simply a passive inactive object. If so, the process of technology design would turn out to be of crucial importance. We cannot leave it merely with engineers, who usually think in terms of efficiency and functionality, rather than of morality. The moral

sides of technology should also be reckoned with in the design process. This implies further that the business of designing technology is a multidimensional undertaking, which is way beyond engineers' specialty alone. In this sense, part of the mission of countering radicalism lies within a reform in the *design* of technologies. Postphenomenology, by pinpointing the details of the technological roots of radicalization, already has paved the way for a preliminary counter-radicalism design plan. The next step to take then would be translating the postphenomenological insights into an engineering agenda. Along this path however one possible pitfall would be breaching the privacy of users or violating values such as freedom of speech, engendered by the said reform, under the pretext of countering radicalism. This is a major peril that needs further research to find a middle ground as to how to eradicate the downsides of the current technologies without threatening democratic values.

## References:

- Ahmedi, Marzia, and Muhammed R Siddiqui. "The value of wet cupping as a therapy in modern medicine-An Islamic Perspective." 2014. *WebmedCentral Alternative Medicine*. 5(12): WMC004785.
- Ammerman, Nancy T. 2013. "Spiritual but not religious? Beyond binary choices in the study of religion." *Journal for the Scientific Study of Religion* 52(2): 258–78.
- Awan, Imran. 2017. "Cyber-Extremism: Isis and the Power of Social Media." *Society* vol. 54 no. 2: 138pp.
- Baker, Josef O, Buster G Smith. 2009. "The Nones: Social characteristics of the religiously unaffiliated." *Social Forces* 87(3): 1251–63.
- Besecke, Kelly. 2013. *You can't put god in a box: Thoughtful spirituality in a rational age*. Oxford and New York: Oxford University Press.
- Boyd, Danah. 2007. "Why Youth (Heart) Social Network Sites: The Role of Networked Publics in Teenage Social Life." In *MacArthur Foundation Series on Digital Learning - Youth, Identity, and Digital Media Volume* edited by David Buckingham, 119-142. Cambridge, MA: MIT Press.
- Brantly, Aaron. 2017. "Innovation and adaptation in jihadist digital security." *Survival* 59(1): 79–102. doi:10.1080/00396338.2017.1282678.
- Bunt, Gary R. 2018. *Hashtag Islam How Cyber-Islamic Environments Are Transforming Religious Authority*. The University of North Carolina Press.
- Chatterjee, Promothesh, and Randall L Rose. 2012. "Do Payment Mechanisms Change the Way Consumers Perceive Products?" *Journal of Consumer Research* 38: 1129-1139.
- Carter, Joseph A, Shiraz Maher, Peter R Neumann. 2014. "#Greenbirds: Measuring importance and influence in Syrian foreign fighter networks." Retrieved from the *International Centre for the Study of Radicalisation and Political Violence website*:

<https://icsr.info/wp-content/uploads/2014/04/ICSRReport-Greenbirds-Measuring-Importance-and-Influence-in-Syrian-Foreign-Fighter-Networks.pdf>.

Carr, Nicholas. 2010. *The shallows: What the Internet is doing to our brains* (1st ed). New York: W.W. Norton.

Conway, Maura. 2003. "What is cyberterrorism? The story so far." *Journal of Information Warfare* 2(2): 33–42.

Conway, Maura. 2017. "Determining the Role of the Internet in Violent Extremism and Terrorism: Six Suggestions for Progressing Research." *Studies in Conflict & Terrorism* 40 no. 1: 77–98.

Dill, Jeffrey. 2012. *Culture of American families: Interview report*. Charlottesville, VA: Institute for Advanced Studies in Culture.

Dreyfus, Herbert L. 2008. *On the Internet* (2nd ed). London and New York: Routledge.

Guardian. 2016 August 19. *Middle East Eye*.

<http://www.middleeasteye.net/news/twitter-suspends-almost-250000-accounts-terror-links-403822918>.

Huda, Achmad Zainal. 2019. "Melawan Radikalisme Melalui Kontra Narasi Online." *Journal of Terrorism Studies* Vol. 1: No. 2, Article 1.

Ihde, Don. 1990. *Technology and the Lifeworld*. Bloomington. Indiana University Press.

Ihde, Don. 1993. *Postphenomenology: Essays in the postmodern context*. Evanston, IL: Northwestern University Press.

Ihde, Don. 2007. *Listening and Voice* (2nd edition). Albany: SUNY Press.

Ihde, Don. 2009. *Postphenomenology and Technoscience: The Peking University Lectures*. Albany: SUNY Press.

Ihde, Don. 2016. *Husserl's Missing Technologies*. Fordham University Press.

Klausen, Jytte. 2015. "Tweeting the Jihad: Social Media Networks of Western Foreign Fighters in Syria and Iraq." *Studies in Conflict & Terrorism* 38:1: 1-22. DOI: 10.1080/1057610X.2014.974948.

Kramer, Gudrun. 2000. "Vision of an Islamic Republic. Good governance according to the Islamists." In *The Islamic World and the West*, edited by Kai Hafez, 33-45. Leiden: Brill.

Kross, Ethan, Philippe Verduyn, Emre Demiralp, Jiyoung Park, David S Lee, Natalie Lin, Holly Kosmin, Barry A, and Ariela Keysar. 2008. *American Nones: The profile of the no religion population ARIS*.

<https://commons.trincoll.edu/aris/publications/2008-2/american-nones-the-profile-of-the-no-religion-population/>.

Lo, Hui-Yi, and Harvey, Nigel. 2011. "Shopping without pain: Compulsive buying and the effects of credit card availability in Europe and the far east." *Journal of Economic Psychology* 32: 79-92.

McClure, Paul K. 2016. "Faith and Facebook in a Pluralistic Age: The Effects of Social Networking Sites on the Religious Beliefs of Emerging Adults." *Sociological Perspectives* 59(4): 818–834. <https://doi.org/10.1177/0731121416647361>

McClure, Paul K. 2020. "The buffered, technological self: Finding associations between Internet use and religiosity." *Social Compass* 67(3): 461–478. <https://doi.org/10.1177/0037768620922128>

Mercadante, Linda A. 2014. *Belief without borders: Inside the minds of the spiritual but not religious*. New York: Oxford University Press.

Pariser, Eli. 2011. "The troubling future of Internet search." *Futurist* 45(5): 6–8.

Pariser, Eli. 2012. *The filter bubble: How the new personalized web is changing what we read and how we think* (reprint edition). New York: Penguin Books

Piwko, Aldona M. 2021. "Islamic fundamentalism: from ideologists to propaganda in the mass media of terrorist groups." *Journal for the Study of Religions and Ideologies* vol. 20 issue 58: 175-192.

Putnam, Robert D, and David E Campbell. 2012. *American grace: How religion divides and unites us*. New York: Simon & Schuster.

Rosenberger, Robert, and Paul P Verbeek. 2015. "A field guide to postphenomenology." In *Postphenomenological Investigations: Essays on Human-Technology Relations*, edited by Robert Rosenberger and Paul P Verbeek, 9–40. Lanham, MD: Lexington Books/Rowman Littlefield Press.

Roy, Eleanor A. 2019, April 24. "No right to livestream murder: Ardern leads push against online terror content." *Guardian*. Retrieved from <https://www.theguardian.com/world/2019/apr/24/christchurch-call-ardernleads-push-against-online-terror-content>.

Roy, Oliver. Trans. 2017. *Jihad and Death: The Global Appeal of Islamic State*. Oxford: Oxford university press.

Sageman, Marc. 2008. *Leaderless jihad: Terror networks in the twenty-first century*. Pennsylvania: University of Pennsylvania Press. <http://dx.doi.org/10.9783/9780812206784>

Saltman, Erin, and Quilliam C Winter. 2014. *Islamic State: The Changing Face of Modern Jihadism*. Londyn: Quilliam.

Schmidt, Leigh E. 2012. *Restless souls: The making of American spirituality* (2nd ed). Berkeley: University of California Press.

Seib, Philip, and Dana Janbek. 2010. *Global Terrorism and New Media: The Post-Al Qaeda Generation*. London and New York: Routledge. 10.4324/9780203845370.

Soetevent, Adriaan R. 2011. "Payment choice, image motivation and contributions to charity: evidence from a field experiment." *American Economic Journal: Economic Policy* 3: 180–205.

Sunstein, Cass R. 2007. *republic.com 2.0*. Princeton: Princeton University Press.

Turkle, Sherry. 2011. "The tethered self: Technology reinvents intimacy and solitude." *Continuing Higher Education Review* 75: 28–31.



Verbeek, Peter P. 2005. *What Things Do: Philosophical Reflections on Technology, Agency and Design*. Pennsylvania: Pennsylvania State University Press.

Verbeek, Peter P. 2011. *Moralizing Technology: Understanding and Designing the Morality of Things*. London: University of Chicago Press.

Wang, ligang, jing Luo, Wenbin Gao, Jio Kong. 2012. "The effect of Internet use on adolescents' lifestyles: A national survey." *Computers in Human Behavior* 28(6): 2007-13.

Warschauer, Mark. 2003. *Technology and social inclusion: Rethinking the digital divide*. Cambridge, MA: MIT Press.

Woodhead, Linda. 2017. "The Rise of "No Religion": Towards an Explanation." *Sociology of Religion* 78: 247-262.