

Open Archive of Hate: Terrorism and Violent Extremism on Internet Archive

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ABSTRACT: The recognized correlation between the growing spread of violent extremist and terrorist content on the Internet and online platforms and the significant increase of attacks inspired by these postings caused governments and security agencies to launch various countermeasures. These measures included removal of terrorist and violent extremist online content (or “deplatforming”), suspension of their social media accounts, hacking websites and pressuring social media companies to remove terrorist propaganda. Struggling to adjust to these countermeasures and sustain their online presence, terrorist and violent extremists moved from mainstream online platforms to alternative online channels including anonymous sharing portals and cloud services. The most popular archiving service used by various extremist and terrorist groups is the Internet Archive. While the few studies on hate speech and violent content on Internet Archive focused only on a certain type of content or a specific group, this study attempts to reveal a wide range of contents, groups and organizations who use this archive for sharing and promoting such contents. To examine the use of Internet Archive by various groups and organizations involved in violence, terrorism, hate speech, racism and neo-Nazism we applied several stages of data collection and analysis. The findings highlight an alarming volume of terrorist, extremist, and racist material on the Internet Archive. These findings are discussed in terms of ethical and practical implications.

KEYWORDS: social media, hate speech, violent extremism, terrorism, Internet Archive

Introduction

The web is changing continuously. New online material emerges while contents die constantly: The stability and size of the internet make it feel like a permanent fixture, but web pages have an average lifespan of about 90 days before they change or disappear. “Digital decay” or “data rot” are terms used to describe the degradation, obsolescence or disappearance of digitized data and information. Efforts to acquire and preserve online information are almost as old as the net itself. National libraries and archives were among the earliest institutions to conduct large-scale collecting, followed by online open access archives. Online archiving involves collecting, uploading, storing, and providing access to information on the Internet. The resulting web archives preserve these files and enable access to viewing and interacting to some degree with the captured websites and online postings. This online archiving is managed by librarians and archivists, often relying on automated technologies like web crawlers. The Internet Archive is probably the best-known online archiving organization, making the past web available via the Wayback Machine since 2001.

The present study reports an alarming volume of terrorist, extremist, and racist material on the Internet Archive. It is based on a systematic search for representative examples of various categories of hate speech, terrorism, and violent extremism. The findings are discussed in terms of ethical and practical implications.

The Online Theater of Terror and Hate

Terrorism, radicalism, and violent extremism have always relied on the mass media for publicity, psychological warfare, propaganda and political achievements. The rise of media-oriented terrorism has led several terrorism and communication scholars to reconceptualize contemporary terrorism within the framework of symbolic communication theory: “As a symbolic act, terrorism

can be analyzed much like other media of communication, consisting of four basic components: transmitter (the terrorist), intended recipient (target), message (bombing, ambush), and feedback (reaction of target audience)" (Karber 1971). Dowling proposed the concept of "rhetoric genre," claiming that "terrorists engage in recurrent rhetorical forms that force the media to provide the access without which terrorism could not fulfill its objectives" (Dowling 1986). Weimann and Winn (1994) applied the "theater of terror" frame to analyze modern terrorism as an attempt to communicate messages through the use of orchestrated violence. This "theater of terror" metaphor materialized in dramatic form in numerous events from the Munich Olympics attack in 1972, the TWA hijacking to Beirut in 1985, the September 11, 2001, attacks on New York and Washington, DC, to the Chechen seizure of a theater in Moscow in 2002 or the Al-Shabaab Attack on the Westgate Mall in Kenya in 2013.

But then came the Internet. At the beginning, the Internet was blessed as bridging populations and cultures and as an ideal promoter for businesses, education, communication and politics. It appeared to offer unmatched options for the formation of public forums in which the "global village" could come together and trade ideas, thus promoting and nurturing democracies throughout the world. However, with the enormous growth in the size and use of the Internet, utopian visions of the promise of the online media were confronted by the spread of violent contents and pornographic and by the abuse of the Internet by extremist organizations of various kinds. The online web of computer-mediated communication is ideal for extremists-as communicators: it is decentralized, cannot be subjected to control or restriction, is not censored and allows free access to anyone who wants it. The typical, loosely knit network of cells, divisions, and subgroups of modern extremist organizations finds the Internet both ideal and vital for inter and intra-group networking. The great virtues of the Internet—ease of access, lack of regulation, vast potential audiences, fast flow of information, and so forth—have been converted into advantages for groups committed to terrorizing societies to achieve their goals. The anonymity offered by the Internet is very attractive to modern radicals, terrorists and vigilantes. Because of their extremist beliefs and values, these actors require anonymity to exist and operate in social environments that may not agree with their ideology or activities. Terrorists and violent radicals and extremists have used the Internet, as several studies have revealed, for numerous purposes (Weimann 2006; 2016; Zelin 2013). They use the Net to launch psychological campaigns, recruit and direct volunteers, raise funds, incite violence and provide training. They also use it to plan, network, and coordinate attacks. Thus, not only has the number of terrorist online platforms increased but also the ways in which terrorists use the Internet has diversified. As Hoffman and Ware (2019) concluded, "today's far-right extremists, like predecessors from previous generations, are employing cutting-edge technologies for terrorist purposes".

Moving to the clouds

The recognized connection between the growing spread of violent extremist and terrorist content on the Internet and online platforms, and the significant increase of attacks inspired by these postings as well the successful recruitment of foreign fighters, caused governments and security agencies to launch various countermeasures (Berger 2015; Klausen 2015; Weimann 2014; Weimann 2016). These measures included removal of terrorist and violent extremist online content (or "deplatforming"), suspension of their social media accounts, hacking websites and pressuring social media companies to remove terrorist propaganda as well as monitoring the "chatter" for intelligence purposes. Struggling to adjust to these countermeasures and sustain their online presence, groups like ISIS had to move from mainstream online platforms to alternative online channels (Conway et al. 2019). Consequently, they have replaced, to some extent, the use of popular platforms such as YouTube, Facebook, or Twitter with encrypted platforms Such as Telegram, Signal, and WhatsApp, as well as with anonymous sharing portals and cloud services.

As Stern and Modi (2010, 282) argued, “terrorists respond to changes in their environments by changing their mission and changing their shape. What is important in such events is that information logistics is essential in disseminating messages of terror”.

Jihadists for instance, are quite innovative in responding to disruption efforts by authorities and counter terrorism agencies, and find new ways to distribute content, as revealed by Fisher, Prucha and Winterbotham’s (2019, 6) report on “Mapping the Jihadist Information Ecosystem”. Their study reveals, “While previously online jihadi activity was focused on posting content directly on major platforms, the research shows major platforms are now often used to share URLs instead to facilitate access to content stored elsewhere. The major platforms are therefore being used as ‘beacons’ directing users to the material” (Fisher, Prucha and Winterbotham 2019, 1).

A relatively new and more sophisticated way terrorists and extremists are communicating online to avoid detection is the use of “virtual dead drops” (Weimann and Vellante 2021). A dead drop, as used in the espionage terminology, is a way to secretly hand out information items using a secret location for temporary storage. Recently, the physical dead drop has been transformed to a digital one mainly in the form of anonymous sharing portals and open archives on online clouds. Thus, these online archives have become the “Black Boxes” of online communication, being opaque from the outside. In Shehabat and Mitew’s study ‘Black-boxing the Black Flag: Anonymous Sharing Platforms and ISIS Content Distribution Tactics’, the authors explore anonymous sharing portals and how ISIS uses them (Shehabat & Mitew 2018). Online archives using cloud sharing is a system in which the user is allotted storage space on a server, providing end users with the ability to access files with any Internet-capable device from any location. At its simplest, it is a secure virtual space that any user can access via his/her browser or a desktop application. The actual location of the stored files is usually in a data center somewhere, in a server, on a hard drive or solid-state drive. Usually, the users can grant access privileges to other users as they see fit. Terrorists and extremists use these online archives and cloud sharing platforms to share material like propaganda, instructions, manuals, publications, and videos without being flagged or deplatformed. As our previous study revealed, ISIS and Al Qaeda operatives use multiple cloud sharing platforms. The most used are *files.fm*, *Pixeldrain*, *Mediafire*, *OneDrive*, *Cloudshare*, *Nextcloud*, *Cloudflare*, *Yandex.Disk*, *Mixdrop*, *4shared*, *Cloudmail*, *Top4top*, *pCloud*, *Usersdrive*, and *Dropapko*. The links terrorists post to direct their audiences to these cloud platforms are in their postings on anonymous share platforms or directly on Twitter (Weimann and Vellante 2021). The most popular archiving service used by various extremist and terrorist group is Internet Archive.

The Dark Side of Internet Archive

The Internet Archive, established in 1996, is a non-profit American organization using thousands of computer servers to save multiple digital copies of pages, requiring over 70 petabytes of data. It is funded through donations, grants and payments for its digitization services.¹ The Internet Archive allows the public to upload and download digital material to its data cluster, but most of its data is collected automatically by its web crawlers, which work to preserve as much of the public web as possible. The massive online digital library is easily accessible for uploading or downloading material, using only an email address, in order to, in the Internet Archive's own words, "upload movies, audio, texts, software, images, and other formats... any time you

¹ According to the Internet Archive website, recent funding has been provided by the Andrew W. Mellon Foundation, Council on Library and Information Resources, Democracy Fund, Federal Communications Commission Universal Service Program for Schools and Libraries (E-Rate), Institute of Museum and Library Services (IMLS), Knight Foundation, Laura and John Arnold Foundation, National Endowment for the Humanities, Office of Digital Humanities, National Science Foundation, The Peter and Carmen Lucia Buck Foundation, The Philadelphia Foundation, and the Rita Allen Foundation.

wish." The page and link created when content is uploaded can then be shared with anyone else at any time. Over 750 million web pages are captured per day in the Internet Archive's Wayback Machine. It provides free access to researchers, librarians and the general public. In addition to its archiving function, the Archive is an activist organization, advocating a free and open Internet. As of December 2021, the Internet Archive holds over 34 million books and texts, 7.4 million movies, videos and TV shows, 797,000 software programs, 13,991,923 audio files, 4.1 million images, and 640 billion web pages in the *Wayback Machine*. But Online archiving, open to all, raises serious ethical concerns. What principles should guide us when collecting online content that present and promote terrorism, hate speech, racism and violent extremism? Building open archives of this nature may amplify the reach and impact of their messages.

In recent years, terrorists, neo-Nazis, antisemites, extreme right-wing groups and other white supremacist and racist groups have been using the Internet Archive (archive.org) for posting, storing and distributing their propaganda and incitement online. In his report on "The Dark Side of Internet Archive", Fisher-Birch (2018) notes that "The site is rife with videos that offer instructions on making explosives as well as propaganda and recruitment videos made by terrorist and extremist groups". The report describes how a variety of terrorist and violent extremist groups such as ISIS, al-Qaeda, and the banned British neo-Nazi group National Action are loading to Internet Archive their instruction materials such as bomb-making videos as well as videos of executions and beheadings and seductive appeals to execute terrorist attacks. ISIS and its supporters, for example, are using the Internet Archive platform to upload their contents and thus overcome efforts to deplatform their online presence. ISIS operatives are snapshotting their online postings and then sharing the links to its Internet Archive location so if the content is taken down online it will be available on the this archive. Already in 2011, the Middle East Media Research Institute (MEMRI) exposed the presence of ISIS and other jihadi groups on Internet Archive (Stalinsky 2011). MEMRI's report concluded that "Al-Qaeda and other jihadi groups are continually and increasingly using the Internet Archive to spread their propaganda/recruitment messages, including video and audio recordings of speeches, attacks, publications, and much more. They often include content encouraging, and urging, terrorist attacks against America. It can be assumed that Al-Qaeda-related material was first posted to the Internet Archive for legitimate research purposes, but that at some point Jihadis discovered that it was an accessible website that they can easily use for their online jihad campaign" (Stalinsky 2011, 1). As revealed in several studies, many ISIS and Al-Qaeda-affiliated websites and social media postings now include links to Archive.org that contain new material including the most recent speeches by Al-Qaeda leader Ayman Al-Zawahiri, speeches by Osama bin Laden, and other productions by Al-Qaeda's Al-Sahab media company. Moreover, several leading jihadi forums are instructing their readers to use the Internet Archive.² Ten years later MEMRI's research on Neo-Nazis' use of Internet Archive revealed that "Now, like jihadis before them, the Internet Archive is enabling neo-Nazis and white supremacists to spread their messages of hate, incitement, and violence by allowing them to post content such as videos and books, and they are sharing this content by linking to it on the Internet Archive via other platforms" (Stalinsky, and Rosnow 2021). A recent study on the use of Internet Archive by the Taliban, revealing that Taliban media outlets are constantly uploading videos to this archive. This uploading included videos of sermons delivered to fighters, footage of Taliban fighters training, videos of attacks, support for martyrdom and tributes for "martyrs" including suicide bombers, and Taliban "music videos" featuring songs (Nasheeds) for inspiration to jihad (Stalinsky 2022).

One of the reasons the Internet Archive is so widely used by terrorists, violent extremists, radical groups, neo-Nazis and white supremacists as a safe content storage is that doing it is extremely simple, access is free, no verification or credentials are required, and a

² For example, the major Jihadi forum Shumoukh Al-Islam gave readers detailed steps for uploading material to Internet Archive.

potential user need only to provide a screen name and an email address (both can be fake). These advantages were noted by the extremists and terrorists: A November 2018 article in the pro-Al-Qaeda online publication *Al-Masra*, highlighted the role of Internet Archive in maintaining an online jihadi archive and urged jihadis to use it. It stressed that "the [jihadi] supporter... will not lose [anything] by signing up with a fake email, in a [few] steps that take less than a minute." There were several efforts to make Internet Archive remove or flag terrorist and extremist content but at least according to some reports, these were futile attempts that did not change much.³ This study is an attempt to reveal the various uses of Internet Archive by various terrorist, violent extremists and radical groups. While the few studies on hate speech and violent contents on Internet Archive focused only on a certain type of content or a group, this study attempts to reveal a wide range of contents, groups and organizations who use this archive for sharing and promoting such contents. Thus, this study set out to answer several research questions:

RQ1: Who among these groups are using this archiving platform?

RQ2: What are the contents archived by these groups?

RQ3: What are the differences in the use of Internet Archive across these various groups?

Method

To examine the use of Internet Archive by various groups and organizations involved in violence, terrorism, hate speech, racism and neo-Nazism we applied several stages of data collection and analysis. The first step involved creating a list of these groups according to the categorization of their activity and nature. We used the categories of terrorist groups (e.g., ISIS, al-Qaeda, Hamas, Hezbollah, and Hezbollah Brigades in Iraq); White Supremacy groups (e.g., American Freedom Party, Patriot Front); Neo-Nazi and neo-fascist groups (e.g., National Socialist Order/Atomwaffen Division (AWD), The Stormer, American Nazi Party, National Socialist Network, United Patriots Front); Racist hate groups (e.g., Blood and Honor, National Alliance); Neo-fascist groups (e.g., Proud Boys) and anarchist and accelerationist movements (e.g., Boogaloo Boys). The categorization is based on the monitoring and documentation of these groups by various organizations, including the Southern Poverty Law Center (SPLC 2022), Anti-Defamation League (ADL), the US Homeland Security Digital Library (HSDL), The Atlantic Council and the Counter Extremism Project (CEP 2022). The categories are not mutually exclusive: There are considerable ideological overlaps created by some shared elements like chauvinist collective identity, racial elitism, conspiracism, antisemitism, hate of "others", legitimacy of violence, and utopianism (Meleagrou-Hitchens, Crawford, & Wutke 2021). This is not a representative sample of the universe of all these extremist and terrorist groups but rather a selected sample of the currently leading and most active.

Terror groups on Internet Archive

All major terrorist groups are using the services of Internet Archive. Terrorist and their followers are constantly archiving material on Internet Archive to spread their propaganda, radicalization and recruitment messages. These contents include video and audio recordings of speeches, instructions, guidebooks, magazines, and much more. Table 1 presents the total amount of content items found on Internet Archive (according to type) and related to each terrorist group.

³ According to the Middle East Media Research Institute executive director Steven Stalinsky, the Internet Archive's Wayback Machine director, Mark Graham, requested a list of all the neo-Nazi content flagged by Stalinsky's study but after receiving it, did nothing to remove it and said that there were difficult ethical decisions around maintaining the site, as reported by Chapman 2021).

Table 1. Content items related to terrorist groups, open on Internet Archive

Group	Movies/videos	Audio files	Text files	Images
Al Qaeda	13,576	3800	2708	929
Islamic State (ISIS)	11, 223	18,603	5,612	2,397
Hamas	12, 907	3,162	1,209	715
Hezbollah	10,371	1.189	407	36
Hezbollah Brigades in Iraq	835	4	2	0

As revealed in Table 1, there are thousands of content items related to terrorist organizations on Internet Archive. Although some of them are news reports, documents and articles about the terrorist groups, many items are items produced, distributed and posted by the terrorist and their supporters. Al Qaeda items include almost all the speeches by the group's leader Ayman Al Zawahiri, speeches by Osama bin Laden, and other productions by al Qaeda's A Sahab media company. Internet Archive presents the items according to "relevance" to the search term. When the archive is searched for "al Qaeda" the front items are those appearing on the screen. In our scan, this search resulted in numerous terrorist contents including an audio tape by Abu Hamza Al Muhajer (al Qaeda leader in Iraq) about a military operation, a publication produced by al Qaeda entitled "Al Qaeda is informed by the Prophet of God Shubra inch information and facts that stunned the enemies of God", al Qaeda's recruitment video, "Our Battle – Loyalty and Innocence" by Abu Hamza al-Baghdadi of the Shari'a Committee of al-Qaeda in Iraq" – a video orated by Abu Hamza al-Baghdadi, a member of the Shari'a Committee of al Qaeda in Iraq, a video produced by al Qaeda, showing German al Qaeda fighters in the training camps in Waziristan, al letter from al Qaeda branch in the Maghreb (AQIM) first published on Telegram and then archived in Internet Archive, a text file entitled "Al Qaeda Training Manual 1" (28 pages on lessons for "military operations" including counterfeit currency and forged documents, hiding places, arms and ammunition, blasting and destroying places of amusement, and more), "Al Qaeda Training Manual 2" (38 pages on various practical terrorist practices including safe meetings, purchase of weapons, safe communication, transporting weapons and more). Thus, out of the 10 first items presented by order of relevance by Internet Archive – 9 are items produced and posted by al Qaeda operatives or followers.

Many of al Qaeda's publications, magazines and newspapers are open to all on Internet Archive. The most notable is *Inspire*, the English language online magazine published by al-Qaeda in the Arabian Peninsula (AQAP). The magazine is aimed at young Western audiences and provided translated messages from Osama bin Laden. Various articles of *Inspire* encouraged terror attacks on U.S. soil, promoting "open-source jihad". *Inspire* became an important al Qaeda brand tool for recruiting, informing, and motivating many attacks by individuals who applied this open-source guidance. On September 2018, the online newspaper Al-Masra produced by al Qaeda in The Arabian Peninsula (AQAP) called the followers to use Internet Archive. One article in the issue explained the significance of creating and maintaining a jihadi archive online as an answer to efforts to flag and remove such contents. The article emphasizes the importance of having jihadi materials at the disposal of jihad supporters: "It [i.e., uploading jihadi content] might take a few minutes of your time and, at the most, hours. So, do not underestimate the work that protects the mujahideen's legacy and message to their ummah, for one such piece of content, which you took part in uploading, might be the reason that convinces an ordinary person with the mujahideen's message..." (MEMRI special report, 2018).

The Islamic State (ISIS) supporters began posting links to pages stored by Internet Archive in March 2016 (Kelian 2018). Tens of thousands of IS videos, speeches and publications have been shared on the Internet Archive site. There are videos of beheadings, bomb-making manuals and magazines uploaded by official Isis accounts and shared with supporters. Among the ISIS content posted there are video and audio productions, online magazines, and radio broadcasts by ISIS's Al-Bayan radio. As noted already in 2015, ISIS has created several accounts on Archive.org. to publish its numerous posts including daily releases (Khayat 2015). These included the following ISIS accounts: Jnoub News, Nenwa, ddfree, Morabet_250, edfre, aedppop, abirsab331, nenwa.1435, Jazeera, raqqa_vd, elkhir and more. Some of the accounts become inactive while new ones emerge.

Our scan of Internet Archive for any ISIS contents revealed thousands of videos, audio recordings and texts produced and archived by ISIS. Their presentation by “relevance” according to Internet Archive’s sorting produces the following order: first are video clips from a series entitled “Islamic State” and are TV programs presented by Sheikh Haitham Al-Haddad, explaining the concept of Islamic State and Khalifa and other rulings related issues. This is an English-speaking series produced by Huda TV, a UK based Muslim Channel. Then comes a photo file, produced by ISIS in Iraq and presenting ISIS figures with the group’s symbols and black flag. Then there is a text file entitled “Advice for the Leaders of the Islamic State”, written by al-Shaykh Abu Hamza al-Muhajir, the Minister of Warfare in the Islamic State of Iraq. It is colorful magazine-like text, with propaganda and Jihadist messages to “our dear Mujahid brothers”. Additional items are the “Islamic State Report 1 [Shaban 1435]” and the “Islamic State News 2 [Shaban 1435]”. Both are propaganda magazines produced by Al Hayat, the official media outlet of the Islamic State. The material presented praised the good life under the rule of the Islamic State yet, they also warn against unloyalty by showing photos of executions and beheadings. Successful attacks with visuals of dead enemies are presented and the Jihadi fighters, dead or alive, are glorified. Another “top relevance” file is an audio recording entitled Establishment of The Islamic State”: this is a recorded lecture of the most notorious Jihadi preacher Anwar Awlaki.

Like al Qaeda, the Islamic State published several magazines and newspapers. All of the are archived and open to all on Internet Archive. *Al-Naba* (in Arabic: *The News* or *The Report*) is an official weekly newspaper issued by the Central Media Office of the Islamic State, first published in 2014. All the issues of *Al-Naba* are easily found on Internet Archive. So are copies of the magazine *Dabiq*. *Dabiq* was an online magazine used by the Islamic State for radicalization and recruitment. It was first published in July 2014 in several different languages (including English) and all the issues are open on Internet Archive. Similarly, the French online magazine of ISIS *Dar al-Islam*, is archived and open to all on Internet Archive. *Dar al-Islam* was published between 2014 and 2016 and included articles praising terrorist attacks in France. As of late 2016, *Dar al-Islam* had apparently been replaced by *Rumiyah*. This online magazine of ISIS released in several languages, including English, French, German, Russian, Indonesian and Uyghur. *Rumiyah* issues contain more operational than *Dabiq*: Its section “just terror tactics” provides the reader with technical and operational information on how to carry out terrorist attacks, ranging from the use of knives (*Rumiyah* 2, p. 12-13; *Rumiyah* 4, p. 8), vehicles and trucks for run-over attacks (*Rumiyah* 3, p. 10-12; *Rumiyah* 9, p. 56), arson operations (*Rumiyah* 5, p. 8-10) and hostage taking (*Rumiyah* 9, p. 46-51).

Since July 2018 to the present, three new radical English-language online magazines have appeared—*Al Risalah* (published by al-Nusra Front, al-Qaeda's Syria affiliate), *One Ummah* (published by al-Qaeda, title means ‘one people’ referring to the *ummah* - the people or nation of Muslims throughout the world) and *Voice of Hind* (first appeared in early 2020 and is meant for Islamic State members and affinity audiences in the Indian subcontinent). All issues of these new publications are available on Internet Archive. Finally, copies of al

Qaeda's online magazine *Vanguards of Khurasan as well as ISIS' Voice of Khurasan*, are also presented on the free archive. One of the new issues of the *Voice of Khurasan*, posted online and on Internet Archive on February 2022, includes the section entitled "the Caravan of Shuhada". One of the articles in this issue profiles suicide bomber *Abdur Rahman Logari, who blew himself up at the Kabul international airport in August 2021, killing 183 people, including 13 American soldiers. The article also describes the American fatalities in Afghanistan caused by terrorist attacks, claiming that "By the help of Allah, the death toll had risen to more than 200, marking one of the darkest days in recent history for the United States and its allies in the war of Afghanistan". Maybe more alarming is the call for recruitment in chaotic Afghanistan: The article, titled "We Remain, Bi Idhnillahi [By The Order Of Allah]" calls on the Afghan Taliban to "declare yourself free from infidel democratic system, free your necks from slavery of infidels and ISI,⁴ repent from infidel beliefs, innovations, and other superstitions". This first issue of the new *Voice of Khurasan* online magazine was released by Al-Azaim Foundation, the official media of the Islamic State's "Khurasan Province," which refers to Afghanistan and its surrounding region and is now accessible to all on Internet Archive.*

Hamas, designated by many Western nations as terrorist organization, is a media-wise group, dominant on numerous online platforms. Its presence on Internet Archive is very significant: a search for the most relevant items archived will yield various contents produced by Hamas. The first is "Hamas Nasheed", a militant video showing rocket attacks on Israel by Hamas operatives. The second item rated by relevance is a video clip entitled "video Hamas Qassam Alqada". This is a propaganda item, loaded with clips of attacks, Hamas fighters, martyrs, leaders, flags and symbols. Among the top ten in relevance there is another propaganda video produced by Hamas, entitled "hamas_HAKKINDA". Izz ad-Din al-Qassam, the military wing of Hamas, has a significant presence on Internet Archive including a full copy of a colorful magazine in Arabic depicting attacks, killed enemies, use of knives, cars, explosives and rockets, building tunnels to invade Israel, dead martyrs and more. An additional online magazine produced by the military wing of Hamas is at the top of Internet Archive's relevancy: this one, also in Arabic, is more focused on recruitment thus glorifying dead warriors with their names, pictures and personal stories. There is also an archived video clip created and posted by Izz ad-Din al-Qassam that contains songs (Nasheed), entitled "Hamas and al Qassam songs". This video and music file is also accompanied by propaganda text. Out of the top 10 according to Internet Archive's list of relevance, 7 items are produced by Hamas and its military wing.

A search for Hezbollah items on Internet Archive yields numerous publications, videos, talks, documents, pictures and instruction manuals produced by this terrorist group. Most popular among the archived contents are the video clips and speeches of Hezbollah's leader Hassan Nasrallah. His pictures, appearances, lectures and video clips are archived in Internet Archive and receive high ranking in relevance. In addition, media outlets of Hezbollah like Al Manar Television archive on Internet Archive their programs and contents. Al Manar, for example, presents there two impressive films ("Al Manar: Fist of Fire"), each one hour long, focusing on propaganda, in Arabic with English subtitles. Another video ("flag of Lebanon") archived by al Manar, combines psychological warfare, presenting defeated Israeli soldiers, with tribute to the Hezbollah fighters (including children in uniforms and armed with weapons).

Finally, the youngest and smallest group, Hezbollah Brigades in Iraq (or Kataib Hezbollah), founded in 2003, is a Shiite militia in Iraq, operating under Iran's direct command. While relatively new on the world stage of terrorism, this terrorist group managed to launch numerous attacks (mainly in Iraq) and to produce publicity-oriented items. Some of

⁴ ISI is the Inter-Services Intelligence of the Pakistani military, which is the main supporter of the Afghan Taliban.

these were introduced on various online platforms and often uploaded to Internet Archive. Unlike the other terrorist groups, Hezbollah Brigades archives only video files. All 50 files presented in Internet Archives' top relevance for this group are video clips produced by Hezbollah Brigades. Most of them present clips of attacks (on Iraqi or American troops in Iraq) using bombs, IEDs, rockets and guns. Some of the video clips are accompanied by text against "US occupation scum along with their allies (including contractors)".

Neo Nazi, White Supremacy and Racist Groups on Internet Archive

All major racist groups and organizations are presenting contents on Internet Archive. These groups and their supporters are archiving material for publicity and recruitment. As with terrorists, these the contents include video and audio recordings of speeches, marches, violent attacks, books, songs, magazines, and much more. Table 2 presents the total amount of content items on Internet Archive related to each of these groups.

Table 2: Content items related to Neo-Nazi, White Supremacy and Racist Groups on Internet Archive

Group	Movies/Videos	Audio files	Text files	Images
American Nazi Party	57	37	152	8
National Socialist Order (NSO)/ Atomwaffen Division (AWD)	2,480	910	201	14
The Daily Stormer	85	201	350	47
Patriot Front	98	11	2	2
National Socialist Network	6	0	1	1
United Patriots Front	23	1	0	0
American Freedom Party	9	15	2	0
Blood and Honour	9	17	24	2
National Alliance	214	378	437	5
Proud Boys	305	172	13	35
Boogaloo Boys	11	88	7	3

All the violent extremist groups and organization studied have significant presence on Internet Archive but there are differences in their contents and use of the archiving service. The American Nazi Party (ANP), founded in 1959, is based largely upon the ideals and policies of Adolf Hitler's Nazi Party in Germany during the Nazi era, and embraced its uniforms and iconography. It embraces anti-Semite, anti-Black attitudes and furthers other racial policies. Its presence on Internet Archive is mainly in text files. These, according to the archive's relevance list, contain many of their publication including the classical *Stormtrooper's Manual* and *The National Socialist Bulletin*. The *Stormtrooper's Manual* is a 16 page long magazine, produced in 1961 by Dan Burros, then the national secretary of the American Nazi Party, second in command to the leader Rockwell. The archived "manual" includes numerous photos of Hitler and Nazi soldiers, the Nazi Swastika and flags and a section on "Questions and Answers". Here there are answers to questions like Why we hate Jews? (The answer: "We are only against Jews who commit treason to this country or the

White Race”) or Why do we believe in struggle? (The answer: “To remain young and virile, civilizations must be watered by blood and tears...in struggle, the weak fall to the wayside and the natural elite arises”). Another video, uploaded by K. C. Sunbeam in January 2020 is a propagandistic presentation of the American Nazi Party and its basic values. The American Nazi Party does not have numerous items on Internet Archive, maybe due to their use of an open website, the White-Power.org site (<https://white-power.org/>) that contains a huge open archive to all the literature, documents, videos, books, magazines, photos lectures and events of the Aryan Freedom Network, declaring itself as “unapologetic committed to the interests, ideas, security and cultural values of the White Race”.

The National Socialist Order (NSO), known also as Atomwaffen Division (AWD), is a nationalist and racist violent extremist group founded in 2015 in the United States and traces its origins to Iron March, a now-defunct internet forum for white supremacists and national socialists, and adopted a decentralized operating model with multiple cells across the US. The NSO material on Internet Archive includes the videotaped discussion by Matt Koehl on “Examining Hitler's Social Policies and Goals, and Germany's Cultural, Financial, and Scientific Achievements”. It highlights the the economic advances of the Third Reich and National Socialism “which eschewed both Communism and Capitalism, two disastrous, speculative systems”. Moreover, it argues that “the National-Socialist order was modern and progressive. The economy was efficient and productive, with full employment that generated a high standard of living for the working class. Mothers and children were honored, respected and cherished. There was free health care and free higher education for all. It was, indeed, a good society!”. Another video, entitled “How Hitler Tackled Unemployment and Revived Germany's Economy”. The Atomwaffen Division (AWD) is a terroristic neo-Nazi organization whose members can be described as accelerationists, believe that violence, depravity and degeneracy are the only sure way to establish order in their dystopian and apocalyptic vision of the world. This group has numerous propaganda and recruitment video and audio files on the Internet Archive. For example, the video entitled *The Sword Has Been Drawn* presents the group, some of its activities (mostly violent), ties to Hitler and Nazi ideology and pictures and names of members. A similar archived recruitment video is “Atomwaffen Division: ACCELERATING VENGEANCE”. Both videos were produced and uploaded by AWD. An audio file in the archive is the taped message, from prison, made by Brandon Russel, an AWD operative sentenced to five years in prison for having explosive material. He too repeats the call for violence, using the slogan “the sword has been drawn, there is no turning back”. AWD members have a macabre fascination with serial killer Charles Manson and his vision of a race war between whites and blacks. Thus, it is not surprising that numerous contents associated with AWD contain collections of Chales Mason’s writing and additional fascist collections like “Path Of Gods: Handbook For The 21st Century Fascist” assembled and posted by IronMarch. Other AWD popular contents are linked to James Mason, the neo-Nazi ideologue (e.g., “Siege: the Collected Writings of James Mason”). Finally, there are numerous archived and open to all neo-Nazi’s texts and publications on Internet Archive, like “The Awakening Of A National Socialist”, “Next Leap”, and “DVX” (devoted to Mussolini; DVX is the Latin spelling of dux, or “leader” in Latin; Mussolini, who styled himself *Il Duce* or “The Leader” in Italian, used DVX to draw parallels between himself and ancient Rome).

The Daily Stormer is a part of the American alt-right movement and serves as a far-right, neo-Nazi, white supremacist, misogynist, Islamophobic, and Holocaust denial online website that advocates for a second genocide of Jews. After the rally in Charlottesville, Virginia on August 11 and 12, 2017, in which a counter-protester, Heather Heyer, was killed, the domain was blocked by Internet providers, but *The Daily Stormer* had returned to the dark web on the Tor network as well as on various cloud services including the Internet Archive. Thus, despite the efforts to remove the Daily Stormer from online platforms, numerous issues

of this publications are open on Internet Archive, with headlines like "All Intelligent People in History Disliked Jews", and "Adolf Hitler: The Most Lied About Man of All Time", followed by statements like: "Fear. Now is the time for it ... We want these people to feel unwanted. We want them to feel that everything around them is against them. And we want them to be afraid", "The fact is, when you give women rights, they destroy absolutely everything around them, no matter what other variable is involved ... Even if you become the ultimate alpha male, some stupid b---- will still ruin your life", "Jews, Blacks and lesbians will be leaving America if Trump gets elected—and he's happy about it. This alone is enough reason to put your entire heart and soul into supporting this man", "The day is coming when we're going to tear down the hoax [Holocaust] memorial in Berlin and replace it with a statue of Hitler 1,000 feet tall", "My problem with blacks is that I have come to understand that their biological nature is incompatible with White society, and that we will never have peace as long as they are among us, given that irrational outbursts of brutal violence are a part of their nature" and "Blacks Loved Slavery and Regretted its End".

The Patriot Front is a white supremacist group whose members maintain that their ancestors conquered America and bequeathed it to them, and no one else. The group justifies its ideology of hate and intolerance under the guise of preserving the ethnic and cultural origins of its members' European ancestors. In 2020, Patriot Front transitioned from using explicit antisemitic and white supremacist language in its propaganda to more cover bigoted language, promoting a form of "patriotism" that emboldens white supremacy, xenophobia, antisemitism, and fascism. The contents open on Internet Archive include text like the group's manifesto arguing that "The previous era has been spent broadening the definition of what an American is. The coming era will refine the definition of an American. To the American people our movement is revolutionary, yet familiar. We bring forth the traditions of our past imbued with new vigor to bring us closer to our grand vision. Our tradition is revolution, and our land is where tyrants come to die". There are also numerous video clips, mainly from marches, violent protests, demonstrations and even the group's attacks on Capitol Hill on January 6th 2021. Other clips posted, clearly videotaped by the group members' show their activities like distributing flyers, posters, etc.

The National Socialist Network, an Australian neo-Nazi group, has on Internet Archive several items including the video entitled The Klan Song. The clip shows the members standing and singing the song with lines like: "Can you see out in the darkness, Crosses burning through the night? And a horseman, in a uniform, All white, guarding the light. And the moon, she makes her way, Far over the KKK". There are also pictures of masked group members protesting and a video by Thomas Sewell, the group's leader tied to other prominent neo-Nazis, and for his attempts to recruit the perpetrator of the 2019 Christchurch Mosque shootings. Sewell, who considers himself a "political soldier for the white race" and idolizes Adolf Hitler, speaks after his release from prison about the continued struggle, his devotion, and signs with "Heil Hitler". Also in Australia, The United Patriots Front (UPF), formed in 2015, is an Australian far-right extremist group (Molloy 2019) that opposes immigration, multiculturalism and the religion of Islam. The group also has an anti-Semite agenda and several members are known neo-Nazis. Videos on Internet Archive include footage of their 2015 rally, an audio clip entitled "50 Shades of White", discussing the anti-Islamic, white supremacist movement in Australia, featuring the United Patriots Front and Reclaim Australia.

The American Freedom Party (formerly American Third Position) is a political party initially established by racist Southern California skinheads that aims to deport immigrants and return the United States to white rule. On Internet Archive, there are several audio files produced by this group, mainly "New Hour", a radio program and several taped interviews with James Kelso from the American Freedom Party. The group explains its aim: "The initial basis of our own upstart organization is the racial nationalist movement. It has been in disarray for the last 20 years so there's not as large a base for us to draw on." Unlike other

white supremacist groups, this organization prefers audio postings, from radio interviews to taped programs.

Originating in the United Kingdom, Blood & Honour is a shadowy international coalition of racist skinhead gangs. In the United States, two rival groups claim to be affiliated with Blood & Honour. One faction, known as Blood & Honour America Division, was "reestablished" in North America by the skinhead group Volksfront in 2005 and includes skinhead, neo-Nazi and Christian Identity adherents in its ranks. According to Blood & Honour's founder Ian Stuart Donaldson, "Eventually there will be a race war and we have to be strong enough in numbers to win it. I'll die to keep this country pure and if it means bloodshed at the end of the day, then let it be." Contents on Internet Archive include a taped "Blood and Honour Field Manual", a presentation of organizational and propaganda tactics that comes also with a video and print versions. It concludes with the statement: "Aryan man will rise again and take back his rightful position on earth. Or he will die fighting for it. There is no middle ground. There is only the solemn call of our forefathers and the glorious vision of the future. Together, as comrades-in-arms, we - the last of the traditional Aryan gladiators and berserkers, the latter-day White knights and crusaders, the inheritors of the armed legions of European National Socialist volunteers - throw ourselves into the final battle for our race and civilization, destined for glory and shaped for victory – whatever it takes". Similarly, groups like the National Alliance, Proud Boys and the Boogaloo Boys, the far right's latest new movement, all have video clips, texts and audio files presenting their motivations, actions, and futures visions – uploaded to Internet Archive and open to all.

Finally, the exposure to contents promoting hate, violence and racism is promoted also by another tool provided by the Internet Archive: its suggestions to readers for reading or viewing additional, similar content – making it easier for readers to consume more and more of it, especially since it adds a helpful "Play All" button. For example, the page for a Holocaust-denial document titled "Holocaust? What Holocaust!" suggests at the bottom "Similar Items" that include titles such as "Holocaust, The New Religion," "Holocaust Legend Exploded," and more.

Discussion

According to the Internet Archive's own description, it seeks to build "a digital library of Internet sites and other cultural artifacts in digital form." Indeed, since 1996, the site is accessed by millions of unique visitors every day and is one of the top 250 websites accessed in the U.S. The Internet Archive hosts millions of videos, books, radio programs, magazines, and even software. But as this study reveals, there is also a troubling dark and dangerous side to the Internet Archive. In recent years, terrorist groups, Jihadists, neo-Nazis and Fascist groups, antisemites, racists and white supremacist groups have been using the Internet Archive's free services for file storage from which they can freely distribute their propaganda materials, conduct recruitment campaigns, incite violence and spread hate.

The findings revealing that all the terrorist and racist, neo-Nazi and white supremacist groups are using the archive is supported by their own calls and directions to followers to use the Internet Archive. Many Al-Qaeda-affiliated websites now include links to Archive.org with posts of new material online. Already On July 20, 2011, a member of the major jihadi forum Shumoukh Al-Islam gave readers detailed steps for uploading material there (Stalinsky 2011). On August 1, 2011, Shumoukh Al-Islam announced the opening of an online course for using Rapidleech, a script that allows users to share files using various online hosts including the Internet Archive. The announcement of the course reads: "My brothers, surely you are aware of the importance of uploading the *mujahideen's* productions to the [Internet] Archive [Archive.org], YouTube, and other uploading sites, seeing that the links to the *mujahideen's* original productions have been deactivated... Therefore, our duty as

supporters of the *mujahideen* is to re-upload these productions to Archive.org and other [such websites]. Seeing that the task of uploading requires extensive knowledge of the Rapidleech script, and we have noticed that the talent of uploading is limited to a small number of brothers; and since we have seen the love of learning on the part of many of the brothers here, whether learning how to upload to Archive.org or to YouTube, or to use the Rapidleech script; and seeing that this knowledge must be entrusted to the next generations – since we won't remain here at our computers but join the caravans of the *mujahideen*, Allah willing – we thought it proper to pass this knowledge on to secure hands to be entrusted with the safeguarding of the *mujahideen's* legacy from destruction" (MEMRI JTTM report 2011).

In January 2022, the U.K.-based white supremacist group "Patriotic Alternative" promoted the Internet Archive in an article titled "Tools for Online Dissent." The "Patriotic Alternative" was founded in July 2019 by the British neo-Nazi and antisemitic conspiracy theorist Mark Collett. It promotes a white nationalist ideology and aims to combat the "replacement and displacement" of white British people by migrants who "have no right to these lands". The article explained that uploading content to the Internet Archive was extremely valuable because "our enemies in the media and the government overplay their hand," and that the platform should be used for archiving content that may be subject to removal from other platforms, and for saving content by "truth-tellers who are running afoul of the powerful" so that their work can be saved for "posterity." It also encouraged users to upload media articles for others to view, since the Internet Archive typically "removes paywalls" so that they can be freely accessed without "helping pay for the cost of the website and employing subversive, lying journalists (Stalinsky 2022)."

These findings raise serious questions regarding Internet Archive's policy towards extremist content on its platforms. According to the platform's Terms of Use the users are asked "not to harass, threaten, or otherwise annoy anyone", and acknowledging that "the collections may contain information that might be deemed offensive, disturbing, pornographic, racist, sexist, bizarre, misleading, fraudulent, or otherwise objectionable". These guidelines are rather vague and impractical. The Internet Archive's Terms of Use makes it clear that the platform takes no responsibility for content uploaded to it, does not attempt to restrict uploading of offensive material and sets out no further guidelines on what, if any, content it permits or forbids.

The debate about the role of Internet Archive policy led to a wrong dilemma between the seemingly only two options: removing the unwanted dangerous material or preserving the intellectual freedom. Well, there are some other options that may minimize the damages to national security and democracy while protecting valuable archived contents. Open to all archives should continue their valuable services in collecting, uploading and preserving material. That may include, as this study indicates, undesirable calls for violence, terrorism, hate and racism. However, while maintaining these important archives, access should be regulated. Right now, anyone can access the archived material, download from it, distribute contents from the archive and even use it as a "dark archive" to store manuals, propaganda and incitement. This free-to-all access can be modified according to several values and principles. First, the user should be identified (as in most conventional libraries that demand "reader's card"). Second, the access to certain archived contents should be limited. Considering the importance of certain extremist and terrorist material for scholars, researchers, educators, students and more – the access should be limited for such education/research-oriented purposes. The guiding principles should be two: a. That there may well be situations where materials are not appropriate for mass consumption and open use (at least not without safeguards); and b. That decisions to block materials or limit access need to be taken in a responsible, transparent, and proportionate way. This may not diminish entirely the potential abuse of the platform by certain extremist and violent actors, but it certainly will minimize it.

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