Loose Links Sink Ships

Opportunities in the World of Online Piracy

Sania Shahid

P | I | P | S

Loose Links Sink Ships
Opportunities in the World of Online Piracy

Sania Shahid
APRIL 2021

Loose Links Sink Ships
Opportunities in the World of Online Piracy

Piracy websites on the surface web attract traffic on a scale comparable to legitimate media platforms, accounting for 31.5 percent of media viewership. Current analysis of online piracy is focused largely on mitigation efforts, which, while necessary, overlooks the opportunity presented by piracy networks. Civil society organizations can use piracy networks to provide access to media and messages restricted by authoritarian governments, create platforms for grassroots social movements, and promote human rights. Through targeted advertisements, pre-movie trailers, and cinematic filters aimed at international audiences, piracy networks can be a vehicle to empower vulnerable populations worldwide.

Introduction

Most governments and NGOs communicate to the public through legitimate forms of media.[1] However, large numbers of people access movies and television shows through illegal sources. In 2020 alone, for example, piracy websites received 130.5 billion views.[2]

Law enforcement agencies and industry almost exclusively focus on combating online piracy.[3] Yet, in spite of these efforts, piracy platforms continue to operate and likely will remain a highly trafficked part of the digital landscape. Pirated digital content is easy to attain and manipulate, available on unregulated or under-regulated sectors of the internet, and incredibly engaging. These features make pirated media especially popular with populations that live in authoritarian regimes and confront high levels of censorship.

The emphasis on eliminating piracy, while important, has caused us to overlook an opportunity. The popularity of piracy websites makes them a powerful tool for human rights and advocacy groups to distribute information to disenfranchised and marginalized groups, when access to legitimate media has been restricted by an illiberal government.[4]

Trends in Online Media Piracy

Piracy is the unlicensed distribution and consumption of copyrighted movies and television shows. Pirated materials are distributed through peer-to-peer websites and downloading channels.[5] Since the emergence of the internet, digital piracy has become the most prevalent form of free entertainment.[6] This analysis focuses on pirated television shows and films that are easily accessible on the surface web.[7]

The financial incentives for distributers of pirated content are threefold—advertising income, subscription fees, and bitcoin mining, while consumers—mostly young and living in countries with limited access to media—seek out pirated content for reasons ranging from its low cost to an

ideological commitment to open access. These motives, in combination with the difficulties enforcement agencies face in combating pirated content, make piracy sites incredibly resilient.

Online Video Piracy

Many different forms of media are pirated digitally.[8] This analysis focuses on video piracy as it attracts a large audience and allows for easier manipulation of files.[9] Video piracy can be categorized based on the distribution method of the original content (e.g., movie theaters, streaming services, etc.).[10] Traditionally, individuals recorded movies and videos on camcorders in movie theaters. Pirates would then publish low quality recordings on their websites.[11] The latest form of video piracy involves copying content from legitimate streaming websites, such as Netflix or Amazon Prime. Illegal streaming accounts for 90.9 percent of TV piracy and 56.5 percent of film piracy.[12] Since January 2017, pirated video content has received more than 483 billion views.[13]

Piracy is profitable. Digital pirates make money through advertising, membership plans, and Bitcoin mining:

- **Advertisements.** Pirates feature paid advertisements on their sites. They can either connect to larger advertising networks, similar to Google AdSense, or create direct deals with specific companies that have less stringent advertising standards.[14] Advertising networks may have difficulty filtering for unknown companies or users, and this loophole allows pirates to appear as legitimate clients, facilitating direct deals.[15] Legitimate companies, like Capital One and Paramount, either knowingly or unknowingly advertise on piracy websites.[16]

- **Premium Memberships.** Many piracy websites offer memberships to their users with monthly or yearly payment plans. These memberships provide benefits, such as advertisement-free viewing and access to more titles.[17] Even in the United States, with a wide range of legitimate sites available for streaming content, an estimated 9 million broadband subscribers pay for a pirate subscription service. [18]

- **Bitcoin Mining.** Bitcoin is a type of cryptocurrency that must be digitally 'mined.'[19] Mining Bitcoins requires a computer's processing power to solve a computational puzzle. Pirates mine Bitcoins by prompting their users to download content that discreetly hijacks their operating system to create a system of networked computers. Indeed, those who download illegal content are 28 times more likely to have their device infected with malware, including software that enables covert mining.[20] These networked computers then provide pirates with greater computing power to mine Bitcoins.

Consumers of Pirated Media

Pirated media is consumed by users prevented from accessing their desired titles on legitimate platforms. They justify pirating content by citing a variety of factors from prohibitive pricing to principles of equality in access.

The primary consumers of pirated media are young people in regions with limited access to legitimate digital streaming due to government censorship or low prioritization by streaming services, which delays the release of new titles in markets deemed less important.

- **Region.** From January 2020 to January 2021, the total number of visits to piracy websites amounted to over 106 billion.[21] Low and middle-income countries, like Georgia, Ukraine, and Belarus, rank the highest in per internet user consumption of pirated films and television shows.[22] These countries suffer from both government censorship and limited viewing options available from streaming services.

- **Age**. Younger age groups, usually individuals aged 18 to 24, are more likely to participate in piracy—though older users are more common as piracy is normalized.[23] The main reason is a lower level of disposable income and inability to pay for streaming services or an unwillingness to pay for multiple services. They typically use platforms, such as Reddit, to find information on where they can watch pirated movies for free or find pirated streaming services with large video catalogs.

The COVID-19 pandemic has increased dramatically the demand for streaming video services. In 2020, video streaming services saw a 71 percent increase in viewership over 2019.[24] However, a variety of other factors lead individuals to visit piracy websites, including:

- **Paywalls.** Streaming and downloading pirated media allows individuals to view content for free and avoid costly paywalls. Even when consumers have bought subscription services, many popular titles can only be streamed at extra cost or are found only on competing services, requiring additional subscriptions.[25]

- **Regional locks.** Most over-the-top (OTT) streaming services, such as HBO and Hulu, are not available outside the United States and Europe.

- **Censorship.** Streaming services like Netflix and Amazon Prime have removed titles or specific episodes in response to government demands. For instance, Netflix removed an episode of the show *Patriot Act* upon the request of the Saudi government due to the host's criticism of Muhammad bin Salman.[26] Many streaming services also have signed voluntary agreements to abide by cultural restrictions, such as censoring unfavorable depictions of Gods and Goddesses in India.[27]

- **National norms**. Some consumers engage in piracy because it is accepted as a common practice and is not energetically discouraged by local governments.[28]

- **Open access supporters.** Many suppliers and consumers believe that pirating content is a form of activism against corporations and governments.[29] Indeed, a number of explicitly pro-piracy political parties have formed in Europe and North America, viewing themselves as a "digital civil rights movement."[30]

Given that piracy is lucrative and users are either unable or unwilling to choose legitimate sites, law enforcement faces significant obstacles when seeking to shut down pirated media sites. These obstacles are made even higher by the very nature of digital technology.

Digital Piracy is Resilient and Unlikely to Disappear

Current anti-piracy efforts focus mainly on closing websites and arresting individuals who distribute pirated content.[31] Digital piracy should be discouraged—however, it is unlikely to disappear given the nature of digital technology.

Three primary factors ensure the resiliency of digital piracy:

- **Digital media is easily copied and distributed.** Piracy websites acquire content from mainstream media sources. Digital content is copied with software and equipment that can be purchased readily online. Copied content is then posted on websites for easy distribution. For example, while Google and YouTube have taken steps to combat piracy on their platforms, viewers can still access pirated content on illegal websites. The majority of these sites can be found with a simple Google search.[32] Indeed, there are communities on Reddit and Facebook where users provide links to pirated content online.[33]

- **A whack-a-mole problem.** The ease of pirating and distributing digital media means that as quickly as authorities shut down a piracy website, providers create a new website to meet consumer demand. Popular piracy websites like 123movies and Pirate Bay have been removed multiple times, but quickly reappear after being rebranded and re-uploaded.[34]

- **Anonymity through Virtual Private Networks.** Virtual Private Networks (VPNs) hide IP addresses, making it more difficult, and in some cases impossible, for law enforcement agencies to trace activity back to the pirates.[35] The proliferation of VPNs has aided piracy by increasing the security users and pirates have when conducting illegal activities on the web.

Providers and consumers are motivated by financial gain, limited income, ideological commitments, and/or government censorship to engage in online video piracy. Technological developments that allow for easy access, instantaneous reproduction of piracy sites, and anonymity further cement piracy sites as permanent features of the internet.

Policy Recommendations: Combining Entertainment with Advocacy

Digital media piracy is highly resilient and likely to persist in spite of law enforcement and industry efforts.[36] Indeed, *Wired* dubbed 2021 "the Platinum Age of Piracy," because major studios are increasingly premiering movies online—a boon for pirates, who can then immediately copy and distribute newly released films on their illegal streaming services.[37]

While digital piracy is illegal and should be combatted, piracy websites could also be a valuable tool for civil society organizations seeking to communicate with vulnerable populations and transmit important public service messages.[38] Piracy sites are useful for messaging precisely because they are resilient and popular.

Information Dissemination through Piracy Websites

Civil society groups can use piracy websites to transmit messages to vulnerable and underserved populations in several ways, including:

- **Online advertising.** Groups can target their messages by using algorithms to pair advertisements with movies and television shows that are likely to be watched by viewers with specific regional and demographic characteristics, such as gender or sexual orientation.

- **Pre-movie trailers.** Civil society groups, like other businesses that advertise on piracy websites, can pay to have pre-movie trailers added to streamed content. Trailers on piracy websites cannot be skipped, increasing the probability that viewers engage with the content. For example, an NGO could use a pre-movie trailer to heighten breast cancer awareness in countries where the topic is taboo.

- **Cinematic filters.** Media companies use cinematic filters in movie theaters to discourage recording.[39] The filters contain messages invisible to the human eye in theaters, but visible on recordings. Messages usually consist of copyright warnings that obscure images on the screen. However, civil society organizations could use this technology to transmit other types of messages or QR codes that direct viewers to websites. To prevent pirates from searching for replacement videos "undamaged" by cinematic filters, such messages could periodically appear on the screen for a limited amount of time.

Online advertisements and pre-movie trailers are the best options for distributing messages, because they take advantage of the existing information-sharing practices used by civil society organizations. Messages also can be targeted at specific audiences. In contrast, cinematic filters require the cooperation of media producers and cinema houses. This option, therefore, faces greater logistical difficulties.

Figure 1: Methods of Information Distribution

On Piracy Websites

	Advertisements	Trailers	Cinematic Filters
Cost	Low-cost	Mid-cost	High-cost
Collaboration	Limited Collaboration	Some Collaboration	High Collaboration
Engagement	Somewhat Direct	Most Direct	Indirect
Audience	Targets Via Regional or Demographic Characteristics	Targets Via Media Titles	Targets Via Media Titles

The Benefits of Advocacy through Piracy Websites

Piracy websites are a useful tool for civil society organizations to communicate with audiences for four reasons:

- **Previously inaccessible audiences.** Information sharing is the first step to creating the space for dissent and civil society, and civil society organizations seek to raise awareness about issues and resources with specific audiences.[40] Many young adults in low and middle-income countries watch pirated videos online, and this demographic is a valuable audience for civil society organizations—these users often seek out pirated media to evade or defy government censorship.

- **Engaging advocacy.** Messages presented in connection with popular pirated videos will likely reach a wide audience. Those messages may be more memorable when viewers can connect them with a theme of the movie.[41] For example, if a message in support of an active civil society is shown before the movie *The Trial of the Chicago 7*, viewers may be more likely to embrace protests.

- **Discrete advertising.** Civil society organizations can advertise on piracy websites without their name being associated with the messages, because piracy websites have less stringent requirements on who advertises on their sites and attribution. Privacy is critical

for civil society organizations under authoritarian regimes that oppose advocacy campaigns targeted at minority groups, such as LGBTQIA+ communities.

- **Resilient messaging.** Because sites are hard to shut down permanently and large numbers of people globally access pirated videos online, the piracy community is highly resilient. The use of VPNs also allows users to hide their identity and bypass or complicate government censorship. Civil society organizations can capitalize on the resiliency of piracy websites and the privacy afforded users to educate viewers about even sensitive online resources or issues, such as shelters for domestic abuse victims.

In countries with high levels of media censorship, piracy websites are a fixture of everyday life—it is essentially impossible for law enforcement to eliminate all forms of media piracy. Civil society groups using piracy websites to distribute information can reach new audiences and provide valuable resources with less fear of a backlash from authoritarian governments.

Conclusion

Information dissemination through piracy networks is an overlooked tool for civil society groups to communicate with vulnerable or marginalized audiences. Large numbers of young adults frequent piracy websites, and many of these users live in authoritarian societies with significant censorship and restrictions on the media. Although piracy websites are illegal and rob artists and corporations of profits, they also are highly resilient and unlikely to disappear. Until they do, piracy websites are a valuable channel through which civil society organizations can promote human rights, provide public service information, create spaces for dissent, and explore advocacy through entertainment.

Acknowledgements:

¹ "Social Networking: A Guide to Strengthening Civil Society Through Social Media." *USAID,* 2014. https://www.usaid.gov/sites/default/files/documents/1866/SMGuide4CSO.pdf.

Gregory Saxton and Richard Waters, "What Do Stakeholders Like on Facebook? Examining Public Reactions to Nonprofit Organizations' Informational, Promotional, and Community-Building Messages," *Journal of Public Relations Research* 26 (May 27, 2014), https://doi.org/10.1080/1062726X.2014.908721.

Gregory Saxton et al., "#AdvocatingForChange: The Strategic Use of Hashtags in Social Media Advocacy," *Advances in Social Work* 16 (July 1, 2015): 154–69, https://doi.org/10.18060/17952.

Chao Guo and Gregory D. Saxton, "Tweeting Social Change: How Social Media Are Changing Nonprofit Advocacy," *Nonprofit and Voluntary Sector Quarterly* 43, no. 1 (February 1, 2014): 57–79, https://doi.org/10.1177/0899764012471585.

² "Piracy in 2020." *MUSO*. Accessed April 20, 2021. https://www.muso.com/magazine/piracy-in-2020-a-snapshot-view.

³ Yang Yue, "The Effects of Movie Piracy on Box-Office Revenue: An Empirical Analysis of the Chinese Movie Market," *Journal of Applied Economics* 23, no. 1 (January 1, 2020): 618–55, https://doi.org/10.1080/15140326.2020.1812477.

Adrian Athique, "The Global Dynamics of Indian Media Piracy: Export Markets, Playback Media and the Informal Economy," *Media, Culture & Society* 30, no. 5 (September 1, 2008): 699–717, https://doi.org/10.1177/0163443708094016.

Michael D. Smith and Rahul Telang, "Assessing the Academic Literature Regarding the Impact of Media Piracy on Sales" (August 19, 2012), https://doi.org/10.2139/ssrn.2132153.

Martin Fredriksson and James Arvanitakis, "Piracy, Property and the Crisis of Democracy," *JeDEM - EJournal of EDemocracy and Open Government* 7, no. 1 (October 23, 2015): 134–50, https://doi.org/10.29379/jedem.v7i1.365.

⁴ William R. Hobbs and Margaret E. Roberts, "How Sudden Censorship Can Increase Access to Information," *American Political Science Review* 112, no. 3 (August 2018): 621–36, https://doi.org/10.1017/S0003055418000084.

⁵ Peer-to-peer networks are websites where users share files and edit links on the pages they visit. However, site-controlled content, where only the website provides the content, is becoming increasingly popular. Site-controlled website interfaces resemble those of legitimate websites that require subscriptions. They create a false sense of legitimacy and users are more likely to feel comfortable navigating the sites or may not realize that they are accessing illegal content. Additionally, the number of platforms available for uploading pirated content is increasing rapidly. These platforms include but are not limited to; streaming sites, torrent sites, linking sites, and cyberlockers. See: "Types of Online Digital Piracy & Solutions," FACT, accessed April 23, 2021, https://www.fact-uk.org.uk/consumer-advice/online-piracy/.

Kalika Navin Doloswala and Ann Dadich, "The Accidental Criminal: Using Policy to Curb Illegal Downloading," *First Monday*, May 29, 2011, https://doi.org/10.5210/fm.v16i6.3412.

"Internet Piracy" *SIIA Protection,* accessed April 20, 2021. https://history.siia.net/Divisions/IP-Protection-Services/About/Internet-Piracy.

⁶ Ashley Johnson, "22 Years After the DMCA, Online Piracy Is Still a Widespread Problem," Information Technology Innovation Foundation, February 7, 2020, https://itif.org/publications/2020/02/07/22-years-after-dmca-online-piracy-still-widespread-problem.

⁷ "Surface web" in this paper refers to sites that are accessible to the average user, through search engines such as Google or other legitimate applications such as Facebook or Reddit. On the other hand, deep or dark web links cannot be easily accessed through search engines.

⁸ Other forms of media piracy include software, music, and publishing. Piracy in these industries is prevalent, and many of the motivating factors for distributers and consumers transfer over from video piracy. However, they are not the focus of this paper because messaging through pirated videos gives civil society organizations greater ability to tailor to specific audiences. For more information on software, music and publishing piracy see:

M. Limayem, M. Khalifa, and W.W. Chin, "Factors Motivating Software Piracy: A Longitudinal Study," *IEEE Transactions on Engineering Management* 51, no. 4 (November 2004): 414–25, https://doi.org/10.1109/TEM.2004.835087.

Steven Caldwell Brown, "Where Do Beliefs about Music Piracy Come from and How Are They Shared? An Ethnographic Study," *International Journal of Cyber Criminology* 10, no. 1 (June 2016): 21–39, http://www.cybercrimejournal.com/Brownvol10issue1IJCC2016.pdf.

Ninh Nguyen et al., "The Proliferation of Piracy in the Publishing Supply Chains of Emerging Countries: A Study in Vietnam," *Publishing Research Quarterly* 33, no. 4 (December 1, 2017): 477–82, https://doi.org/10.1007/s12109-017-9549-9.

[9] Amit Chowdhry, "Study: Relevant Video Content Drives More Engagement and Revenue." *Forbes*. Accessed April 20, 2021. https://www.forbes.com/sites/amitchowdhry/2018/09/18/study-relevant-video-content-drives-more-engagement-and-revenue/.

[10] Michael Beausoleil, "The New Trend in Streaming: Piracy," *Medium*, February 16, 2021, https://medium.com/swlh/the-new-trend-in-streaming-piracy-9882165da769.

Bertrand Chupeau, Séverine Baudry, and Gwenaël Doërr, "Forensic Characterization of Pirated Movies: Digital Cinema Cam vs. Optical Disc Rip," 2014, https://doi.org/10.1109/WIFS.2014.7084320.

[11] The term "Pirates" in this paper refers to individuals who are distributing and publishing pirated material online. It does not refer to consumers of pirated content.

[12] Data from Muso.com. These figures are based on recorded piracy visits for TV shows and films from January 2017 through March 2021.

[13] Data from Muso.com.

[14] Dr. Augustine Fou, "Ad-Supported Piracy Is Thriving, Thanks To Programmatic Ad Tech," *Forbes*, accessed March 12, 2021, https://www.forbes.com/sites/augustinefou/2020/09/02/ad-supported-piracy-is-thriving-thanks-to-programmatic-ad-tech/.

[15] Ananth Baliga, "Piracy Websites Roped in $227 Million in Ad Revenues," *UPI*, February 18, 2014, https://www.upi.com/Business_News/2014/02/18/Piracy-websites-roped-in-227-million-in-ad-revenues-in-2013/8271392741002/.

"Good Money Still Going Bad: Digital Thieves and the Hijacking of the Online Ad Business," *Digital Citizens Alliance*, May 2015, https://www.digitalcitizensalliance.org/clientuploads/directory/Reports/goodstillbad.pdf.

[16] Independently conducted research of the top 20 piracy websites as recorded by MUSO's piracy by industry dashboard. See: "Online Anti-Piracy Insights and Content Monitoring," MUSO, accessed April 24, 2021, https://www.muso.com/products/discover.

[17] "Money for Nothing: The Billion-Dollar Pirate Subscription IPTV Business," *Digital Citizens Alliance*, August 2020, https://www.digitalcitizensalliance.org/clientuploads/directory/Reports/DCA-Money-for-Nothing-Report.pdf.

[18] "Money for Nothing: The Billion-Dollar Pirate Subscription IPTV Business."

[19] The term 'mined' refers to the process in which a bitcoin is awarded to a computer that solves a complex series of algorithms. Mining bitcoins requires large amounts of computational processing and is a very energy intensive activity. See: "Electricity Needed to Mine Bitcoin Is More than Used by 'Entire Countries,'" *The Guardian*, February 27, 2021. http://www.theguardian.com/technology/2021/feb/27/bitcoin-mining-electricity-use-environmental-impact.

[20] "Digital Bait: How Content Theft Sites and Malware Are Exploited by Cybercriminals to Hack into Internet Users' Computers and Personal Data," *Digital Citizens Alliance*, December 2015. https://www.digitalcitizensalliance.org/clientuploads/directory/Reports/digitalbait.pdf.

Sergio Pastrana and Guillermo Suarez-Tangil, *A First Look at the Crypto-Mining Malware Ecosystem: A Decade of Unrestricted Wealth*, 2019.

[22] Data from Muso.com

[23] "Piracy Is Back: Piracy Statistics for 2021," *DataProt*, March 19, 2021, https://dataprot.net/statistics/piracy-statistics/.

Ian Brunton-Smith and Daniel J. McCarthy, "Explaining Young People's Involvement in Online Piracy: An Empirical Assessment Using the Offending Crime and Justice Survey in England and Wales," *Victims & Offenders* 11, no. 4 (October 1, 2016): 509–33, https://doi.org/10.1080/15564886.2015.1121943.

[24] "Media Nations 2020." *Ofcom*, November 3, 2020. https://www.ofcom.org.uk/research-and-data/tv-radio-and-on-demand/media-nations-reports/media-nations-2020.

[25] "What Is Disney Plus Premier Access? Your Questions Answered," *Business Insider*, accessed April 23, 2021, https://www.businessinsider.com/disney-plus-premiere-access.

"Why Do TV Shows and Movies Leave Netflix?" *Help Center*, accessed April 23, 2021, https://help.netflix.com/en/node/60541.

Andy Maxwell, "Do Justifications for Content Piracy Really Hold Up Under Scrutiny?" *TorrentFreak*, accessed April 23, 2021, https://torrentfreak.com/do-justifications-for-content-piracy-really-hold-up-under-scrutiny-200517/.

Eriq Gardner, "Apple Must Face Lawsuit for Telling Consumers They Can 'Buy' Movies, TV Shows," *The Hollywood Reporter*, April 22, 2021, https://www.hollywoodreporter.com/thr-esq/apple-must-face-lawsuit-for-telling-consumers-they-can-buy-movies-tv-shows.

[26] "Now Streaming: Censorship." *Freedom House*, accessed April 20, 2021. https://freedomhouse.org/article/now-streaming-censorship.

 "Tandav Row: Two Scenes Axed as Fresh FIRs Are Filed, Here Are Details of Cuts," *Hindustan Times*, January 20, 2021. https://www.hindustantimes.com/entertainment/web-series/tandav-row-two-scenes-axed-as-fresh-firs-are-filed-here-are-details-of-cuts-101611146196552.html.

[27] Alex Marshall, "Netflix Expands into a World Full of Censors," *The New York Times*, October 31, 2019, https://www.nytimes.com/2019/10/31/arts/television/netflix-censorship-turkey-india.html.

Cynthia Khoo, "5 Ways Extreme Copyright Rules Can Be Used to Censor the Internet," *RINF Alternative News & Media*, July 8, 2014. http://rinf.com/alt-news/sicence-technology/5-ways-extreme-copyright-rules-can-used-censor-internet/.

[28] Godwin Udo, Kallol Bagchi, and Moutusy Maity, "Exploring Factors Affecting Digital Piracy Using the Norm Activation and UTAUT Models: The Role of National Culture." *Journal of Business Ethics* 135, no. 3 (May 1, 2016): 517–41. https://doi.org/10.1007/s10551-014-2484-1.

[29] Fredriksson and Arvanitakis, "Piracy, Property and the Crisis of Democracy."

Simon Lindgreen and Jessica Linde, "The Subpolitics of Online Piracy: A Swedish Case Study," *Convergence: The International Journal of Research into New Media Technologies* 18, no. 2 (May 1, 2012): 143–64. https://doi.org/10.1177/1354856511433681.

[30] Fredriksson and Arvanitakis, "Piracy, Property and the Crisis of Democracy," 134.

[31] Jacey Fortin, "Three Charged with Leaking Movies as Part of Global Piracy Ring," *The New York Times*, August 26, 2020. https://www.nytimes.com/2020/08/26/business/media/piracy-ring-movies-internet.html.

[32] Fortin, "Three Charged With Leaking Movies as Part of Global Piracy Ring."

[33] Reddit has attempted to make some changes to its r/piracy thread; however, the website still allows for posting links about piracy website home pages that can lead to specific titles. See: "Piracy Wiki - Megathread of Pirate Sites / Apps / Tools / FAQ / Guides (and RULES)." Reddit Post. *R/Piracy*, February 28, 2021. www.reddit.com/r/Piracy/comments/lurqmi/piracy_wiki_megathread_of_pirate_sites_apps_tools/., Nicole Kobie, "First It Was Football Streams, Now Reddit Is Going after r/Piracy," *Wired UK*, April 14, 2019, https://www.wired.co.uk/article/reddit-piracy-streams.

[34] Ernesto Van Der Sar, "The Pirate Bay Remains Resilient, 11 Years After the Raid," *TorrentFreak*, May 31, 2017. https://torrentfreak.com/the-pirate-bay-remains-on-top-11-years-after-the-raid-170531/.

"SuperTorrents Admin Calls It Quits, Site to Rebrand," *TorrentFreak*, accessed April 20, 2021, https://torrentfreak.com/supertorrents-admin-calls-it-quits-site-to-rebrand-130709/.

[35] Stefan Larsson et al., "Law, Norms, Piracy and Online Anonymity: Practices of de-Identification in the Global File Sharing Community," *Journal of Research in Interactive Marketing* 6 (October 1, 2012), https://doi.org/10.1108/17505931211282391.

[36] "Media Piracy in Emerging Economies," *Social Science Research Council,* 2011, http://piracy.americanassembly.org/wp-content/uploads/2011/06/MPEE-PDF-1.0.4.pdf.

[37] Abigail De Kosnik, "2021 Will Launch the Platinum Age of Piracy," *Wired*. Accessed March 12, 2021. https://www.wired.com/story/2021-platinum-age-piracy-streaming/.

[38] Saskia Brechenmacher and Thomas Carothers, "Examining Civil Society Legitimacy," Carnegie Endowment for International Peace, May 2, 2018, https://carnegieendowment.org/2018/05/02/examining-civil-society-legitimacy-pub-76211.

[39] Kate Greene, "Preventing Movie Piracy," MIT Technology Review, July 5, 2006, https://www.technologyreview.com/2006/07/05/228673/preventing-movie-piracy/.

[40] "Choose Communication Tools to Support Advocacy Activities," Accessed April 20, 2021, International Centre for Policy Advocacy. https://advocacyguide.icpolicyadvocacy.org/642-choose-communication-tools-to-support-advocacy-activities.

[41] In a study on anti-smoking advertisements aired before movies, researchers found that young women were less likely to be influenced by film stars if they had seen the advertisement. This principle can be applied to messaging by civil society organizations in connection to themes in the movies they are attaching their advertisements to. See: C. A. Edwards et al., "Out of the Smokescreen: Does an Anti-Smoking Advertisement Affect Young Women's Perception of Smoking in Movies and Their Intention to Smoke?" *Tobacco Control* 13, no. 3 (September 1, 2004): 277–82, https://doi.org/10.1136/tc.2003.005280.

Teixeira, Thales S. "When People Pay Attention to Video Ads and Why." *Harvard Business Review*, October 14, 2015. https://hbr.org/2015/10/when-people-pay-attention-to-video-ads-and-why.,

The principles from informative advertising, which is used to make consumers aware of a product, can be applied to marketing alongside relevant movies to increase the connection consumers feel to the message they are exposed to. See: Hunt, Shelby D. "Informational vs. Persuasive Advertising: An Appraisal." *Journal of Advertising* 5, no. 3 (October 1, 1976): 5–8. https://doi.org/10.1080/00913367.1976.10672644.