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Internet control points as LGBT rights mediation

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ABSTRACT

Conflicts over lesbian, gay, bisexual, and transgender (LGBT) rights, similar to other social struggles, are increasingly materializing within technical functions of Internet governance and architecture rather than at the surface level of content. This paper examines how various functional areas of Internet governance, such as the assignment of domain names, the policy-making role of private information intermediaries, and intellectual property rights enforcement mechanisms serve as control points over LGBT speech, identity expression, and community formation. This turn to Internet governance control points to mediate LGBT rights has implications for public policy, for scholarship at the intersection of Internet governance and human rights, and for media companies and activists in their work of shaping infrastructures that can promote free expression and human rights.

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Political and economic conflicts increasingly materialize within arrangements of Internet governance rather than at the surface level of content (DeNardis, 2012). Financial companies severed the flow of donations to WikiLeaks after it released US diplomatic cables. The Internet's Domain Name System (DNS) is increasingly used for intellectual property rights enforcement and censorship. Politically motivated distributed denial of service attacks have enabled governments to silence human rights organizations as well as activists to disrupt government servers. The Egyptian and Syrian governments, among others, have disrupted Internet service during political turmoil. Such high-profile examples help make visible digital control points and how Internet governance mechanisms can restrict or expand online expression.

Debates about lesbian, gay, bisexual, and transgender (LGBT) rights have traditionally been content-mediated. Tens of thousands participated in Dan Savage's online 'It Gets Better Campaign' (2013) to oppose bullying and support LGBT youth. Prior to the Supreme Court's 2013 decision to overturn Section 3 of the Defense of Marriage Act (DOMA), Facebook users changed their profile pictures to a red Human Rights Campaign (HRC) equality logo in support of same-sex couples (HRC, 2013). The equality campaign 'All Out' (2013) posted a video prior to the 2014 Russian Olympics depicting a lesbian figure skater winning the Olympics and violating Russian law by publicly kissing her

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partner. Much research on LGBT issues has, in turn, focused on content-related issues such as usage and online behavior (e.g. Braquet & Mehra, 2006; Magee, Bigelow, DeHaan, & Mustanski, 2012), identity politics online (e.g. Gray, 2009; Pingel et al., 2013) and cyberbullying (e.g. Gilden, 2013; Varjas, Meyers, Kiperman, & Howard, 2013).

But conflicts over LGBT rights, similar to other social deliberations, increasingly manifest within Internet architecture and governance. For example, the Pakistan government appropriated the Internet's DNS to block access to LGBT sites (Ghosh, 2013). Former Senator Rick Santorum asked Google to alter its search engine algorithms so that a website satirizing his anti-gay positions was removed or demoted in search rankings (Gillespie, 2012). Popular filtering software often blocks LGBT-related content, including health-related information (Daniels & Gray, 2014).

These emerging phenomena create a moment of opportunity for an inquiry into how LGBT rights issues become embedded within frameworks of Internet architecture and governance. Internet governance involves the administration of the technical infrastructure necessary to keep the Internet operational and the enactment of substantive policy around this infrastructure (DeNardis, 2014). It is not a single system but an ecosystem of distinct tasks overseen by a combination of private companies, national laws, intergovernmental agreements, and new global institutions.

As an organizing conceptual framework into this inquiry, this research project employs an existing six-level typology of Internet governance by Raymond and DeNardis (2015) for locating and analyzing empirical case studies that could help establish whether and how various functions of Internet governance mediate LGBT conflicts and what this signifies for the future of LGBT rights and other human rights issues. The six functional areas include: the administration of domain names and Internet addresses; Internet standards-setting; access and interconnection coordination; cybersecurity governance; the policy-making role of private intermediaries; and technical architecture-based intellectual property rights enforcement. According to Raymond and DeNardis (2015, pp. 590–592), these six functional areas are comprised of the following tasks:

- (1) Control of 'Critical Internet Resources'
 - Central Oversight of Names and Numbers
 - Technical Design of IP Addresses
 - New Top-Level Domain Approval
 - Domain Name Assignment
 - Authorization of Root Zone File Changes
 - IP Address Distribution (Allocation/Assignment)
 - Management of Root Zone File
 - Autonomous System Number Distribution
 - Operating Internet Root Servers
 - Resolving DNS Queries (Billions per Day)
- (2) Setting Internet Standards
 - Protocol Number Assignment
 - Designing Core Internet Standards
 - Designing Core Web Standards
 - Establishing Other Communication Standards

- (3) Access and Interconnection Coordination
 - Facilitating Network Interconnection
 - Peering and Transit Agreements to Interconnect
 - Setting Standards for Interconnection (e.g. BGP)
 - Network Management (Quality of Service)
 - Setting End User Access and Usage Policies
 - Regulating Access (e.g. Net Neutrality)
- (4) Cybersecurity Governance
 - Securing Network Infrastructure
 - Designing Encryption Standards
 - Cybersecurity Regulation/Enforcement
 - Correcting Software Security Vulnerabilities
 - Software Patch Management
 - Securing Routing, Addressing, DNS
 - Responding to Security Problems
 - Trust Intermediaries Authenticating Web Sites
- (5) Information Intermediation
 - Commercial Transaction Facilitation
 - Mediating Government Content Removal Requests (Discretionary Censorship)
 - App Mediation (Guidelines, Enforcement)
 - Establishing Privacy Policies (via End User Agreements and Contracts)
 - Responding to Cyberbullying and Defamation
 - Regulating Privacy, Reputation, Speech
 - Mediating Government Requests for Personal Data
- (6) Architecture-Based Intellectual Property Rights Enforcement
 - Domain Name Trademark Dispute Resolution
 - Removal of Copyright-Infringing Content
 - Algorithmic Enforcement (e.g. Search Rankings)
 - Blocking Access to Infringing Users
 - Domain Name System IPR Enforcement
 - Regulating Online IPR Enforcement
 - Standards-Based Patent Policies
 - Enacting Trade Secrecy in Content Intermediation

This delineation of technical governance areas and tasks is not exhaustive, and there are many possible taxonomies (e.g. Mueller, 2010), but the framework does serve to dispel a common practice of discussing Internet governance monolithically. Distinct tasks are carried out by numerous actors ranging from standards-setting institutions such as the Internet Engineering Task Force (IETF), regional Internet registries that distribute Internet addresses, Certificate Authorities that certify the system of authenticating websites, private companies that enforce copyright, and many other institutions, corporations, and governmental entities. The framework also serves to extend the discussion well beyond platforms, software and algorithms to include institutions of Internet governance, the public policies of private companies, and the context of national and international rulemaking.

The inquiry also views LGBT rights online as analogous to broader human rights online as delineated, for example, in the United Nations General Assembly (2011) report on the right to freedom of opinion and expression online, which includes access to knowledge, access to technical infrastructure, freedom of expression, and the right to privacy and data protection.

The underlying research question asks whether LGBT rights conflicts embed within all six functional areas, even the most concealed and technically complex areas of Internet governance. The research findings locate cases, multiple cases, at all six levels. For example, one name and number coordination case examines contention over the introduction of the .GAY top-level domain (TLD) by the Internet Corporation for Assigned Names and Numbers (ICANN); cases involving the policy-making role of private intermediaries are many, including Facebook's termination of accounts belonging to drag queens over real name policy violations and activists alerting members of the LGBT community that Egyptian police had used locational data in the gay dating app Grindr to track down gay men; and at the level of online intellectual property rights enforcement, one case involves a trademark mediation dispute resolving whether the satirical website www.chickfilafoundation.com constituted a violation of Chick-fil-A's trademark. The paper develops the six general case areas in which each of these functions directly mediates LGBT rights conflicts and concludes with a brief discussion of the implications of Internet governance-based rights mediation for the future of LGBT rights advocacy and research.

The internet's DNS and contention over '.GAY'

A core task of Internet governance is the administration of domain names, like cnn.com, and Internet addresses, the unique binary numbers indicating the virtual location of Internet devices. Because each of these identifiers must be globally unique, assignment requires centralized coordination, overseen by ICANN and delegated to various regional and private entities. The DNS, a distributed database management system that translates human readable domain names into their associated Internet addresses, is organized hierarchically, with TLDs like .com serving as high-level administrative categories. The administration of names and numbers is a technical function but also involves complicated political and economic decisions about speech (e.g. should .XXX be allowed), domain name trademark rights (e.g. who should control .AMAZON), and the extent to which the DNS is used for filtering content (DeNardis, 2014).

In 2012, ICANN announced a massive expansion of TLDs and accepted applications for new domains by those who would operate the space (e.g. assigning/selling domain names within the space; serving as the registry operator maintaining the domain's authoritative name and number mapping) (ICANN, 2012). ICANN received nearly 2000 proposals for new TLDs, many contentious. For example, ICANN rejected Amazon's application for the .AMAZON TLD after objections by countries with the Amazon rainforest within their borders. Locating a possible LGBT-related case involved reviewing the registry of proposed TLDs and the associated public comments addressing the submissions.

The proposal for a .GAY string emerged as an obvious case. Would the TLD provide a safe space for the community or create a centralized point of control over LGBT expression? The introduction of the TLD encountered resistance by countries historically opposed to LGBT rights. At the same time, the question of who should control the

proposed .GAY TLD was at play, with three business applications and one ‘community’ application proposing a .GAY TLD and one business application proposing an .lgbt TLD (dotgay LLC, 2013). As a ‘community applicant’, dotgay LLC had to indicate how it would represent the LGBT community in overseeing the TLD (ICANN, 2015a). Dotgay LLC (2012) planned to restrict domain name registrations to authenticated community members and vowed to return sixty-seven percent of domain name profits to community organizations. While more than 240 international LGBT groups expressed support for the community applicant (dotgay LLC, 2015), the organization’s application also raised concern over potential censorship in the .GAY TLD, claiming to

make best efforts to prevent incitement to or promotion of real or perceived discrimination based upon race, color, gender, sexual orientation or gender expression, ethnicity, religion or national origin, or other similar types of discrimination that violate generally accepted legal norms recognized under principles of international law. (dotgay LLC, 2012, 20e)

As a ‘community applicant’, dotgay LLC was evaluated under a ‘community priority evaluation’ that would have automatically assigned the entity with TLD oversight. Evaluations were carried out by a panel of the independent ICANN contractor, the Economist Intelligence Unit (EIU), a political and economic business consultant (ICANN, 2015b). The EUI panel rejected the priority evaluation, among other concerns questioning whether the string would be representative of the LGBT community (ICANN, 2014). After dotgay LLC filed an objection to the decision, ICANN solicited a reevaluation of the community application (Naimark, 2015).

General concerns about the .GAY string played out on ICANN’s online public comment forum. Some objections (al-Timimy, 2012; Batayneh, 2012) cited cultural values and norms. One individual claimed ‘the applied-for gTLD string (gay) is not welcomed in many societies and communities and is against the law and public morality. ICANN should work for the benefit of all societies. It should not indulge itself in prompting [*sic*] and expanding western culture on the Internet’ (al-Timimy, 2012). Similarly, a user posting in the name of the Communication and Information Technology Commission of the Kingdom of Saudi Arabia requested the application’s rejection because ‘many societies and cultures consider homosexuality to be contrary to their culture, morality or religion. The creation of a gTLD string which promotes homosexuality will be offensive to these societies and cultures’ (Abdulmjid, 2012).

Others registered objections to the community proposal for a .gay TLD over concern that the space would facilitate censorship of anti-gay content (Contreras, 2013). Still others viewed the umbrella term ‘gay’ as not representative of ‘the entire gay, lesbian, transgender, bisexual and queer community. The community has become more diverse and will continue to evolve’ (Colman, 2013). A representative of the Polish transgender organization Trans-Fuzja Foundation expressed concern about one of the commercial applications for .GAY, fearing that the business would be ‘mostly interested in branding the LGBT community identities, expressions and other means of life style’ (Dynarski, 2012) rather than representing the needs of the community. In this context, the Capital Area Gay and Lesbian Chamber of Commerce in the Washington, DC area also emphasized the importance of ‘the ability of our 400 small and medium sized LGBT owned and operated business members to acquire .GAY or .LGBT domains is done fairly and in a manner where they have equal opportunity to acquire the urls they deem a good fit’

(Guenther, 2012). Those expressing support for the TLD were likely to show support for the community application submitted by dotgay LLC. A representative of the International Gay & Lesbian Travel Association (IGLTA) believed that the community application would provide 'safety, visibility and support to the LGBT community' (Massad, 2012). Despite concerns that there is no one way to represent a community, a member of the Federation of Gay Games believes that 'dotgay LLC is the only applicant to seek community support and to offer mechanisms for community participation' (Naimark, 2013).

The ongoing dispute over the proposed .GAY TLD illustrates the significant role of DNS administration in the mediation of LGBT conflicts. While some have criticized ICANN's move to reject the 'community priority evaluation' for .GAY, others agree that the string fails to represent the diversity of LGBT communities and expressed concerns over potential censorship. The extent to which the TLD will represent the interests of LGBT people will largely depend upon the interests of the business assigned to manage .GAY.

Politics of technical specifications: gamertags restraining LGBT identities

Technical design choices, whether in globally deployed Internet standards or in proprietary specifications within a single company's product portfolio, create parameters for such public interest questions as whether anonymity is permitted, how individuals are tracked, and the allowable structure of names. This study did not locate any examples of LGBT-related issues in the open Internet standards set by organizations such as the World Wide Web Consortium (W3C) and the IETF, but it did find cases involving the proprietary rules established by corporations within their platforms. The examples located are not crisply defined shared standards but they do serve to demonstrate the ways in which rules established in proprietary systems also intersect with public policy, generally, and LGBT issues specifically. For example, consumer backlash against Nintendo emerged in 2014 because the company's real-life simulation game, *Tomodachi Life*, prohibited avatars from entering same-sex relationships (Magdaleno, 2014). After LGBT and other gamers protested this prohibition, Nintendo (2014) released an apology promising that future versions of the game would 'strive to design a game-play experience from the ground up that is more inclusive, and better represents all players'.

Gaming platform manufacturers both determine the conditions of inclusivity in gaming systems and arbitrate conflicts that arise within their platforms' own technological design affordances. Within the Xbox Live community, the gamertag 'RichardGaywood' used by a gamer with the legal name Richard Gaywood, was banned from a multiplayer game. In a similar incident, the gamertag 'theGAYERgamer' was reportedly found to violate Xbox Live's terms of services (Alexander, 2008; Plunkett, 2008). In a statement expressing his support for LGBT rights, Xbox policy director Stephen Toulouse (2008) pointed out that 'Gamertags are visible to everyone and it would be hard for me to defend to a parent of a young child who saw it that the name did not contain content of a sexual nature'. Toulouse further stated that the same restrictions would apply to the gamertags 'TheStraighterGamer' and 'TheHeterosexualgamer'.

Geographic location can also lead to the suspension of users. After listing his hometown as Fort Gay, West Virginia, gamer Josh Moore was suspended from the platform. After

both Moore and Fort Gay's Major contacted Microsoft representatives to clarify the existence of the town, they were informed that using the term gay in a gamer's profile was considered 'inappropriate'. It was not before Stephen Toulouse was informed of the incident that Moore's account was restored (Fleming, 2010). After experiencing some public backlash, Microsoft revised its policy standards for the multiplayer gaming platform and allowed users to indicate sexual orientation (Elliot, 2010).

The debate over LGBT identity expression within the gaming community prompted the media monitoring organization GLAAD to investigate Microsoft's policies (Cole, 2009). The investigation found that LGBT-related restriction was an issue not only prevalent on Xbox Live, but also prevalent in the larger gaming industry. For instance, the chat tool in Playstation Home's beta version did not allow users to type sexual orientation labels like 'gay' or 'lesbian'. If someone attempted to type the terms, the chat window would display asterisks in place of letters. This design constraint came to light after a gamer attempted to start a gay/straight alliance club on Sony's Playstation Home. Similar to the chat tool, club names and the club forum did not allow the use of sexual orientation labels. Other terms that had reportedly been filtered in the gaming community were 'Christ' and 'Jew' (Kim, 2008). During its investigation of both Sony and Xbox Live, GLAAD found that the restrictive policies were an attempt to prevent homophobia and other discriminatory actions within the gaming community (Cole, 2009). While Xbox's (2013) code of conduct explicitly prohibits discriminatory language or acts, online anonymity had led to a rise in homophobia in multiplayer games.

While some have appropriately noted the role of digital media in affording LGBT people with a platform for identity negotiation and (e.g. Gray, 2009), technically designed prohibitions of LGBT characters in real-life simulation games restrict LGBT gamers from fully expressing their identity. Viewing the issue of restrictive gamertags through a lens of Internet governance, the technological affordances that establish rules and standards of behavior and representation play a significant role in constraining or fostering LGBT expression.

Governments and private entities controlling access to LGBT-related content

Locating and accessing information online require passing through specific infrastructural choke points such as search engines, Internet exchange points that interconnect independently run networks to collectively form the global Internet, and 'last mile' access connections such as cellular networks, Internet service providers, or cable companies. The policies regarding how (or whether) information passes through these concentration points determine the basic physical and virtual conditions of access to knowledge. Most of these access and interconnection points are operated by the private sector, which sometimes independently chooses to block information or does so based on requests delegated to the private sector from the state, such as the Egyptian and Syrian governments ordering the termination of Internet and cellular access during national demonstrations (Roberts, Zuckerman, Farris, York, & Palfrey, 2011).

In June 2013, Russian President Vladimir Putin enacted a 'propaganda law' that would restrict the promotion of 'non-traditional sexual relations among minors' (Kremlin, 2013). The law had profound consequences for Russian LGBT citizens as well as the community's

online visibility. Shortly after the law took effect, Russia's largest LGBT news platform Gay.ru reported that the website could no longer be found through Google Russia's news-feed search, despite it still being listed in the news feed and search results of Russia's largest search engine, Yandex ('Google in Russia promotes isolation of homosexuals by banning gay websites', 2013). Despite Gay.ru editor in chief's presumption that Google had proactively blocked the site to comply with Russian law, the circumstances under which the site disappeared from search results remain nebulous. The Gay.ru community platform also became subject to government investigation after an unidentified source filed a complaint with the federal media regulator Roskomnadzor. The media authority found that Gay.ru did not propagandize gay relationships to minors as it was clearly designated with a +18 label ('Gay.ru is not propaganda', 2013). While the community platform Gay.ru escaped further censorship or a fine, the controversial 'gay propaganda law' would remain to pose a threat to the online visibility of the LGBT community. Deti-404, a website catering to LGBT youth in the country, was found to be in violation of the law and its founder, Elena Klimova, was charged with a 50,000 roubles fine. While a Russian court also ordered authorities to block the platform from the European social networking site VKontakte, the page is still accessible (Luhn, 2015). Censorship of LGBT content in non-Western nations frequently provokes international protest, but is not limited to countries traditionally opposed to LGBT rights. In the United States, the Children's Internet Protection Act (CIPA) of 2000 has come under criticism for blocking non-explicit LGBT-related content in federally funded schools and libraries (e.g. Daniels & Gray, 2014).

A well-known example of LGBT rights conflicts embedded in Internet architecture involves the relationship between search engine algorithms and a web campaign to highlight and satirize former Senator Rick Santorum's anti-gay positions during his campaign for the Republican nomination in the 2012 US presidential election. The Senator's comparisons between homosexuality and incest and his outspoken opposition to same-sex marriage led LGBT rights activist Dan Savage (2003a) to facilitate an explicit definition 'attaching his [Santorum's] name to a sex act'. After receiving several thousand votes, Savage selected a definition linking Santorum to anal sex and created the website SpreadingSantorum.com that would promote the term (Savage, 2003b). With bloggers and other Savage followers actively spreading word about the website, an Internet meme was born, with media reporting that Santorum himself acknowledged his 'Google problem' (Burns, 2011).

By the time the campaigns for the Republican ticket were underway, SpreadingSantorum.com had become the top Google search result for Rick Santorum (Wilson, 2012). Santorum appealed to Google to remove the website from search results. Google denied the request, emphasizing that the website could not be considered a 'Google bomb' (Sullivan, 2011), a tactic that 'involves linking a specific term to a specific site as many times as possible all over the Internet' (Buck, 2012). Rather, Dan Savage had generated followers through search engine optimization, asking followers to generate traffic to his website. In the past, the private intermediary had intervened in several 'Google bombs' manipulating the web presence of political figures. The controversy around SpreadingSantorum.com would not be resolved until February 2012 when the search for 'Santorum' and 'Rick Santorum' no longer returned SpreadingSantorum.com as a top result (Sullivan, 2012). Some speculated that modified search algorithms had solved Santorum's 'Google problem' (Sullivan, 2012). In addition to other changes, Google (2012) announced an 'adjustment to

how we detect official pages to make more accurate identifications.’ At the same time, search algorithms would now more easily detect and filter out ‘irrelevant adult content’. With search engines like Google making decisions on whether or not to intervene in ‘Google bombing’ and related issues, private intermediaries play a significant role in mediating LGBT-related conflicts.

Debates around filtering and blocking of LGBT-related content frequently revolve around government censorship efforts in countries traditionally opposed to LGBT rights. National laws as well as policy and technological design choices of private companies also constrain access to LGBT content and expression in the Western world. Arbitrating access to LGBT content, technical designs like search engine algorithms also mediate values of privacy, reputation and free expression. This increasingly important arbitrating role of the private industry is complicated by the fact that design choices such as Google’s search algorithms are protected trade secrets, obscuring the online mediation of LGBT issues and other human rights issues.

Cybersecurity conflicts and LGBT rights

Cybersecurity governance, such as authenticating websites and securing critical Internet infrastructure, is a central function necessary in keeping the Internet operational. At the same time, cybersecurity attacks have become direct proxies for political and social conflicts. The Stuxnet worm targeted Iranian nuclear control systems in the geopolitical context of concerns about Iran’s nuclear program. Sony pictures experienced an invasive cybersecurity attack carried out by the self-described ‘Guardians of Peace’ which claimed to be retaliating for the planned release of a Sony movie – *The Interview* – which included a storyline about assassinating North Korean leader Kim Jong-Un.

This politicization of cybersecurity has begun to carry over into the realm of LGBT rights conflicts. In August of 2013, the Ridgedale Church of Christ in Tennessee expelled a family after sixty years of membership because the family supported their lesbian daughter, police detective Kat Cooper (Hardy, 2013). The Collegedale city commission had just granted the police detective the right to cover her wife under government benefits. Because family members of the detective supported this right, they were expelled by their church community. Shortly after their expulsion became public, Ridgedale’s Facebook page was breached by anonymous hackers who posted several pro-LGBT pictures and messages to the page. The Church’s profile picture was changed to the red version of the HRC’s logo that went viral before the Supreme Court’s first landmark ruling on DOMA. Another picture satirically depicted different ‘forms’ of marriage appearing in the Bible. For example, the picture included forced marriages between slaves and a marriage between a rapist and his victim.

Hackers have similarly disrupted official websites of nations with severe anti-LGBT laws. After Nigeria passed a law punishing same-sex relations with imprisonment, an Irish activist identifying as @PaddyHack hacked the country’s website by posting a beheaded figure in front of a rainbow flag. The individual, identifying as member of the hacker collective Anonymous asked Nigeria’s president to ‘renounce and veto this Bill ...’ within 72 hours (@PaddyHack, as cited in Ogala, 2013). The post also threatened to reveal government corruption if officials failed to comply (Littauer, 2013; Ogala, 2013). PaddyHack (2013) posted a statement on Pastebin saying that

I am not inspired to do this because I am pro LGBT, I'm not even gay. I am inspired to do this because I am anti hate. Declaring gayness as being a sin is nothing more than hiding hate behind your bibles. ...

In 2012, Anonymous also claimed responsibility for hacking the website of the Ugandan government to protest the country's homophobic policies (Brocklebank, 2012).

In conflicts over LGBT rights, similar to other sociopolitical conflicts, activists turn to infrastructure to make political statements via cybersecurity attacks. Commonly, hackers such as those behind the hacking of Ridgedale Church's fanpage choose to remain anonymous. Claiming responsibility for their on- and offline protests and making statements on free expression issues ranging from Wikileaks to homophobia, the decentralized Anonymous network has become a political force (Coleman, 2013). While different forms of infrastructure-based activism are often illegal, they have become critical repertoires for online activists and are frequently compared to offline protest forms like sit-ins. Digital civil disobedience, however, is complicated by the privatization of Internet infrastructure (Sauter, 2014). At the same time, these tactics can cause 'collateral damage' by disrupting free expression online (DeNardis, 2014). While the presented cases show the role of hacktivism in making pro-LGBT statements, the tactic is also used to disrupt LGBT expression and privacy. For example, the infamous hack of adultery site Ashley Madison raised significant security concerns for the LGBT community after hackers revealed the personal information of users seeking anonymous gay sex (LGBT Technology Partnership & Institute, 2015). In the realms of online human rights mediation, these cases demonstrate how battles over free expression can stand in tension with both personal safety and stability of infrastructure.

LGBT rights shaped by private information intermediaries

The policies of social media platforms and other content intermediaries play a vital role in facilitating global citizens' participation in the digital public sphere, such as either enabling or constraining transgender individuals' ability to express their gender identity (DeNardis & Hackl, 2015). Information intermediaries are institutions, such as network operators, Internet Exchange Points, content aggregation providers, social media companies, and search engine companies, that do not themselves create content, but rather transmit, sort, store, or organize content created by others. Two incidents involving Apple's intelligent personal assistant Siri demonstrate the capacity for content intermediaries to shape expression around LGBT issues and identities. In Spring 2015, a YouTube user identifying as Alex posted a video showing how Russian Siri avoided questions about same-sex marriage and related issues and gave negative responses to some of the queries (Parkinson, 2015). At the same time, Siri acknowledges the gender identity of Olympian Caitlyn Jenner. In Spring 2015, the Olympian athlete formerly known as Bruce Jenner came out as transgender, an announcement that received significant public attention. Asked about 'Bruce Jenner's' real name and gender identity, Siri correctly responds with Caitlyn Jenner and female (Greenberg, 2015).

A policy design that has received significant public attention are real name requirements on social media platforms. Internet companies such as Facebook and their decisions over policy designs have significant implications not only for safety and privacy, but also

for identity expression. Drag communities, for example, rely on these platforms to navigate different aspects of their identity and to facilitate personal and professional relationships (Lingel & Gillespie, 2014; Lingel & Golub, 2015). After announcing a stricter enforcement of real name requirements and terminating accounts of several drag queens over their violation of the policy, Facebook came under criticism for jeopardizing the online safety of LGBT people and other minority groups (Kayyali & York, 2014). In response to pressure from activists like Sister Roma, member of the famous San Francisco drag group Sisters of Perpetual Indulgence, Facebook agreed to relax the policy's enforcement (Farrington, 2014). Despite a public apology announcing the relaxation of the policy's enforcement, Facebook did not terminate its real name requirements, instead emphasizing that users only had to use their 'authentic name they use in real life' rather than their 'legal name' (Cox, 2014). Activists soon raised concern that more accounts had been terminated and organized a protest in front of Facebook's Menlo Park headquarters as well as calling on San Francisco's Pride board to ban Facebook from the parade (Wong, 2015). Facebook soon came under more pressure after the Nameless Coalition, consisting of the Electronic Frontier Foundation (2015) and other organizations, released an open letter demanding fundamental changes to the policy. In response, Facebook expressed its commitment to real name requirements, but also announced significant changes, including requiring those reporting a real name violation to provide more details about their claims (Schultz, 2015). While Facebook's refusal to terminate real name requirements has harmful implications for minority individuals' safety and identity expression, this change is not insignificant as flagging mechanisms allowing for only limited human intervention have found to be co-opted for targeting minority groups (Crawford & Gillespie, 2014).

Social media companies emphasize the importance of real name requirements for combating cyberbullying and other forms of harassment. While these issues are critical, real name policies also serve the economic interests of advertising business models that depend upon the collection and disclosure of these data. The registration process for social media usage may not only require disclosure of real name identifiers but also a wide range of metadata such as IP address, location, and device information (DeNardis & Hackl, 2015). Locational data and other information can jeopardize the safety of LGBT people, such as when Egyptian police reportedly used the dating app Grindr to track down gay men. Grindr (2014a) is a location-based dating app allowing users to search for other gay men in their vicinity. Gay activists in Egypt have expressed concern over police using the app to track down members of the LGBT community. After a response by Grindr stating that users could easily turn off locational tracking, activists and news media discussed how easily the app could be used to identify the exact location of users via 'triangulation' of each user's position (Tanriverdi, 2014). Grindr (2014b) announced a change in its locational data collection after activists used online platforms to alert members of the LGBT community:

... Grindr is taking proactive measures to keep users safe in territories with a history of violence against the gay community. Any user who connects to Grindr is [*sic*] these countries will have their distance hidden automatically by default, which include Russia, Egypt, Saudi Arabia, Nigeria, Liberia, Sudan and Zimbabwe. There are many more countries already being protected by this location change, and we will continue to add more to this list.

The relative online anonymity that characterized the early Internet seemed to promise a safe space for LGBT people and other marginalized communities. Repressive governments, however, have adapted quickly to digital platforms and have co-opted these tools to persecute political activists and other vulnerable groups (MacKinnon, 2012). At the same time, the policy frameworks of private intermediaries can play a significant role in mediating the safety of global LGBT communities, making them not only critical aspects of the digital public sphere (DeNardis & Hackl, 2015), but also gatekeepers of minority expression.

The Chick-fil-A LGBT controversy and intellectual property rights online

One of the most complicated areas of Internet governance is intellectual property rights enforcement, whether addressing the sharing of pirated music or movies or blocking online sales of counterfeit pharmaceutical products or luxury goods. Enforcement efforts include the notice and takedown requirements of the Digital Millennium Copyright Act (DMCA) in which information intermediaries have immunity from liability for infringement but are required to take down copyright-infringing content upon request. In other cases, authorities turn to infrastructure-based enforcement such as controversial three-strikes laws that terminate a user's access after multiple violations or the use of the DNS to redirect access from websites violating copyright or trademark laws via domain name seizures. Private intermediaries assume a mediating role both by establishing policy frameworks about intellectual property rights and by responding to government requests to remove infringing content. These intermediaries are not only on the front lines of enforcement, but also push back against some of these requests (Mueller, 2010).

Trademark disputes also arise over domain names. One such LGBT-related trademark conflict arose over a website that parodied the fast food chain Chick-fil-A. The restaurant's president, Dan T. Cathy, had made public statements opposing same-sex marriage and made large contributions to anti-LGBT initiatives (Severson, 2012). In response, LGBT activists used social media platforms like Facebook and Twitter to call for boycotts of the restaurant and called on same-sex couples to participate in a 'kiss-in' at Chick-fil-A locations across the country ('Gay rights activists hold "kiss day"', 2012). Comedians Jason Selvig and Davram Stiefler also set up the chickfilafoundation.com website as a parody of the fast food chain's gay rights positions. The satirical website, for example, offered those willing to give up their 'homosexual lifestyle' a coupon for a free chicken sandwich. Chick-fil-A claimed that the website violated its trademark rights. Under the Uniform Domain Name Dispute-Resolution Policy established within the ICANN regime, the restaurant filed a complaint with an approved domain name trademark dispute-resolution service provider, in this case the World Intellectual Property Organization (WIPO) (WIPO, 2012) Arbitration and Mediation Center.

Chick-fil-A's complaint was ultimately rejected. Representatives of the restaurant chain argued that chickfilafoundation.com violated the Chick-fil-A trademark through similarity in domain name and website design. The complaint argued that the website had been created in 'bad faith' and that the website's statement indicating that chickfilafoundation.com was not associated with the Chick-fil-A trademark was not sufficiently prominent. The defense claimed that the website was intended as a parody of Chick-fil-A and that the creation had not been motivated by economic interests. The comedians also

noted that www.chickfilafoundation.com was easily distinguishable from the Chick-fil-A trademark. While WIPO's panel found chickfilafoundation.com to be 'confusingly similar' to the Chick-fil-A's trademark, the restaurant chain's complaint was rejected as the parody website had not been created in 'bad faith' or to gain commercial profit (WIPO, 2012). While representatives of Chick-fil-A considered the website a violation of the fast food chain's trademark, the defense argued that the parody was intended as an artistic commentary on the same-sex marriage controversy. While WIPO denied Chick-fil-A's complaint, the controversial domain name is no longer accessible. The Chick-fil-A foundation, however, did not completely disappear. For example, the foundation's Youtube account contains satirical videos about conservative and traditional family values.

Domain trademark disputes have long been a policy concern in Internet governance. Because domain names contain alphanumeric content, they involve policy disputes over property and speech. The Chick-fil-A example helps to illustrate both the complexity and public interest implications of these domain name trademarks conflicts and demonstrates how LGBT debates are reflected in the Internet governance realm of architecture-based intellectual property rights.

New strategies for rights mediation

Conflicts over LGBT rights, just like other types of human rights, have materialized across all functional levels of Internet architecture governance. The cases addressed in this paper, while all quite distinct, are tied together by several themes. Most obviously, they help to demonstrate the embedded politics of technical infrastructure and governance. Technical arrangements in areas as diverse as locational metadata or TLD authorizations have profound implications not only for keeping the Internet operational but also for human rights. The cases also demonstrate the central role of the private industry in determining how social conflicts and rights play out and are resolved. Finally, the cases serve as a counterbalance to prevailing narratives about the positive role of the Internet in promoting LGBT rights. Particularly in the global context of culturally diverse views about LGBT rights, Internet points of control have created powerful tools for repressing the identity expression, association, and communicative liberty of LGBT citizens, whether private companies suppressing identity choices within their digital platforms or governments using Internet intermediation points to censor information or track down and arrest LGBT citizens. Content-centric examinations of the role of the Internet in advancing rights must also account for the ways in which Internet control points can both expand and repress rights.

Concern about the nature of human rights online requires attention to the underlying systems of administrative coordination and infrastructure that keep the Internet operational. These points of control lie beneath the more visible layers of content, devices, and applications. As such, there is a great opportunity for scholarly and activist inquiry into LGBT rights that casts attention to more technologically concealed layers of the Internet, rather than merely content and usage issues. As demonstrated by several examples, the advancement of rights requires extending far beneath communication strategies around content and organization into the question of how to create conditions that promote human freedom and expression. Given the place of the private industry in

establishing and maintaining much of the infrastructure underlying online expression, Internet companies should routinely assess how decisions over policy and technological design impact LGBT rights. Finally, public policy attention to human rights online similarly will have increasing opportunities to account for the role of Internet governance functions in mediating minority rights and expression.

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