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INTERNET-TELEVISION, PEER-TO-PEER TECHNOLOGY AND FREE SPEECH: LESSONS FROM WEB 1.0

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I. INTRODUCTION

The functional and technical walls that once separated media outlets such as broadcast, cable, telephony, and the Internet are beginning to crumble. This Article will discuss the trend toward such convergence and specifically focus on the prospects of Internet protocol-based television services (IPTV). One particular Internet television platform, Joost, has recently grabbed headlines and has been widely touted for its claimed ability to one day provide unlimited content to consumers for free. Hence, Joost could serve to greatly increase the range of not only entertainment content but also the amount of public issue-oriented and minority viewpoint content. As public issue and minority viewpoint content often cannot effectively compete for access in the current television market structure, Joost, or a similar IPTV platform, potentially presents a distribution outlet where such programming is not marginalized by larger content providers.

This potential for unlimited programming is due in large part to Joost's platform design architecture – a distribution network that gains efficiency and capacity as the number of network users increases. This phenomenon is often referred to as a "positive network effect," that is, as a network grows in size, the value of the network to each individual user increases. However, and somewhat paradoxically, this very same architecture is also subject to "negative network effects." Negative network effects can potentially be exploited by those in control of a networked market through means described later in this Article. This may lead to a scenario in the IPTV market in which content providers that cannot gain access to the dominant IPTV platform have no viable competing IPTV platform as an alternative.

This Article explores the possibility of whether an Internet television platform such as Joost can truly revolutionize the means by which public issue and minority viewpoint programming is distributed and debated, thereby promoting a greater variety and quantity of issue-oriented speech. Concurrently, this Article also considers whether government regulation to compel diverse speech (that is, requiring a media outlet to disseminate particular content) on such a platform is warranted to prevent potential negative network effects which may limit speech. To this end, this Article suggests that the current inter-media regulatory model will be of little value in resolving the issue of content diversity if policymakers attempt to simply equate IPTV with one of the established content media and its related medium-specific regulatory regime. Rather, the propriety of any such regulation, as applied to IPTV, will require policymakers to examine the totality of – and frequently competing – free speech values embodied within all current medium-specific models to determine which of these values should direct policy.

This conclusion is reached through an examination of current legal rationales across media with respect to compelled speech and how they can potentially be applied to IPTV.

Part I of this Article presents a discussion of convergence, Internet television generally, and Joost specifically. Part II describes the phenomenon of network effects in technical markets and how networked markets can run afoul of antitrust law as evidenced by the landmark litigation involving Microsoft and the development and implementation of its web browser, Internet Explorer. Part II concludes with how network effects can potentially operate within the Joost business model to both promote and stifle speech. Finally, Part III discusses how compelled speech laws have been applied across media and also discusses specific Federal Communications Commission (FCC) initiatives designed to promote diverse speech on the public airwaves and within the cable industry. The Article concludes by discussing the propriety and applicability of existing inter-media regulatory policy to emerging IPTV technology.

II. MEDIA CONVERGENCE AND THE MOVEMENT TOWARD INTERNET-BASED TELEVISION DELIVERY PLATFORMS

A. *Convergence and the Deregulation of the Telecommunications Industry*

The notion of "media convergence" is sometimes a nebulous concept, as it is often unclear exactly what is meant by the term. To be sure, within the mass communications field, the phrase encompasses distinct, albeit often interrelated, definitions, which are primarily derivative of that particular aspect of the industry said to be "converging." The potential ambiguity of such a context-specific concept has not gone unnoticed by scholars.

Professor Gracie Lawson-Borders observes, for example, that convergence has been defined broadly as "the strategic, operational, product and cultural union of print, audio, video and interactive digital information services and organizations."[1] From a media-specific "journalism perspective," however, Professor Lawson-Borders notes that convergence has been defined as "the practice of sharing and cross-promoting content from a variety of media, some interactive, through newsroom collaborations and partnerships."[2] Other meanings of

1. GRACIE LAWSON-BORDERS, MEDIA ORGANIZATIONS AND CONVERGENCE: CASE STUDIES OF MEDIA CONVERGENCE PIONEERS 3-4 (2006).

2. *Id.* at 3. After surveying other varying definitions of the term, Lawson-Borders offers

convergence have emphasized (1) the consolidating nature of the media industry and inter-media cross-ownership;[3] (2) media delivery and distribution architectures;[4] and (3) the end-user's perspective, that is, the simple melding of two forms of previously separate consumer media.[5] Examples of the above would include media companies owning multiple outlets in both print and broadcast and developing distribution systems, such as streaming Internet video websites that provide content that was traditionally viewed through television sets.

While much of the recent focus on convergence, however defined, centers around broadband Internet delivery service capabilities, the idea of a converging media and its legal implications is, in relative terms, not a new phenomenon. Indeed, Professor Ithiel de Sola Pool observed that statements made in 1980 by the FCC chairman, querying whether a newspaper delivered by teletext-a communication system that can transmit text messages to television sets equipped with specialized decoders-would constitute a "broadcast" for regulatory purposes.[6] This prospect "sent a shiver through print journalists" and pointedly highlighted the potential expanding scope of government regulation over converging media.[7]

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her own additional definition of "convergence" as the "realm of possibilities when cooperation occurs between print and broadcast for the delivery of multimedia content through the use of computers and the Internet." *Id.* at 4.

3. *See* ITHIEL DE SOLA POOL, TECHNOLOGIES OF FREEDOM 23 (1983). Pool characterizes this shift as a "convergence of modes" where a single transmission conduit could offer multiple services, and such services could be provided by multiple media outlets once considered unique to their respective traditional media businesses. *Id.* Pool argues that such "[t]echnology-driven convergence of modes is reinforced by the economic process of cross-ownership" and that the "growth of conglomerates which participate in many business at once means that newspapers, magazine publishers, and book publishers increasingly own or are owned by, companies that also operate in other fields." *Id.* at 23-24. *See also* Tony Kern, *Convergence Makes a Comeback*, BROADCASTING & CABLE, Dec. 5, 2005, at 32 (defining convergence as the "combination of two previously discrete business lines, products or services that result in a new alliance, value chain or economic model that generates value, often changing the structure of existing industries").

4. *See* Michael O. Wirth, *Broadband Convergence: Future Directions and Societal Impacts*, 8 INT'L J. MEDIA MGMT. 19, 19-20 (2006) (noting that convergence has "implie[d] the creation of a common distribution network that will replace previously discrete telephone, television, and personal computing networks, and will transform the distribution of many other products and services" and defining a "converged broadband network" as a "network capable of delivering all types of information (i.e., voice, video, and data) over multiple channels using different frequencies at a minimum speed (i.e., bandwidth) of 1.544 Mbps); Gary Audin, *Architectures for Convergence*, A SUPPLEMENT TO BUS. COMMS. REV., Oct. 2004, at 4 (defining convergence as "one structure, one architecture to support all forms of information media on all forms of network technology").

5. *See* LAWSON-BORDERS, *supra* note 1, at 3 (noting that convergence has also been defined as "marrying the slick format of television to the almost infinite information-providing capacity of the Internet").

6. *See* POOL, *supra* note 3, at 1.

7. *Id.*

Twenty-seven years later, the current "converged" media landscape has largely been forged and facilitated by the Telecommunications Act of 1996 (TCA).[8] The TCA significantly relaxed horizontal and vertical ownership restrictions and also dismantled previous barriers to cross-media competition, which prevented firms from providing differing media services. Today, cable operators often provide bundled television, broadband cable Internet, and Internet-based local and long distance telephone[9] packages to their subscribers. Similarly, telephone companies bundle their own local and long distance services with broadband Internet services through digital subscriber lines (DSL) and are also increasingly beginning to package video that competes with cable and direct broadcast satellite (DBS). The FCC Chairman's 1980 regulatory query regarding a relatively simple "converged" technology-teletext communication-is as salient now as ever. Indeed, as technologies advance and convergence moves forward at an increasing rate, the issues of regulatory control and propriety over media outlets become increasingly complex and pressing.

B. *Trending Toward Internet-based Television: IPTV and Joost*

Enter the age of the converged television and IPTV. In the broadest sense, IPTV is any service that provides the "distribution of television programming over the Internet or other network through the use of Internet protocol packet switching."[10] One of the advantages of the IPTV architecture is that it allows the user to select the specific program he or she intends to view, and the platform transmits only the particular content currently being viewed. Such an end-user controlled interactive approach could, in theory, allow for unlimited channel capacity and thus the opportunity for diverse and highly specialized programming.[11]

In contrast, the variety of cable and satellite programming is constrained by aggregated capacity limitations because their architectures simultaneously transmit all channel signals regardless of whether the channel is actually being viewed by the customer.[12] The

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8. Telecommunications Act of 1996, Pub. L. No. 104-104, 110 Stat. 56 (codified in various sections of the Communications Act of 1934, 47 U.S.C. §§ 151-614), *available at* http://www.fcc.gov/Reports/tcom1996.pdf. *See also* THOMAS F. BALDWIN ET AL., CONVERGENCE: INTEGRATING MEDIA, INFORMATION, AND COMMUNICATION 1 (1996) (labeling the Telecom Act of 96 as creating a communications services competition "digital free-for-all"). The authors further discuss the potential implications of a deregulated communications marketplace. *Id.* at 298.

9. Such services are commonly referred to as "Voice over Internet Protocol," or "VoIP."

10. COMMUNICATION TECHNOLOGY UPDATE 366 (August E. Grant & Jennifer H. Meadows eds., 10th ed. 2006).

11. *See* Ari Bensinger, *IPTV: Big Potential – But When?*, BUS. WK. ONLINE, Oct. 4, 2005, http://www.businessweek.com/ investor/content/oct2005/pi2005104_1227_pi044.htm.

12. *See id.*; *see also* John R. Quain, *I Want My IPTV. Look Out, Satellite and Cable:*

telephony industry has shown particular interest in developing IPTV on its infrastructure as a means to compete with cable and satellite[13] in the video content market and achieve its own media "triple play" of data, video and voice services.[14] In turn, the cable industry has already entered into the telephony market with the development of voice-over Internet protocol (VoIP) services.

While telephony initiatives have received much of the recent attention in the development and deployment of IPTV, numerous IPTV services unaffiliated with the major cable and telephony firms are being developed and are accessed directly through their own Internet websites. These websites provide downloadable IPTV software interfaces that the consumer uses to operate the IPTV service or simply operate directly over the Internet without the need to download any software. Joost, and other web-based IPTV platforms,[15] transmit data

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Broadband TV is Here, U.S. NEWS & WORLD REP., Oct. 3, 2005, *available at* http://www.usnews.com/usnews/ culture/articles/051003/3tech.div.htm (noting the potential for a "virtually limitless number of stations").

13. *See* Ed Gubbins, *IPTV in a Bottle*, TELEPHONY, July 2006, *available at* http://telephonyonline.com/mag/telecom_iptv_ bottle/. Valley Telephone Cooperative, a south Texas telephony firm, planned to launch IPTV service to seventeen local telephone exchanges aimed at competing in rural markets where cable is unavailable and satellite services dominate the video market. *Id.*

14. *See* Bensinger, *supra* note 11; *see also* Vince Vittore, *IPTV Era Begins to Take Shape*, TELEPHONY, Jan. 23, 2006, *available at* http://telephonyonline.com/iptv/news/telecom_ iptv_era_begins/ (discussing Verizon Communications' IPTV offering, FiOS TV, a customizable video-on-demand service coupled with a gaming network). This same article also highlights AT&T's IPTV initiative, the video-on-demand service, U-verse. *Id.* Despite widespread IPTV development projects, IPTV is not without its critics and such critics, include the telephony industry itself. *See* Ed Gubbins, *Experts Tout IPTV But Advise Caution*, TELEPHONY, June 26, 2006. While there is optimism that telephony IPTV can capture up to 20% of the residential video market, some have urged caution to refrain from debuting services laden with too many features. *Id.*; *see also* Carol Wilson, *IPTV Ready 10 to 'Think Big, Start Small, Move Fast,'* TELEPHONY, May 8, 2006. The strategy rather is to ease consumers in the transition from traditional passive viewing television entertainment toward the more interactive experience IPTV offers. *See* Wilson, *supra*. Additionally, firms fear the higher costs associated with a premium service will deter consumers from subscribing. *See* Gubbins, *supra*; Wilson, *supra*. FiOS TV and U-verse are just two of many similar IPTV services being developed across the United States and around the world. Tvover.net, IPTV Providers, http://www.tvover.net/ serviceprovider.aspx (last visited May 28, 2009). For a listing of various telephony IPTV services currently being offered, see *id.* Despite the recent growth of telephony IPTV services, some have questioned telephony's technical capability to provide quality video programming on its existing infrastructure and have observed that the industry is in the process of upgrading its facilities to meet necessary data transmission speeds. *See* Bensinger, *supra* note 11.

15. For a discussion of other current web-based IPTV platforms, see Josh Catone, *Internet Killed The Television Star: Reviews of Joost, Babelgum, Zattoo, and More*, ReadWriteWeb, Mar. 6, 2007, at http://www.readwriteweb.com/archives/internet_killed_the_television_star_ joost_babelgum_zattoo.php (discussing other current web-based IPTV platforms). *See also* Brad Stone, *Internet Start-Up to Take A Hybrid Media Approach*, N.Y. TIMES, Mar. 8, 2007, at C3 (discussing Next New Networks, an IPTV company comprised of former media executives from networks such as Nickelodeon and MTV, envisioned to provide specialized niche video-on-demand programming). Additional competing websites that have entered the IPTV market since

over any particular broadband connection such as cable and DSL utilizing whatever broadband medium to which the consumer subscribes to in order to deliver content to the consumer's computer. Hence, Joost envisions itself to be a distinct competitor to cable and telephony video services.[16]

Joost,[17] originally known as the "Venice Project," is the brainchild of Janus Friis and Niklas Zennström, previous developers of the popular Internet-based VoIP service Skype and the popular, and litigation-embroiled, file-sharing network Kazaa.[18] Joost aims to provide free[19]

Joost include Hulu.com and YouTube. Hulu is a partnership between NBC Universal and News Corp. to provide television shows produced by Fox Television networks and NBC as well as Universal and Twentieth Century Fox movies. *See* Brad Stone, *Hulu Readies Its Online TV, Dodging the Insults*, N.Y. TIMES, Oct. 29, 2007, at C1. Media giant Google also recently reached a deal with CBS whereby its video service YouTube will also begin providing full-length television episodes from series such as Star Trek, Dexter, and Beverly Hills 90210. *See* Brian Stelter, *YouTube to Offer TV Shows with Ads Strewn Through*, N.Y. TIMES, Oct. 11, 2008, at B2.

16. *See* Jeremy W. Peters, *Internet Renegades Go by the Book*, N.Y. TIMES, Feb. 27, 2007, at C3. Media analysts have observed that Joost is not in competition with services such as YouTube, which allows users to upload video (either self-produced or clips of others' content), but with cable television. *Id.* Joost co-creater Janus Friis states that "It's not Web video; it's TV." *Id.* Joost content will be authorized by Joost itself, along with its content providers. What is not addressed in this article is, of course, the current debate over "network neutrality" and how it may play a large role in the ultimate success of Joost's business model. *See generally* John P. Mello, Jr., *Internet TV: A Million Channels, Zero Cable Networks*, E-COMMERCE TIMES, Jan. 10, 2007, http://www.ecommercetimes.com/story/ 54998.html. The owners of the cable and telephony transmission infrastructure would likely resist allowing a legitimate web-based competitor to utilize their broadband delivery networks. Network neutrality advocates (e.g., Joost, as well as content producers who would be able to bypass cable and telephony companies and have direct access to consumers) would seek, among other things, to prevent the owners of the delivery networks from discriminating against particular content flows (via outright blockage or downgrading the delivery speed of content) over their networks. *Id.* However, such positions, based purely on monetary considerations, are often not overtly cited by the opposing parties. *See id.*

17. Individuals could once sign up to participate in open beta version testing at Joost's homepage, http://www.joost.com. As of late February 2007 approximately 20,000 people were taking part in Joost beta testing. *See* Jeremy W. Peters, *Viacom Deal Will Allow Its TV Clips On Internet*, N.Y. TIMES, Feb. 21, 2007, at C8. Joost services are currently available for download to all.

18. *See* Spencer Reiss, *Here Comes Trouble*, WIRED, Feb. 2007, at 94-97. The duo sold Skype to eBay in 2005 for $2.6 billion. *Id.* Kazaa, at its popularity peak (in 2001 before copyright infringement lawsuits were filed against it, resulting in a $115 million settlement with the movie and music industries), was managing 3 million downloads per month. *Id.* Press accounts vary as to whether the settlement figure was $115 million or $125 million. *See, e.g.*, Eric Pfanner, *Record and Movie Industries Reach a Settlement With Kazaa*, N.Y. TIMES, July 28, 2006, at C3 (stating that the lawsuits were settled for $115 million). More recent sources have stated that the claims were settled for $125 million. *See* Jeremy W. Peters, *Internet Renegades Go by the Book*, N.Y. TIMES, Feb. 27, 2007, at C3.

19. *See* Reiss, *supra* note 18, at 97. Revenues are anticipated to flow exclusively from advertising. *Id.* The Joost business model posits that the ability to provide individualized and specialized niche programming in turn allows for highly focused and targeted advertising opportunities. *Id.* Joost architecture is anticipated to contain a "backend ad engine" that can

television-quality video from major media content providers over the Internet with essentially infinite channel capacity and content choice.[20] To this end, Joost has announced deals with major outlets such as CBS[21] and Viacom to provide certain content over its platform.[22]

For example, Viacom provided content from popular television network holdings such as MTV, VH1, Comedy Central, BET, and SpikeTV, as well as full-length movies from its Paramount Pictures division.[23] In addition, Joost has secured content licensing agreements from such major media outlets as Warner Music and the National Geographic Channel.[24] Further, Joost also reportedly partnered with JumpTV, the world's largest distributor of international television station programming.[25] Programming customization and social

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locate viewers by "location, time of day, viewing habits, and opt-in profile information to serve up a perfect ad." *Id.* at 99. Joost's head of product development, Henrik Werdelin, believes that such capabilities "offer targeting they've never dreamed about in the TV world and a deeper relationship with customers. Not just deeper than TV, but deeper than most of what you get on the Net. I don't think anyone really knows what those things are worth." *Id.* For specific examples of how targeted marketing could be employed within the Joost architecture, see Jeremy Caplan, *50,000 TV Channels! The Skype Guys Strike Again*, TIME, Mar. 1, 2007, *available at* http://www.time.com/time/ magazine/article/0,9171,1595254,00.html. Joost has announced advertising partnerships with thirty firms including, among others, Microsoft, Sony Electronics, United Airlines, Intel, Taco Bell, and the U.S. Army. *See* Eric Pfanner, *This Internet TV Program Is Brought to You by . . .*, N.Y. TIMES, Apr. 26, 2007, at C11. Such advertisers have reportedly agreed to a "three-month trial period" at a cost of $50,000 for advertisements appearing only in the United States and $100,000 for global advertisements. *See id.*

20. *See* Reiss, *supra* note 18, at 94-96.

21. *See* Ken Fisher, *Joost Scores First Deal With Major Broadcaster*, CBS, Apr. 12, 2007, *available at* http://arstechnica. com/old/content/2007/04/joost-scores-first-major-broadcast-deal-with-cbs.ars; *see also* Andy Fixmer & Leon Lazaroff, *Web Firms to Distribute CBS Shows on Internet*, WASH. POST, Apr. 13, 2007, at D03.

22. *See* Peters, *supra* note 17. While the exact terms of the deal were not disclosed, Viacom in part agreed to the deal with assurances that the content provided will be insulated from copyright infringement – a concern that prompted Viacom to recently demand that YouTube remove over 100,000 clips of claimed copyright-protected programming appearing on its website. *Id.* The deal also appears to be non-exclusive as Viacom's Chief Executive, Phillippe P. Dauman, was quoted in the above article as stating, "We have never been averse to entering into transactions with anyone who will respect the value of copyright. We're always open to partners." *Id.* Finally, although undisclosed, media experts believe an advertising revenue split that favors Viacom 65-35 would seem "reasonable." *See also* Catherine Holahan, *Viacom Juices Joost: A deal by the media conglomerate to license shows to the online video service is a "shot across the YouTube bow,"* BUSINESSWEEK ONLINE, Feb. 21, 2007, *available at* http://www.businessweek.com/technology/content/ feb2007/tc20070221_566348.htm (reporting that media analysts speculate that Viacom could receive as much as a two-thirds share of its advertising revenue stream).

23. *See* Peters, *supra* note 17.

24. *See id.* For a complete current listing of all content anticipated to be available through Joost, see Matthew McInerney, *Joost Channels*, Mar. 3, 2007, http://pixelspread.com/blog/90/ joost-channels.

25. *See* Caplan, *supra* note 19. JumpTV owns distribution rights for approximately 270 international television stations based in 70 countries. *Id.* The Joost content will reportedly

networking chat features have also been built into the platform.[26] Joost software allows consumers to create their own personalized "smart channels" and incorporates online social networking features such as buddy lists, instant messaging, and program rating/sharing options between users.[27]

What is architecturally unique about Joost as an IPTV platform, and why this Article analyzes Joost as opposed to alternative platforms, is that it will utilize peer-to-peer (P2P) delivery technology similar to, but distinct from, that employed in Kazaa and other popular file-sharing software. The advantage of P2P networks in delivering content is that the architecture uses the nodes and pathways of all computers linked to the system to transfer content.[28] Therefore, while a user is downloading a particular file to his or her computer, cached bits of the same file (or cached bits of other files currently being downloaded on the network) are being uploaded to others who are also downloading the same file. In this way, all computers on the pathway network are used to simultaneously transfer discrete packets of a file to all other computers requesting the same file. Once received, these file packets are then reassembled in the correct order for viewing. This delivery method distributes bandwidth load throughout the entire network rather than forcing all transfer activity through a central server or routing node, thus alleviating the potential for a bandwidth bottleneck.

Therefore, "a peer-to-peer network actually gains efficiency when a howling mob of would-be viewers suddenly logs in, creating exponentially more paths for data to follow."[29] As high-resolution, full-length video files can be a significant drain on limited bandwidth resources, P2P is a highly desirable delivery method to ease network congestion. The Joost delivery architecture is not a pure P2P network because it will not be wholly decentralized. It has been termed a "hybrid" P2P system because it also employs large capacity servers for long-term storage.[30] Such servers will operate as injection points for

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initially consist of prerecorded Spanish and Arabic programming from Latin America and the Middle East. *Id.* JumpTV also intends to eventually provide live television station feeds from around the world, further moving Joost from a video-on-demand type service toward a more traditional television viewing experience. *Id.*

26. *See* Reiss, *supra* note 18, at 96.

27. *See* Reiss, *supra* note 18, at 96.

28. While all P2P networks share similar properties in terms of some form of decentralized transfer protocols, there are numerous variants of P2P networks. For a discussion of the various types of P2P networks, see generally Stephanos Androutsellis-Theotokis & Diomidis Spinellis, *A Survey of Peer-to-Peer Distribution Technologies*, 36 ACM COMPUTING SERV. 335 (2004). *See also* IAN J. TAYLOR, FROM P2P TO WEB SERVICES AND GRIDS 23-41 (2005).

29. *See* Reiss, *supra* note 18, at 97. This type of interconnected network synergy, often referred to as positive "network effects," is discussed in the following section.

30. *See id.* at 98.

new content. They will also house less popular programming, which may not be as widely accessible through the peer network.[31]

III. NETWORK EFFECTS: FREE SPEECH PARALLELS FROM ANTITRUST LAW

A. *Network Effects and the Case Against Microsoft*

Economists Michael Katz and Carl Shapiro have described positive network effect externalities as the increasing utility a consumer derives from a good as additional consumers consume the same good.[32] More simply, a "positive network effect is a phenomenon by which the attractiveness of a product increases with the number of people using it."[33] Within the telecommunications and technology sphere, examples of positive network effects abound. Direct positive network effects are derived from communication technologies such as the telephone and facsimile machine, wherein one's consumption value increases as the number of users on the network increases.[34] In the context of telephone and facsimile technologies, the network's value increases for the individual user as additional users connect because one can now use the network to communicate with a greater number of people. Similarly, computer hardware devices can exhibit network effects as the variety of software available on a given platform can be expressed as a positive function of the total number of hardware devices in use.[35]

As with computer hardware, computer software operating systems (e.g., Microsoft Windows) also produce network effects. "Software products are complimentary goods to an operating system and have high fixed costs and low marginal costs of production."[36] As the amount of software for a particular operating system increases, more consumers are apt to select that particular operating system.[37] This in turn encourages more software developers to write programs for that

31. *See id.* The company anticipates using streaming servers large enough to hold 40 terabytes of programming – roughly equivalent to 80,000 hours of half-hour television episodes – for long-tail storage. *Id.*

32. *See* Michael L. Katz & Carl Shapiro, *Network Externalities, Competition and Compatibility*, 75 AM. ECON. REV. 424, 424 (1985).

33. United States v. Microsoft Corp., 84 F. Supp. 2d 9, 20 (D.D.C. 1999); *see also* Eric Fisher, *Antitrust, in* CHASING MOORE'S LAW: INFORMATION TECHNOLOGY POLICY IN THE UNITED STATES 231, 232 (William Aspray ed., 2004).

34. *See* Katz & Shapiro, *supra* note 32, at 424.

35. *See id.*

36. Max Schanzenbach, *Network Effects and Antitrust Law: Predation, Affirmative Defenses, and the Case of* U.S. v. Microsoft, 2002 STAN. TECH. L. REV. 4, 8 (2002).

37. *See id.*

operating system as the high fixed costs can be spread out among more consumers.[38]

Just as there are positive network effects, so too exist negative network effects. The following four negative economic network effects are discussed herein, as they are of particular importance to the free speech parallels drawn in this Article's thesis: (1) first-mover advantage; (2) tipping; (3) lock-in; and (4) foreclosing essential facilities.

Where no previous network exists, "first-movers," that is, those firms that are first to enter into an emerging market, have a distinct advantage over subsequent market players. Such advantages include not having to overcome existing entry barriers, the lack of consumer switching costs to the network, and the fact that it will initially have the greatest number of users (thereby having a better chance of experiencing the positive network effects discussed previously).[39] Once an initial level of positive network effects is achieved, the market "tips" in favor of the dominant network. "Tipping" may result as one network obtains such a large market share that competing networks, even if preferred by certain individuals, can never achieve the required level of users in order to be a viable competitor.[40]

"Lock-in" occurs when one network has become so dominant that the individual benefits of remaining on such a network outweigh the costs of switching to a preferred alternative.[41] Even if switching costs are individually minimal, the costs of convincing a large number of network users to switch will likely be high and increase as a function of network size.[42]

The potential consequences of the negative network effects described above are obvious. Inferior or less-desirable networks can emerge and maintain dominance despite perhaps even a universal agreement that a preferred alternative exists.[43] Furthermore, the owner of a network who is aware that such negative network effects are present may have incentive to act anti-competitively and exploit its dominant position.[44]

A final consequence of negative network effects occur when a dominant network becomes so pervasive that it is viewed as an "essential facility" where a competitor needs access to the infrastructure

38. *See id.* Schanzenbach notes that this cycle is often referred to as a "positive feedback loop." *Id.* (citing *Microsoft*, 84 F. Supp. 2d ¶ 39).

39. *See id.* at 25.

40. *See id.* at 26 (citing Mark A. Lemley & David McGowan, *Legal Implications of Network Economic Effects*, 86 CAL. L. REV. 481, 495-500 (1998)).

41. *See id.* at 28.

42. *See id.*

43. *See id.* at 26-28.

44. *See id.* at 26-31.

or platform owned by the dominant firm to effectively participate in the market.[45] While some argue that a rational player who owns an "essential facility" should allow competitors access at super-competitive prices, it may be in one's long-term interest to exclude a rival instead.[46] Hence, at the expense of short-term monopoly profits, foreclosing access to a computer network or software operating system could prevent future market share encroachment and allow the dominant firm to maintain its hold on the market.[47]

The landmark antitrust case discussing how network effects can be utilized to perpetuate dominance in a technology market is *United States v. Microsoft Corporation*.[48] In bringing suit, the government alleged that Microsoft violated sections 1 and 2 of the Sherman Antitrust Act in an attempt to protect its standing as the dominant firm in the computer operating systems market.[49] Microsoft perceived the two main threats to its Windows operating system to be Netscape, developer of the "Navigator" web browser, and Sun Microsystems, developer of a programming language called Java, as both contained specialized software that could potentially obviate the need to use Windows as an operating system.[50]

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45. *See id.* at 39-40 (citing U.S. v. Terminal Railroad Ass'n of St. Louis, 224 U.S. 383 (1912) (discussing the essential facilities doctrine in relation to a transportation competitor's access to railway infrastructure owned by a rival firm)).

46. *See id.* at 40 (citing David Reiffen & Andrew N. Kleit, *Terminal Railroad Revisited: Foreclosure of an Essential Facility or Simple Horizontal Monopoly?*, 33 J.L. & ECON. 419, 420 (1990)).

47. *See id.* at 42 (citing Michael L. Katz & Carl Shapiro, *Antitrust in Software Markets, in* COMPETITION, INNOVATION AND THE MICROSOFT MONOPOLY: ANTITRUST IN THE DIGITAL MARKETPLACE, 65, 70, 78 (Jeffrey A. Eisenach & Thomas M. Lenard eds., 1999)).

48. 87 F. Supp. 2d 30 (D.D.C. 2000), *aff'd in part and rev'd in part*, 253 F.3d 34 (D.C. Cir. 2001).

49. *See id.* at 35. Section 1 of the Sherman Antitrust Act prohibits "[e]very contract, combination in the form of trust or otherwise, or conspiracy, in restraint of trade or commerce. . . ." 15 U.S.C. § 1 (2007). Section 2 of the Act states "[e]very person who shall monopolize, or attempt to monopolize, or combine or conspire with any other person or persons, to monopolize any part of the trade or commerce among the several States, or with foreign nations, shall be deemed guilty of a felony. . . ." 15 U.S.C. § 2 (2007).

50. A summary giving a thorough explanation of the perceived threats to Microsoft's dominance in the operating systems market and the alleged actions taken in response is provided here. *See* Schanzenbach, *supra* note 36, at 76-85. Essentially, Microsoft's Windows operating system provides support for certain code known as application program interfaces (APIs), which exist to facilitate coding new software. *See id.* at 77. APIs are standard lines of code that can be incorporated within any software designed to run on Windows to perform basic actions, thus eliminating the need to create new code to execute general tasks. *See id.* Both Netscape and Java, however, also developed APIs that programmers could utilize to create programs that run using their respective APIs regardless of what underlying operating system is installed. *See id.* at 80. This potentially threatened Microsoft's place in the operating system market because, as Netscape and Java became more popular, programs using Netscape and Java APIs could one day be run through any underlying operating system. *See id.*

To combat these threats, Microsoft took a host of actions that effectively forced consumers to use its web browser, Internet Explorer (IE), restricted consumer access to Netscape, and inhibited the functionality of Java, all of which, in conjunction with its market power, the government argued, amounted to an antitrust violation.[51] Microsoft's actions had their desired effect because it had market power in a highly-networked asset that most consumers used. In addition, by restricting how competing products interacted with Microsoft Windows, it could limit consumer use of and exposure to such products, preventing them from ever gaining widespread consumer acceptance. This also discouraged developers from writing software using competing operating system platforms, further contributing to a competitor's downfall.

While the economic and legal issues in the case were numerous, the court, in trying to determine whether Microsoft had engaged in monopolistic behavior by tying IE to Windows, questioned whether the positive consumer benefits derived from network efficiencies required a

51. With respect to the perceived Netscape threat, these actions included developing its own web browser, Internet Explorer (IE), and tying the browser to Windows. *See* United States v. Microsoft Corp., 253 F.3d 34, 64-65 (D.C. Cir. 2001). To maximize IE's visibility and limit the use of Netscape, Microsoft entered into licensing agreements with original equipment manufacturers (OEMs), which prevented them from: (1) removing IE desktop icons, folders or "Start Menu" inserts; (2) altering the Windows startup boot sequence; and (3) in any way altering the appearance of the windows desktop. *Id.* at 60-61. The first and third restrictions effectively eliminated a rival browser's chance to be included on a computer as the desktop could not be altered to include Netscape icons. *See id.* at 61-62. Even if it could be altered, it was found that doing so would significantly increase an OEMs' support costs as redundancy of functions would lead to consumer confusion. *See id.* This confusion, which would result in increased customer service costs, simply made it too costly for OEMs to install rival browsers. *See id.* Prohibiting modifications to the boot sequence restricted the OEMs' prior practice of inserting Internet sign-up promotions within which Netscape was often promoted as the preferred browsing tool. *See id.* at 62-63. Microsoft also made it difficult for consumers to erase IE from their systems, e.g., not including it as an option in the "add/remove programs" utility, and integrating IE code with other necessary code so that the system would be crippled if IE was deleted. *See id.* at 64-65. Microsoft also set IE as the default browser to launch even though a consumer may not have wanted it to do so. *Id.* Microsoft also reached out to numerous outside firms, including AOL, to exclusively promote IE. *See id.* at 68. It also entered into a deal with Apple Computers to have IE installed on Apple operating systems. *See id.* at 71. Apple's switch from Netscape to IE was suspected to be a result of Microsoft's threat to no longer license its "Mac Office" software to Apple. *See id.* at 71-74. In the case of Sun Microsystems, the government contended that Microsoft developed its own Java-compatible program that allowed Java applications to run faster on Windows than if using Sun Microsystems's Java program. *See id.* at 74. However, an application using the Microsoft Java program could not be run using Sun Microsystem's Java program and vice versa. *See id.* Microsoft then entered into agreements with software vendors to exclusively use its Java program. *See id.* at 75. Microsoft also deceived many software developers by convincing them to use certain Java software development tools which, despite Microsoft assurances that their usage would result in an application that would run on both Microsoft and Java platforms, ultimately rendered such applications executable only on Microsoft's system. *See id.* at 76. Internal Microsoft documents confirm that it was the intent all along to deceive software developers in this regard. *Id.* at 76.

reexamination of whether such behavior in a networked market justified findings of *per se* antitrust violations.[52] "[B]ecause of the pervasively innovative character of platform software markets, tying in such markets may produce efficiencies that courts have not previously factored into the per se rule as originally conceived."[53]

The issues of whether or not Microsoft ultimately violated the law and how network effects should factor into antitrust analysis have been the focus of much scholarly debate,[54] but are not the primary focus here. What is presently important to this Article is how the case illustrates the duality of network effects in action in a computer operating system software platform whose use is virtually ubiquitous in modern-day life despite the existence of numerous alternative operating systems.[55] The networked market dominated by a single firm can produce consumer benefit through lower costs, increased connectivity among computers, and software and file interoperability among computers. This type of market, however, allows the dominant player to engage in negative behaviors such as tipping, fosters consumer lock-in, and potentially allows the dominant firm to stifle competition by refusing meaningful access to its platform. As the *Microsoft* court noted, "[o]nce a product or standard achieves wide acceptance [in a networked market], it becomes more or less entrenched. Competition in such industries is 'for the field' rather than 'within the field.'"[56]

B. *Parallels in a Networked Media Content Distribution Architecture*

The Joost architecture depends on the positive network effects derivative of P2P technology to: (1) efficiently transmit video programming that requires a relatively large bandwidth allocation; and (2) theoretically provide an unlimited amount of content to the user. Additionally, positive network effects are also inherent in the social networking aspects of the platform. That is, as more of one's friends and family connect to the network, greater individual utility is achieved through Joost's messaging and content sharing capabilities. Finally, the greater number of users on the network leads to greater incentive for content providers (and advertisers) to gain access to the platform and

52. *Id.* at 94.

53. *Id.* at 93. "For example, the bundling of a browser with OSs enables an independent software developer to count on the presence of the browser's APIs, if any, on consumers' machines and thus to omit them from its own package." *Id.* Such cost savings would increase as the size of the network increases.

54. *See, e.g.*, William Kolasky, *Network Effects: A Contrarian View*, 7 GEO. MASON. L. REV. 577, 584 (1999).

55. Such operating systems include, for example, Unix, Linux /Ubuntu and Mac Os X.

56. *See Microsoft*, 253 F.3d at 49 (citing Harold Demsetz, *Why Regulate Utilities*?, 11 J.L. & ECON. 55, 57 n.7 (1968)) (emphasis omitted).

create compatible programming, thus creating a cycle of exponential content growth. This cycle has been referred to as a positive feedback loop.[57]

These are indeed exciting and welcomed prospects. Joost, or a similar platform, could be the forerunner of a new media IPTV revolution much the same way cable television forever transformed the multi-channel video delivery landscape beginning in the 1970s. The birth of niche programming, which would otherwise not be a commercially viable venture, becomes a more likely possibility. Not only does this bode well for people interested in such specialized topics as classic car restoration or Australian rugby leagues, but also for those seeking to utilize Joost as a vehicle for social, political and educational promotion and awareness.

Political and social movements that cannot now effectively penetrate the speech market and, hence operate on the margins of mainstream media, could potentially have the same kind of message penetration, in terms of accessibility, as more traditional messages. Public broadcasting outlets could increase the amount and variety of their educational programming. Third-party political and minority social agendas could reach wider audiences. In short, technologies like Joost could potentially broaden the total amount of readily available educational and issue-oriented speech, which some scholars have argued is essential for the enduring success of a self-governing society.[58] Further, such technology could serve to prevent what some scholars have recognized as a potential threat to deliberative democracy: the growing fragmentation of society and shrinking of a common societal homogeny, which isolates people from diverse viewpoints.[59] These changes would undoubtedly be welcomed changes by many.

However, in light of the potential negative network effects that can result from such "first-movers," the wells of possibility that have thus far been widely trumpeted by the media, as well as Joost creators Friis and Zennström, may not ultimately run as deep as they appear to at first glance. As noted earlier, first-movers have a distinct advantage in being the first networks to achieve positive network effects which can tip the market in their favor. A user's switching costs to competing platforms can deter one from making the switch, thereby frustrating the ability of such platforms to generate positive network effects and become truly

57. *See* Schazenbach, *supra* note 36 and accompanying text.

58. For a discussion of free speech and popular sovereignty, see generally ALEXANDER MEIKLEJOHN, FREE SPEECH AND ITS RELATION TO SELF-GOVERNMENT (1948).

59. *See, e.g.*, Cass Sunstein, *The Future of Speech*, *in* ETERNALLY VIGILANT, 285-310 (Lee Bollinger & Geoffrey Stone eds., 2002).

viable alternatives. Hence, some have noted that first-mover lock-in is a distinct concern as IPTV evolves.[60]

If network effects produce a dominant P2P IPTV platform, the potential negative consequences that can serve to suppress unlimited content (i.e., speech) cannot be ignored. Joost revenue streams come strictly from advertising. Therefore, it is likely that the greatest revenues will stem from entertainment niche programming and, perhaps, more importantly, from widely popular content provided by major media firms such as Viacom. The incentive to provide or actively promote content that does not necessarily have commercial appeal-or, like Public Broadcasting content, was never designed for commercial gain-is not particularly strong within the Joost business model as it will not be very attractive to advertisers. This is not necessarily a problem on its face. The platform architecture itself is appropriately designed to account for this. At worst, Joost would have to allocate server space to such less-popular content, something its creators already plan to do.

Problems may arise when network owners give preferential treatment to the major sources of revenue-generating content over less profitable content.[61] Such preferential treatment could manifest itself in a number of ways. First, Joost could simply refuse to allow specific content access to the network, or prevent content that is already within the network from being further transferred to and among users. Second, less-profitable content could be relegated to a secondary transmission tier system that may not deliver content as readily as the top-level tier, thus discouraging viewing. Finally, content could be presented to the user in a programming selection interface that highlights the most popular content to the exclusion of opposing or competing content. Such tactics are similar to Microsoft's decision to place IE icons on its Windows desktop layout and block the presence of competing Netscape icons. Simply put, if the choice is not readily accessible, it is less likely that a user will opt for it.

Conflicts that could result in network owners using any of the above restrictive actions would likely stem from competing programming, such as Nickelodeon/Cartoon Network content and Sesame Street, where one is profitable and the other is not necessarily so. A further example would be the blocking of content that is antagonistic to a content provider or advertiser's business interests. Such programming could range from social content presenting alternative viewpoints on the environment, healthcare, or religion to political advertisements for

60. *See* BRUCE M. OWEN, THE INTERNET CHALLENGE TO TELEVISION, 32-34 (1999).

61. Similar issues over content have arisen in the cable industry regarding the industry's challenge to "must-carry" rules. Cable operators challenged such rules in order to be free to abandon FCC-mandated public interest programming in favor of more profitable content. For a discussion of must-carry rules, see Part IV of this Article.

candidates whose views are unpopular among certain industries. In such cases it makes economic sense to align one's politics with those who generate the most profit for one's company. The more controversial the topic, the greater the chance that such pressures would likely be exerted.

If a platform such as Joost can one day truly dominate the IPTV market, the power to direct content arguably lies with Joost itself because content providers need the network as much as the network needs them. However, the competition for content and advertising dollars is fierce and it may not make sense to strain relations with profitable business partners for the benefit of relations with less profitable partners. Further, the availability of competing IPTV platforms for significant "alternative" content market penetration, even at a zero price point, may not exist in any viable manner in the networked environment. Finally, people may be unlikely to seek out such programming on alternative platforms when the bulk of the most popular programming, such as sports, movies, or news, comes from a platform like Joost.

These suppositions, both positive and negative, are admittedly prospective. The potential for Joost as an outlet to expand the scope of speech beyond what is presently available on video outlets such as cable is promising. The anticipated content explosion, however, may be comprised primarily of a wealth of newly specialized entertainment media along with other content already available on existing platforms. This is what arguably has occurred in the cable market with the advent of digital cable. Hence, at this point, the Joost business model should be embraced with invigorated, but guarded long-term optimism. The fact that Friis and Zennström have thus far approached their creations with an eye toward end-user empowerment and widespread distribution is encouraging, but should mindfully be examined within the environment of networked technology behaviors — especially in light of the events giving rise to the Microsoft litigation discussed earlier.

IV. IPTV: A CANDIDATE FOR COMPELLED SPEECH REGULATION?

A. *Regulation Standards Across Media*

Traditionally, different media outlets such as print, broadcast, and cable have been subject to different compelled speech content regulatory standards specific to the unique attributes that the media exhibit. Courts have recently focused on the Internet as an emerging fourth medium for potential content regulation. For example, the Supreme Court has struck down attempts to regulate access to indecent

content online[62] while at the same time federal district courts have upheld a private entity's right to exclude advertising from its network.[63] The established legal justifications for imposing and rejecting content requirements on varying media will assuredly provide policymakers with the foundations from which any IPTV regulatory scheme would be devised. Hence, their relevance and importance are paramount in discussing the IPTV's regulatory forecast.

Presented below is a discussion of leading cases that establish a continuum of standards for content regulation in terms of the government's ability to demand the inclusion of particular content within media. Further, while compelled speech regulations were not at issue in the case, this section also discusses the leading U.S. Supreme Court case regarding free expression rights on the Internet to demonstrate how such speech has thus far been afforded great First Amendment protection within the medium.

1. Print Regulation

At one end of the content regulation continuum lies the print media. Within this sphere, content providers are generally free from government edicts mandating the inclusion of any particular content. The leading case setting forth the rationale for the print media standard is found in *Miami Herald Pub. Co. v. Tornillo*.[64] In that case, the Miami Herald printed two editorials criticizing Tornillo, a candidate for the Florida House of Representatives.[65] Relying on a state "right of reply" statute, Tornillo demanded that the Miami Herald print his replies to such editorials verbatim.[66] The Court held that the statute was

62. Most notably the Communications Decency Act (CDA), embodied in Title V of the Telecommunications Act of 1996, and its successor, the Children's Online Protection Act of 1998, 47 U.S.C. § 231, attempts to regulate a minor's access to indecent material on the Internet, and were both stymied on First Amendment grounds; the former struck down by the U.S. Supreme Court as unconstitutional in *Reno v. American Civil Liberties Union*, 521 U.S. 844 (1997), the latter enjoined from enforcement by the Court in *Ashcroft v. ACLU*, 542 U.S. 656 (2004). For discussion of the Court's decision regarding the constitutionality of the CDA, *see infra* text accompanying notes 119-22. For additional reading on these acts and resultant litigations, see Dawn C. Nunziato, *Do Children Have the Same First Amendment Rights as Adults?: Toward a Constitutional Regulation of Minors' Access to Harmful Internet Speech*, 79 CHI-KENT L. REV. 121 (2004); Steven E. Merlis, *Preserving Internet Expression While Protecting Our Children: Solutions Following* Ashcroft v. ACLU, 4 N.W. J. TECH. & INTELL. PROP. 117 (2005).

63. *See* Cyber Promotions, Inc. v. America Online Inc., 948 F. Supp. 436 (E.D. Pa. 1996).

64. 418 U.S. 241 (1974).

65. *See id.* at 243-44.

66. *See id.* at 244-45. Florida's "right of reply" statute read as follows:

> *Newspaper assailing candidate in an election; space for reply* – If any

unconstitutional under the First Amendment and held that the Herald was not required to publish that which "'reason' tells them should not be published."[67]

The *Tornillo* court acknowledged that newspapers had become big business, and consolidation within the industry had resulted in powerful organizations operating in non-competitive markets with the ability to persuade mass audiences.[68] Thus, unlike in "earlier time[s]" when entry into the newspaper business did not present the high economic hurdles present in the current market, dissident voices may not have an effective counter-voice in the print media.[69] Despite such arguments in favor of access, the Court held that any governmental intrusion into the sovereignty of editorial discretion was an affront to the First Amendment and cannot be enforced.[70] In articulating this position, the Court quoted *CBS v. Democratic National Committee*:

> The power of a privately owned newspaper to advance its own political, social, and economic views is bounded by only two factors: first, the acceptance of a sufficient number of readers – and hence advertisers – to assure financial success; and, second, the journalistic integrity of its editors and publishers.[71]

The Court also held that the Florida "right of reply" statute was unconstitutional as it effectively served as a command to publish, an evil that operated much in the same manner as a statute forbidding publication of particular content.[72] In the Court's view, the ills of compelled publication, as well as the penalties for failure to abide by the statute, could exact a penalty on content resulting in a chilling effect on speech, which may persuade a newspaper to avoid any controversy and

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> newspaper in its columns assails the personal character of any candidate for nomination or for election in any election, or charges said candidate with malfeasance or misfeasance in office, or otherwise attacks his official record, or gives to another free space for such purpose, such newspaper shall upon request of such candidate immediately publish free of cost any reply he may make thereto in as conspicuous a place and in the same kind of type as the matter that calls for such reply, provided such reply does not take up more space than the matter replied to. Any person or firm failing to comply with the provisions of this section shall be guilty of a misdemeanor of the first degree. . . .

Id. at 244.

67. *Id.* at 256.
68. *See id.* at 249.
69. *See id.* at 251.
70. *See id.* at 254-55.
71. *See id.* at 255.
72. *See id.* at 256.

simply choose not to print.[73] Finally, the Court noted that even in the face of no additional costs associated with printing a reply:

> A newspaper is more than a passive receptacle or conduit for news, comment, and advertising. The choice of material to go into a newspaper, and the decisions made as to limitations on the size and content of the paper, and treatment of public issues and public officials – whether fair or unfair – constitute the exercise of editorial control and judgment. It has yet to be demonstrated how governmental regulation of this crucial process can be exercised consistent with First Amendment guarantees of a free press as they have evolved to this time.[74]

In short, Tornillo solidified the print media's First Amendment rights to broad editorial discretion, holding that only compelled speech laws satisfying strict scrutiny review would ever be constitutionally permissible.

2. Broadcasting Regulation

At the opposite end of the regulation continuum from print media lies over-the-air broadcasting wherein the government has the greatest authority in terms of regulating what content must be transmitted. In the landmark U.S. Supreme Court case *Red Lion Broadcasting Co. v. FCC*, the Court determined the constitutionality of the FCC's "fairness doctrine," a long-standing FCC requirement that opposing sides of an issue be presented fairly over the broadcast airwaves.[75] The case had its genesis in a November 27, 1964 "Christian Crusade" broadcast series over Red Lion's airwaves wherein the Reverend Billy Hargis made various negative statements about Fred J. Cook, author of a book critical of Barry Goldwater.[76] Upon hearing the broadcast, Cook "concluded

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73. *See id.* at 257. Interestingly, a similar "chilling" argument was dismissed by the Court in Red Lion Broad. Co. v. FCC, 395 U.S. 367, 367 (1969). There the Court held that such concerns were "speculative" and that according to the FCC, broadcasters had "taken pains" to present controversial issues in the past and had no intention to abandon such prior practice. *See id.* at 393.

74. *See Tornillo*, 418 U.S. at 258. The right to be free from government compelled speech has since also been extended beyond newspapers and been held to apply to corporate speakers generally. *See* Pac. Gas & Elec. Co. v. Pub. Utilities Comm'n, 475 U.S. 1 (1986).

75. *See Red Lion*, 395 U.S. at 369. Two particular aspects of the fairness doctrine, the right to reply to "personal attacks" in the context of controversial public issues and within political editorials, were codified via FCC regulation in 1967. *Id.* at 370.

76. *See id.* at 371. Hargis claimed that: (1) Cook was fired by a newspaper for making false charges against city officials; (2) Cook had worked for a Communist-affiliated publication; (3) he supported Alger Hiss and was critical of the Central Intelligence Agency and J. Edgar

that he had been personally attacked and demanded free reply time, which the station refused."[77] A correspondence exchange among Cook, Red Lion and the FCC ended with the FCC concluding that Cook was personally attacked, that Cook be granted free on-air reply time, and that Red Lion had failed to meet its fairness doctrine obligations.[78]

Red Lion challenged the application of the fairness doctrine to the particular broadcast at issue on the grounds that the First Amendment supported its right to use its operating license in the manner it saw fit, and therefore Red Lion had the right to broadcast and exclude speakers and viewpoints at its sole discretion.[79] Red Lion also challenged two aspects of the fairness doctrine particularly germane to the litigation — the right to reply to "personal attacks" within the contexts of controversial public issues and the right to reply to political editorials, promulgated via FCC regulation in 1967.[80]

Cognizant of the First Amendment implications of the matter before it, the Supreme Court nonetheless upheld the constitutionality of the fairness doctrine, honing in on the peculiar nature of radio broadcast transmission operations that, in its view, justified congressionally-authorized content regulations on broadcast speech.[81] Scarce spectrum resources and resultant airwave management rules required to prevent interfering signal transmissions inevitably leads to a situation where willing speakers outnumber total available broadcast licenses.[82] Hence, it is the government's role to ensure that all sides of an issue have an opportunity to be heard within a medium that by its very nature restricts access. "It is the right of viewers and listeners, not the right of the broadcasters, which is paramount."[83] The Court stated that:

> No one has a First Amendment right to a license or to monopolize a radio frequency; to deny a station license because

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Hoover; and (4) he had written the book against Goldwater in an effort to smear the Senator. *Id.*

77. *Id.* at 371-72.

78. *Id.* at 372.

79. *Id.* at 386.

80. *See id.* at 373-75. These two particular aspects of the fairness doctrine were codified into formal FCC regulations subsequent to the filing of the *Red Lion* litigation. *Id.* at 373. Initially, Red Lion was ordered to allocate response time to Cook's previous fairness doctrine requirements in place at the time the original incident occurred. *Id.* at 372-73. It should be noted that amid criticism that the fairness doctrine had grown to inhibit, rather than foster, speech in the modern media marketplace, and that it also could likely be held unconstitutional upon revisitation, the FCC rescinded the doctrine in 1987. However, recently some members of Congress have raised the possibility of putting such requirements back in force. *See* Nate Anderson, *Dennis Kucinich: Bring Back the Fairness Doctrine*, Jan. 17, 2007, *at* http://arstechnica.com/news.ars/post/20070117-8640.html.

81. *Red Lion*, 395 U.S. at 386, 400-01.

82. *Id.* at 387-91.

83. *Id.* at 390 (citations omitted).

> "the public interest" requires it "is not a denial of free speech." By the same token, as far as the First Amendment is concerned, those who are licensed stand no better than those to whom licenses are refused. A license permits broadcasting, but the licensee has no constitutional right to be the one who holds the license or to monopolize a radio frequency to the exclusion of his fellow citizens. There is nothing in the First Amendment which prevents the Government from requiring a licensee to share his frequency with others and to conduct himself as a proxy or fiduciary with obligations to present those views and voices which are representative of his community and which would otherwise, by necessity, be barred from the airwaves.[84]

Further justifying its decision, the Court noted that "[i]t is the purpose of the First Amendment to preserve an uninhibited marketplace of ideas in which truth will ultimately prevail, rather than to countenance monopolization of that market, whether it be by the Government itself or a private business."[85] In *Red Lion*, the Court effectively applied the least restrictive level of constitutional scrutiny, a "rational basis" review, to the regulation of broadcast.[86] Under such a standard, the government need only demonstrate that a law regulating speech be rationally related to a legitimate government interest.

Although the fairness doctrine no longer remains in force,[87] the rationale behind content regulation over the public airwaves set forth in *Red Lion*, spectrum scarcity, endures. Broadcast regulation is still, for example, subject to content regulations regarding indecency,[88] children's programming requirements, and equal time/reasonable access provisions, all of which in part are justified on the basis of the spectrum scarcity/public ownership rationale.

Importantly, the Supreme Court has declined to extend the spectrum scarcity rationales to situations wherein an individual simply demands paid broadcast time for editorial advertisements on issues of public importance as opposed to making such demands in response to another's message as was the case in *Red Lion*.[89] Licensees fulfill their public interest obligations by providing an adequate and fair amount of coverage on issues of public importance without becoming the organ of each and every voice that seeks to broadcast over the airwaves.[90]

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84. *Id.* at 389. (citations omitted).

85. *Id.* at 390. (citations omitted).

86. *See id.* at 382.

87. *See* Anderson, *supra* note 80.

88. *See* FCC v. Pacifica Found., 438 U.S. 726, 739-40 (1978).

89. *See* Columbia Broad. Sys. v. Nat'l Democratic Comm., 412 U.S. 94, 121-24, 126 (1973).

90. *See id.* at 120-27.

According to the Court, to allow for such unrestricted accessibility would transform broadcasters into common carriers — a result that Congress never intended under the Communications Act of 1934.[91]

Two additional FCC "public interest" regulatory broadcast policies that compel speech from broadcast media outlets, the "equal time rule" and the "reasonable access rule," also operate under the scarcity rationale. First, the "equal time" rule states that if a broadcast licensee provides time to a legally-qualified candidate for political office, the licensee must provide equal opportunities for air time for all other qualified candidates seeking the same office at equal cost to all.[92] The equal time rule does not apply when a qualified candidate appears on: (1) a bona fide newscast; (2) a bona fide news interview; (3) a bona fide news documentary "if the appearance of the candidate is incidental to the presentation of the subject or subjects covered by the news documentary;" and (4) on-the-spot coverage of bona fide news events.[93]

Second, the "reasonable access" rule states that a broadcast licensee can face license revocation penalties for willfully or repeatedly failing to provide candidates for elected federal office "reasonable access" to the airwaves upon request of the candidate.[94] One significant way in which this rule differs from the equal time rule is that it effectively grants candidates for federal office airwave access rights and is not dependent upon another's use of airtime for it to become operative.[95]

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91. *See id.* at 107-16.

92. *See* 47 U.S.C. § 315 (2007). Airtime costs for political candidates are further regulated as election day nears, providing that costs cannot exceed that which is charged for the same class and amount of time to any person, not simply one's political opponents. *Id.* § 315(b).

> The charges made for the use of any broadcasting station by any person who is a legally qualified candidate for any public office in connection with his campaign for nomination for election, or election, to such office shall not exceed . . . during the forty-five days preceding the date of a primary or primary runoff election and during the sixty days preceding the date of a general or special election in which such person is a candidate, the lowest unit charge of the station for the same class and amount of time for the same period."

Id.

93. *See id.* § 315(b). The exceptions to the equal time rule have long been considered "pro-incumbent" as incumbent candidates are more likely to be the subject of or provide comment upon news events that fall within the exceptions. These exceptions were proposed and passed by Congress in 1959. *See* Pub. L. No. 86-274, § 1, 73 Stat. 557 (responding to an FCC ruling, which stated that the equal time provisions were triggered when a political candidate appeared on a regularly-scheduled newscast); *In re* Telegram to CBS, Inc. (Lar Daly), 18 P & F Rad. Reg. (P&F) 238 (1959), reconsideration denied, 26 F.C.C. 715, 18 P & F Rad. Reg. 701 (1959).

94. 47 U.S.C. § 312(a)(7) (2007). The law exempts non-commercial educational licensees. *Id.*

95. *Id.*

3. Cable Regulation

In the middle of the regulation continuum lies cable television, which the government regulates through "must-carry" rules. These rules, upon the request of local broadcast licensees, require cable operators to carry a certain amount of local commercial and non-commercial signals on their cable systems at no cost. In part out of concern over perceived threats the cable television industry posed to the vitality of broadcast programming, Congress passed, over Presidential veto, the Cable Television Consumer Protection and Competition Act of 1992 (1992 Cable Act), which contained broadcast must-carry rules.[96] Upon passage of the 1992 Cable Act, the must-carry rules were immediately challenged in court on First Amendment grounds, and the case eventually landed before the U.S. Supreme Court.[97]

The Court noted that must-carry rules regulate speech as they "reduce the number of channels over which cable operators exercise unfettered control, and they render it more difficult for cable programmers to compete for carriage on the limited channels remaining."[98] Central to the disposition of the case was the level of scrutiny the Court applied to compelled speech regulations within the medium of cable programming. The government argued for application of the less exacting television broadcast regulation standards set forth in *Red Lion* while attorneys for the cable industry argued that strict scrutiny analysis, the most speech-protective, should be applied.[99] Applying strict scrutiny would require the government to demonstrate a compelling state interest in regulating speech and also demonstrate that the regulation targeting speech was narrowly-tailored to achieve the state's interest. The Court rejected both arguments.[100] With respect to the government's contention, the Court held that broadcast regulation scrutiny standards were founded upon spectrum scarcity rationales and the inherent limitations on the number of speakers in such a medium that naturally flow from spectrum limitations.[101] The Court held[102] that such rationales did not apply to cable technology.

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96. *See* 1992 Cable Act, Pub. L. 102-385, 106 Stat. 1460, 1462, 1470 codified within the Communications Act of 1934 at 47 U.S.C. §§ 534-535. The must-carry rules contained within the 1992 Cable Act are the most recent iteration of must-carry rules that have intermittently been part of the FCC's cable regulatory scheme since the late 1960s. The cable industry's First Amendment challenges to previous versions of must-carry rules have met with success. *See* Quincy Cable TV, Inc. v. FCC, 768 F.2d 1434, 1454, 1463 (D.C. Cir. 1985), *cert. denied*, 476 U.S. 1169 (1986); Century Comm. Corp. v. FCC, 835 F.2d 292, 293, 305 (D.C. Cir. 1987), *cert. denied*, 486 U.S. 1032 (1988).

97. Turner Broad. Sys., Inc. v. FCC (*Turner I*), 512 U.S. 622, 634 (1994).

98. *Id.* at 636-37.

99. *See id.* at 637.

100. *See id.* at 661-62, 639.

101. *See id.* at 637-39.

The cable companies offered three main arguments as to why strict scrutiny should apply to the case. First, they argued that editorial control over content is lost as must-carry rules compel certain speech.[103] Second, strict scrutiny should apply because must-carry rules favored the speech of broadcasters over that of cable operators.[104] Finally, they argued that strict scrutiny applies because must-carry rules single out certain members of the media – cable companies – for inequitable treatment.[105]

With respect to the cable companies' first position, the Court held *Tornillo* inapplicable for the following reasons. First, unlike the content-based right of reply access law in *Tornillo*, the Court held must-carry rules to be content neutral[106] as applied; nor did the must-carry rules grant broadcasters access to cable on the grounds that broadcasters serve to counterbalance the speech of cable operators but instead confer benefits on all local broadcasters.[107] Further, such rules did not force a cable operator to alter its own messages nor shy away from particular content for fear of creating controversy as in *Tornillo*.[108]

Turner's second contention was that must-carry rules favor the speech of broadcasters over cable operators.[109] The Court held that the cable operators' reliance on *Buckley v. Valeo*,[110] a 1976 Supreme Court case in which First Amendment challenges were made to federal laws regulating campaign spending and contribution limits, was overreaching

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102. *See id.* at 638-39.

103. *See id.* at 653 (citing *Tornillo*, 418 U.S. at 241).

104. *See id.* at 657 (citing Buckley v. Valeo, 421 U.S. 1 (1976)).

105. *See id.* at 659 (citing Ark. Writers' Project, Inc. v. Ragland, 481 U.S. 221 (1987); Minneapolis Star & Tribune Co. v. Minn. Comm'r of Revenue, 460 U.S. 575 (1983); and Grosjean v. Am. Press Co., 297 U.S. 233 (1936)). These cases all involved successful challenges to discriminatory taxes directed at the press.

106. *See id.* at 643-44.

> Insofar as they pertain to the carriage of full-power broadcasters, the must-carry rules, on their face, impose burdens and confer benefits without reference to the content of speech. Although the provisions interfere with cable operators' editorial discretion by compelling them to offer carriage to a certain minimum number of broadcast stations, the extent of the interference does not depend upon the content of the cable operators' programming.

Id. The decision to classify must-carry rules as content neutral is the source of much debate within the legal scholarship community. For a critique on this classification as well as an overall extensive analysis of *Turner I*, see Laurence H. Winer, *The Red Lion of Cable and Beyond?* – Turner Broadcasting v. FCC, 15 CARDOZO ARTS & ENT. L.J. 1 (1997).

107. *See Turner I*, 512 U.S. at 653-55.

108. *See id.* at 655-56.

109. *See id.* at 653.

110. 424 U.S. 1 (1976).

and therefore inapplicable.[111] Turner argued that under *Buckley*, any government regulation that favors one speaker (broadcasters) over another (cables operators) requires strict scrutiny analysis.[112] The Court rejected this argument, noting that *Buckley* stood for the proposition that strict scrutiny applies when the government favors one speaker's *content* over another's.[113] Because the Court had already found must-carry rules to be content-neutral, *Buckley* did not control.[114]

In rejecting Turner's third argument for strict scrutiny – that the regulations single out cable operators for unequal treatment – the Court reasoned that discriminating among different media, does not necessarily run afoul of the First Amendment, especially when each exhibits unique characteristics that guide the course of its regulation.[115] Further, the regulations were broad-based and imposed on cable operators nationwide, further diffusing the argument that they were targeted restrictions on individual speech rights.[116]

In rejecting both the standards argued by the government and Turner, the Court agreed with the lower court's determination to apply an intermediate level of scrutiny to evaluate the constitutionality of must-carry rules.[117] Congress's asserted interests in promulgating must-carry rules included: "(1) preserving the benefits of free, over-the-air local broadcast television, (2) promoting the widespread dissemination of information from a multiplicity of sources, and (3) promoting fair competition in the market for television programming."[118] While the Court found these interests to be important "in the abstract," it was unconvinced on the record before it that such concerns were, in reality, legitimate and that such interests were actually fostered through must-carry rules.[119]

The Court vacated the lower court's grant of summary judgment in favor of the government because sufficient evidence to address the Court's concerns was lacking.[120] The case was remanded to the district court for further factual inquiry regarding: (1) whether local

111. *See Turner I*, 512 U.S. at 657-59.

112. *See id.* at 657.

113. *See id.* at 658.

114. *See id.* at 657-59.

115. *See id.* at 659-61.

116. *See id.* at 661.

117. *See id.* at 661-62. The test for intermediate scrutiny is set forth in United States v. O'Brien, 391 U.S. 367 (1968). Under the *O'Brien* test, a content-neutral regulation will be sustained if "it furthers an important or substantial governmental interest; if the governmental interest is unrelated to the suppression of free expression; and if the incidental restriction on alleged First Amendment freedoms is no greater than is essential to the furtherance of that interest." *Id.* at 377.

118. *See Turner I*, 512 U.S. at 662.

119. *See id.* at 663-65.

120. *See id.* at 668.

broadcasting markets were indeed in economic jeopardy and in need of must carry protections, and if so, (2) whether the burden's of must-carry regulatory policy did not inhibit any more speech than necessary to further the government's legitimate interests in preserving broadcast television through must-carry rules.[121] Upon the conclusion of extensive evidentiary proceedings in the district court in accordance with the Supreme Court's 1994 remand opinion, the case once again reached the Supreme Court in 1997; this time on appeal from the district court again granting summary judgment in favor of the government.[122] In *Turner II*, the Court was charged with determining whether the factual record developed below supported summary judgment in favor of the government upholding the constitutionality of must-carry rules.[123] Upon a review of the evidence, the Court ultimately upheld the must-carry rules under an intermediate scrutiny standard.[124]

4. Internet Regulation

The U.S. Supreme Court has yet to address whether the government can require Internet media outlets to transmit particular speech. However, the Court has, within the context of regulating access by minors to indecent materials online, given instruction as to the level of First Amendment protection afforded the Internet. In *Reno v. American Civil Liberties Union*, the Court was charged with determining the constitutionality of the Communications Decency Act (CDA), a federal law that prohibited "the knowing transmission of obscene or indecent messages to any recipient under 18 years of age" and "the knowing sending or displaying of patently offensive messages in a manner that is available to a person under 18 years of age."[125]

In *Reno*, the Court rejected the *Red Lion* rational basis level of scrutiny because "unlike the conditions that prevailed when Congress first authorized regulation of the broadcast spectrum, the Internet can hardly be considered a 'scarce' expressive commodity. It provides relatively unlimited, low-cost capacity for communication of all kinds."[126] Instead, the Court applied a strict scrutiny standard, which requires the government to demonstrate a compelling state interest for the regulation and that the regulation is narrowly-tailored to achieve that interest.[127] Ultimately, the Court held that the language of the CDA was overbroad and, therefore, not narrowly tailored to achieve the

121. *See id.* at 666-68.
122. *See* Turner Broad. Sys. v. FCC (*Turner II*), 520 U.S. 180, 185 (1997).
123. *See id.* at 185.
124. *Id.* at 189.
125. Reno v. Am. Civil Liberties Union, 521 U.S. 844, 849, 858-59 (1997).
126. *Id.* at 870.
127. *See id.* at 882.

government's interest in preventing a minor's access to indecent online materials.[128] While the *Reno* case involved the regulation of indecent speech on the Internet, as opposed to regulating compelled speech, the fact that the Court applied strict scrutiny, the most speech-protective level of constitutional review, to the Internet is significant. As a result, Internet content regulation currently stands more akin to print media regulation standards than it does to other media.

While the Supreme Court has struck down government efforts to curb access to indecent materials online, federal district courts have upheld a private actor's right to limit access to its network. In 1996, the U.S. District Court for the Eastern District of Pennsylvania held that Cyber Promotions, Inc. did not have a right to send e-mail advertising messages through America Online's (AOL) network without AOL's consent.[129] The court held that the fact that AOL is a widely-used service did not transform it into a public entity, and AOL therefore had the right to refuse access.[130] The court also noted that a variety of alternative avenues were available for Cyber Promotions to advertise its products.[131]

In sum, the unique technical aspects and business characteristics of each medium weigh heavily in determining whether speech laws will pass constitutional muster. Additionally, the practical effect of the laws themselves, that is whether they work to regulate content, should be considered. It is against this regulatory backdrop that the propriety of applying such rationales to IPTV will be discussed.

B. *IPTV Regulatory Options: Now and for the Future*

The Joost business model derives its technical viability from the network effects of P2P technology. The diffused bandwidth delivery architecture theoretically renders the capacity limitations inherent in broadcast, and to a lesser extent, cable, a nullity. This makes truly unlimited content flow over the platform a real possibility. However, the negative network effects also inherent in such a system could operate to limit speech because particular content can simply be blocked from the system. In this way, access to the dominant platform, which could be essential for widespread communication, can at the same time be limited.

This section discusses the application of compelled speech doctrine to IPTV and concludes that IPTV presents its own unique regulatory paradigm to which established regulatory schemes simply cannot be

128. *Id.*
129. *See* Cyber Promotions, Inc. v. Am. Online Inc., 948 F. Supp. 436 (E.D. Pa. 1996).
130. *See id.* at 445.
131. *Id.* at 443-44.

directly applied. This is so because an IPTV market characterized by P2P architecture in which one firm dominates does not fit squarely into any existing media-specific regulatory model. Hence, such a medium presents a situation where, should regulation be enacted, policymakers will be forced to choose which free speech values should be reflected in the medium. As discussed in greater detail below, the challenge of choosing among such competing, and often equally legitimate, values will be central to the regulatory debate over the IPTV market as described.

Despite the relative freedom thus far enjoyed by Internet communications, regulatory oversight looms, and the possibility of compelling speech on converged technologies such as IPTV is real. For example, in 2005, the U.S. House of Representatives Energy and Commerce Committee proposed draft "discussion" legislation, which included language to impose must-carry and equal time provisions, as currently codified in the Communications Act, on all "broadband video service providers."[132] Platforms such as Joost would almost certainly qualify because such providers are broadly defined in the draft.[133] Hearings were held on the matter in November 2005,[134] but such legislation never moved beyond committee proceedings. Nonetheless, the idea of regulating Internet video and its implications for converged technologies did not go unnoticed, and some new media free market proponents cried foul.[135]

If a statute was eventually enacted which left the compelled speech provisions of the draft bill in place, constitutional challenges would undoubtedly follow. Such a law would likely not withstand current standards of First Amendment review as the one conclusion that can be drawn from the Supreme Court's cross-media compelled speech regulation opinions is that application of the law requires sensitivity to the structural, technological and operational features unique to each medium. The converged nature of a networked IPTV, however, makes it difficult to definitively classify under any existing regulatory scheme. Accordingly, it becomes important to now begin the debate as to how, and if, the IPTV market should be regulated.

Courts frequently apply established precedent to new facts and circumstances, such as the emergence of IPTV. However, IPTV

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132. *See* 109th Cong. § 304 (2005) (discussion draft of H. Energy and Commerce Comm.), *available at* http://www.benton.org/ benton_files/BITS%20Staff%20Draft%20110305.pdf.

133. *See id.* § 2.

134. *See Internet Protocol and Broadband Services Legislation: Hearing Before Subcomm. on Telecommunications and the Internet of the H. Comm. on Energy and Commerce*, 109th Cong. (2005).

135. *See, e.g.*, Adam Thierer, *A Look at the Broadband Video Provisions of the House Commerce Committee Telecom Act Reform Discussion Draft*, Sept. 2005, *at* http://www.pff.org/issues-pubs/ps/2005/ps1.12telactdraft.html.

presents a unique challenge because it exhibits technical characteristics of different media and therefore implicates multiple differing free speech values, which support, or reject, regulation in each particular medium. Scholars have begun to analyze the problems inherent in these situations. Professor Lawrence Lessig has stated that, in such circumstances, the task of choosing among competing, and often equally legitimate, values that form the underpinnings for constitutional interpretation is the result of what is termed a "latent ambiguity" present within the original law.[136] The law in its original context may have made sense and was clear in its application.[137] When a latent ambiguity is present, one cannot restore a right nullified by changing circumstances through simply identifying the value(s) inherent in the original right and adopting a reading of the law that restores that right; a process Lessig refers to as "translation."[138]

Rather, in some circumstances, the process of translation breaks down either because society no longer wants to preserve the underlying value, or it is not clear what values the "translation" process would select.[139] Professor Lessig argues that it is in these situations where latent ambiguities reveal themselves; the context in which the law is applied has changed, and this change will require society to determine what values embodied in the original law should be applied to the present context.[140] More than one interpretation of the law can be correct because the interpretation depends upon which of the value(s) embodied within the law are chosen to be upheld in the new context.

Broadcast regulation is built upon spectrum scarcity rationales and the resultant situation of more speakers wanting to speak than available broadcast outlets. Hence, to ensure issues of public importance and diverse viewpoints find their way into the marketplace, the government regulates. As new technology erodes the legitimacy of scarcity regulatory rationales, however, many argue that increased media deregulation should be embraced, even in the broadcast arena.[141]

In today's Internet video market, spectrum scarcity rationales are inapplicable. As the *Reno* Court explicitly recognized in refusing to apply rational basis constitutional review to Internet free speech analysis, anyone who wishes to speak on the Internet may do so

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136. *See* LAWRENCE LESSIG, CODE: VERSION 2.0 25 (2006).

137. *Id.*

138. *Id.* at 165.

139. *Id.*

140. *Id.*

141. For example, Lessig has argued that implementation of a radio broadcast architecture similar to P2P, wherein consumers' home units work not just as receivers but also as transponders in a networked market (thus spreading the spectrum throughout the network similar to P2P bandwidth diffusion), could obviate the need for broadcast regulation. *Id.* at 270-73.

relatively cheaply.[142] Therefore, it seems nonsensical to apply broadcast compelled speech rules such as "equal time" and "reasonable access" to a medium where access is literally just a click away. Indeed, scarcity rationales currently go no further than broadcast because the *Turner* Court found such rules constitutionally inapplicable to cable outlets under an intermediate scrutiny standard.[143] As cable provides greater channel variety than broadcast, the Internet provides that much greater variety as compared to cable.

Hence, IPTV, with its "unlimited" channel capacity and the courts' likely application of strict scrutiny analysis as found in *Reno*, does not seem to be a likely candidate for compelled speech regulation — at least not right now. In a future, highly-networked P2P IPTV environment, there may indeed be a single dominant means for receiving television programming, and in that sense the medium is "scarce." Requiring that political candidates receive "airtime" access is arguably the only means for them to effectively communicate and would be at little or no burden to an IPTV operator with unlimited channel capacity.

Such a mandate, however, would run afoul of the editorial autonomy rights, discussed in *Tornillo*, that IPTV providers would likely assert in light of *Reno*. Regulating such medium clashes with respect to political access speech by trying to classify IPTV as either more like print or more like broadcast misses the mark. It is here where policymakers will be forced to deal with the latent ambiguity presented by P2P IPTV, and the query necessarily turns on what free speech values are to be favored.

In *Red Lion*, the Court upheld the right of listeners to have access to a variety of viewpoints in a medium where, due to spectrum constraints, access was limited to those few entities licensed to speak. In contrast, the Court in *Tornillo* focused on editorial control over content in a medium where printing space was limited. Further, in *Reno*, the Court held that content regulations should be analyzed under strict scrutiny and specifically noted that access limitations like those in *Red Lion*, and the regulatory model based upon such limitations, is inapplicable to the Internet.

However, P2P IPTV operates over a medium in which anyone can gain access and distribute content. At the same time, IPTV becomes the one platform on the medium where distribution of one's message is critical if one seeks to reach a large audience. Hence, the technology also exhibits problems similar to the broadcast spectrum limitation circumstance with which the *Red Lion* Court was concerned. Finally, one must also consider the private nature of the IPTV platform and the

142. *See Reno*, 521 U.S. at 882.
143. *Turner II*, 520 U.S. at 189.

argument that the network owner should have the right to control what content flows through the network.

That IPTV implicates all of these regulatory models obviously means that the free speech values underlying them are also implicated. Policymakers will have to weigh free speech values of editorial control against the value of promoting a system where all sides of an issue and greater variety of speech are presented. With P2P IPTV, positive network effects will create a market where editors are no longer faced with capacity limitations, and the costs of distributing additional content are extremely low, if not wholly insignificant.

Tornillo did not contemplate the former circumstance. The *Tornillo* court made clear that a "no additional cost" framed argument was irrelevant to determining whether a newspaper should be forced to print particular content. However, the burden on editorial control may be lessened in a P2P IPTV environment to such an extent that it is now outweighed by the goals of promoting diverse speech. It is questionable whether strict scrutiny should be the preferred standard of review in such a situation particularly in a market where a dominant platform does not carry one's message, because that means it may simply not make sense to produce the message in the first place. In contrast, perhaps media autonomy rights should govern because the relatively cheap access to the Internet provides and adequately protects the goal of promoting diverse speech. A P2P IPTV technology brings these ambiguities to the surface, and it is clear the current regulatory scheme does not directly answer such questions.

As to any proposed Internet must-carry rules, setting aside for the moment the issue of whether intermediate scrutiny analysis, as opposed to strict scrutiny, would be appropriate, it is perhaps more appropriate to focus on the *Turner* Court's holding under an intermediate analysis: that cable television posed a threat to the viability of broadcast television and that must-carry rules addressed this concern without unduly burdening the cable industry's speech rights. As to the first requirement, IPTV presently poses no such threat to broadcast television but could conceivably do so much in the same manner and timeframe as cable. Therefore, considering the second requirement, if bandwidth limitations are eventually eliminated, the burden on the operator to impose must-carry rules will be insignificant. Hence, as long as the government could meet its burden in showing harm, a must-carry rule could likely be found constitutional under *Turner* in an environment where one IPTV provider dominates and refuses to carry local signals.

Another issue to be considered, however, would be why an IPTV provider would not elect to transmit local broadcast stations in the first place. In *Turner II*, evidence showed that significant local programming was included on cable systems despite capacity limitations and would

have been carried regardless of the imposition of must-carry rules.[144] Obviously the demand for local programming exists, and in a realm where capacity constraints no longer dictate programming choices, Internet video service providers would have an economic incentive to carry local programming. Therefore, must-carry compelled speech regulatory schemes may be irrelevant to an IPTV market characterized by unlimited capacity.

Current government must-carry regulation is designed to combat a perceived negative consequence of cable technology which may likely not exist in a networked IPTV market that has the independent incentive to privately provide that which is government-mandated within the cable medium. Proponents of editorial autonomy will argue that it is indeed their right to limit access to private networks and cases such as *Cyber Promotions* support such an argument. There is good reason to support a rationale that holds that private entities have the right to control their content and do not become public simply because they are popular platforms. But again, one must also analyze the free speech values implicit in must-carry rules. The purpose of the regulation was to preserve a dissemination medium where broadcaster content, which includes localized programming and some degree of access rights, provides information that may otherwise not be produced.

If one places value on preserving such content, then it may be permissible to require a P2P IPTV network to open its system in the same manner cable companies have been required to do. The rationale of *Cyber Promotions* does not contemplate a scenario where one dominant network, by restricting access, does more than limit a message, but also effectively prevents the message from ever being created because it becomes too costly. Indeed, the IPTV market may solve the must-carry debate on its own. But again, if some form of must-carry regulation is enacted, policymakers will be forced to weigh the First Amendment burdens of compelled speech to a P2P IPTV platform with the benefits of promoting diverse speech in the market.

V. CONCLUSION

The current regulatory scheme is ill-equipped to formulate a coherent approach to compelled speech doctrines in a networked IPTV platform. This is not to argue that regulation is warranted at this point. It would be unwise to hamper the growth of emerging technologies with regulatory restrictions as it is yet unknown exactly how converged Internet video and IPTV media will ultimately evolve. As IPTV

144. *See id.* at 215.

evolves, so will the utilization of the platform, its users, and its impact on competing media. Until such parameters can be reliably measured, the imposition of any regulatory scheme that forces content providers to transmit speech is premature.

Although the IPTV landscape is yet largely unmapped, the array of possible outcomes and the free speech values that should be reflected in such an architecture should be considered. Platforms like Joost, and the eventuality of a networked IPTV market dominated by a single firm are not an unrealistic future. P2P technology could enable Joost to serve both as a provider of unlimited entertainment media as well as a vehicle for expanding the breadth of public issue viewpoint diversity. Despite this, in an IPTV market ultimately dominated by Joost or a similar platform, negative network effects may justify some form of compelled speech regulation. Political speech access rights and similar public interest programming requirements may be warranted in order to ensure information regarding important public issues and candidates for public office have a viable electronic dissemination vehicle.

However, other compelled speech modalities such as must-carry rules may indeed be but an antiquated notion with respect to IPTV regulation. Whatever compelled speech regulation the government may ultimately require, convergent technologies such as IPTV should stand alone as new media, related to, but distinct from, established media, and be regulated with this in mind.

IPTV regulation should be viewed as a last resort. Legislation that treads upon First Amendment rights should not be enacted based on forecast or adherence to outdated or inapplicable regulatory rationales. For now, the prudent approach is to allow the nascent market to develop and monitor for negative network effects and other market failures. In the end, aside from the promised plethora of entertainment media, without some form of regulation, platforms like Joost may not provide any additional diverse public issue or political programming than what is currently available through cable and broadcast television. Perhaps alternative media and viewpoints will continue to operate on the margins. Even if such noble goals go unrealized, the ability of a free IPTV platform like Joost to perhaps one day replicate and even improve upon current cable and broadcast media without government regulation would indeed be its own victory for free speech, as well as a victory for consumers. But if one moves beyond replicating the existing media landscape, and society decides that technology should be used to enable as much speech from as many viewpoints as possible, free speech value choices will have to be confronted and made. Determining what free speech values society wants to preserve and protect in this future will be the critical first step in shaping such an environment.