

## Canadian Television Policy after Broadcasting

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Ronald Coase asserted that intellectuals favor extensive regulation of product markets while simultaneously endorsing *laissez-faire* in the market for ideas. Yet, the stated paradox mischaracterizes regulatory history and institutions. Moreover, the conflict today is just the reverse: free trade in goods is threatening protectionism for media content. The disruptive economics are that, whereas governments have traditionally erected high barriers to block substitutes for state-owned or state-licensed TV broadcasting, new program distribution networks are dissolving bottlenecks and slashing transport costs. Consumers naturally strive to access the emerging cornucopia of information and entertainment media, while content producers foresee a new golden era. This coalition makes current policies shaky. The strongly positive correlation between information technology and economic growth, and the growing strain between globalization and domestic barriers, will most likely make them topple. An alternative policy model combines open entry into video markets with continuing government support for cultural programming and public broadcasting. Despite lower protectionist barriers in the U.S., the PBS system successfully competes as a high-quality niche content provider, enjoying steady audience share and funding levels, weathering new video competition program and the implosion of commercial broadcast TV.

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## I. The Market for Goods and the Market for Ideas

[T]he general view... is that, in the market for goods, government regulation is desirable whereas, in the market for ideas, government regulation is undesirable and should be strictly limited.<sup>2</sup>

Ronald Coase once pondered an intriguing asymmetry gleaned from policy debates held in the United States, the United Kingdom, and other democracies: “free speech... is ‘the only area where *laissez-faire* is still respectable.’”<sup>3</sup> Coase found that “intellectuals have shown a tendency to exalt the market for ideas and to deprecate the market for goods,”<sup>4</sup> and offered that, “I do not believe that this distinction... is valid.”<sup>5</sup> However one stands on the issues, there is something curious about the rival views. “The paradox,” noted Coase, “is that government intervention which is so harmful in the one sphere becomes beneficial in the other.”<sup>6</sup>

Coase argued that the cognitive dissonance derived from the self-interest of scholars: intellectuals typically support the regulation of product markets because they find it benign, in terms of self-interest, or even helpful, as regulation of product markets drives demand for a variety of intellectual outputs. Coase identified rules limiting evening news programs carried by the British Broadcasting Corporation (banning news broadcasts prior to seven o’clock, then revised to six o’clock) as political responses to demands by the traditional press for protection from new media.

Normatively, Coase recommended that scholars blend their analytical perspectives, viewing both the market for ideas and the market for goods as subject to the same general laws of economics. Intellectuals might then adjust their demand functions,

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<sup>2</sup> R.H. Coase, *The Market for Goods and the Market for Ideas*, 64 AMER. ECON. REV. 384 (May 1974).

<sup>3</sup> Quoting Aaron Director, *Ibid.*, 385.

<sup>4</sup> *Ibid.*

<sup>5</sup> *Ibid.*, 389.

<sup>6</sup> *Ibid.*, 386.

augured Coase, as the market for ideas seems to exhibit the greater propensity for failure owing to pervasive externality and public good dilemmas. At a minimum, convergence of the distinct perspectives was in order.<sup>7</sup>

The positive proposition put forth by Coase is provocative but unconvincing. While the policy convergence he advocated is today occurring, it is a product of developments that – ironically again – intrude from exactly the opposite direction looked to by Coase. Free trade in the market for goods is exposing the infirmities, and anti-consumer consequences, of regulation in the market for ideas. The effect of globalization, both through the evolution of markets and via explicit free trade agreements, is reinforcing fundamental trends favoring liberalization in media markets, including the appearance of yet another generation of New Media, and a growing political demand by excluded entrants to gain access to the market for ideas.

While appearing to herald an unprecedented social transformation, the emergence of vastly superior communications systems for distributing video triggers another iteration in a centuries-old cycle. The printing press, radio, broadcast television and cable television have each produced distinct political reactions, empowering new interests and challenging old. Cable, satellite, and the Internet are dramatically lowering the costs of transmitting video broadcast widely, transmitted narrowly, or used interactively. These rival networks place the traditional over-the-air television broadcast system, now over a half-century old, in considerable jeopardy should competition be allowed to break out. It is already proving difficult to hold in check, and despite government's best efforts, the day of mass-market broadcast television is drawing to a close.

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<sup>7</sup> Coase's argument actually created a major controversy in the United States, leading to an outpouring of commentary and an interview in TIME MAGAZINE. "The press was horrified by the idea," said Coase in 1996. "As they assumed that all regulation in the market for goods was fine, it never struck them that the argument was really the other way around." Thomas W. Hazlett, *Looking for Results: An Interview with Ronald Coase*, REASON MAGAZINE (Jan. 1997), <http://www.manhattan-institute.org/hazlett/rahazlett77.htm>.

In a pattern seen many times before, the status quo maintains a considerable standing army and potent strategic advantages. But the forces of change are growing in strength and possess an ally that can dominate the field of battle: time. As economies grow, and as countries seek to keep pace with rival nations, which also seek to grow, they must jettison the barriers blocking development of broadband infrastructure. Meanwhile, allies of the old media will defect, seizing exciting new opportunities too profitable to ignore. This transition is already well under way. The incredible shrinking broadcast TV sector is being eclipsed within its entertainment space by video rivals that harbor a majority of audience share in some nations; within the spectrum communications space by mobile phone suppliers eager and willing to bid away the scarce input common to both; and within the information space by the world wide web, which has only just begun to stream. As conduits become broader, content more digital, homes and offices better connected, and broadband content business models more robust, it will not be your father's video communications marketplace, any more.

What is the role of regulation in this transition? Thus far, it has largely been to hold it back. Progress can be stymied for some years. But an unstable equilibrium results. Now, push is coming to shove. As the next generation of protectionism for broadcast TV must be ratcheted way up to compensate for the fast-growing alternatives that consumers of news, information and entertainment enjoy, a transition to new institutions is forced. Other factors buttress this day of reckoning, including the explicit trade agreements that nations increasingly desire for their financial health, and which produce, as a happy spin-off, an end to regulations blocking the free exchange of video entertainment. Whatever the perceived impact on media regulation or national culture, the dividends of world trade and the productivity gains from high levels of connectedness are too rich to ignore.

As abundant choices for consumers sneak their way into the video marketplace, commercial TV licensees (members of the old cartel) and public broadcasters (erstwhile monopolists) will adjust to a world in which niche programming

proves relatively valuable and mass market fare decline. State-owned video suppliers are already adapting to the era of greater access by commercializing programs and funding sources, and petitioning for more channel space to offer a “bouquet” of services. The video scoreboard appears to be flashing: *Game Over!*

Yet, the experience in the United States – cultural imperialist to the bitter end – may be the light at the end of the Canadian tunnel. The U.S. Public Broadcasting System has managed to successfully maintain its viewer ratings over two decades of increasingly vigorous competition. Its low, but steady, share of the national audience has continued to receive support from governments of either party, as well as private donors. Its output is often rated among the best on television. Public broadcasting lives on, with subsidies, in an evolving marketplace. As Eli Noam writes, “Program diversification can be achieved by additive policies of production and distribution support rather than by subtractive entry barriers.”<sup>8</sup>

## II. Rise and Decline of Regulation in Markets for Ideas

Coase did identify an interesting quirk, but it was very far from a “general view” and it has not been a controlling perspective. Citing Aaron Director, Coase focused on the libertarian free speech views of the late U.S. Supreme Court Justice William O. Douglas. A champion of economic regulation, Justice Douglas was also a First Amendment fundamentalist, taking literally the constitutional stricture in the U.S. Bill of Rights: “Congress shall make no law... abridging the freedom of speech, or of the press.” As one legal commentary aptly put it: “Justice Douglas came close to a complete *laissez-faire* theory of broadcast regulation.”<sup>9</sup>

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<sup>8</sup> Eli Noam, *Television in Europe* (New York: Oxford University Press, 1992), 57.

<sup>9</sup> Abbott B. Lipsky, Jr., *Reconciling Red Lion and Tornillo: A Consistent Theory of Media Regulation*, 28 STAN L REV 563 (Feb. 1976). Coase could have cited other contemporary liberals who similarly embraced libertarian free speech rules (including the late Chief Judge of the D.C. Circuit Court of Appeals, David Bazelon [Bazelon 1975]). But the views of these thinkers are best known in dissent.

Yet Douglas was a loner. In the landmark case of *Red Lion*,<sup>10</sup> a 1969 Supreme Court verdict established that the government had the right to compel radio stations to offer equal time, free of charge, to persons criticized under the Federal Communications Commission's (FCC) "fairness doctrine" rules. Justice Douglas, who failed to participate in the decision owing to medical reasons, later noted that he would have voted to bar such power as a constitutional violation.<sup>11</sup> But without him, the opinion was unanimous for the government: 8-0.

The curious bifurcation of law is not between the market for goods and the market for ideas, but *within* the market for ideas. U.S. courts have allowed ambitious government intervention in electronic media, while even modest rules governing the print press have been struck down as unconstitutional.<sup>12</sup> Just five years after *Red Lion*, the Supreme Court's *Tornillo* ruling held that even a powerful newspaper that indisputably dominated its market could not be forced to provide equal time to a political candidate its editors had savaged, overturning a state statute mandating such a right of reply as unconstitutional.<sup>13</sup> While other democratic countries typically allow greater regulatory intervention in print media than is allowed in the United States, the bifurcation remains plainly visible: electronic media, particularly radio and television broadcasting, are subject to substantially higher levels of government control.

#### a. Liberalization of Print Media in England and France

Today, it appears that print media are fundamentally different from electronic media, and that those distinctions account for diverse regulatory treatment. In fact, print media were originally regulated much the same as electronic media have been in recent times; state monopolies and then licensing of the private press were standard for

<sup>10</sup> *Red Lion v. FCC*, 395 U.S. 367 (1969).

<sup>11</sup> *CBS v. Democratic National Committee*, 412 U.S. 94, 154 (1973).

<sup>12</sup> Matthew L. Spitzer, *Seven Dirty Words and Six Other Stories: Controlling the Content of Print and Broadcast* (New Haven: Yale University Press; 1986).

<sup>13</sup> *Tornillo v. Miami Herald*, 418 U.S. 241 (1974).

more than two hundred years after the introduction of the printing press in England and France. Great social upheaval surrounded the efforts of reformers and revolutionaries to establish “freedom of the press.” The primary distinction between old and new media may simply be *time*.

When new information media are introduced, a standard pattern is observed. First, these media are recognized as influential, socially important, and dangerous. Second, governments make a pointed effort to control them so as to prevent disruption of established political, economic, and social relationships. Government officials of the fifteenth century quickly grasped that the printing press was a technological advance of vast potential. It dramatically lowered the cost of distributing information, and so represented a most fundamental challenge to authority. In England, the Stationers Company was awarded royal privilege and monopoly power in return for obeisance in the editorial function. In France, the Paris Book Guild danced to the same tune. By restricting access to the technology, publishing was made artificially scarce and the right to publish artificially lucrative. Licenses were then conditioned on content. Cooperation with the Crown resulted in economic advantage (i.e. rents); displeasing it, in economic loss. The terms were self-policing, as members of the privileged class rivaled one another to please authority, and vigilant in detecting interlopers who might violate the rules on content – and steal their profits.

Eventually, the royally supported cartel withered, and freedom of the press came to be established in either country. Coase suggests that the intellectuals simply turned against the prohibitive rules. He quotes John Milton, author of the 1644 *Areopagitica*, “probably the most celebrated defense of freedom of the press ever written.”<sup>14</sup> Coase asserts that “there has surely never been a more high minded scholar than John Milton,”<sup>15</sup> and argues that Milton proposed freedom of ideas – i.e. the written word – out of “a good deal of intellectual pride.”

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<sup>14</sup> Coase, *op sit.*, 388.

<sup>15</sup> *Ibid.*

In fact, Milton was not a proponent of any general freedom for ideas; Milton's "intellectual pride" spread only to high-brow tracts. By 1651, he was employed full-time as a censor of news publications, too deep in the informational pecking order to qualify for freedom. Moreover, Milton's motivation appears clear: financial self-interest. The *Areopagitica* was itself published as a protest against professional licensing rules excluding Milton from the business of writing:

The immediate occasion for Milton's interest in liberty of the press was his difficulties with the Stationers Company and the authorities over his pamphlets on divorce. This first pamphlet growing out of Milton's difficulties with his wife was published in August, 1643. It was anonymous and unlicensed. A second edition appeared 2 February 1644, also unlicensed but with the author's initials (J.M.) This was followed by a second tract on divorce (15 July 1644) which was properly entered on the registers of the Stationers Company and was licensed under the hands of Mr. Dounham and Mr. Parker, wardens. The ire of both the Westminster Assembly and Parliament over the publication of these obnoxious pamphlets aroused the officials of the Stationers Company to exculpate themselves. In a memorial to Parliament, they pointed out that the blasphemous and pernicious opinions were being aired in unlicensed and unregistered pamphlets as objectionable to the printers as they were to Parliament... Milton carefully prepared his answer to the Stationers Company, to the Westminster Assembly, and to the Committee on Printing. It appeared 24 November 1644 as *Areopagitica; A Speech of Mr. John Milton/For the Liberty of Unlicensed Printing/to the Parliament of England*.<sup>16</sup>

There is no doubt some considerable dollop of professional pride in Milton's paean to free speech. But its fundamental motivation should be familiar to

<sup>16</sup> Fredrick Seaton Siebert, Freedom of the Press in England, 1476-1776 (Chicago: University of Illinois Press, 1965), 195-96.

economists. It was not, at its essence, a lobbying effort by an entrant in the market for ideas. Given the technology to turn prose and poetry into products, wordsmiths naturally endeavored to supply information and entertainment in the marketplace. Milton was “a great literary genius” who read and wrote for a living, and who was led to engage “in the production of anonymous and argumentative pamphlets.”<sup>17</sup> But the barriers of the Stationers Company, cartelization agent for the King of England, used its licensing authority to control both content and entry. The resulting clash of economic interests produced the very assault on entry barriers that today stands as the quintessential argument for a free press.

Over time, printing presses declined in cost, more workers became skilled in the printing trades, and levels of literacy rose. Hence, the potential supply of reading material increased, as did the demand, and the limits placed on either by the constraints of the licensing cartel came under increasing pressure. By 1640, writes historian Frederick Siebert, the government-imposed barriers were producing severe opposition from aspiring writers and would-be printers excluded by the laws of privilege.

The journeymen and apprentices after securing their freedom found themselves unable to make an honest living. Either they must work for the monopolists at a starving wage or they must engage in surreptitious printing of forbidden or patented works.<sup>18</sup>

After two centuries of policy-imposed scarcity via the King’s licensing scheme with the Stationers Company, the system was jettisoned by a political impasse. Members of rival political parties did not trust each other with control over this influential medium of opinion. The licensing law was simply allowed to expire in 1694 “not due to any philosophical conclusion concerning the advisability of a free press but primarily to an inability to devise an enforceable system of regulation capable of

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<sup>17</sup> Ibid., 195.

<sup>18</sup> Ibid., 167.

achieving the results desired.”<sup>19</sup> *Laissez-faire* came to pass due to the “practical reasons arising from the difficulties of administration and the restraints on trade.”<sup>20</sup>

An economically driven campaign also ended French licensing of the press. There, revolutionary forces challenged the King’s right to license the press, with the support for deregulation originating from excluded suppliers. Even when the French Revolution was well under way, arguments for protecting the public from freedom of the press were made by established members of the cartel. Said one:

An infinite number of people who can barely read have established boutiques in all the quarters of the capital, putting their names and the sign Bookseller on their doors, a title which they have unscrupulously usurped... We dare to hope that... the National Assembly will soon want to turn its attention to the Book Trade; this guild has always been exempted when corporate monopolies have been suppressed, as much because of abuses and piracy... as because the sale of bad books will soon infect France if everyone is free to enter the book trade.<sup>21</sup>

Placing censorship in the public interest, the Paris Book Guild argued that “the only way to prevent continuous assaults on the government and on respectable people was to revive the regulations of 1723 limiting the number of printers and controlling the book trade.”<sup>22</sup> This protected class had amassed a fortune “based on printing monopolies and a closed market in privileged texts...”<sup>23</sup> They were rocked by the fall of their political patrons in the Revolution, and ultimately appropriated of their privileged positions with the rise of a new class of entrepreneurial printers, “whose careers had been made in a competitive market, beyond the borders and on the margins of

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<sup>19</sup> Ibid., 260.

<sup>20</sup> Ibid., 263.

<sup>21</sup> This is from an actual plea against the ending of press monopoly delivered to the French Assembly by book sellers in Paris. Cited in Carla Hesse, *Publishing and Cultural Politics in Revolutionary Paris, 1789-1810* (Berkeley: University of California Press, 1991), 52.

<sup>22</sup> Ibid., 54.

<sup>23</sup> Ibid., 62.

the corporatist system.”<sup>24</sup> The combination of political revolution, on the one hand, and the rise of a new class of viable entrants, on the other, was too much to withstand. In 1791 the Paris Book Guild collapsed.<sup>25</sup>

#### b. Liberalization of Entry for Commercial TV in Europe

Throughout the continent of Europe the pattern of state action in the television sector has been remarkably uniform. In its early days, television was quickly identified as an emerging medium of key social significance. This prompted states to establish public broadcasting companies that would provide programs on a monopoly basis, usually over just one or two channels. The programming would meet certain standards of quality and culture, reflecting the social vision of governing elites and the protectionist views of policy makers elected by citizens. The extremely parsimonious use of broadcast frequencies, utilizing a small fraction of the radio spectrum formally allocated for over-the-air television service, severely truncated the quantity and diversity of offerings, resulting in substantial pent-up demand for additional programs. These limits also substantially reduced the financial opportunities afforded producers, artists, technicians, and other specialized talent engaged (or potentially engaged) in the creation of programming.

Over time, the cost of such restrictions becomes increasingly severe, inciting rising opposition from excluded suppliers and, often, widespread activity by citizens to escape the system of controls. Across Europe, the rise of “pirate” radio and cross-border television transmissions have played an important role in illustrating the degree to which opportunities to receive unlicensed (and often illegal) broadcasts hampered consumer choice. In response, governments slowly opened their monopoly public broadcasting systems to permit some (initially very limited) commercial stations. The limited number of licenses issued made each permit quite valuable, and allowed

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<sup>24</sup> Ibid.

<sup>25</sup> Ibid.

governments to attach far-reaching regulations over broadcast content as a condition of operation.

Just as pent-up demand fueled the plea for commercial television, it also drove interest in multi-channel subscription television. Cable and satellite TV would enable customers to access the bandwidth for video programming denied them via regulation of terrestrial over-the-air television. Consumer demand for additional video programs was hardly satiated by the entry of a small number of commercial stations, but the commercial broadcasters quickly turned into allies of state broadcasting authorities in opposing the spread of multi-channel operators. In country after country, legal barriers were thrown up to discourage the “siphoning” (as it was formally called by the U.S. Federal Communications Commission) of viewers from broadcast TV stations. Yet, over time, the barriers again gave way. Pushed by programming interests and eagerly received by the public, cable and satellite systems were permitted to offer far larger packages of viewing fare, such that today many countries are primarily served not by over-the-air television but by multi-channel video program distributors (MVPD).

Germany is both typical and atypical. The distinct element is regional regulatory control; as opposed to the national broadcasting authorities elsewhere in Europe, German states control broadcast policy. Nonetheless, when the present TV system began in 1954, it was limited to a single channel throughout (Western) Germany, with each state government responsible for programming in its area.<sup>26</sup> In 1959, Chancellor Conrad Adenauer advocated the establishment of a second channel to be licensed to a private provider by the central government, but the proposal ran into stiff

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<sup>26</sup> The German constitution states: “Freedom of the press and freedom of reporting by broadcast and film are guaranteed.” How this squares with government-controlled broadcast media has been litigated. In 1971, the German Constitutional Court found: “[B]roadcasting has become one of the most powerful means of mass communications which, because of its wide-reaching effect and possibilities as well as the danger of misuse for one-sided propagandizing, cannot be left to the free play of market forces.” (Cited in Noam 1992, 80.) This verdict dispenses with the nonsensical “physical scarcity” rationale for regulation used by U.S. courts, establishing that the broadcast market is just too flawed, and broadcasting too influential, to allow free speech. Thus, the Court – enunciating conventional policy wisdom -- takes the opposite stance on regulation of the market for ideas from that identified by Prof. Coase.

opposition. The states took the issue to court, won, and set up their own second channel in 1961.<sup>27</sup> The public networks produced programs of high artistic quality, and were also highly politicized, with content clearly tailored to the interests of dominant political coalitions.

No commercial broadcasting in radio was allowed in Germany until 1985,<sup>28</sup> and none in TV until 1987.<sup>29</sup> The pressure from excluded competitors was bolstered by a switch in the position of the Social Democratic Party (SPD), which came to favor private broadcasting at the urging of the SPD Mayor of Hamburg – a media center experiencing high unemployment. The introduction of private broadcasting was thus cast as a pro-labor policy.<sup>30</sup>

The standard cycle of monopoly, gradually loosening to a cartel, has been observed across the globe. Many nations now face new threats to the established broadcasting order from cable, satellite, and Internet, where streaming video technologies continue to improve and which offer – in tandem with broadband connections – program services directly competitive to television broadcasting in the near future. The degree to which the *ancien régime* has limited opportunities for distributing video programming is illustrated by data supplied by the European outlier in broadcasting policy, Italy. In the early to mid-1970s, Italian courts found unlicensed entry into cable television service legal. Ironically, the economic impact was to undermine development of cable television, as private TV broadcasting facilities were quickly erected and, on the legal grounds applicable to unlicensed cable entry, respected as legal despite their unlicensed status. Demand for cable television service has elsewhere been driven by the desire of consumers and program suppliers to sidestep the limitations of broadcasting regulation; with broadcasting subject to free entry, Italian cable development fizzled.

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<sup>27</sup> Noam 1992, 79-81.

<sup>28</sup> Noam 1992, 86.

<sup>29</sup> Noam 1992, 85. See also: Report of the Committee on Financing the BBC, Presented to Parliament by the Secretary of State for the Home Department by Command of Her Majesty (July 1986). This study, chaired by Prof. Alan Peacock, notes that private TV was only “under discussion” in Germany as of 1986 (*ibid.*, 36).

<sup>30</sup> Noam 1992, 85.

In 1976, there were 90 TV stations in Italy; by 1985 there were 1,319 – the densest deployment in any country. The utilization of the broadcast band is, proportionally, more than twenty times that in Canada or the United States, calibrating the degree to which spectrum allocation decisions truncate viewer choice. See Table 1. As noted, broadcast liberalization did not bode well for cable TV. Despite the effective deregulation of entry for cable in 1973, only five percent of Italian households are today passed by cable and fewer than 1% subscribe.<sup>31</sup> In fact, a recent report from the Italian government boasts: “The Italian radiotelevision market is typified by the absence of cable TV, which was compensated with the total liberalization of the radiotelevision sector in 1976.”<sup>32</sup>

TABLE 1. CALIBRATING REGULATORY CONSERVATISM: PRIVATE TV LICENSES IN THE UNITED STATES, CANADA, ITALY <sup>33</sup>				
	197	1985	2001	Most recent TV stations/10,000 pop
United States	6		1,472	0.05
Canada			136	0.05
Italy	90	1,319		1.0
Los			23	0.015

<sup>31</sup> Working Party on Telecommunication and Information Services Policies, *Development of Broadband Access in OECD Countries*, Organization for Economic Cooperation and Development, JT00115500 (Oct. 29, 2001), 12.

<sup>32</sup> Autorità per le Garanzie Nelle Comunicazioni (AGCOM), *The Regulation of the Media in Italy* (Aug. 31, 2001), [www.agcom.it/eng/resp\\_reg.htm](http://www.agcom.it/eng/resp_reg.htm).

<sup>33</sup> Sources: Noam 1992, 88; Television Bureau of Canada, TV Basics of 2000-2001; Nielsen Media Research.

Angeles				
Toronto/H amilton			10	0.016
Rome		83		0.308

### c. Liberalization of Cable and Satellite TV in the United States and Canada

Having limited TV broadcasting by parsimonious allocation of frequencies, regulators increased demand for multi-channel subscription services and, quite naturally, moved to plug this loophole. In the United States, in fact, FCC authority over cable was not covered in the agency's enabling legislation, the Communications Act of 1934, but was seized in the 1960s on what the courts later approved as the "ancillarity doctrine." Because competition from cable TV service could undermine the cross-subsidies built into broadcast TV regulation, where monopoly profits were purposely created so as to fund programs considered to be in the "public interest," cable rules were "ancillary" to the responsibilities of the Commission.<sup>34</sup>

The U.S. regulatory experience in television is atypical in that it has not evolved from a dominant public broadcasting monopoly. Public stations, and government subsidies, are provided for, but they buttress the essentially private TV broadcasting system. This model is being forced on other countries by economic and political developments, and will be discussed below. What is relevant here is the manner in which U.S. regulators sought to suppress cable television to protect over-the-air TV broadcasters when cable sought to compete in the 1960s. San Diego, California, was the first major U.S. city where substantial numbers of cable subscribers received substantial numbers of programs from outside the market. (Los Angeles stations were micro-waved 120 miles south, and delivered to households via coaxial cable. The stations were successful largely due to popular sports programming.) To protect local broadcasters from "imported" signals, the FCC initiated a series of rule makings in 1962 that imposed severe restrictions on cable programming options. The anti-cable policies stayed in place until the late 1970s, when the growing demand for cable programs (by then cheaply distributed via satellites) combined with a national tide of deregulation to produce policy

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<sup>34</sup> Lucas A. Powe, Jr., *American Broadcasting and the First Amendment* (Berkeley: University of California Press, 1987), Ch. 12.

reform. Cable's ultimate rout of broadcast TV in the national ratings race proved broadcast lobbyists prescient for crippling cable two decades earlier.<sup>35</sup> See Table 2.

Satellite TV in the United States was forced to travel the regulatory path taken by the cable industry before it. It, too, potentially offered new choices for customers and expanded distribution for programmers, and was able to attract significant capital for deployment. But established broadcast and cable television interests united to keep program rights out of reach of the new entrant, and in promoting regulatory rulings that limited the economic viability of direct broadcast satellite (DBS).<sup>36</sup> "In light of the transnational capabilities of DBS, this conspiracy produced quite the opposite of what the cultural imperialism paradigm might anticipate: the cable companies actively worked to prevent the development of expanding North American markets for *their* programming..."<sup>37</sup>

TABLE 2. TELEVISION NETWORK RATINGS, 1982 v. 1997 <sup>38</sup> (SHARES OF U.S. TV VIEWING)			
<i>Network Type</i>	<i>Includes</i>	<i>1982</i>	<i>1997</i>

<sup>35</sup> Deregulation was not total, of course, and policies to protect U.S. broadcasters against competition from cable and satellite operators exist to this day. Foremost among them is "must carry," the rules granting local broadcast TV licensees a property right to zero-priced carriage on multi-channel subscription systems. Thomas W. Hazlett, *Digitizing Must Carry under Turner Broadcasting v. FCC (1997)*, 8 S CT ECON REV 141 (2000).

<sup>36</sup> "Like the US cable television industry, television and radio broadcasters have opposed DBS [direct broadcast satellite]. In general, the National Association of Broadcasters [U.S. trade association for commercial stations] has been anxious about more competition. One of the core arguments used by the NAB against DBS is its potential threat to the economic viability of local stations and network affiliates. Over-the-air broadcasters believe that because of the low costs involved in reaching *each* consumer through DBS, direct broadcasters pose a direct threat to their audience share." Edward A. Comor, Communication, Commerce and Power: The Political Economy of America and the Direct Broadcast Satellite, 1960-2000 (New York: St. Martin's Press, 1998) (emphasis in original), 169.

<sup>37</sup> *Ibid.*, 170.

<sup>38</sup> Source: National Cable Television Association.

Commercial broadcast networks	CBS, NBC, ABC (Fox in 1997)	72%	51%
Independent stations	Superstations except TBS	21%	12%
Basic cable networks	TBS	3%	37%
Pay cable networks		5%	7%
PBS		3%	3%

But technical advances, and growing dissatisfaction with the market power exerted by cable television systems (which had become so successfully in countering broadcast TV stations that they had amassed an enviable incumbency as local multi-channel video monopolists), led to new entry. While DBS operators first entered the market in the early 1980s via a technology that resulted in large losses and market exit, the DBS licensees became viable a decade later when digital compression techniques (and permissive rules allowing such technology to be deployed) dramatically increased effective bandwidth. Combined with enhanced access to video program networks under the access provisions of the 1992 Cable Act, DirecTV (in 1994) and EchoStar (in 1996) met success. By year-end 2001, some sixteen million subscribers were enlisted, compared to about seventy million U.S. cable TV households and fourteen million roof-top antennae viewers.<sup>39</sup>

Canadian regulatory barriers against cable television were also erected to protect broadcasters from competition, with enhanced Canadian government ownership of broadcast facilities and program content intensifying this motive. But the existence of a relatively well-developed television market on its border has always pulled Canadian media regulation in the direction of openness. Given that ninety percent of Canadians

<sup>39</sup> Thomas W. Hazlett, *The U.S. Digital TV Transition: Time to Toss the Negroponte Switch*, AEI-Brookings Joint Center for Regulatory Studies, Working Paper 01-15 (Nov. 2001), [http://www.aei-brookings.org/publications/working/working\\_01\\_15.pdf](http://www.aei-brookings.org/publications/working/working_01_15.pdf).

live within one hundred miles of U.S. media markets, the cost of foreclosing viewing opportunities can be perceived in crystal clarity – even if *grey* to regulators – by many of the constituents of the policy makers responsible.

While cable TV in Canada dates to 1960, its initial incursions were limited to markets outside the reach of broadcast facilities. Only Canadian broadcast signals could be delivered. But strong interest in U.S. broadcast TV, and relatively low-cost substitution, prompted rules allowing the three major American TV networks, plus the Public Broadcasting System, to be carried by cable systems. Canadian cable subscribership surged. “Today, Canada is the most cabled country in the world, with a penetration rate of roughly 80%.”<sup>40</sup> A comparison with Italy suggests that Canada’s conservative policy with respect to over-the-air television, combined with its proximity to alternative programming (priming both demanders and suppliers for greater transmission capacity in Canada), drives this outcome.

Like cable systems, Canadian satellites have been propelled by “the public outcry” over rules stopping Canadians from enjoying the signals of U.S. satellites.<sup>41</sup> Response to market events forced the government to permit private satellite TV systems. Both cable and satellite systems are subject to rules favoring both Canadian broadcasters (similar to U.S. must-carry regulations) and to the licensing of program networks (a level of control not seen in the United States). Canadian multi-channel vendors are not permitted to offer customers more non-Canadian than Canadian channels, and domestic content may be further favored by program licensing. “[T]here are 70+ applications for licenses [for] new services currently pending before the CRTC.”<sup>42</sup>

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<sup>40</sup> Michael Koch, *Two Solitudes: Canadian Communications Regulation Applied to the Internet*, 2 INT’L J COMM L & POL (Winter 1998/99), [www.ijclp.org](http://www.ijclp.org), 6.

<sup>41</sup> Ibid.

<sup>42</sup> Simply delaying new programming from competing in the market tends to protect the market share of existing broadcasters.

#### d. The Internet Threat to Regulated Broadcast Television<sup>43</sup>

Borders are a problem for broadcast TV regulators. The standard model of control imposed substantial levels of artificial scarcity via allocation decisions, redistributing the economic rents thereby created via subsidies that maximize the wealth, power, and political support of the governing coalition. Borders curtail the regulators' power, and leak in either direction. Video programs may sneak in, or consumers out. Alternatives to the regulated market may be found, undercutting the audiences of approved content, the rents of licensees, and the funds available for subsidy.

Geographic borders are a well-known problem. Beginning in 1958, pirate radio signals began broadcasting unlicensed content to listeners in Sweden and Denmark, where authorities had limited radio choice to a single station. Soon, Holland, Belgium and the England were struck with unauthorized ship-to-shore radio broadcasts. Regulators were forced to retreat, offering more choices – grudgingly. When it became apparent that they would have to allow a popular music service to be broadcast, the BBC chose not to herald the effect of competition in producing enhanced product diversity, but to attack “the Government” for not having “dealt firmly with the first pirate stations at any early state in their existence.”<sup>44</sup>

But geographic borders are the least important factors pressuring broadcasting policy today. Technological borders are shifting, causing regulatory tumult. The advent of cable television gave programmers an option to end-run the restrictions of broadcast regulators, and has – in countries including Canada and the U.S. – emerged ultimately victorious in most regulatory battles. Satellite TV entry has been slow to develop, as spectrum-allocation authorities fear disruption of audience shares (buttressed by the arguments of existing television broadcasters and cable TV systems). But digital compression brings transmission costs down and new programming dangerously closer.

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<sup>43</sup> With apologies to Bruce Owen, *The Internet Threat to Television* (Cambridge, MA: Harvard University Press, 1999).

<sup>44</sup> Quoted in Noam 1992, 5.

Courts can swiftly cross legal frontiers, as when an Italian court blessed unregulated entry in cable and broadcasting. The gold rush in over-the-air TV was so successful that development of cable TV is stymied to this day. And political borders zig and zag, heralding change. Politicians embrace broadcasters public and private as allies in the perpetual campaign to sway public opinion, but there are risks. Namely, that the “ins” will be “out,” and that the next to rule will wield this powerful sword. That is both daunting and annoying. In country after country, a single channel public monopoly TV service was ended by a new party ascending, or by an old power attempting to brace its fall. British Conservative Winston Churchill surely makes a strange bunk-mate for the French Socialist François Mitterand, but both leaders moved to open up state broadcasting services after feeling the brunt of public censorship out of power.<sup>45</sup>

There are borders everywhere, and slipping across the geographic, technological, legal or political margins to a more robust system of video choice is a constant fear of the interests that benefit from restrictions on choice. In this light, the importance of the emergence of advanced data networks comes into sharp focus. The very logic of the Internet is to transport the user up to, and potentially across, each and every border. As capacities expand and as broadband comes to replace narrowband in the last-mile connections used by residential subscribers in Canada and elsewhere, the model of broadcast regulation deflates. When each user connects to each other, the border is wherever an audience of one places it.

Of course, even when governments cannot regulate the network’s *reach* they may block access by their citizens *to* the network. Infrastructure, including conduits and the hardware or software used to make it functional, can be restricted, taxed, or loaded up with the government’s own priority content – users must first get through the

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<sup>45</sup> “Despite his masterful use of the BBC during the war, Churchill harbored long-standing resentments. He had neither forgiven nor forgotten having been denied access to the airwaves in the 1930s. His attitude was similar to that of France’s Socialist President François Mitterand, who, thirty years later, resented his earlier exclusion by the official broadcasters and, once in power, ended their monopoly.” Noam 1992, 125.

approved reading list before bolting to the objects of their true desire. But such brakes on productive use of the Internet are exactly what firms cannot do if they hope to compete in the access market,<sup>46</sup> and what governments cannot do if they value productivity. Industrial development is clearly tied to widely decentralized use of precisely the same machines, and networks, delivering news, information, and entertainment services. What makes us smarter at work makes us more joyous at play.<sup>47</sup>

The networked world sneaked up as an industrial development, offering users productive reasons to go online. This very dynamic, sitting atop that other industrial revolution, the ubiquitous PC, has opened electronic markets for business. But the market for ideas is a weightless free rider. This unveils a world of vast new opportunities for writers, producers, and video artists, swelling the ranks of Excluded Publishers. A critical revolutionary vanguard amasses at the regulatory gates.

Everyone may soon see a big TV station just over the border no matter where they reside or work. Worse, there will be no neighboring government, restricting its TV sector, just across the way. Worse still, the technology can be suppressed, and its distribution thwarted, only at great and obvious social cost. Information and entertainment are inextricably woven, and the human and physical capital to access retail databases, scientific papers, or accounting records are identical to those assets used to video streaming. Worse once more is that the industries that prosper with the growth of new networks are already large, savvy, and persuasive. The influence peddlers of the New Economy gleefully fight border guards and man underground railroads 24/7.

The cycle of liberalization is running once more, but its full thrust will not be felt until there is mass-market distribution of full-motion video via the Internet. That

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<sup>46</sup> The fears of a “walled garden” that accompanied the growth of such network access providers as AOL and MSN have now receded, as market competition has forced Internet Service Providers to provide seamless passage to non-proprietary content. Thomas W. Hazlett and George Bittlingmayer, *The Political Economy of Cable ‘Open Access,’* STAN TECH L REV (forthcoming, Fall 2001), [http://www.aei.brookings.org/publications/working/working\\_01\\_06.pdf](http://www.aei.brookings.org/publications/working/working_01_06.pdf).

<sup>47</sup> Communications technologies are themselves driving economic growth in surprising ways and to an astounding degree.

may not be long. In the meanwhile, no serious attempt to block progress will succeed. The political and economic costs of slowing the Internet swamp benefits. The last super-power to make a serious attempt to control information technologies, the Soviet Union, collapsed when its government's effort to utilize new systems in a limited, controlled *perestroika* fell under the weight of its contradictions.<sup>48</sup>

### III. The Death of Broadcasting: A Gala TV Special

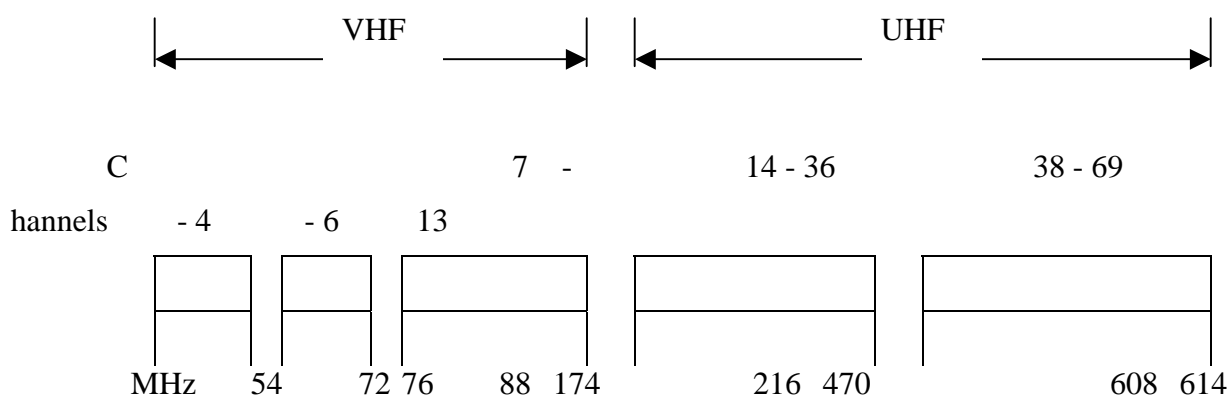
The traditional broadcast system limited the number of outlets that would compete for productions and limited the bidding among them.<sup>49</sup>

The dramatic demise of traditional public and private television broadcasting will usher in a golden age for video programming. The growing demand for programming driven by cable and satellite systems with capacity to fill is already having a profound impact, and driving the "content is king" hysteria. Of course, content is not king; the golden age arrives precisely because the king is dead. Content is, however, made more valuable by increasing the ease with which consumers may access their favorite programs. The New Media are stimulating investments, innovation and creativity in the informational products people might like to buy.

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<sup>48</sup> Stephen Kotkin, Armageddon Averted: The Soviet Collapse 1970-2000 (New York: Oxford University Press).

<sup>49</sup> Noam, 1992, 20.

FIGURE 1. THE CANADIAN & U.S. BROADCAST TV BAND<sup>50</sup>

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The transition to more efficient distribution of broadband content is now well along and the crippling restrictions of the old system are being laid bare. Once these market imperfections become visible even to newspaper reporters, the prevailing policy equilibrium will collapse. Chief among them is the essential foundation of the broadcast TV system, its allocation of radio spectrum. In both Canada and the United States, a vast allocation of channels – 67 – consumes valuable bandwidth while delivering very little service to the public. Since each video channel is given 6 MHz of frequency space, the total allotment for television is 402 MHz. This is more than twice the total airspace devoted to mobile telephony in the United States or Canada. See Figure 1.

This is a vast commitment of radio spectrum, a scarce natural resource with substantial opportunity costs. Particularly expensive is the unavailability of prime

<sup>50</sup> *Frequency Allocations Chart* (2000), <http://strategis.ic.gc.ca/SSG/sf01608e.html>; U.S. Congressional Budget Office (CBO). *Where Do We Go From Here? The FCC Auctions and the Future of Radio Spectrum Management* (April 1997), 46.

TABLE 3. TV STATIONS IN CANADA AND THE UNITED STATES <sup>51</sup>		
	Canada	United States
Total full-power stations	136	1,472
Number of TV markets	43	210
Stations per market	3.16	7.0
Stations per market weighted by number of households	5.77	13.0
Most stations per market	10 (Toronto)	23 (Los Angeles)
Median stations per market	2	6

VHF/UHF frequencies for mobile telephone and wireless web applications. Two-way fixed wireless broadband access is provided very cheaply and effectively in these bands, and could promote broadband last-mile connections in competition with cable modem service and digital subscriber lines (DSL) offered by local telephone exchange providers.

One U.S. television station has been given permission to reallocate its bandwidth, on an experimental basis, from low-power UHF TV service to providing one-way fixed broadband access to the Internet. Despite the limitations of one-way service in eliciting corporate customers, AccelerNet is using a single channel of bandwidth (Channel 43 in Houston) to serve 600 business users. Cellularization is possible, making the service scalable. But government rules must be relaxed to allow operators sufficient flexibility to make wireless broadband access a viable financial proposition.<sup>52</sup> Blocking

<sup>51</sup> Canadian data: Television Bureau of Canada, *TV Basics 2000-2001*, [www.tvb.ca/tvbresources.htm](http://www.tvb.ca/tvbresources.htm); Canadian Broadcasting Corporation, *Annual Report 2000-2001*. U.S. data: *Nielsen Station Index, Directory of TV Stations, 2000-2001*, published by Nielsen Media Research, [www.nielsenmedia.com/index.html](http://www.nielsenmedia.com/index.html). Station count excludes low-power, satellite, cable, or international.

<sup>52</sup> Despite authorization in Dec. 2000 from Congress for 13 low-power UHF TV stations to use their allocated 6 MHz of bandwidth to provide 2-way high-speed access, FCC rules currently block development

access to these productive spectrum inputs is triply expensive to society, because not only are the direct benefits of more efficient online access lost, so are gains from enhanced network formation (i.e. network effects) and benefits accruing from the competitive responses of broadband access (last-mile) rivals.

The sparse utilization of the TV band in Canada has already been noted by way of comparison with Italy. The station data can be examined in a slightly different way, as seen in Table 4. Given that there are 43 distinct TV markets in Canada and 136 full-power TV stations, the average Canadian market features just three viewing choices. Of course, the larger markets tend to have more stations; adjusting for population gives us a weighted average of slightly fewer than six stations – the over-the-air (OTA) selection for the average Canadian TV viewer.<sup>53</sup>

TABLE 4. CANADIAN VIDEO DELIVERY MEDIA <sup>54</sup>		
	<i>No. of Households</i>	<i>Percent of Canadian Households</i>
Cable television	8.5 million	73.9
Satellite TV (Canadian)	0.8 million	7.0
Satellite TV (U.S.)	1.0 million	8.7
OTA broadcast TV	1.2 million	10.4
Total for Canada	11.5 million	100.0

of this service. Thomas W. Hazlett, *Liberalizing U.S. Radio Spectrum Allocation*, TELECOM POL (forthcoming); [www.manhattan-institute.org/hazlett/Liberalizing%20U.S.%20Spectrum%20Allocation.pdf](http://www.manhattan-institute.org/hazlett/Liberalizing%20U.S.%20Spectrum%20Allocation.pdf).

<sup>53</sup> This generously assumes that each viewer can receive all local TV stations via a rooftop antenna.

<sup>54</sup> Source: Satellite Communications Assoc. of Canada, as reported in Dave Waddell, *Satellite Wars: Dishing it Out*, The Windsor Star (Oct. 2, 2000).

It is possible to argue over the optimal size of the TV viewing package. It is not possible to argue that 67 channels of scarce radio spectrum are optimally used to deliver six video channels. The typical Canadian market uses just 4.5% of its allocated bandwidth. In that no Canadian viewer enjoys more than ten over-the-air channels, the TV band is under-employed throughout the country. There are no offsetting efficiency arguments for this spectrum squandering; wasting this communications capacity produces no social dividend, while additional uses could be accommodated on the TV band without any material impact on existing transmissions.<sup>55</sup>

But this is the tip of the under-utilization iceberg. Over-the-air (OTA) broadcast television is rapidly disappearing from the Canadian household, as families opt out of “free” TV for fee-based access to additional video choices. As the exodus from broadcasting to subscription TV proceeds, a dwindling number of Canadians rely on OTA signals for video – currently, just over one million homes, or ten percent of the population. Satellite receivers, with dish antennae and installation, can be purchased in the United States for under US\$300. This suggests that for something below C\$600 million, 1.2 million OTA Canadian households can be converted to satellite TV viewers. While the capital cost of new satellite customer connections is an incremental outlay, the delivery of “free” broadcast programming is not. Abstracting from intellectual property rights, broadcast video is a public good and the payment streams required to compensate for their distribution via satellite are purely distributional.

In a recent paper I outlined a plan for transitioning the U.S. market, which is now about 87% subscribed to multi-channel subscription TV providers, to non-

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<sup>55</sup> The question is not, as it is often posed in regulatory hearings: *Will new wireless uses create interference?* All wireless transmissions (and a good many non-wireless applications, such as the desktop PC this paper is being written on) radiate emissions that have the potential to alter existing communications. The question properly posed is: *Are new uses likely to impose costs greater than the benefits they create?* The natural tendency is for regulators to over-value potential interference to existing users, and to under-value new uses. The better arrangement is for policy makers to define the rights of new and existing users, allowing parties to trade to an optimal level of interference. Thomas W. Hazlett, *The Wireless Craze, the Unlimited Bandwidth Myth, the Spectrum Auctions Faux Pas, and the Punchline to Ronald Coase’s ‘Big Joke’: An Essay on Airwave Allocation Policy*, 15 HARV J L & TECH (Spring 2001).

broadcast video delivery systems.<sup>56</sup> The benefits there are enormous, between about US\$100 billion and US\$600 billion, with transition costs of under \$3 billion. The Canadian market is less populous, so the benefits of alternative use in the TV band are reduced. But they should yet be significant, and exceed by at least an order of magnitude the cost of replacing roof-top antennae with satellite dishes (C\$600 million).

TABLE 5. AUCTIONS OF CANADIAN WIRELESS LICENSES<sup>57</sup>

<i>License</i>	<i>Dates</i>	<i>No of Licenses</i>	<i>Total Auction Revenue (C\$)</i>	<i>Total Bandwidth (MHz)</i>	<i>Mean C\$ per (POP/ MHz)<sup>b</sup></i>
24 GHz & 38 GHz	Oct. 18, 1999 - Nov. 19, 1999	25 8 <sup>a</sup>	171,82 1,520	1,200	0.001 7
2 GHz PCS	Jan. 15, 2001 - Feb. 1, 2001	52	1,481, 920,000	40 (4 X 10 MHz)	0.470 8

<sup>a</sup> 354 licenses were offered but 258 were awarded.

<sup>56</sup> Thomas W. Hazlett, *The U.S. Digital TV Transition: Time to Toss the Negroponte Switch*, AEI-Brookings Joint Center for Regulatory Studies, Working Paper 01-15 (Nov. 2001), [http://www.aei.brookings.org/publications/working/working\\_01\\_15.pdf](http://www.aei.brookings.org/publications/working/working_01_15.pdf).

<sup>57</sup> Sources: Strategis, *Backgrounder Information for the 2000 Auction of Additional PCS Spectrum*, <http://strategis.ic.gc.ca/SSG/sf02138e.html>; Strategis, *2 GHz PCS Auction. Summary By License Winner*, <http://strategis.ic.gc.ca/SSG/sf05389e.html>; Strategis, *Backgrounder*, <http://strategis.ic.gc.ca/SSG/sf01834e.html>; Strategis, *24 and 38 GHz Auction. Summary By License Winner*, <http://strategis.ic.gc.ca/SSG/sf01982e.html>; Strategis, *24 and 38 GHz Auction Fact Sheet*, <http://strategis.ic.gc.ca/SSG/sf01986e.html>.

These benefits can be roughly evaluated by reference to the Canadian PCS licenses sold at auction in 2001. See Table 5. At the prices paid by bidders there, the TV band is valued at:

$$(402 \text{ MHz})(\text{C}\$0.4708/\text{POP}/\text{MHz})(31,000,000\text{POP}) = \text{C}\$5,867,109,600.$$

This sum represents an estimate of the producers' surplus, or capitalized economic profit, that wireless telecommunications suppliers would expect over the life of licenses allowing similar opportunities to those afforded Canadian PCS licensees. The estimate could be too high, if the large bandwidth allocated the licenses increased service sufficiently to substantially depress market prices (i.e. customer service rates), or if license terms were too inflexible to allow the exploitation of available opportunities in supplying other wireless services. The estimate could be low, however, given that the 402 MHz lies between 54 MHz and 806 MHz, highly productive bandwidth that can easily (and cheaply) transmit through walls, trees, and other obstacles, or split into distinct cells, aiding in frequency re-use. The prices paid for licenses allocated frequencies in the 24 GHz and 38 GHz bands were far below those for the 2 GHz PCS licenses, differences accounted for by distinct service rules and spectrum propagation characteristics.

This estimate of the benefits of TV band reallocation can be turned into a flow. Given the estimated market value, a conservative investment in fixed securities could yield: @ 3% = C\$176,013,288. Such an annual flow might augment the national budget, or be earmarked for subsidies for Canadian video production.

While the benefit/cost ratio for transitioning to an all-subscription TV system is already estimated to be in the neighborhood of ten to one, this is a severe under-statement.<sup>58</sup> The benefits of redeploying the TV band are more than just the producers'

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<sup>58</sup> Another source of under-statement in the ratio involves an over-statement of transition costs. I do not (in the text) consider how subscription TV service could be provided to those Canadians now relying on OTA broadcasting in a least-cost manner, and for expository convenience simply estimate the cost of assigning all of the transition to the two Canadian satellite TV services. In fact, competitive bidding could be employed to drive the cost down. It is likely that cable television operators, satellite providers, broadcasters, telephone companies, fixed wireless operators, or newly formed consortia could offer to

surplus, as forecast by license bids, but include consumers' surplus. Because consumers will continue to access the broadcast TV programs via satellite, the new opportunities enjoyed by consumers are pure gains. These are likely to be some substantial multiple of producers' surplus; studies in the United States estimate that cellular telephone markets' consumer surplus was about ten times the size of producer surplus.<sup>59</sup>

Digital television will not die with the elimination of the TV Band, but will flourish. Successful analog-to-digital conversion in television is taking place in the cable and satellite sectors. There, consumers do not absorb additional expense in purchasing costly new viewing sets, receiving digital programs seamlessly processed by the set-top box. Ironically, TV broadcasting may itself enjoy life after death. A forward-looking spectrum policy would allow the spectrum allocated the TV Band to be used flexibly by market competitors in wireless.<sup>60</sup> Because opening the band will not cause demand for over-the-air TV signals to vanish, broadcasters, programmers, or other interests may well pay the (competitive) opportunity cost of frequency use to provide OTA video on either a subscription or ad-supported distribution model.

New technology is already changing the basics of the business. In a digitized format, bundles of OTA signals may be transmitted on a very small number of 6 MHz bands; standard compression techniques can send four or more video programs via the frequency space used to send just one analog (NTSC) transmission. High-definition pictures are more intense bandwidth users (about one-to-one with the current standard) but digitization allows broadcasters to better use contiguous channels. Hence, a small

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provide connections (either nationwide or on a region-by-region basis) to households meeting certain criteria (e.g. not current cable or satellite subscribers) for some period of time. Cable companies can, in fact, connect new subscribers for far less than US\$300 per unit in all areas where cable plant is in place.

<sup>59</sup> See Hazlett, *The U.S. Digital TV Transition...*, 22.

<sup>60</sup> The consensus spectrum policy advocated by U.S. policy economists with experience in the area is a regime in which wireless licensees are given full flexibility to use airwaves on a non-interfering basis, with competitive concerns addressed by antitrust authorities. This turns the current wireless operating license used to grant access to frequencies in Canada and the U.S. into an actual spectrum permit, with the private licensee determining the optimal array of services to offer and technologies to deploy. *Comment of 37 Concerned Economists*, submitted to the Federal Communications Commission, In the Matter of Promoting Efficient Use of Spectrum Through Elimination of Barriers to the Development of Secondary Markets, WT Docket No. 00-230 (Feb. 7, 2001), <http://www.aei.brookings.org/publications/related/fcc.pdf>.

sliver of the 402 MHz TV Band might deliver far more video programming than the six analog television pictures available in the average Canadian market today.

#### IV. The Political Wild Card: Free Trade

The powerful economic trends forcing liberalization of broadcasting policy are clear. Traditional television broadcasting, and its public and private licensees, are being eclipsed by the expanding range of video choice available over cable, satellite, and – soon – the Internet. Holding these emerging networks back costs the country dearly in economic development, as well as in governmental support from consumers, network providers, and the newly empowered class of producers who see the new efficiencies in program distribution as economic empowerment.

Just this combination of factors would be enough to produce extremely threatening circumstances for the status quo. But another potent political force adds to the assault – free trade. The globalization of economic relations is well documented and widely understood, and virtually all democratic countries (and a good many undemocratic ones) take it for granted that barriers protecting domestic industry are a distinct threat to prosperity. This realization has grown *pari passu* with the pronounced increase in international trade flows that has become a defining characteristic of the post-World War II global economy, and has given birth to – or been ushered in by – formal trade agreements chopping down tariffs and quotas. These include three recent treaties signed by Canada: the North American Free Trade Agreement (NAFTA) in 1993; the Uruguay Round of the General Agreement on Trade and Tariffs (GATT) in 1994; and the General Agreement on Trade in Services (GATS) in 1994. Glenn Gottselig sees four Canadian policies in the television sector challenged by the new regime: “subsidies; quotas and

Canadian content provisions; foreign investment restrictions and Canadian ownership restrictions; and other legislative measures.”<sup>61</sup>

Cultural exceptions have been carved out of previous agreements, but that practice is ending. “A plain reading of GATS Article I (3)(b), which states, ‘services’ includes any service in any sector except services supplied in the exercise of government authority,’ implies that GATS extends to the audiovisual sector.”<sup>62</sup> The rules and regulations that discriminate against the free flow of ideas are now the target of existing treaties and those presumably to come. The cause of such agreements is not a made-for-TV-movie version of Milton’s *Aeropatigica*, but convergence of two factors: the globalization of commerce and the commercialization of content. Old-fashioned economic interest pushes the U.S. to aggressively promote further trade – “the U.S. preoccupation with further liberalization in the audiovisual sector.”<sup>63</sup> As Eli Noam elucidated a decade ago:

Film and television are part of the larger U.S. service economy. Throughout the developed world, manufacturing-based economies are shifting toward a service base, and this trend is most advanced, among the larger countries, in the United States. Hence, the leadership of the American film production industry is no more surprising than that of the American computer software industry. As its manufacturing loses ground to Pacific Basin countries, the U.S. economy relies on such services for its present comparative advantage. From the American perspective, this makes restrictions against its own media products especially unfair: although it is flooded by foreign manufacturing products, its own expert strength in information is stymied on grounds of cultural domination.<sup>64</sup>

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<sup>61</sup> Glenn A Gottselig, *Canada and Culture: Can Current Cultural Policies Be Sustained in the Global Trade Regime?* 5 INT’L J COMM L & POL (Summer 2000), [www.ijclp.org](http://www.ijclp.org), 10.

<sup>62</sup> Ibid., 24.

<sup>63</sup> Ibid., 25.

<sup>64</sup> Noam, Television in Europe, 22.

Neither these economic trends, nor the resulting political pressures, are likely to dissolve any time soon. They will continue to build, in fact, until entry barriers quarantining markets are removed, unleashing international rivalry in video content. This attack on protection is seamlessly attached to the larger movement towards free trade in goods and services generally, and so marshals formidable allies – and momentum – to its cause. It provides a key political component buttressing the fundamental economic forces undermining traditional broadcast regulation.

#### V. Public Broadcasting's Competitive Niche

The Canadian Broadcasting Company (CBC) has not abandoned its regulatory agenda and will seek to exclude competitive media where possible. But it has been forced to respond to the growing fragmentation of markets by embracing the new multi-channel world of video. Even true believers herald the change. Bernd Holznagel, a champion of public interest regulation, argues that public broadcasting “has not lost any of its relevance.”<sup>65</sup> But defense of that position no longer leads reflexively to protectionist policy. Instead, Holznagel asserts that “new, innovative programme strategies are necessary,” in particular, the provision of “digital programme bouquets” including “on-line offers” and “hybrid forms of services such as Intercast and Web TV.”<sup>66</sup> The approach focuses public broadcaster attention on ways to exploit new distribution economies rather than shutting off escape routes for domestic consumers yearning for competitive content. The lure of the new technology proves distracting, as it invites non-dominant media interests for a new chance to compete in global markets: “A common strategy could probably diminish American influence in the ‘network of networks’ and promote European diversity and national cultures.”<sup>67</sup>

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<sup>65</sup> Bernd Holznagel, *The Mission of Public Service Broadcasters*, 5 INT’L J COMM L & POL (Summer), [www.ijclp.org](http://www.ijclp.org), 3.

<sup>66</sup> *Ibid.*, 4.

<sup>67</sup> *Ibid.*

The idea that public broadcasting companies must integrate or die has been heard from the Canadian Broadcasting Company itself: “The CBC believes it must embrace a constellation model in order to position itself effectively throughout the evolution of the delivery of programs. The constellation model entails a closely-knit web of distribution and programming functions... The CBC claims that constellations have moved in to replace networks as the dominant industrial structures.”<sup>68</sup> While the arguments for extending public TV networks into additional markets can be put forth as a corporate restructuring, scale economies have always been present. The crisis forcing change is competitive rivalry. It is every network for itself, and the CBC can no longer afford to leave valuable news, information or entertainment products on the cutting room floor.

This is exactly the socially useful consequence trumpeted for market competition. Deregulation of markets *tightens* regulation of the public enterprise, forcing social efficiencies. This progressive response abandons the old approach of addition by subtraction. It offers video consumers more choice, not less. As Gottselig writes:

The CBC’s proposed shift to a constellation model is an example of a new initiative that does rely on antiquated industry support measures... [T]he constellation model would appear to have significant potential to enable the CBC to compete more effectively both in domestic and international markets, and yet remain in compliance with actual and potential international trading commitments.<sup>69</sup>

This approach to competition positions public broadcasters to offer truly valuable products to citizens, bracing themselves for the tectonic shifts accompanying the advent of ubiquitous broadband. When real-time video streaming, Internet TV, video-on-demand, and interactive broadband applications gain the bandwidth they need to burst

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<sup>68</sup> Gottselig, *Canada and Culture...*, 18.

<sup>69</sup> Gottselig, *Canada and Culture...*, 55.

onto residential monitors, the broadcast TV world will be a quaint memory. To avoid the electronic dustbin, public broadcasters should prepare today.

The competitive world is not entirely inhospitable to public broadcasting, as the American experience demonstrates. The Public Broadcasting Service (PBS) has seen its once comfortable incumbency, as one of only four national U.S. broadcast networks in the 1960s and 1970s, eroded by an onslaught of new entry in television markets over the past twenty years. There are now seven English-language broadcast TV networks (Fox, which formed in 1986, has been followed by WB, UPN, and Paxson). Cable subscribership more than tripled, 1980-2000, while satellite TV, with nominal (large-dish) subscribership in 1980, served fifteen percent of all U.S. TV households at year-end 2000. See Table 6. The average basic cable package included just 21 channels in 1984, 58.5 in 2000. Basic cable includes local broadcast channels (on average, about 13 local stations), meaning that the number of non-broadcast video channels available to the typical American household has climbed several-fold in just a few years.

TABLE 6. NON-BROADCAST VIDEO TRANSMISSION IN THE UNITED STATES, 1980-2000 <sup>70</sup>					
Year	Average number of channels on cable system	Cable subscribers	Cable subs (% U.S. HHS)	Satellite TV subscribers	Satellite TV subs (% U.S. HHS)
1980	N/A	18,300,000	22.66	0	0.00
1984	21	32,000,000	37.52	0	0.00
1993	38.5	57,200,000	59.32	1,682,000	1.74
2000	54.8	66,500,000	63.51	14,463,717	13.81

This explosion in viewer choice has devastated ratings for commercial television in the United States. Between 1982 and 1997, nearly one-quarter of the audience of commercial broadcasters fled; among the top networks, the loss was nearly one-third. Basic cable television networks saw a ten-fold gain in audience share. Yet

<sup>70</sup> Sources:

No. Cable channels: NCTA Cable TV Handbook 2001, page 1-C-3; Report on Cable Industry Prices, Dec 31, 1996 (para. 25-26); Report on Cable Industry Prices, Feb. 8, 2001 (page 12).

No. Households: US Census Bureau. "Households by type 1940 to present" [www.census.gov/population/www/socdemo/hh-fam.html](http://www.census.gov/population/www/socdemo/hh-fam.html)

Satellite TV subscribers: 2nd Annual Report: In the matter of annual assessment of the Status of Competition in the Market for the Delivery of Video Programming. FCC 95-491; Seventh Annual Report: In the matter of annual assessment of the Status of Competition in the Market for the Delivery of Video Programming. FCC 01-1

Cable subscribers: Warrens Publication. Television & Cable Factbook 2000.

N.B.: Satellite TV subscribers includes Direct Broadcast Satellite and Home Satellite Systems.

PBS viewership maintained its three percent market share. See Table 2. This small but loyal audience is receptive to relatively high-quality programming for children and adults, and PBS has been able to fund its market niche. Federal subsidies delivered via the Corporation for Public Broadcasting have remained fairly constant, in real terms, over the 1980-2000 period, despite dramatic coalitional shifts in both the executive and legislative branches of government. See Table 7. Total PBS revenues grew substantially in the years 1995-2001, a period in which splintering of the video program market has been most vigorous. See Table 8. Through sharp increases in market-oriented activities, including product sales and licensing fees from such sources as a new network (PBS Kids) to cable and satellite systems, PBS revenues grew forty percent in real terms, 1995-2001. PBS not only survives in the new multi-channel video marketplace, but flourishes.

TABLE 7. U.S. CORPORATION FOR PUBLIC BROADCASTING FUNDING (2001 \$MIL)						
Fiscal Year	Administration request	House Allowance	Senate Allowance	Appropriation	Appropriation (2001 dollars) <sup>71</sup>	
1970	15.0		15.0	15.0	68.47	
1980	120.0	145.0	172.0	152.0	326.69	
1990	214.0	238.0	248.0	229.4	310.84	
2000	325.0	300.0	300.0	300.0	308.54	
2002	350.0	340.0	350.0	350.0	N/A	
2004		365.0	395.0	380.0	N/A	

TABLE 8. REVENUES OF THE U.S. PUBLIC BROADCASTING SYSTEM (\$000s) <sup>72</sup>					
Year	Sales License	and Fee	Underwriting	Total Revenues	Sales & Fees as

<sup>71</sup> Nominal appropriations deflated with yearly average Consumer Price Index from the U.S. Bureau of Labor Statistics (all urban consumers).

<sup>72</sup> Source: PBS Annual Reports, 1998-2001.

	<i>Revenue</i>	<i>Donations</i>		<i>%Revenue</i>
5	199 39,640	162,320	344,473	58.6
6	199 55,335	139,243	334,430	58.2
7	199 70,961	142,604	385,130	55.5
8	199 90,257	186,148	448,127	61.7
9	199 107,310	137,319	421,574	58.0
0	200 132,140	175,876	488,959	63.0
1	200 117,624	221,904	541,622	62.7

## VI. Regulators Marching to the Cliff

On May 21, 1999 the CRTC handed down its much-awaited decision regarding the awarding of French-language specialty channel licenses. The Commission announced that it was approving four of the seventeen applications to provide certain specialty broadcasting services to the French Canadian specialty channel market.<sup>73</sup>

Regulators generally do not internalize the costs they create. Market failure, rampant in the common pools in which they swim, is yet the bullet-proof

<sup>73</sup> Gottselig, *Canada and Culture...*, 11.

argument for wading into imperfect private ponds.<sup>74</sup> Ominously, the costs incurred by regulatory agents may have pronounced effects but long lags until apparent to principles – voters and consumers. Even then, calamities can be blamed on others. Policies, and their outcomes, are public goods. If positive results appear to obtain, regulators may embrace them, boasting of their role. If negative results obtain, regulators hold hearings and assign blame to others. If no action is taken and good outcomes result, credit may still be garnered.

The FCC recently issued a report taking credit for the emergence of the Internet – by not regulating it.<sup>75</sup> As curious as the claim sounds, it contains more than a germ of truth. Regulatory forbearance is under-valued because it is difficult for the regulator to capture the benefits of doing nothing. Policy makers prosper politically by intervening. Even when policies wreak a fair amount of havoc, the adept regulator seizes the moment by focusing disappointment on the performance of lobbyists, special interests, political opponents, disruptive technologies, and market failure.

For many years, Canadian consumers have expressed keen interest in opting out of the constraints placed on video markets by regulators. The then-radical moment when cable operators were allowed to bring in four U.S. channels in the early 1970s is marked as the historic take-off for Canadian cable development. Canada's cable industry is now among the most developed in the world. Demand for services that Canada's broadcast regulations blocked from efficient over-the-air delivery is largely responsible for this infrastructure development. In essence, consumers paid for alternative bandwidth; having 67 channels reduced to a trickle of through-put, they invested billions of dollars in a less-regulated, more inclusive menu of spectrum-delivered video services.

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<sup>74</sup> For a detailed analysis see the fine book by Charles Wolf, Jr., *The Theory of Non-Market Failure* (Cambridge, MA: MIT Press, 1979).

<sup>75</sup> Jason Oxman, *The FCC and the Unregulation of the Internet*, Office of Plans and Policy, Federal Communications Commission, OPP Working Paper No. 31 (July 1999).

Observing regulatory evasion, policy makers abandoned spectrum scarcity rationales to pre-empt unregulated abundance. The result in the United States was a series of anti-cable regulations in the 1960s and 1970s, and must-carry rules for broadcast signals that continue to this day. In Canada, the intervention was more direct, involving the licensing of cable networks under rules favoring channels produced by Canadians.<sup>76</sup> The 1999 decision by Canadian regulators to deny entry to 13 of 17 new video program networks illustrates that the campaign to limit broadcast program alternatives is alive. But it can also be seen that such restrictions ignite further demands for broadband to the home. Regulatory bottlenecks drive the alternatives. Cable and satellite TV subscription systems have only primed this pump. These delivery systems undermined the regulatory structure by dramatically increasing consumer choice, but they did not eliminate regulatory barriers. The free-flowing bit streams of the Internet present quite a more fundamental problem for broadcast regulators.

The standard race has been seen for the last half century. Faced with the emergence of television, policy makers rushed in to block unregulated development. In all major democracies but the U.S., state monopolies took center stage. Over time, the severe restrictions on distributing popular video fare gave rise to costly efforts by consumers to opt out, and to lobbying efforts by producer groups intent on expanding markets for commerce in programming. Just as royal monopolies grudgingly expanded under the Stationers Company and the Paris Book Guild, cartels of private broadcasters – licensed and regulated – were carefully permitted to offer service in competition with public broadcasting monopolies. But more intense pressure for freedom of choice has arrived.

We today appear to stand not far from the break-down of the regulated printing press, when measured deregulation does not pack the wallop to keep markets in

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<sup>76</sup> This is erroneously referred to as “Canadian content.” In fact, the content itself is not regulated, only the nationalities of the actors, writers, directors, producers, and owners. See William T. Stanbury, Stanbury, Canadian Content Regulations: The Intrusive State at Work (Vancouver, B.C.: Fraser Institute; August 1998).

line. Full scale liberalization – open entry – has been put on the agenda by the emergence of multi-channel video carriers allowing consumers and programmers a glimpse of the world beyond regulatory scarcity. As broadband networks mature, they will naturally gravitate to the “killer app” by consensus, video-over-IP. Experiments have been on for some years now, and first generation systems – also known as digital cable and video-on-demand – are online, performing, and garnering increasing viewer interest.

Left to a straight-up conflict between regulators and consumers, regulators might yet win once more. But the battlefield now tips. The new sources of video choice are embedded in delivery systems deemed essential to economic development, and the software sold by producers increasingly subject to the rules of international trade in commerce. The economic interests of democratic governments shifted some time ago in favor of free trade, and exemptions carved out for broadcasting are being squeezed out.

Public broadcasters in Canada and the United States see their mission being redefined, and are engaging in competitive tactics to cope. This is not a public bad, but a public good. Their output will be more a product of what, at the margin, is demanded by viewers, and yet they will continue to garner government funds for the creation of programming that would not otherwise be provided. The intellectuals whom Ronald Coase mistook for free speech purists may, alas, come to embrace consumer sovereignty and thereby salvage his stated paradox – when confronted with a prodigious number of new Internet chat shows devoted to an appreciation of their as-yet under-appreciated scholarship.

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